



Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel 030 - 809977-0		ASB Nr.:	Datum: 12.03.99
Programm: 4H-FRAP 11/97 / pcas-GmbH / kren509758			
Bauwerk: 9813 - 2.00			

Stabellung und Querschnittswerte

Stab	s	E-Modul kN/cm <sup>2</sup>	G-Modul kN/cm <sup>2</sup>	A cm <sup>2</sup>	I <sub>y</sub> cm <sup>4</sup>	I <sub>z</sub> cm <sup>4</sup>	I <sub>yz</sub> cm <sup>4</sup>	n <sub>y</sub>	n <sub>z</sub>	e <sub>y</sub>	e <sub>z</sub>
676	0.334	0.21E+09	0.81E+08	0.12E-04	0.6442E-02	0.5078E-02	0.1901E-04	0.1269E-04	0.216	0.169	0.216
677	0.501	0.21E+09	0.81E+08	0.12E-04	0.6508E-02	0.6342E-02	0.1505E-04	0.1270E-04	0.216	0.172	0.216
678	0.669	0.21E+09	0.81E+08	0.12E-04	0.6574E-02	0.6443E-02	0.1273E-04	0.1270E-04	0.216	0.178	0.216
679	0.836	0.21E+09	0.81E+08	0.12E-04	0.6641E-02	0.6523E-02	0.1001E-04	0.1270E-04	0.216	0.184	0.216
680	1.003	0.21E+09	0.81E+08	0.12E-04	0.6707E-02	0.6603E-02	0.7343E-04	0.1270E-04	0.216	0.190	0.216
681	1.170	0.21E+09	0.81E+08	0.12E-04	0.6773E-02	0.6683E-02	0.4643E-04	0.1270E-04	0.216	0.196	0.216
682	1.334	0.21E+09	0.81E+08	0.12E-04	0.6839E-02	0.6763E-02	0.1970E-04	0.1269E-04	0.216	0.202	0.216
683	1.501	0.21E+09	0.81E+08	0.12E-04	0.6905E-02	0.6839E-02	0.8343E-04	0.1269E-04	0.216	0.208	0.216
684	1.669	0.21E+09	0.81E+08	0.12E-04	0.6971E-02	0.6919E-02	0.1270E-04	0.1269E-04	0.216	0.214	0.216
685	1.836	0.21E+09	0.81E+08	0.12E-04	0.7037E-02	0.7000E-02	0.1270E-04	0.1269E-04	0.216	0.220	0.216
686	2.003	0.21E+09	0.81E+08	0.12E-04	0.7103E-02	0.7073E-02	0.1270E-04	0.1269E-04	0.216	0.226	0.216
687	2.170	0.21E+09	0.81E+08	0.12E-04	0.7169E-02	0.7149E-02	0.1270E-04	0.1269E-04	0.216	0.232	0.216
688	2.334	0.21E+09	0.81E+08	0.12E-04	0.7235E-02	0.7225E-02	0.1270E-04	0.1269E-04	0.216	0.238	0.216
689	2.501	0.21E+09	0.81E+08	0.12E-04	0.7301E-02	0.7291E-02	0.1270E-04	0.1269E-04	0.216	0.244	0.216
690	2.669	0.21E+09	0.81E+08	0.12E-04	0.7367E-02	0.7367E-02	0.1270E-04	0.1269E-04	0.216	0.250	0.216
691	2.836	0.21E+09	0.81E+08	0.12E-04	0.7433E-02	0.7433E-02	0.1270E-04	0.1269E-04	0.216	0.256	0.216
692	3.003	0.21E+09	0.81E+08	0.12E-04	0.7499E-02	0.7499E-02	0.1270E-04	0.1269E-04	0.216	0.262	0.216
693	3.170	0.21E+09	0.81E+08	0.12E-04	0.7565E-02	0.7565E-02	0.1270E-04	0.1269E-04	0.216	0.268	0.216
694	3.334	0.21E+09	0.81E+08	0.12E-04	0.7631E-02	0.7631E-02	0.1270E-04	0.1269E-04	0.216	0.274	0.216
695	3.501	0.21E+09	0.81E+08	0.12E-04	0.7697E-02	0.7697E-02	0.1270E-04	0.1269E-04	0.216	0.280	0.216
696	3.669	0.21E+09	0.81E+08	0.12E-04	0.7763E-02	0.7763E-02	0.1270E-04	0.1269E-04	0.216	0.286	0.216
697	3.836	0.21E+09	0.81E+08	0.12E-04	0.7829E-02	0.7829E-02	0.1270E-04	0.1269E-04	0.216	0.292	0.216
698	4.003	0.21E+09	0.81E+08	0.12E-04	0.7895E-02	0.7895E-02	0.1270E-04	0.1269E-04	0.216	0.298	0.216
699	4.170	0.21E+09	0.81E+08	0.12E-04	0.7961E-02	0.7961E-02	0.1270E-04	0.1269E-04	0.216	0.304	0.216
700	4.334	0.21E+09	0.81E+08	0.12E-04	0.8027E-02	0.8027E-02	0.1270E-04	0.1269E-04	0.216	0.310	0.216
701	4.501	0.21E+09	0.81E+08	0.12E-04	0.8093E-02	0.8093E-02	0.1270E-04	0.1269E-04	0.216	0.316	0.216
702	4.669	0.21E+09	0.81E+08	0.12E-04	0.8159E-02	0.8159E-02	0.1270E-04	0.1269E-04	0.216	0.322	0.216
703	4.836	0.21E+09	0.81E+08	0.12E-04	0.8225E-02	0.8225E-02	0.1270E-04	0.1269E-04	0.216	0.328	0.216
704	5.003	0.21E+09	0.81E+08	0.12E-04	0.8291E-02	0.8291E-02	0.1270E-04	0.1269E-04	0.216	0.334	0.216
705	5.170	0.21E+09	0.81E+08	0.12E-04	0.8357E-02	0.8357E-02	0.1270E-04	0.1269E-04	0.216	0.340	0.216
706	5.334	0.21E+09	0.81E+08	0.12E-04	0.8423E-02	0.8423E-02	0.1270E-04	0.1269E-04	0.216	0.346	0.216
707	5.501	0.21E+09	0.81E+08	0.12E-04	0.8489E-02	0.8489E-02	0.1270E-04	0.1269E-04	0.216	0.352	0.216
708	5.669	0.21E+09	0.81E+08	0.12E-04	0.8555E-02	0.8555E-02	0.1270E-04	0.1269E-04	0.216	0.358	0.216
709	5.836	0.21E+09	0.81E+08	0.12E-04	0.8621E-02	0.8621E-02	0.1270E-04	0.1269E-04	0.216	0.364	0.216
710	6.003	0.21E+09	0.81E+08	0.12E-04	0.8687E-02	0.8687E-02	0.1270E-04	0.1269E-04	0.216	0.370	0.216
711	6.170	0.21E+09	0.81E+08	0.12E-04	0.8753E-02	0.8753E-02	0.1270E-04	0.1269E-04	0.216	0.376	0.216
712	6.334	0.21E+09	0.81E+08	0.12E-04	0.8819E-02	0.8819E-02	0.1270E-04	0.1269E-04	0.216	0.382	0.216
713	6.501	0.21E+09	0.81E+08	0.12E-04	0.8885E-02	0.8885E-02	0.1270E-04	0.1269E-04	0.216	0.388	0.216
714	6.669	0.21E+09	0.81E+08	0.12E-04	0.8951E-02	0.8951E-02	0.1270E-04	0.1269E-04	0.216	0.394	0.216
715	6.836	0.21E+09	0.81E+08	0.12E-04	0.9017E-02	0.9017E-02	0.1270E-04	0.1269E-04	0.216	0.400	0.216
716	7.003	0.21E+09	0.81E+08	0.12E-04	0.9083E-02	0.9083E-02	0.1270E-04	0.1269E-04	0.216	0.406	0.216
717	7.170	0.21E+09	0.81E+08	0.12E-04	0.9149E-02	0.9149E-02	0.1270E-04	0.1269E-04	0.216	0.412	0.216
718	7.334	0.21E+09	0.81E+08	0.12E-04	0.9215E-02	0.9215E-02	0.1270E-04	0.1269E-04	0.216	0.418	0.216
719	7.501	0.21E+09	0.81E+08	0.12E-04	0.9281E-02	0.9281E-02	0.1270E-04	0.1269E-04	0.216	0.424	0.216
720	7.669	0.21E+09	0.81E+08	0.12E-04	0.9347E-02	0.9347E-02	0.1270E-04	0.1269E-04	0.216	0.430	0.216
721	7.836	0.21E+09	0.81E+08	0.12E-04	0.9413E-02	0.9413E-02	0.1270E-04	0.1269E-04	0.216	0.436	0.216
722	8.003	0.21E+09	0.81E+08	0.12E-04	0.9479E-02	0.9479E-02	0.1270E-04	0.1269E-04	0.216	0.442	0.216
723	8.170	0.21E+09	0.81E+08	0.12E-04	0.9545E-02	0.9545E-02	0.1270E-04	0.1269E-04	0.216	0.448	0.216
724	8.334	0.21E+09	0.81E+08	0.12E-04	0.9611E-02	0.9611E-02	0.1270E-04	0.1269E-04	0.216	0.454	0.216
725	8.501	0.21E+09	0.81E+08	0.12E-04	0.9677E-02	0.9677E-02	0.1270E-04	0.1269E-04	0.216	0.460	0.216
726	8.669	0.21E+09	0.81E+08	0.12E-04	0.9743E-02	0.9743E-02	0.1270E-04	0.1269E-04	0.216	0.466	0.216
727	8.836	0.21E+09	0.81E+08	0.12E-04	0.9809E-02	0.9809E-02	0.1270E-04	0.1269E-04	0.216	0.472	0.216
728	9.003	0.21E+09	0.81E+08	0.12E-04	0.9875E-02	0.9875E-02	0.1270E-04	0.1269E-04	0.216	0.478	0.216
729	9.170	0.21E+09	0.81E+08	0.12E-04	0.9941E-02	0.9941E-02	0.1270E-04	0.1269E-04	0.216	0.484	0.216
730	9.334	0.21E+09	0.81E+08	0.12E-04	1.0007E-02	1.0007E-02	0.1270E-04	0.1269E-04	0.216	0.490	0.216
731	9.501	0.21E+09	0.81E+08	0.12E-04	1.0073E-02	1.0073E-02	0.1270E-04	0.1269E-04	0.216	0.496	0.216
732	9.669	0.21E+09	0.81E+08	0.12E-04	1.0139E-02	1.0139E-02	0.1270E-04	0.1269E-04	0.216	0.502	0.216
733	9.836	0.21E+09	0.81E+08	0.12E-04	1.0205E-02	1.0205E-02	0.1270E-04	0.1269E-04	0.216	0.508	0.216
734	10.003	0.21E+09	0.81E+08	0.12E-04	1.0271E-02	1.0271E-02	0.1270E-04	0.1269E-04	0.216	0.514	0.216
735	10.170	0.21E+09	0.81E+08	0.12E-04	1.0337E-02	1.0337E-02	0.1270E-04	0.1269E-04	0.216	0.520	0.216
736	10.334	0.21E+09	0.81E+08	0.12E-04	1.0403E-02	1.0403E-02	0.1270E-04	0.1269E-04	0.216	0.526	0.216
737	10.501	0.21E+09	0.81E+08	0.12E-04	1.0469E-02	1.0469E-02	0.1270E-04	0.1269E-04	0.216	0.532	0.216
738	10.669	0.21E+09	0.81E+08	0.12E-04	1.0535E-02	1.0535E-02	0.1270E-04	0.1269E-04	0.216	0.538	0.216
739	10.836	0.21E+09	0.81E+08	0.12E-04	1.0601E-02	1.0601E-02	0.1270E-04	0.1269E-04	0.216	0.544	0.216
740	11.003	0.21E+09	0.81E+08	0.12E-04	1.0667E-02	1.0667E-02	0.1270E-04	0.1269E-04	0.216	0.550	0.216
741	11.170	0.21E+09	0.81E+08	0.12E-04	1.0733E-02	1.0733E-02	0.1270E-04	0.1269E-04	0.216	0.556	0.216
742	11.334	0.21E+09	0.81E+08	0.12E-04	1.0799E-02	1.0799E-02	0.1270E-04	0.1269E-04	0.216	0.562	0.216
743	11.501	0.21E+09	0.81E+08	0.12E-04	1.0865E-02	1.0865E-02	0.1270E-04	0.1269E-04	0.216	0.568	0.216
744	11.669	0.21E+09	0.81E+08	0.12E-04	1.0931E-02	1.0931E-02	0.1270E-04	0.1269E-04	0.216	0.574	0.216
745	11.836	0.21E+09	0.81E+08	0.12E-04	1.0997E-02	1.0997E-02	0.1270E-04	0.1269E-04	0.216	0.580	0.216
746	12.003	0.21E+09	0.81E+08	0.12E-04	1.1063E-02	1.1063E-02	0.1270E-04	0.1269E-04	0.216	0.586	0.216
747	12.170	0.21E+09	0.81E+08	0.12E-04	1.1129E-02	1.1129E-02	0.1270E-04	0.1269E-04	0.216	0.592	0.216
748	12.334	0.21E+09	0.81E+08	0.12E-04	1.1195E-02	1.1195E-02	0.1270E-04	0.1269E-04	0.216	0.598	0.216
749	12.501	0.21E+09	0.81E+08	0.12E-04	1.1261E-02	1.1261E-02	0.1270E-04	0.1269E-04	0.216	0.604	0.216
750	12.669	0.21E+09	0.81E+08	0.12E-04	1.1327E-02	1.1327E-02	0.1270E-04	0.1269E-04	0.216	0.610	0.216
751	12.836	0.21E+09	0.81E+08	0.12E-04	1.1393E-02	1.1393E-02	0.1270E-04	0.1269E-04	0.216	0.616	0.216
752	13.003	0.21E+09	0.81E+08	0.12E-04	1.1459E-02	1.1459E-02	0.1270E-04	0.1269E-04	0.216	0.622	0.216
753	13.170	0.21E+09	0.81E+08	0.12E-04	1.1525E-02	1.1525E-02	0.1270E-04	0.1269E-04	0.216	0.628	0.216
754	13.334	0.21E+09	0.81E+08	0.12E-04	1.1591E-02	1.1591E-02	0.1270E-04	0.1269E-04			

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 909977-0	
Programm:	4H-FRAP 11/87 / pcas-GmbH / kren9509756	
Bauwerk:	9813 - 2 00	ASB Nr.: Datum: 12.03.99

Verfasser:	Ingenleurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel 030 - 909977-0		
Programm:	4H-FRAP 11/97 / pcas-GmbH / kren5059756		
Bauwerk:	9813 - 2.00	ASB Nr.:	Datum: 12.03.99

### Stabteilung und Querschnittswerte

[illegible]

### Stabteilung und Querschnittswerte

	C-Model	G-Model	A	I <sub>0</sub>	I <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>	I <sub>4</sub>	I <sub>5</sub>	I <sub>6</sub>	I <sub>7</sub>	I <sub>8</sub>	I <sub>9</sub>	I <sub>10</sub>	I <sub>11</sub>	I <sub>12</sub>	I <sub>13</sub>	I <sub>14</sub>	I <sub>15</sub>	I <sub>16</sub>	I <sub>17</sub>	I <sub>18</sub>	I <sub>19</sub>	I <sub>20</sub>	I <sub>21</sub>	I <sub>22</sub>	I <sub>23</sub>	I <sub>24</sub>	I <sub>25</sub>	I <sub>26</sub>	I <sub>27</sub>	I <sub>28</sub>	I <sub>29</sub>	I <sub>30</sub>	I <sub>31</sub>	I <sub>32</sub>	I <sub>33</sub>	I <sub>34</sub>	I <sub>35</sub>	I <sub>36</sub>	I <sub>37</sub>	I <sub>38</sub>	I <sub>39</sub>	I <sub>40</sub>	I <sub>41</sub>	I <sub>42</sub>	I <sub>43</sub>	I <sub>44</sub>	I <sub>45</sub>	I <sub>46</sub>	I <sub>47</sub>	I <sub>48</sub>	I <sub>49</sub>	I <sub>50</sub>	I <sub>51</sub>	I <sub>52</sub>	I <sub>53</sub>	I <sub>54</sub>	I <sub>55</sub>	I <sub>56</sub>	I <sub>57</sub>	I <sub>58</sub>	I <sub>59</sub>	I <sub>60</sub>	I <sub>61</sub>	I <sub>62</sub>	I <sub>63</sub>	I <sub>64</sub>	I <sub>65</sub>	I <sub>66</sub>	I <sub>67</sub>	I <sub>68</sub>	I <sub>69</sub>	I <sub>70</sub>	I <sub>71</sub>	I <sub>72</sub>	I <sub>73</sub>	I <sub>74</sub>	I <sub>75</sub>	I <sub>76</sub>	I <sub>77</sub>	I <sub>78</sub>	I <sub>79</sub>	I <sub>80</sub>	I <sub>81</sub>	I <sub>82</sub>	I <sub>83</sub>	I <sub>84</sub>	I <sub>85</sub>	I <sub>86</sub>	I <sub>87</sub>	I <sub>88</sub>	I <sub>89</sub>	I <sub>90</sub>	I <sub>91</sub>	I <sub>92</sub>	I <sub>93</sub>	I <sub>94</sub>	I <sub>95</sub>	I <sub>96</sub>	I <sub>97</sub>	I <sub>98</sub>	I <sub>99</sub>	I <sub>100</sub>	I <sub>101</sub>	I <sub>102</sub>	I <sub>103</sub>	I <sub>104</sub>	I <sub>105</sub>	I <sub>106</sub>	I <sub>107</sub>	I <sub>108</sub>	I <sub>109</sub>	I <sub>110</sub>	I <sub>111</sub>	I <sub>112</sub>	I <sub>113</sub>	I <sub>114</sub>	I <sub>115</sub>	I <sub>116</sub>	I <sub>117</sub>	I <sub>118</sub>	I <sub>119</sub>	I <sub>120</sub>	I <sub>121</sub>	I <sub>122</sub>	I <sub>123</sub>	I <sub>124</sub>	I <sub>125</sub>	I <sub>126</sub>	I <sub>127</sub>	I <sub>128</sub>	I <sub>129</sub>	I <sub>130</sub>	I <sub>131</sub>	I <sub>132</sub>	I <sub>133</sub>	I <sub>134</sub>	I <sub>135</sub>	I <sub>136</sub>	I <sub>137</sub>	I <sub>138</sub>	I <sub>139</sub>	I <sub>140</sub>	I <sub>141</sub>	I <sub>142</sub>	I <sub>143</sub>	I <sub>144</sub>	I <sub>145</sub>	I <sub>146</sub>	I <sub>147</sub>	I <sub>148</sub>	I <sub>149</sub>	I <sub>150</sub>	I <sub>151</sub>	I <sub>152</sub>	I <sub>153</sub>	I <sub>154</sub>	I <sub>155</sub>	I <sub>156</sub>	I <sub>157</sub>	I <sub>158</sub>	I <sub>159</sub>	I <sub>160</sub>	I <sub>161</sub>	I <sub>162</sub>	I <sub>163</sub>	I <sub>164</sub>	I <sub>165</sub>	I <sub>166</sub>	I <sub>167</sub>	I <sub>168</sub>	I <sub>169</sub>	I <sub>170</sub>	I <sub>171</sub>	I <sub>172</sub>	I <sub>173</sub>	I <sub>174</sub>	I <sub>175</sub>	I <sub>176</sub>	I <sub>177</sub>	I <sub>178</sub>	I <sub>179</sub>	I 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<sub>296</sub>	I <sub>297</sub>	I <sub>298</sub>	I <sub>299</sub>	I <sub>300</sub>	I <sub>301</sub>	I <sub>302</sub>	I <sub>303</sub>	I <sub>304</sub>	I <sub>305</sub>	I <sub>306</sub>	I <sub>307</sub>	I <sub>308</sub>	I <sub>309</sub>	I <sub>310</sub>	I <sub>311</sub>	I <sub>312</sub>	I <sub>313</sub>	I <sub>314</sub>	I <sub>315</sub>	I <sub>316</sub>	I <sub>317</sub>	I <sub>318</sub>	I <sub>319</sub>	I <sub>320</sub> </
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Bauteil:	Pos. 10 / 3D-Struktur Busbahnsteig 4/5	Archiv Nr.:
Block:		Seite: 145
Vorgang:		

Bauteil:	Pos.10 / 3D-Struktur Bustehnsieg 4/5	Archiv Nr.:
Block:		Seite: 146
Vorgang:		

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 909977-0		
Programm:	4H-FRAP 11/87 / pcse-GmbH / kran9509750		
Bauwerk:	9813 - 2.00	ASB Nr.:	Datum: 12.03.95

### Stabteilung und Querschnittswerte

[illegible]

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 808877-0	
Programm:	4H-FRAP 11/97 / pcse-GmbH / kren9509756	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.98

### Stabteilung und Querschnittswerte

[illegible]

Bauteil:	Pos.10 / 3D-Struktur Burbahnstieg 4/5	Archiv Nr.:
Block:		
Vorgang:	Seite: 147	

Bauteil: Pos.10 / 3D-Struktur Busbahnung 4/5 Block: Vorgang:	Seite: 148	Archiv Nr.:
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Verfasser:	Ingenleurbüro Krentel GmbH Forststr. 28 14163 Berlin - Zehlendorf Tel. 030 - 808977-0	
Programm:	4H-FRAP 11/97 / pcba-GmbH / Wan3509756	
Bauwerk:	9813 - 2.00	
ASB Nr.:		Datum: 12.03.98

### Stabteilung und Querschnittswerte

[illegible]

Verfasser:	Ingenieurbüro Krentel GmbH Forestr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	
Programm:	4H-FRAP 11/87 / PC-86-GmbH / kren/9509756	
Bauwerk:	9813 - 2.00	ASP 11/87

Stichting 1.8

Stabilung und Querschnittswerte

Stab	E-Modul	G-Modul	$m$	$\lambda$	$\mu$	$\eta$	$\eta_1$	$\eta_2$
	$\times 10^9$	$\text{km}^2$	$\times 10^9$	$\text{km}^2$	$1/\text{K}$			
914 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
914 0.117	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
914 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
914 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
914 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
914 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
914 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
916 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
918 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
920 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
922 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
924 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
926 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
928 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
928 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
928 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
928 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
928 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
928 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
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932 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
932 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
932 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
932 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
932 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
932 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
932 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
934 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
936 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 0.147	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 0.334	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 0.501	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 0.678	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 0.834	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
938 1.003	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E+04	0.1701E+04	0.1248E+04	0.216 1.162
940 0.000	0.21E+09	0.81E+08	0.12E+04	0.4330E+02	0.8122E			

Teil:	Pos.10 / 3D-Struktur Busbahnhof 4/5	Archiv Nr.:
ok:	Seite: 149	
gang:		

	0.826	0.21E+09	0.81E+08	0.12E+04	0.5589E-02	0.5219E-04	0.5289E-06	0.8599E-06	0.1267E-04	0.216	0.108	
										0.216	0.122	
utitel:	Pos.10 / 3D-Struktur Bauhahnung 4/5										Archiv Nr.:	
lock:												
gang:											Seite:	150

Auftraggeber: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0		
Auftrag: 4H-FRAP 11/07 / pcba-GmbH / krentel500758		
Arbeitsnr.: 9813 - 2.00	ASB Nr.:	Datum: 12.03.98

### Verteilung und Querschnittswerte

[illegible]

Pos.10 / 3D-Struktur Bauherrtrag 4/5	Seite 151	Archiv Nr.:
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**Verfasser:** Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 509977-0

**Gramm:** 4H-FRAP 11/97 / pcae-GmbH / kren9509758

**Nr. der Werk:** 9813 - 2.00

work: 9813 - 2.00

[illegible]

Pos. 10 / 3D-Struktur Beschreibung 4/5	Seite: 152	Archiv Nr.:
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Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 809977-0	
Programm:	4H-FRAP 11/87 f. pc-ee GmbH / kren3509756	
Bauwerk:	9813 - 2.00	ASB Nr. Datum: 12.03.98

### Stabteilung und Querschnittswerte

Slab	$E_{\text{modul}}$	$E_{\text{modul}}$	$\mu$	$A$	$I_1$	$I_2$	$I_3$	$\eta_1$	$\eta_2$	$\eta_3$	$\eta_4$
965	0.649	0.21E+09	0.81E+08	0.12E+04	0.5299E-06	0.4049E-06	0.1269E-04	0.216	0.102		
965	0.836	0.21E+09	0.81E+08	0.12E+04	0.5558E-02	0.5219E-06	0.7984E-09	0.24E-04	0.12		
956	1.003	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
970	0.376	0.21E+09	0.81E+08	0.12E+04	0.5139E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
970	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
970	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.113	
970	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.111	
970	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.105	
970	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.102	
970	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.102	
972	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.116	
972	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.113	
972	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.111	
972	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.105	
972	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.102	
972	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.102	
974	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.105	
974	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.105	
974	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.105	
974	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.105	
974	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.105	
974	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.105	
974	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.105	
976	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
976	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
976	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	
976	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.119	
976	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.119	
976	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.119	
976	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.119	
978	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
978	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
978	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	
978	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.119	
978	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.119	
978	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.119	
978	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.119	
980	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
980	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
980	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	
980	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.119	
980	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.119	
980	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.119	
980	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.119	
982	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
982	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
982	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	
982	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.119	
982	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.119	
982	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.119	
982	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.119	
984	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
984	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
984	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	
984	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.119	
984	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.119	
984	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.119	
984	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.119	
986	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
986	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
986	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	
986	0.376	0.21E+09	0.81E+08	0.12E+04	0.5340E-02	0.4956E-06	0.6086E-05	0.1264E-04	0.216	0.119	
986	0.501	0.21E+09	0.81E+08	0.12E+04	0.5298E-02	0.4895E-06	0.5895E-05	0.1264E-04	0.216	0.119	
986	0.627	0.21E+09	0.81E+08	0.12E+04	0.5238E-02	0.4834E-06	0.5709E-05	0.1264E-04	0.216	0.119	
986	0.752	0.21E+09	0.81E+08	0.12E+04	0.5187E-02	0.4773E-06	0.4961E-05	0.1264E-04	0.216	0.119	
988	0.000	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5139E-06	0.7359E-05	0.1264E-04	0.216	0.119	
988	0.125	0.21E+09	0.81E+08	0.12E+04	0.5411E-02	0.5078E-06	0.6787E-05	0.1264E-04	0.216	0.119	
988	0.251	0.21E+09	0.81E+08	0.12E+04	0.5390E-02	0.5017E-06	0.6494E-05	0.1264E-04	0.216	0.119	

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 909977-0	
Programm:	4H-FRAP 11/97 / pcae-GmbH / kren9508756	
Bauwerk:	9813 - 2.00	ASB Nr. Datum: 12.02.00

### Stabteilung und Querschnittswerte

[illegible]

Bauteil:	Pos.10 / 3D-Struktur Busbahnstang 4/5	Archiv Nr.:
Block:		Seite: 153
Vorgang:		

Bauteil:	Pos. 10 / 3D-Struktur	Archiv Nr.:
Block:	Bauzeichnung 4/5	
Seite:		154

Verlasser:	Ingenieurburo Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel 030 - 809977-0	
Programm:	4H-FRAP 11/97 / pcwa-GmbH / kran8509756	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.99

### Stabteilung und Querschnittswerte

[illegible]

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809277-0	
Programm:	4H-FRAP 11/97 / pcase-GmbH / kren9509756	
Bauwerk:	9813 - 2 00	

### Stellung und Organisation

Stabellung und Querschnittswerte										
Stab	m	E-Modul kN/m <sup>2</sup>	G-Modul kN/m <sup>2</sup>	l <sub>1</sub> m	l <sub>2</sub> m	I <sub>y</sub> cm <sup>4</sup>	I <sub>z</sub> cm <sup>4</sup>	I <sub>yz</sub> cm <sup>4</sup>	W <sub>y</sub> cm <sup>3</sup>	W <sub>z</sub> cm <sup>3</sup>
593	0.167	0.21E+09	0.81E+08	0.12E-04	0.5658E+02	0.5219E-04	0.7946E+05	0.1267E-04	0.2714	0.322
594	0.334	0.21E+09	0.81E+08	0.12E-04	0.5625E+02	0.5299E-08	0.8598E+05	0.1267E-04	0.2616	0.326
595	0.501	0.21E+09	0.81E+08	0.12E-04	0.5681E+02	0.5193E-08	0.9255E+05	0.1267E-04	0.2616	0.329
595	0.669	0.21E+09	0.81E+08	0.12E-04	0.5757E+02	0.5499E-08	0.9982E+05	0.1267E-04	0.2616	0.333
595	0.836	0.21E+09	0.81E+08	0.12E-04	0.5884E+02	0.5539E-08	0.1069E+06	0.1267E-04	0.2616	0.336
595	1.003	0.21E+09	0.81E+08	0.12E-04	0.5990E+02	0.5619E-08	0.1147E+06	0.1267E-04	0.2616	0.340
642	0.000	0.21E+09	0.81E+08	0.12E-04	0.4800E+02	0.5619E-08	0.1145E+06	0.1267E-04	0.216	0.340
642	0.167	0.21E+09	0.81E+08	0.12E-04	0.5960E+02	0.5703E-08	0.1235E+06	0.1267E-04	0.216	0.340
642	0.334	0.21E+09	0.81E+08	0.12E-04	0.6303E+02	0.5787E-08	0.1318E+06	0.1267E-04	0.216	0.343
642	0.501	0.21E+09	0.81E+08	0.12E-04	0.6699E+02	0.5871E-08	0.1404E+06	0.1267E-04	0.216	0.346
642	0.669	0.21E+09	0.81E+08	0.12E-04	0.6169E+02	0.5855E-08	0.1500E+06	0.1267E-04	0.216	0.350
642	0.836	0.21E+09	0.81E+08	0.12E-04	0.6239E+02	0.6039E+04	0.1599E+06	0.1267E-04	0.216	0.358
642	1.003	0.21E+09	0.81E+08	0.12E-04	0.6308E+02	0.6122E-08	0.1701E+06	0.1267E-04	0.216	0.362
691	0.000	0.21E+09	0.81E+08	0.12E-04	0.6122E+02	0.6122E-08	0.1701E+06	0.1267E-04	0.216	0.362
691	0.167	0.21E+09	0.81E+08	0.12E-04	0.6387E+02	0.6202E-08	0.1802E+06	0.1267E-04	0.216	0.362
691	0.334	0.21E+09	0.81E+08	0.12E-04	0.6488E+02	0.6282E-08	0.1907E+06	0.1267E-04	0.216	0.366
691	0.501	0.21E+09	0.81E+08	0.12E-04	0.6588E+02	0.6362E-08	0.2013E+06	0.1267E-04	0.216	0.370
691	0.669	0.21E+09	0.81E+08	0.12E-04	0.6744E+02	0.6443E+02	0.2127E+06	0.1267E-04	0.216	0.374
691	0.836	0.21E+09	0.81E+08	0.12E-04	0.6848E+02	0.6523E+02	0.2243E+06	0.1267E-04	0.216	0.378
740	0.000	0.21E+09	0.81E+08	0.12E-04	0.6707E+02	0.6603E+02	0.2263E+06	0.1267E-04	0.216	0.382
740	0.167	0.21E+09	0.81E+08	0.12E-04	0.6961E+02	0.6231E+02	0.2342E+06	0.1267E-04	0.216	0.386
740	0.334	0.21E+09	0.81E+08	0.12E-04	0.6908E+02	0.6251E+02	0.2442E+06	0.1267E-04	0.216	0.390
740	0.501	0.21E+09	0.81E+08	0.12E-04	0.6707E+02	0.6403E+02	0.2623E+06	0.1267E-04	0.216	0.394
836	0.000	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
836	0.167	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
836	0.334	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
836	0.501	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
836	0.669	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
836	0.836	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
836	1.003	0.21E+09	0.81E+08	0.12E-04	0.6532E+02	0.6532E+02	0.2243E+06	0.1267E-04	0.216	0.398
867	0.000	0.21E+09	0.81E+08	0.12E-04	0.6308E+02	0.6122E-08	0.1701E+06	0.1267E-04	0.216	0.362
867	0.167	0.21E+09	0.81E+08	0.12E-04	0.6239E+02	0.6039E+04	0.1599E+06	0.1267E-04	0.216	0.358
867	0.334	0.21E+09	0.81E+08	0.12E-04	0.6122E+02	0.6122E-08	0.1701E+06	0.1267E-04	0.216	0.362
867	0.501	0.21E+09	0.81E+08	0.12E-04	0.6039E+02	0.5955E+02	0.1800E+06	0.1267E-04	0.216	0.366
867	0.669	0.21E+09	0.81E+08	0.12E-04	0.5955E+02	0.5871E+02	0.1907E+06	0.1267E-04	0.216	0.370
867	0.836	0.21E+09	0.81E+08	0.12E-04	0.5871E+02	0.5787E+02	0.2013E+06	0.1267E-04	0.216	0.374
867	1.003	0.21E+09	0.81E+08	0.12E-04	0.5787E+02	0.5703E+02	0.2127E+06	0.1267E-04	0.216	0.378
867	1.170	0.21E+09	0.81E+08	0.12E-04	0.5703E+02	0.5619E+02	0.2243E+06	0.1267E-04	0.216	0.382
836	0.000	0.21E+09	0.81E+08	0.12E-04	0.5619E+02	0.5619E-08	0.1145E+06	0.1267E-04	0.216	0.340
836	0.167	0.21E+09	0.81E+08	0.12E-04	0.5842E+02	0.5539E+02	0.1069E+06	0.1267E-04	0.216	0.336
836	0.334	0.21E+09	0.81E+08	0.12E-04	0.5757E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
836	0.501	0.21E+09	0.81E+08	0.12E-04	0.5681E+02	0.5193E+02	0.9255E+05	0.1267E-04	0.2616	0.329
836	0.669	0.21E+09	0.81E+08	0.12E-04	0.5625E+02	0.5299E+02	0.8598E+05	0.1267E-04	0.2616	0.326
836	0.836	0.21E+09	0.81E+08	0.12E-04	0.5539E+02	0.5193E+02	0.9255E+05	0.1267E-04	0.2616	0.329
836	1.003	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
836	1.170	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	0.000	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	0.167	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	0.334	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	0.501	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	0.669	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	0.836	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	1.003	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	1.170	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	1.337	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	1.504	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	1.671	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	1.838	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	2.005	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	2.172	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	2.339	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	2.506	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	2.673	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	2.840	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	3.007	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	3.174	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	3.341	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	3.508	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	3.675	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	3.842	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	4.009	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	4.176	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	4.343	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	4.510	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	4.677	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	4.844	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	5.011	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	5.178	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	5.345	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	5.512	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	5.679	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	5.846	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	6.013	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	6.180	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	6.347	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0.333
985	6.514	0.21E+09	0.81E+08	0.12E-04	0.5499E+02	0.5499E+02	0.9982E+05	0.1267E-04	0.2616	0

Bauzeit:	Pos. 10 / 3D-Struktur Bauzeitsieg 4/5	Archiv Nr.:
Block:		Seite: 155

Bauteil: Pos.10 / 3D-Struktur Beschreibung 4/5	Archiv Nr.:
Block:	Seite: 156

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977 0	
Programm:	4H-FRAP 11/97 / pcas-GMDH / tran9509756	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.99

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel 030-809977-0	
Programm:	4H-FRAP 11/87 / pcsw-GmbH / kran9509756	
Bauwerk:	9813 - 2.00	

### Stabteilung und Querschnittswerte

State	n	E <sub>Modul</sub>	E <sub>Modul</sub>	$\mu_1$	$\mu_2$	$\mu_3$	$\mu_4$	$\mu_5$	$\mu_6$	$\mu_7$	$\mu_8$	$\mu_9$	$\mu_{10}$	$\mu_{11}$	$\mu_{12}$	$\mu_{13}$	$\mu_{14}$	$\mu_{15}$	$\mu_{16}$	$\mu_{17}$	$\mu_{18}$	$\mu_{19}$	$\mu_{20}$	$\mu_{21}$	$\mu_{22}$	$\mu_{23}$	$\mu_{24}$	$\mu_{25}$	$\mu_{26}$	$\mu_{27}$	$\mu_{28}$	$\mu_{29}$	$\mu_{30}$	$\mu_{31}$	$\mu_{32}$	$\mu_{33}$	$\mu_{34}$	$\mu_{35}$	$\mu_{36}$	$\mu_{37}$	$\mu_{38}$	$\mu_{39}$	$\mu_{40}$	$\mu_{41}$	$\mu_{42}$	$\mu_{43}$	$\mu_{44}$	$\mu_{45}$	$\mu_{46}$	$\mu_{47}$	$\mu_{48}$	$\mu_{49}$	$\mu_{50}$	$\mu_{51}$	$\mu_{52}$	$\mu_{53}$	$\mu_{54}$	$\mu_{55}$	$\mu_{56}$	$\mu_{57}$	$\mu_{58}$	$\mu_{59}$	$\mu_{60}$	$\mu_{61}$	$\mu_{62}$	$\mu_{63}$	$\mu_{64}$	$\mu_{65}$	$\mu_{66}$	$\mu_{67}$	$\mu_{68}$	$\mu_{69}$	$\mu_{70}$	$\mu_{71}$	$\mu_{72}$	$\mu_{73}$	$\mu_{74}$	$\mu_{75}$	$\mu_{76}$	$\mu_{77}$	$\mu_{78}$	$\mu_{79}$	$\mu_{80}$	$\mu_{81}$	$\mu_{82}$	$\mu_{83}$	$\mu_{84}$	$\mu_{85}$	$\mu_{86}$	$\mu_{87}$	$\mu_{88}$	$\mu_{89}$	$\mu_{90}$	$\mu_{91}$	$\mu_{92}$	$\mu_{93}$	$\mu_{94}$	$\mu_{95}$	$\mu_{96}$	$\mu_{97}$	$\mu_{98}$	$\mu_{99}$	$\mu_{100}$	$\mu_{101}$	$\mu_{102}$	$\mu_{103}$	$\mu_{104}$	$\mu_{105}$	$\mu_{106}$	$\mu_{107}$	$\mu_{108}$	$\mu_{109}$	$\mu_{110}$	$\mu_{111}$	$\mu_{112}$	$\mu_{113}$	$\mu_{114}$	$\mu_{115}$	$\mu_{116}$	$\mu_{117}$	$\mu_{118}$	$\mu_{119}$	$\mu_{120}$	$\mu_{121}$	$\mu_{122}$	$\mu_{123}$	$\mu_{124}$	$\mu_{125}$	$\mu_{126}$	$\mu_{127}$	$\mu_{128}$	$\mu_{129}$	$\mu_{130}$	$\mu_{131}$	$\mu_{132}$	$\mu_{133}$	$\mu_{134}$	$\mu_{135}$	$\mu_{136}$	$\mu_{137}$	$\mu_{138}$	$\mu_{139}$	$\mu_{140}$	$\mu_{141}$	$\mu_{142}$	$\mu_{143}$	$\mu_{144}$	$\mu_{145}$	$\mu_{146}$	$\mu_{147}$	$\mu_{148}$	$\mu_{149}$	$\mu_{150}$	$\mu_{151}$	$\mu_{152}$	$\mu_{153}$	$\mu_{154}$	$\mu_{155}$	$\mu_{156}$	$\mu_{157}$	$\mu_{158}$	$\mu_{159}$	$\mu_{160}$	$\mu_{161}$	$\mu_{162}$	$\mu_{163}$	$\mu_{164}$	$\mu_{165}$	$\mu_{166}$	$\mu_{167}$	$\mu_{168}$	$\mu_{169}$	$\mu_{170}$	$\mu_{171}$	$\mu_{172}$	$\mu_{173}$	$\mu_{174}$	$\mu_{175}$	$\mu_{176}$	$\mu_{177}$	$\mu_{178}$	$\mu_{179}$	$\mu_{180}$	$\mu_{181}$	$\mu_{182}$	$\mu_{183}$	$\mu_{184}$	$\mu_{185}$	$\mu_{186}$	$\mu_{187}$	$\mu_{188}$	$\mu_{189}$	$\mu_{190}$	$\mu_{191}$	$\mu_{192}$	$\mu_{193}$	$\mu_{194}$	$\mu_{195}$	$\mu_{196}$	$\mu_{197}$	$\mu_{198}$	$\mu_{199}$	$\mu_{200}$	$\mu_{201}$	$\mu_{202}$	$\mu_{203}$	$\mu_{204}$	$\mu_{205}$	$\mu_{206}$	$\mu_{207}$	$\mu_{208}$	$\mu_{209}$	$\mu_{210}$	$\mu_{211}$	$\mu_{212}$	$\mu_{213}$	$\mu_{214}$	$\mu_{215}$	$\mu_{216}$	$\mu_{217}$	$\mu_{218}$	$\mu_{219}$	$\mu_{220}$	$\mu_{221}$	$\mu_{222}$	$\mu_{223}$	$\mu_{224}$	$\mu_{225}$	$\mu_{226}$	$\mu_{227}$	$\mu_{228}$	$\mu_{229}$	$\mu_{230}$	$\mu_{231}$	$\mu_{232}$	$\mu_{233}$	$\mu_{234}$	$\mu_{235}$	$\mu_{236}$	$\mu_{237}$	$\mu_{238}$	$\mu_{239}$	$\mu_{240}$	$\mu_{241}$	$\mu_{242}$	$\mu_{243}$	$\mu_{244}$	$\mu_{245}$	$\mu_{246}$	$\mu_{247}$	$\mu_{248}$	$\mu_{249}$	$\mu_{250}$	$\mu_{251}$	$\mu_{252}$	$\mu_{253}$	$\mu_{254}$	$\mu_{255}$	$\mu_{256}$	$\mu_{257}$	$\mu_{258}$	$\mu_{259}$	$\mu_{260}$	$\mu_{261}$	$\mu_{262}$	$\mu_{263}$	$\mu_{264}$	$\mu_{265}$	$\mu_{266}$	$\mu_{267}$	$\mu_{268}$	$\mu_{269}$	$\mu_{270}$	$\mu_{271}$	$\mu_{272}$	$\mu_{273}$	$\mu_{274}$	$\mu_{275}$	$\mu_{276}$	$\mu_{277}$	$\mu_{278}$	$\mu_{279}$	$\mu_{280}$	$\mu_{281}$	$\mu_{282}$	$\mu_{283}$	$\mu_{284}$	$\mu_{285}$	$\mu_{286}$	$\mu_{287}$	$\mu_{288}$	$\mu_{289}$	$\mu_{290}$	$\mu_{291}$	$\mu_{292}$	$\mu_{293}$	$\mu_{294}$	$\mu_{295}$	$\mu_{296}$	$\mu_{297}$	$\mu_{298}$	$\mu_{299}$	$\mu_{300}$																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1386	0.375	0.21E+09	0.01E+08	0.12E+04	0.5740E-02	0.2990E-04	0.2890E-04	0.2990E-04	0.1290E-04	0.120	0.200																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Bauteil:	Pos.10 / 3D-Struktur Busbahnsteig 4/5	Archiv Nr.:
Block:		Seite: 157
Vorgang:		

## Stabteilung und Querschnittswert

[illegible]

Bauteil:	Pos.10 / 3D-Struktur Busbahntag 4/5	Archiv Nr.:
Block:		
Vorgang:	Seite: 158	

Verlasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel: 030 - 809977-0	
Programm:	4H-FRAP 11/97 / pcsw-GmbH / kren0509756	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.99

### Stellung und Querschulter

Abbildung 1 – Querschnittswerte											
		E-Modul [N/mm <sup>2</sup> ]	G-Modul [N/mm <sup>2</sup> ]	qu [mm]	A [mm <sup>2</sup> ]	Z <sub>1</sub>	I <sub>y</sub>	I <sub>z</sub>	I <sub>xy</sub>	W <sub>y</sub>	W <sub>z</sub>
		[N/mm <sup>2</sup> ]	[N/mm <sup>2</sup> ]	[mm]	[mm <sup>2</sup> ]		[mm <sup>4</sup> ]	[mm <sup>4</sup> ]	[mm <sup>4</sup> ]	[mm <sup>3</sup> ]	[mm <sup>3</sup> ]
0,050	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,056	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,058	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,059	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,060	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,062	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,063	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,064	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,065	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,066	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,067	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,068	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,069	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,070	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,071	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,072	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,073	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,074	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,075	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,076	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,077	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,078	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,079	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03		0,358	0,358
0,080	0,21E+09	0,81E+08	0,18E+04	0,1350E-01	0,1350E-01	0,3970E-03	0,1805E-03	0,1895E-03			

Teil:	Pos.10 / 3D-Struktur Busbahnhof 4/5	Archiv Nr.:
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gang:	Seite: 159	

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 806977-0	ASB Nr.:	
Programm:	4H-FRAP 11/87 / pcse-GmbH / kren9506756	Datum:	12.03.99
Bauwerk:	9813 - 2.00		

### Stellung und Funktion in

[illegible]

Anteil: Pos.10/ 3D-Struktur Besatzungslog 4/5 Pack: Gang:	Seite: 160	Archiv Nr.:
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Verfasser:	Ingenleurbüro Krentel GmbH Forestr. 26 14163 Berlin - Zehlendorf Tel. 030 - 609977-0	
Programm:	4K-FRAP 11/97 / pcas-GmbH / kuan3509758	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.98

### Stabteilung und Querschnittswerte

[illegible]

Bauteil:	Pos.10 / 3D-Struktur Busbahnhof 4/5	Archiv Nr.:
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Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809077-0		
Programm:	4H-FRAP 11/97 / pcas-GmbH / kren0509756		
Bauwerk:	9813 - 2.00	ASB Nr.:	Datum: 12.03.99

### Stabteilung und Querschnittswerte

[illegible]

Bauteil:	Pos.10 / 3D-Struktur Buszahnstang 4/5	Archiv Nr.:
Block:	Seite: 163	
Vorwand:		

Verfasser:	Ingenieurbüro Krentel GmbH Forsstr. 26 14163 Berlin - Zehlendorf Tel. 030 - 800977-0	
Programm:	4H-FRAP 11/87 / pcba-GmbH / kren9509758	
Bauwerk:	9813 - 2.00	ASB Nr. _____ Datum: 12.03.99

### Stabteilung und Querschnittswerte

[illegible]

Bauteil:	Pos.10 / 3D-Struktur Bustahnhaltg 4/5	Archiv Nr.:
Block:		Seite: 162
Vorgang:		

Verlasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809877-0	
Programm:	4H-FRAP 11/87 / pcas-GmbH / kran9509750	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.99

### Stabteilung und Querschnittswerte

#	s	E-MQ <sub>1</sub> h <sub>1</sub> /n <sub>1</sub> <sup>2</sup>	G-MQ <sub>1</sub> h <sub>2</sub> /n <sub>2</sub> <sup>2</sup>	C 1/7C	A <sub>1</sub> n <sub>1</sub>	I <sub>1</sub>	I <sub>2</sub>	I <sub>3</sub>	I <sub>4</sub>	I <sub>5</sub>	I <sub>6</sub>	I <sub>7</sub>	I <sub>8</sub>	I <sub>9</sub>	I <sub>10</sub>	I <sub>11</sub>	I <sub>12</sub>	I <sub>13</sub>	I <sub>14</sub>	I <sub>15</sub>	I <sub>16</sub>	I <sub>17</sub>	I <sub>18</sub>	I <sub>19</sub>	I <sub>20</sub>	I <sub>21</sub>	I <sub>22</sub>	I <sub>23</sub>	I <sub>24</sub>	I <sub>25</sub>	I <sub>26</sub>	I <sub>27</sub>	I <sub>28</sub>	I <sub>29</sub>	I <sub>30</sub>	I <sub>31</sub>	I <sub>32</sub>	I <sub>33</sub>	I <sub>34</sub>	I <sub>35</sub>	I <sub>36</sub>	I <sub>37</sub>	I <sub>38</sub>	I <sub>39</sub>	I <sub>40</sub>	I <sub>41</sub>	I <sub>42</sub>	I <sub>43</sub>	I <sub>44</sub>	I <sub>45</sub>	I <sub>46</sub>	I <sub>47</sub>	I <sub>48</sub>	I <sub>49</sub>	I <sub>50</sub>	I <sub>51</sub>	I <sub>52</sub>	I <sub>53</sub>	I <sub>54</sub>	I <sub>55</sub>	I <sub>56</sub>	I <sub>57</sub>	I <sub>58</sub>	I <sub>59</sub>	I <sub>60</sub>	I <sub>61</sub>	I <sub>62</sub>	I <sub>63</sub>	I <sub>64</sub>	I <sub>65</sub>	I <sub>66</sub>	I <sub>67</sub>	I <sub>68</sub>	I <sub>69</sub>	I <sub>70</sub>	I <sub>71</sub>	I <sub>72</sub>	I <sub>73</sub>	I <sub>74</sub>	I <sub>75</sub>	I <sub>76</sub>	I <sub>77</sub>	I <sub>78</sub>	I <sub>79</sub>	I <sub>80</sub>	I <sub>81</sub>	I <sub>82</sub>	I <sub>83</sub>	I <sub>84</sub>	I <sub>85</sub>	I <sub>86</sub>	I <sub>87</sub>	I <sub>88</sub>	I <sub>89</sub>	I <sub>90</sub>	I <sub>91</sub>	I <sub>92</sub>	I <sub>93</sub>	I <sub>94</sub>	I <sub>95</sub>	I <sub>96</sub>	I <sub>97</sub>	I <sub>98</sub>	I <sub>99</sub>	I <sub>100</sub>	I <sub>101</sub>	I <sub>102</sub>	I <sub>103</sub>	I <sub>104</sub>	I <sub>105</sub>	I <sub>106</sub>	I <sub>107</sub>	I <sub>108</sub>	I <sub>109</sub>	I <sub>110</sub>	I <sub>111</sub>	I <sub>112</sub>	I <sub>113</sub>	I <sub>114</sub>	I <sub>115</sub>	I <sub>116</sub>	I <sub>117</sub>	I <sub>118</sub>	I <sub>119</sub>	I <sub>120</sub>	I <sub>121</sub>	I <sub>122</sub>	I <sub>123</sub>	I <sub>124</sub>	I <sub>125</sub>	I <sub>126</sub>	I <sub>127</sub>	I <sub>128</sub>	I <sub>129</sub>	I <sub>130</sub>	I <sub>131</sub>	I <sub>132</sub>	I <sub>133</sub>	I <sub>134</sub>	I <sub>135</sub>	I <sub>136</sub>	I <sub>137</sub>	I <sub>138</sub>	I <sub>139</sub>	I <sub>140</sub>	I <sub>141</sub>	I <sub>142</sub>	I <sub>143</sub>	I <sub>144</sub>	I <sub>145</sub>	I <sub>146</sub>	I <sub>147</sub>	I <sub>148</sub>	I <sub>149</sub>	I <sub>150</sub>	I <sub>151</sub>	I <sub>152</sub>	I <sub>153</sub>	I <sub>154</sub>	I <sub>155</sub>	I <sub>156</sub>	I <sub>157</sub>	I <sub>158</sub>	I <sub>159</sub>	I <sub>160</sub>	I <sub>161</sub>	I <sub>162</sub>	I <sub>163</sub>	I <sub>164</sub>	I <sub>165</sub>	I <sub>166</sub>	I <sub>167</sub>	I <sub>168</sub>	I <sub>169</sub>	I <sub>170</sub>	I <sub>171</sub>	I <sub>172</sub>	I <sub>173</sub>	I <sub>174</sub>	I <sub>175</sub>	I <sub>176</sub>	I <sub>177</sub>	I <sub>178</sub>	I <sub>179</sub>	I <sub>180</sub>	I <sub>181</sub>	I <sub>182</sub>	I <sub>183</sub>	I <sub>184</sub>	I <sub>185</sub>	I <sub>186</sub>	I <sub>187</sub>	I <sub>188</sub>	I <sub>189</sub>	I <sub>190</sub>	I <sub>191</sub>	I <sub>192</sub>	I <sub>193</sub>	I <sub>194</sub>	I <sub>195</sub>	I <sub>196</sub>	I <sub>197</sub>	I <sub>198</sub>	I <sub>199</sub>	I <sub>200</sub>	I <sub>201</sub>	I <sub>202</sub>	I <sub>203</sub>	I <sub>204</sub>	I <sub>205</sub>	I <sub>206</sub>	I <sub>207</sub>	I <sub>208</sub>	I <sub>209</sub>	I <sub>210</sub>	I <sub>211</sub>	I <sub>212</sub>	I <sub>213</sub>	I <sub>214</sub>	I <sub>215</sub>	I <sub>216</sub>	I <sub>217</sub>	I <sub>218</sub>	I <sub>219</sub>	I <sub>220</sub>	I <sub>221</sub>	I <sub>222</sub>	I <sub>223</sub>	I <sub>224</sub>	I <sub>225</sub>	I <sub>226</sub>	I <sub>227</sub>	I <sub>228</sub>	I <sub>229</sub>	I <sub>230</sub>	I <sub>231</sub>	I <sub>232</sub>	I <sub>233</sub>	I <sub>234</sub>	I <sub>235</sub>	I <sub>236</sub>	I <sub>237</sub>	I <sub>238</sub>	I <sub>239</sub>	I <sub>240</sub>	I <sub>241</sub>	I <sub>242</sub>	I <sub>243</sub>	I <sub>244</sub>	I <sub>245</sub>	I <sub>246</sub>	I <sub>247</sub>	I <sub>248</sub>	I <sub>249</sub>	I <sub>250</sub>	I <sub>251</sub>	I <sub>252</sub>	I <sub>253</sub>	I <sub>254</sub>	I <sub>255</sub>	I <sub>256</sub>	I <sub>257</sub>	I <sub>258</sub>	I <sub>259</sub>	I <sub>260</sub>	I <sub>261</sub>	I <sub>262</sub>	I <sub>263</sub>	I <sub>264</sub>	I <sub>265</sub>	I <sub>266</sub>	I <sub>267</sub>	I <sub>268</sub>	I <sub>269</sub>	I <sub>270</sub>	I <sub>271</sub>	I <sub>272</sub>	I <sub>273</sub>	I <sub>274</sub>	I <sub>275</sub>	I <sub>276</sub>	I <sub>277</sub>	I <sub>278</sub>	I <sub>279</sub>	I <sub>280</sub>	I <sub>281</sub>	I <sub>282</sub>	I <sub>283</sub>	I <sub>284</sub>	I <sub>285</sub>	I <sub>286</sub>	I <sub>287</sub>	I <sub>288</sub>	I <sub>289</sub>	I <sub>290</sub>	I <sub>291</sub>	I <sub>292</sub>	I <sub>293</sub>	I <sub>294</sub>	I <sub>295</sub>	I <sub>296</sub>	I <sub>297</sub>	I <sub>298</sub>	I <sub>299</sub>	I <sub>300</sub>	I <sub>301</sub>	I <sub>302</sub>	I <sub>303</sub>	I <sub>304</sub>	I <sub>305</sub>	I <sub>306</sub>	I <sub>307</sub>	I <sub>308</sub>	I <sub>309</sub>	I <sub>310</sub>	I <sub>311</sub>	I <sub>312</sub>	I <sub>313</sub>	I <sub>314</sub>	I <sub>315</sub>	I <sub>316</sub>	I <sub>317</sub>	I <sub>318</sub>	I <sub>319</sub>	I <sub>320</sub>	I <sub>321</sub>	I <sub>322</sub>	I <sub>323</sub>	I <sub>324</sub>	I <sub>325</sub>	I <sub>326</sub>	I <sub>327</sub>	I <sub>328</sub>	I <sub>329</sub>	I <sub>330</sub>	I <sub>331</sub>	I <sub>332</sub>	I <sub>333</sub>	I <sub>334</sub>	I <sub>335</sub>	I <sub>336</sub>	I <sub>337</sub>	I <sub>338</sub>	I <sub>339</sub>	I <sub>340</sub>	I <sub>341</sub>	I <sub>342</sub>	I <sub>343</sub>	I <sub>344</sub>	I <sub>345</sub>	I <sub>346</sub>	I <sub>347</sub>	I <sub>348</sub>	I <sub>349</sub>	I <sub>350</sub>	I <sub>351</sub>	I <sub>352</sub>	I <sub>353</sub>	I <sub>354</sub>	I <sub>355</sub>	I <sub>356</sub>	I <sub>357</sub>	I <sub>358</sub>	I <sub>359</sub>	I <sub>360</sub>	I <sub>361</sub>	I <sub>362</sub>	I <sub>363</sub>	I <sub>364</sub>	I <sub>365</sub>	I <sub>366</sub>	I <sub>367</sub>	I <sub>368</sub>	I <sub>369</sub>	I <sub>370</sub>	I <sub>371</sub>	I <sub>372</sub>	I <sub>373</sub>	I <sub>374</sub>	I <sub>375</sub>	I <sub>376</sub>	I <sub>377</sub>	I <sub>378</sub>	I <sub>379</sub>	I <sub>380</sub>	I <sub>381</sub>	I <sub>382</sub>	I <sub>383</sub>	I <sub>384</sub>	I <sub>385</sub>	I <sub>386</sub>	I <sub>387</sub>	I <sub>388</sub>	I <sub>389</sub>	I <sub>390</sub>	I <sub>391</sub>	I <sub>392</sub>	I <sub>393</sub>	I <sub>394</sub>	I <sub>395</sub>	I <sub>396</sub>	I <sub>397</sub>	I <sub>398</sub>	I <sub>399</sub>	I <sub>400</sub>	I <sub>401</sub>	I <sub>402</sub>	I <sub>403</sub>	I <sub>404</sub>	I <sub>405</sub>	I <sub>406</sub>	I <sub>407</sub>	I <sub>408</sub>	I <sub>409</sub>	I <sub>410</sub>	I <sub>411</sub>	I <sub>412</sub>	I <sub>413</sub>	I <sub>414</sub>	I <sub>415</sub>	I <sub>416</sub>	I <sub>417</sub>	I <sub>418</sub>	I <sub>419</sub>	I <sub>420</sub>	I <sub>421</sub>	I <sub>422</sub>	I <sub>423</sub>	I <sub>424</sub>	I <sub>425</sub>	I <sub>426</sub>	I <sub>427</sub>	I <sub>428</sub>	I <sub>429</sub>	I <sub>430</sub>	I <sub>431</sub>	I <sub>432</sub>	I <sub>433</sub>	I <sub>434</sub>	I <sub>435</sub>	I <sub>436</sub>	I <sub>437</sub>	I <sub>438</sub>	I <sub>439</sub>	I <sub>440</sub>	I <sub>441</sub>	I <sub>442</sub>	I <sub>443</sub>	I <sub>444</sub>	I <sub>445</sub>	I <sub>446</sub>	I <sub>447</sub>	I <sub>448</sub>	I <sub>449</sub>	I <sub>450</sub>	I <sub>451</sub>	I <sub>452</sub>	I <sub>453</sub>	I <sub>454</sub>	I <sub>455</sub>	I <sub>456</sub>	I <sub>457</sub>	I <sub>458</sub>	I <sub>459</sub>	I <sub>460</sub>	I <sub>461</sub>	I <sub>462</sub>	I <sub>463</sub>	I <sub>464</sub>	I <sub>465</sub>	I <sub>466</sub>	I <sub>467</sub>	I <sub>468</sub>	I <sub>469</sub>	I <sub>470</sub>	I <sub>471</sub>	I <sub>472</sub>	I <sub>473</sub>	I <sub>474</sub>	I <sub>475</sub>	I <sub>476</sub>	I <sub>477</sub>	I <sub>478</sub>	I <sub>479</sub>	I <sub>480</sub>	I <sub>481</sub>	I <sub>482</sub>	I <sub>483</sub>	I <sub>484</sub>	I <sub>485</sub>	I <sub>486</sub>	I <sub>487</sub>	I <sub>488</sub>	I <sub>489</sub>	I <sub>490</sub>	I <sub>491</sub>	I <sub>492</sub>	I <sub>493</sub>	I <sub>494</sub>	I <sub>495</sub>	I <sub>496</sub>	I <sub>497</sub>	I <sub>498</sub>	I <sub>499</sub>	I <sub>500</sub>	I <sub>501</sub>	I <sub>502</sub>	I <sub>503</sub>	I <sub>504</sub>	I <sub>505</sub>	I <sub>506</sub>	I <sub>507</sub>	I <sub>508</sub>	I <sub>509</sub>	I <sub>510</sub>	I <sub>511</sub>	I <sub>512</sub>	I <sub>513</sub>	I <sub>514</sub>	I <sub>515</sub>	I <sub>516</sub>	I <sub>517</sub>	I <sub>518</sub>	I <sub>519</sub>	I 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<sub>578</sub>	I <sub>579</sub>	I <sub>580</sub>	I <sub>581</sub>	I <sub>582</sub>	I <sub>583</sub>	I <sub>584</sub>	I <sub>585</sub>	I <sub>586</sub>	I <sub>587</sub>	I <sub>588</sub>	I <sub>589</sub>	I <sub>590</sub>	I <sub>591</sub>	I <sub>592</sub>	I <sub>593</sub>	I <sub>594</sub>	I <sub>595</sub>	I <sub>596</sub>	I <sub>597</sub>	I <sub>598</sub>	I <sub>599</sub>	I <sub>600</sub>	I <sub>601</sub>	I <sub>602</sub>	I <sub>603</sub>	I <sub>604</sub>	I <sub>605</sub>	I <sub>606</sub>	I <sub>607</sub>	I <sub>608</sub>	I <sub>609</sub>	I <sub>610</sub>	I <sub>611</sub>	I <sub>612</sub>	I <sub>613</sub>	I <sub>614</sub>	I <sub>615</sub>	I <sub>616</sub>	I <sub>617</sub>	I <sub>618</sub>	I <sub>619</sub>	I <sub>620</sub>	I <sub>621</sub>	I <sub>622</sub>	I <sub>623</sub>	I <sub>624</sub>	I <sub>625</sub>	I <sub>626</sub>	I <sub>627</sub>	I <sub>628</sub>	I <sub>629</sub>	I <sub>630</sub>	I <sub>631</sub>	I <sub>632</sub>	I <sub>633</sub>	I <sub>634</sub>	I <sub>635</sub>	I <sub>636</sub>	I <sub>637</sub>	I <sub>638</sub>	I <sub>639</sub>	I <sub>640</sub>	I <sub>641</sub>	I <sub>642</sub>	I <sub>643</sub>	I <sub>644</sub>	I <sub>645</sub>	I <sub>646</sub>	I <sub>647</sub>	I <sub>648</sub>	I <sub>649</sub>	I <sub>650</sub>	I <sub>651</sub>	I <sub>652</sub>	I <sub>653</sub>	I <sub>654</sub>	I <sub>655</sub>	I <sub>656</sub>	I <sub>657</sub>	I <sub>658</sub>	I <sub>659</sub>	I <sub>660</sub>	I <sub>661</sub>	I <sub>662</sub>	I <sub>663</sub>	I <sub>664</sub>	I <sub>665</sub>	I <sub>666</sub>	I <sub>667</sub>	I <sub>668</sub>	I <sub>669</sub>	I <sub>670</sub>	I <sub>671</sub>	I <sub>672</sub>	I <sub>673</sub>	I <sub>674</sub>	I <sub>675</sub>	I <sub>676</sub>	I <sub>677</sub>	I <sub>678</sub>	I <sub>679</sub>	I <sub>680</sub>	I <sub>681</sub>	I <sub>682</sub>	I <sub>683</sub>	I <sub>684</sub>	I <sub>685</sub>	I <sub>686</sub>	I <sub>687</sub>	I <sub>688</sub>	I <sub>689</sub>	I <sub>690</sub>	I <sub>691</sub>	I <sub>692</sub>	I <sub>693</sub>	I <sub>694</sub>	I <sub>695</sub>	I <sub>696</sub>	I <sub>697</sub>	I <sub>698</sub>	I <sub>699</sub>	I <sub>700</sub>	I <sub>701</sub>	I <sub>702</sub>	I <sub>703</sub>	I <sub>704</sub>	I <sub>705</sub>	I <sub>706</sub>	I <sub>707</sub>	I <sub>708</sub>	I <sub>709</sub>	I <sub>710</sub>	I <sub>711</sub>	I <sub>712</sub>	I <sub>713</sub>	I <sub>714</sub>	I <sub>715</sub>	I <sub>716</sub>	I <sub>717</sub>	I <sub>718</sub>	I <sub>719</sub>	I <sub>720</sub>	I <sub>721</sub>	I <sub>722</sub>	I <sub>723</sub>	I <sub>724</sub>	I <sub>725</sub>	I <sub>726</sub>	I <sub>727</sub>	I <sub>728</sub>	I <sub>729</sub>	I <sub>730</sub>	I <sub>731</sub>	I <sub>732</sub>	I <sub>733</sub>	I <sub>734</sub>	I <sub>735</sub>	I <sub>736</sub>	I <sub>737</sub>	I <sub>738</sub>	I <sub>739</sub>	I <sub>740</sub>	I <sub>741</sub>	I <sub>742</sub>	I <sub>743</sub>	I <sub>744</sub>	I <sub>745</sub>	I <sub>746</sub>	I <sub>747</sub>	I <sub>748</sub>	I <sub>749</sub>	I <sub>750</sub>	I <sub>751</sub>	I <sub>752</sub>	I <sub>753</sub>	I <sub>754</sub>	I <sub>755</sub>	I <sub>756</sub>	I <sub>757</sub>	I <sub>758</sub>	I <sub>759</sub>	I <sub>760</sub>	I <sub>761</sub>	I <sub>762</sub>	I <sub>763</sub>	I <sub>764</sub>	I <sub>765</sub>	I <sub>766</sub>	I <sub>767</sub>	I <sub>768</sub>	I <sub>769</sub>	I <sub>770</sub>	I <sub>771</sub>	I <sub>772</sub>	I <sub>773</sub>	I <sub>774</sub>	I <sub>775</sub>	I <sub>776</sub>	I <sub>777</sub>	I <sub>778</sub>	I <sub>779</sub>	I <sub>780</sub>	I <sub>781</sub>	I <sub>782</sub>	I <sub>783</sub>	I <sub>784</sub>	I <sub>785</sub>	I <sub>786</sub>	I <sub>787</sub>	I <sub>788</sub>	I <sub>789</sub>	I <sub>790</sub>	I <sub>791</sub>	I <sub>792</sub>	I <sub>793</sub>	I <sub>794</sub>	I <sub>795</sub>	I <sub>796</sub>	I <sub>797</sub>	I <sub>798</sub>	I <sub>799</sub>	I <sub>800</sub>	I <sub>801</sub>	I <sub>802</sub>	I <sub>803</sub>	I <sub>804</sub>	I <sub>805</sub>	I <sub>806</sub>	I <sub>807</sub>	I <sub>808</sub>	I <sub>809</sub>	I <sub>810</sub>	I <sub>811</sub>	I <sub>812</sub>	I <sub>813</sub>	I <sub>814</sub>	I <sub>815</sub>	I <sub>816</sub>	I <sub>817</sub>	I <sub>818</sub>	I <sub>819</sub>	I <sub>820</sub>	I <sub>821</sub>	I <sub>822</sub>	I <sub>823</sub>	I <sub>824</sub>	I <sub>825</sub>	I <sub>826</sub>	I <sub>827</sub>	I <sub>828</sub>	I <sub>829</sub>	I <sub>830</sub>	I <sub>831</sub>	I <sub>832</sub>	I <sub>833</sub>	I <sub>834</sub>	I <sub>835</sub>	I <sub>836</sub>	I <sub>837</sub>	I <sub>838</sub>	I <sub>839</sub>	I <sub>840</sub>	I <sub>841</sub>	I <sub>842</sub>	I <sub>843</sub>	I <sub>844</sub>	I <sub>845</sub>	I <sub>846</sub>	I <sub>847</sub>	I <sub>848</sub>	I <sub>849</sub>	I <sub>850</sub>	I <sub>851</sub>	I <sub>852</sub>	I <sub>853</sub>	I <sub>854</sub>	I <sub>855</sub>	I <sub>856</sub>	I <sub>857</sub>	I <sub>858</sub>	I <sub>859</sub>	I <sub>860</sub>	I <sub>861</sub>	I <sub>862</sub>	I <sub>863</sub>	I <sub>864</sub>	I <sub>865</sub>	I <sub>866</sub>	I <sub>867</sub>	I 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Bauteil:	Pos. 10 / 3D-Struktur Ausbauelement 4/5	Archiv Nr.:
Block:		Seite: 164
Vorgang:		

Verfasser:	<b>Arbeitsgemeinschaft "Bahnhofsumfeld Goslar"</b> Ingrid Hentschel - Prof. Axel Oestreich Architekten BDA Rheinstr. 45 - 12161 Berlin	Ingenieurbüro Krentel GmbH Beratender Ingenieur für Bauwesen Forststr. 13 - 14163 Berlin	Seite : 2197
Bauwerk:	Baumaßnahme : Umgestaltung des Bahnhofsumfeldes		Pos. : .....

## 10.1 Ermittlung der Lastsummen für die Einzellastfälle :

Teilsicherheitsbeiwert der Einzellastfälle :  $\gamma(F) = 1,00$

Zur Ermittlung der Lastsummen der Einzellastfälle werden die Auflagerkräfte am Ersatzsystem mit in einen Knotenpunkt konzentriertem Auflager bestimmt ( hier stellvertretend Knoten 855 ).

Lastfall	Bezeichnung	Teilsicherheitsbeiwert
1	Eigengewicht Stahlkonstruktion	1,00
2	Eigengewicht Glasdach	1,00
3	Schnee, Achse A-B / M-N	1,00
4	Schnee, Achse A-B / L-M	1,00
5	Schnee, Achse B-D / M-N	1,00
6	Schnee, Achse B-D / L-M	1,00
7	Schnee, Achse D-F / M-N	1,00
8	Schnee, Achse D-F / L-M	1,00
9	Schnee, Achse F-H / M-N	1,00
10	Schnee, Achse F-H / L-M	1,00
11	Schnee, Achse H-J / M-N	1,00
12	Schnee, Achse H-J / L-M	1,00
15	Wind in Querrichtung : (+Y)	1,00
16	Wind in Querrichtung : (- Y)	1,00
17	Wind in Längsrichtung : (+X)	1,00
18	Wind in Längsrichtung : (-X)	1,00

Bauteil: Pos. 2.00 Busbahnsteig 4 + 5	Archiv-Nr.:
Block:	
Vorgang:  Datum : 01.02.1999	



Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	2198
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756	
Bauwerk: 9813 - 2.00	ASB Nr.: Datum: 12.03.99

## LASTFALL 1: EIGENGEW. STAHLKONSTR.

### Lagerreaktionen der Knoten

Lastfall 1: Eigengew. Stahlkonstr.

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-390.74	0.00	907.59	0.00
Min	0.00	0.00	-390.74	0.00	907.59	0.00
Max	0.00	0.00	-390.74	0.00	907.59	0.00

## LASTFALL 2: EIGENGEW. GLASDACH

### Lagerreaktionen der Knoten

Lastfall 2: Eigengew. Glasdach

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-310.63	0.00	341.69	0.00
Min	0.00	0.00	-310.63	0.00	341.69	0.00
Max	0.00	0.00	-310.63	0.00	341.69	0.00

## LASTFALL 3: SCHNEE A-B/M-N

### Lagerreaktionen der Knoten

Lastfall 3: Schnee A-B/M-N

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-16.60	-33.20	-337.81	0.00
Min	0.00	0.00	-16.60	-33.20	-337.81	0.00
Max	0.00	0.00	-16.60	-33.20	-337.81	0.00

## LASTFALL 4: SCHNEE A-B/L-M

### Lagerreaktionen der Knoten

Lastfall 4: Schnee A-B/L-M

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-16.60	33.20	-337.81	0.00
Min	0.00	0.00	-16.60	33.20	-337.81	0.00
Max	0.00	0.00	-16.60	33.20	-337.81	0.00

Bauteil: Pos.10.1 / Lastsummen Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 1
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	2199
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756	
Bauwerk: 9813 - 2.00	ASB Nr.: Datum: 12.03.99

## LASTFALL 5: SCHNEE B-D/M-N

### Lagerreaktionen der Knoten

Lastfall 5: Schnee B-D/M-N

Knotnr	AP <sub>r</sub> kN	AP <sub>a</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>a</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-26.56	-53.12	-350.59	0.00
M1n	0.00	0.00	-26.56	-53.12	-350.59	0.00
Max	0.00	0.00	-26.56	-53.12	-350.59	0.00

## LASTFALL 6: SCHNEE B-D/L-M

### Lagerreaktionen der Knoten

Lastfall 6: Schnee B-D/L-M

Knotnr	AP <sub>r</sub> kN	AP <sub>a</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>a</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-26.56	53.12	-350.59	0.00
M1n	0.00	0.00	-26.56	53.12	-350.59	0.00
Max	0.00	0.00	-26.56	53.12	-350.59	0.00

## LASTFALL 7: SCHNEE D-F/M-N

### Lagerreaktionen der Knoten

Lastfall 7: Schnee D-F/M-N

Knotnr	AP <sub>r</sub> kN	AP <sub>a</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>a</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-26.56	-53.12	-116.86	0.00
M1n	0.00	0.00	-26.56	-53.12	-116.86	0.00
Max	0.00	0.00	-26.56	-53.12	-116.86	0.00

## LASTFALL 8: SCHNEE D-F/L-M

### Lagerreaktionen der Knoten

Lastfall 8: Schnee D-F/L-M

Knotnr	AP <sub>r</sub> kN	AP <sub>a</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>a</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-26.56	53.12	-116.86	0.00
M1n	0.00	0.00	-26.56	53.12	-116.86	0.00
Max	0.00	0.00	-26.56	53.12	-116.86	0.00

Bauteil: Pos.10.1 / Lastsummen Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 2
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	2/100
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756	
Bauwerk: 9813 - 2.00	ASB Nr.: Datum: 12.03.99

## LASTFALL 9: SCHNEE F-H/M-N

### Lagerreaktionen der Knoten

Lastfall 9: Schnee F-H/M-N

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-26.56	-53.12	116.86	0.00
Mfn	0.00	0.00	-26.56	-53.12	116.86	0.00
Max	0.00	0.00	-26.56	-53.12	116.86	0.00

## LASTFALL 10: SCHNEE F-H/L-M

### Lagerreaktionen der Knoten

Lastfall 10: Schnee F-H/L-M

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-26.56	53.12	116.86	0.00
Mfn	0.00	0.00	-26.56	53.12	116.86	0.00
Max	0.00	0.00	-26.56	53.12	116.86	0.00

## LASTFALL 11: SCHNEE H-J/M-N

### Lagerreaktionen der Knoten

Lastfall 11: Schnee H-J/M-N

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-49.80	-99.60	849.09	0.00
Mfn	0.00	0.00	-49.80	-99.60	849.09	0.00
Max	0.00	0.00	-49.80	-99.60	849.09	0.00

## LASTFALL 12: SCHNEE H-J/L-M

### Lagerreaktionen der Knoten

Lastfall 12: Schnee H-J/L-M

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	-49.80	99.60	849.09	0.00
Mfn	0.00	0.00	-49.80	99.60	849.09	0.00
Max	0.00	0.00	-49.80	99.60	849.09	0.00

Bauteil: Pos.10.1 / Lastsummen Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 3
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	2/101
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756	
Bauwerk: 9813 - 2.00	ASB Nr.: Datum: 12.03.99

## LASTFALL 13: (LEER)

### Lagerreaktionen der Knoten

Lastfall 13: (leer)

Knonr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	0.00	0.00	0.00	0.00
Min	0.00	0.00	0.00	0.00	0.00	0.00
Max	0.00	0.00	0.00	0.00	0.00	0.00

## LASTFALL 14: (LEER)

### Lagerreaktionen der Knoten

Lastfall 14: (leer)

Knonr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	0.00	0.00	0.00	0.00	0.00
Min	0.00	0.00	0.00	0.00	0.00	0.00
Max	0.00	0.00	0.00	0.00	0.00	0.00

## LASTFALL 15: WIND: RICHT. + Y

### Lagerreaktionen der Knoten

Lastfall 15: Wind: Richt. + Y

Knonr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	-79.56	102.08	-730.90	-112.29	-14.15
Min	0.00	-79.56	102.08	-730.90	-112.29	-14.15
Max	0.00	-79.56	102.08	-730.90	-112.29	-14.15

## LASTFALL 16: WIND: RICHT. - Y

### Lagerreaktionen der Knoten

Lastfall 16: Wind: Richt. - Y

Knonr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	0.00	79.56	102.08	730.90	-112.29	14.15
Min	0.00	79.56	102.08	730.90	-112.29	14.15
Max	0.00	79.56	102.08	730.90	-112.29	14.15

Bauteil: Pos.10.1 / Lastsummen Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 4
Vorgang:	



Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		2/102
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		
Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99

## LASTFALL 17: WIND: RICHT. + X

### Lagerreaktionen der Knoten

Lastfall 17: Wind: Richt. + X

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	-95.55	0.00	0.00	0.00	441.82	0.00
Min	-95.55	0.00	0.00	0.00	441.82	0.00
Max	-95.55	0.00	0.00	0.00	441.82	0.00

## LASTFALL 18: WIND: RICHT. - X

### Lagerreaktionen der Knoten

Lastfall 18: Wind: Richt. - X

Knotnr	AP <sub>r</sub> kN	AP <sub>s</sub> kN	AP <sub>t</sub> kN	AM <sub>r</sub> kNm	AM <sub>s</sub> kNm	AM <sub>t</sub> kNm
855	95.55	0.00	0.00	0.00	-441.82	0.00
Min	95.55	0.00	0.00	0.00	-441.82	0.00
Max	95.55	0.00	0.00	0.00	-441.82	0.00

Bauteil: Pos.10.1 / Lastsummen Busbahnsteig 4/5	Seite: 5	Archiv Nr.:
Block:		
Vorgang:		

Verfasser:	<b>Arbeitsgemeinschaft "Bahnhofsumfeld Goslar"</b> Ingrid Hentschel - Prof. Axel Oestreich Architekten BDA Rheinstr. 45 - 12161 Berlin	Ingenieurbüro Krentel GmbH Beratender Ingenieur für Bauwesen Forststr. 13 - 14163 Berlin	Seite : <u>2/103</u>
Bauwerk:	Baumaßnahme : Umgestaltung des Bahnhofsumfeldes		Pos. : .....

## 10.2 Grafik der Verformungen im Gebrauchszustand

### Lastkollektiv 1 :

Lastfall	Bezeichnung	Teilsicherheitsbeiwert
1	Eigengewicht Stahlkonstruktion	1,00
2	Eigengewicht Glasdach	1,00

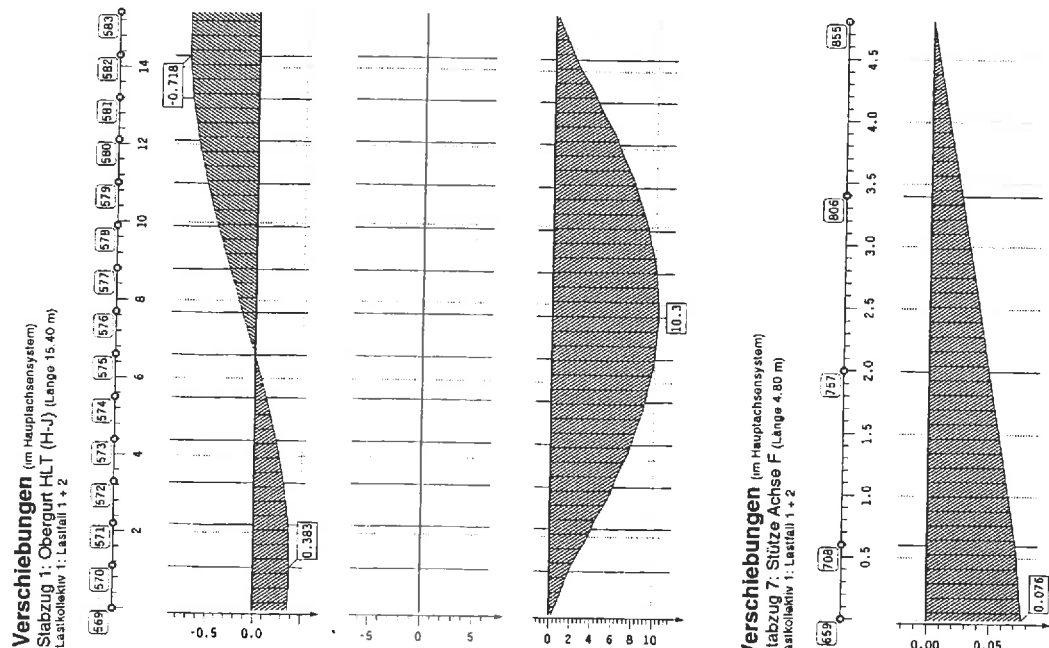
### Lastkollektiv 2 :

Lastfall	Bezeichnung	Teilsicherheitsbeiwert
3	Schnee, Achse A-B / M-N	1,0
4	Schnee, Achse A-B / L-M	1,0
5	Schnee, Achse B-D / M-N	1,0
6	Schnee, Achse B-D / L-M	1,0
7	Schnee, Achse D-F / M-N	1,0
8	Schnee, Achse D-F / L-M	1,0
9	Schnee, Achse F-H / M-N	1,0
10	Schnee, Achse F-H / L-M	1,0
11	Schnee, Achse H-J / M-N	1,0
12	Schnee, Achse H-J / L-M	1,0

Bauteil: Pos. 2.00 Busbahnsteig 4 + 5	Archiv-Nr.:
Block:	
Vorgang:	
Datum : 01.02.1999	

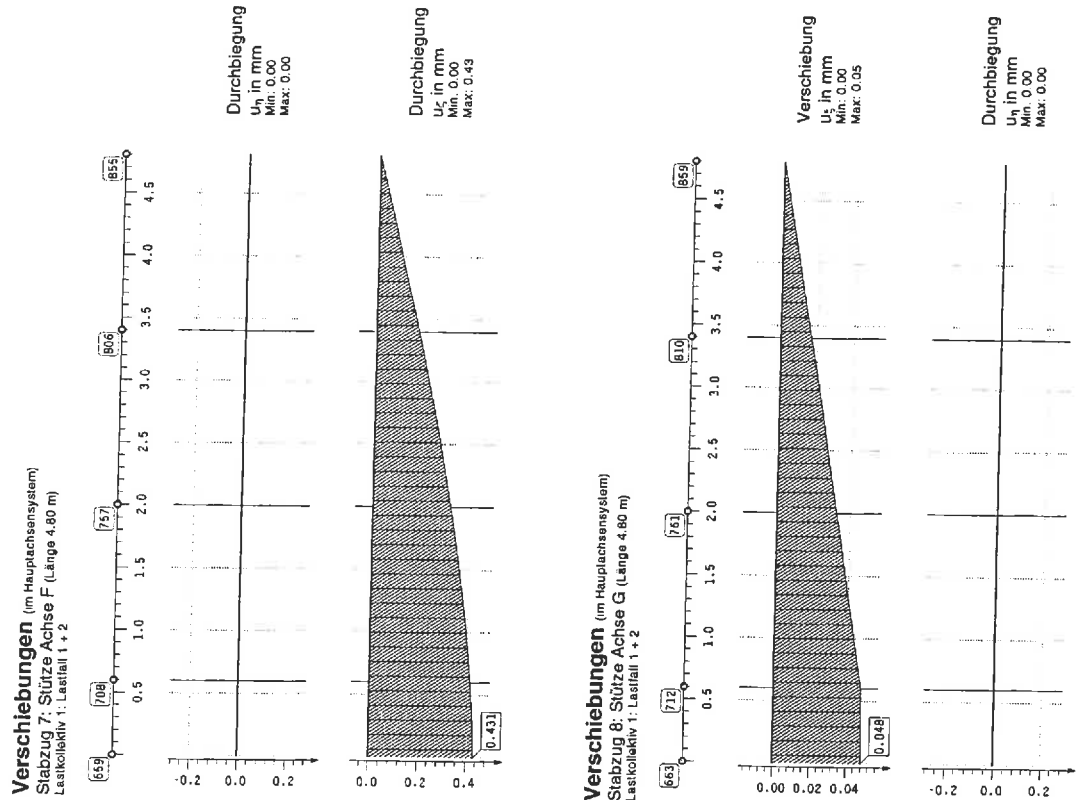
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Programm:	4H-FRAP 11/97 / pcas-GmbH / kren9509756		
Bauwerk:	9813 - 2.00		

### LASTKOLLEKTIV 1: LASTFALL 1 + 2



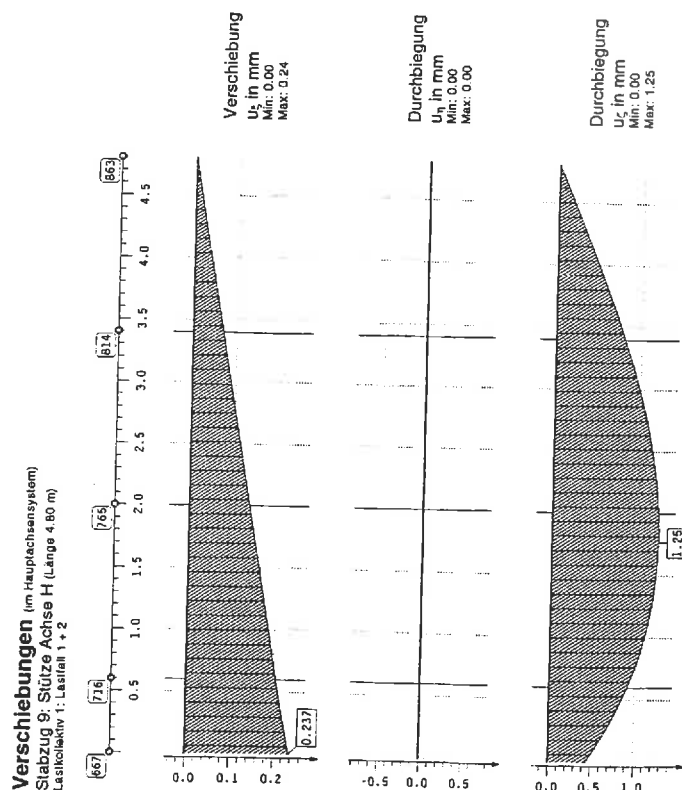
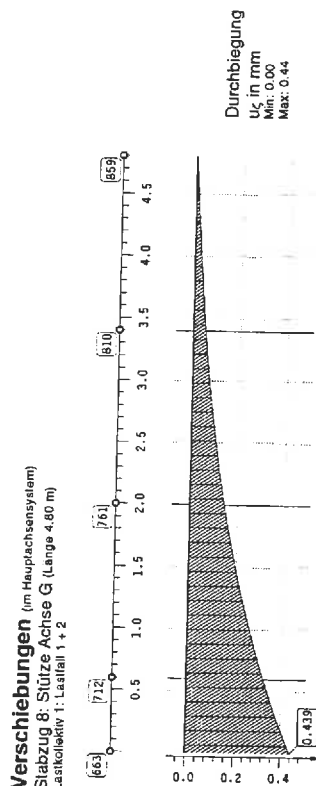
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Block:	Bauabschnitt 4/5	Seite: 1
Vorgang:		

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	ASB Nr.:	Datum: 12.03.99
Programm:	4H-FRAP 11/97 / pcas-GmbH / kren9509759		
Bauwerk:	9813 - 2.00		



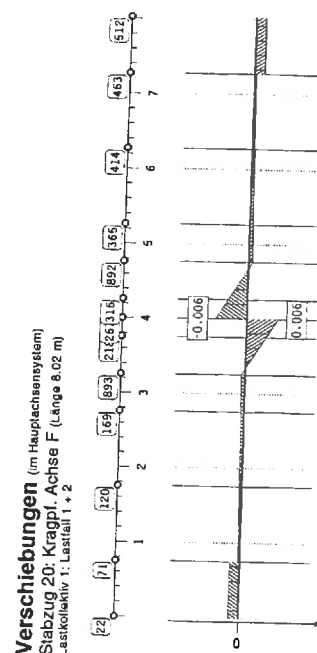
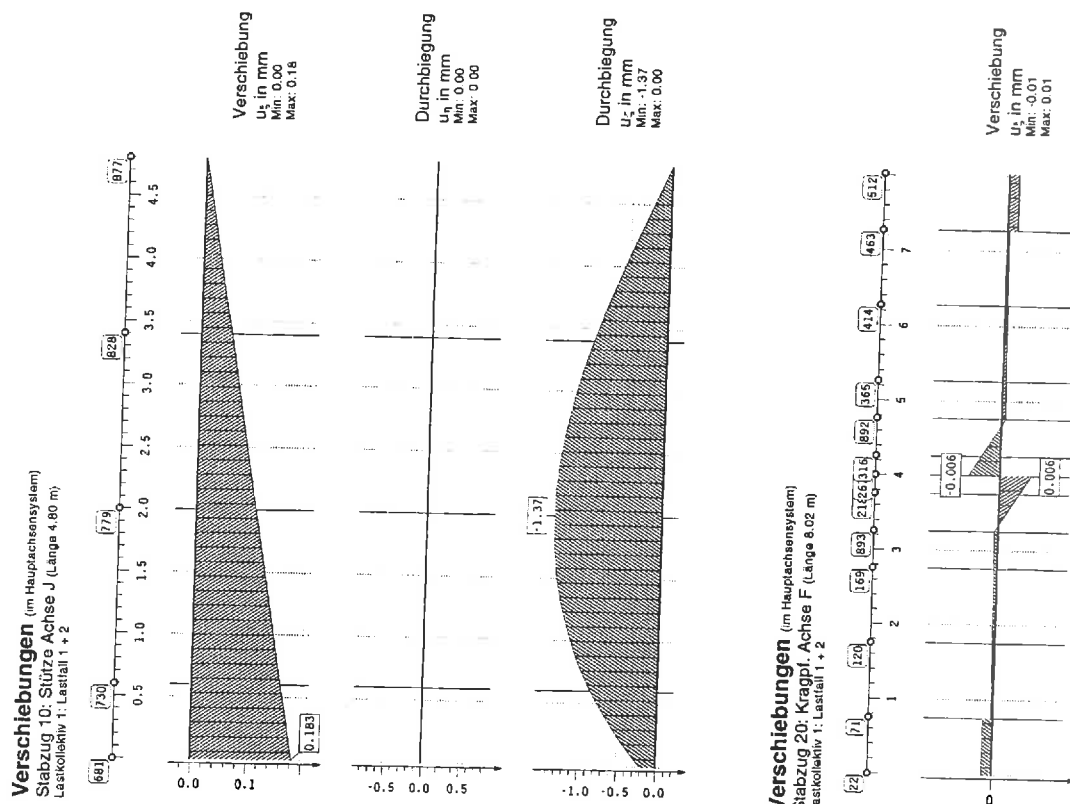
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Block:	Bauabschnitt 4/5	Seite: 2
Vorgang:		

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26, 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programmiert: 4H-FRAP 11/97 / pcas-GmbH / ken9509758 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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Bauteil: Pos. 10.2 / Gebrauchszust. Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 3
Vorgang:	

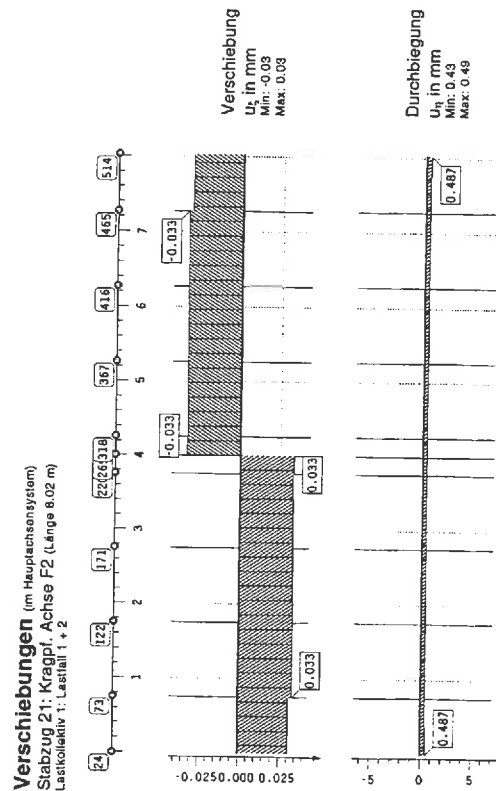
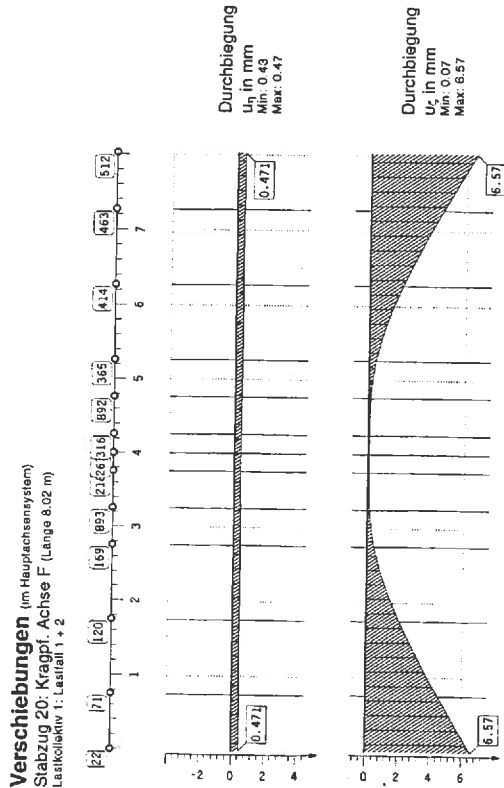
Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26, 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programmiert: 4H-FRAP 11/97 / pcas-GmbH / ken9509758 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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Bauteil: Pos. 10.2 / Gebrauchszust. Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 4
Vorgang:	

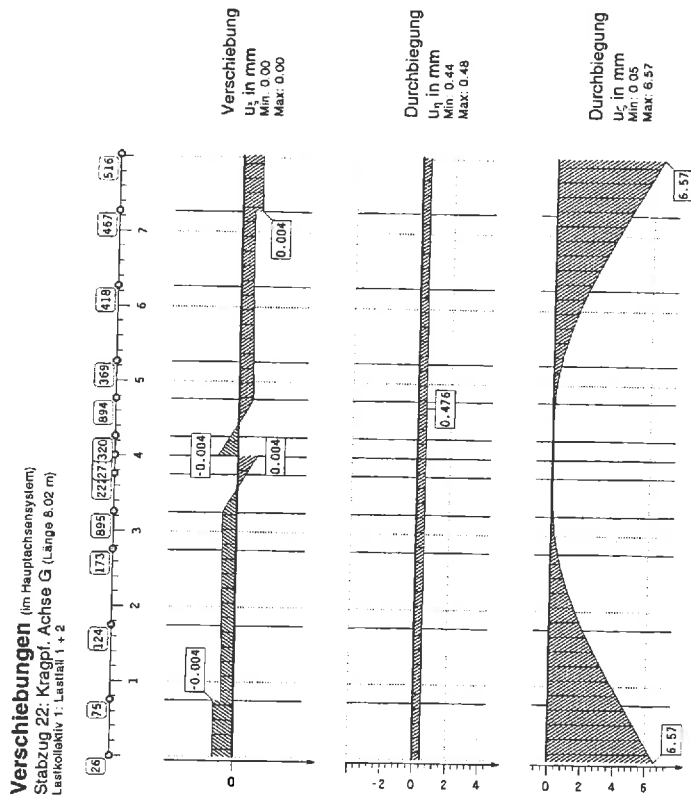
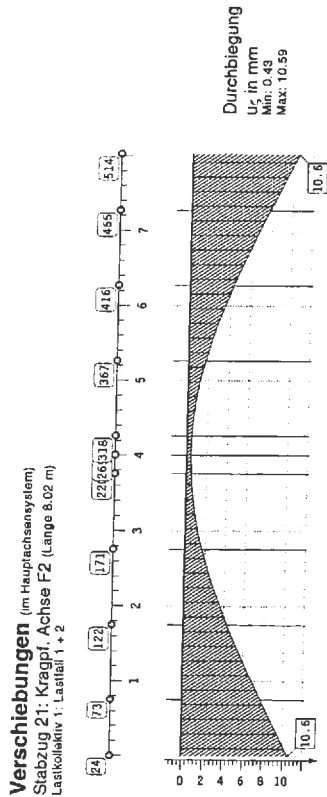


Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0	ASB Nr.:	Datum: 12.03.99
Programm: 4H-FRAP 11/97 / pcse-GmbH / kren9509756		
Bauwerk: 9813 - 2.00		



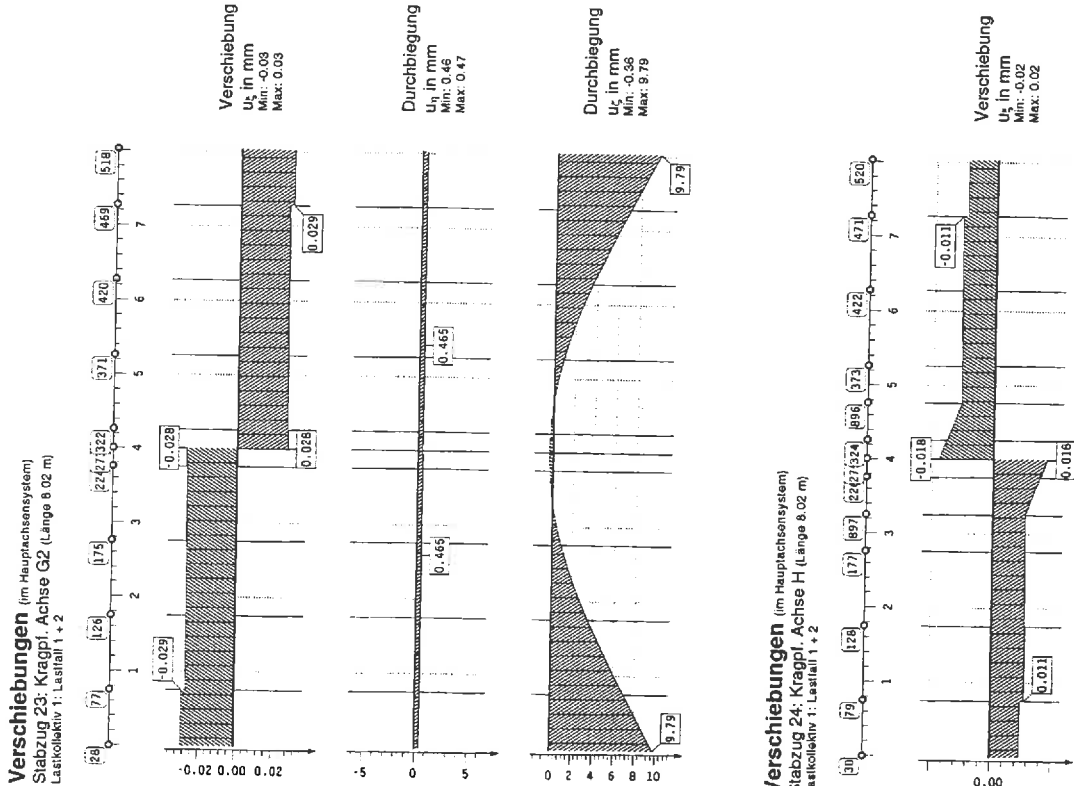
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Block:	Seite: 5	
Vorgang:		

Verfasser: <b>Ingenieurbü. Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0	ASB Nr.:	Datum: 12.03.99
Programm: 4H-FRAP 11/97 / pcse-GmbH / kren9509756		
Bauwerk: 9813 - 2.00		



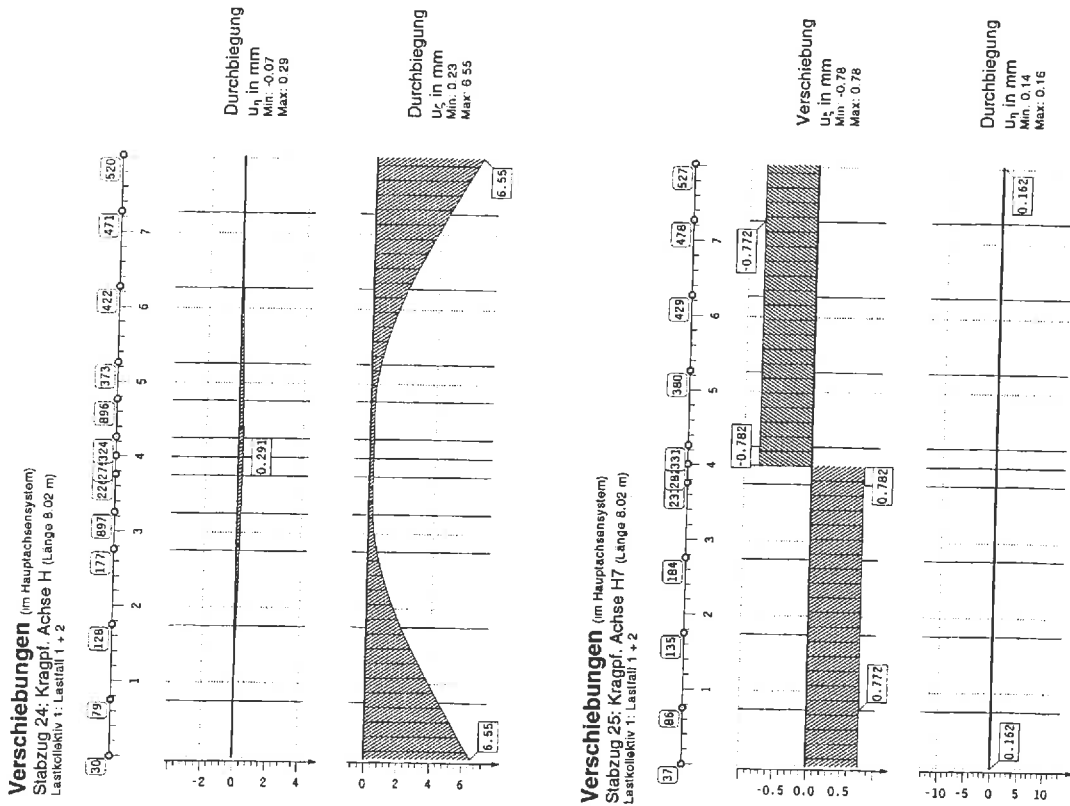
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Block:	Seite: 6	
Vorgang:		

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Program: 4H-FRAP 11/97 / pcae-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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Bauteil: Pos.10.2 / Gebrauchszust.	Archiv Nr.:
Block: Busbahnsteig 4/5	Seite: 7
Vorgang:	

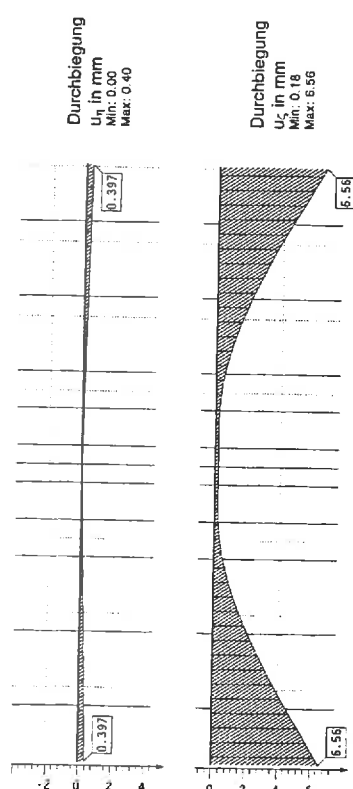
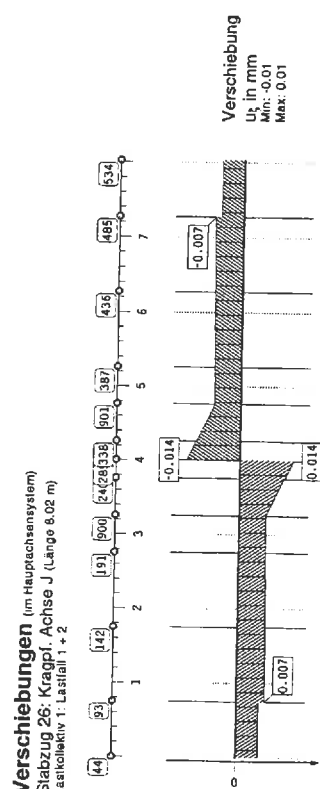
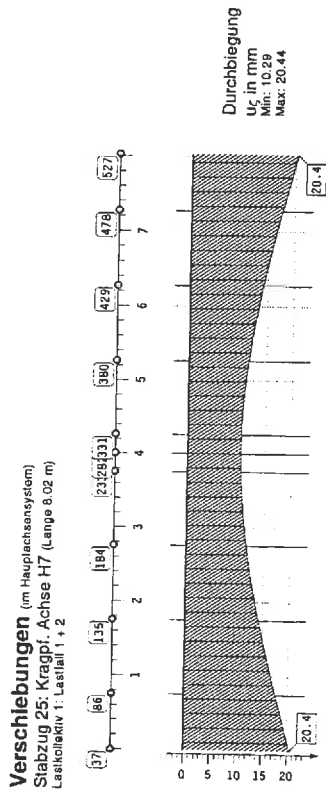
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Bauteil: Pos.10.2 / Gebrauchszust.	Archiv Nr.:
Block: Busbahnsteig 4/5	Seite: 8
Vorgang:	

Verfasser:  
**Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programmiert: 4H-FRAP 11/97 / pcae-GmbH / kre9503758  
Bauwerk: 9813 - 2.00

ASB Nr.:  
Datum: 12.03.99

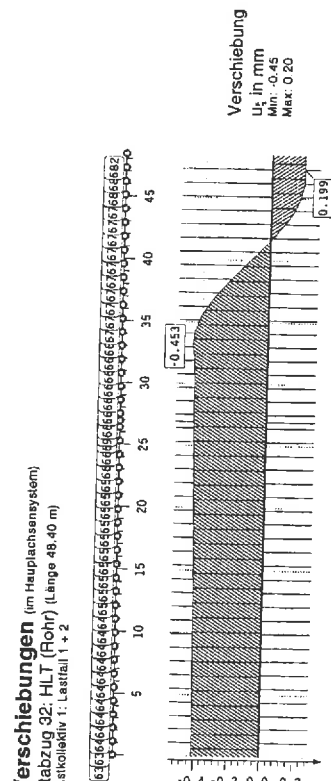
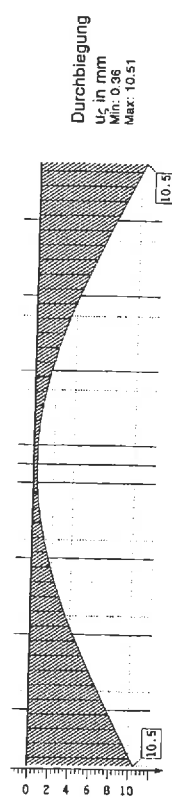
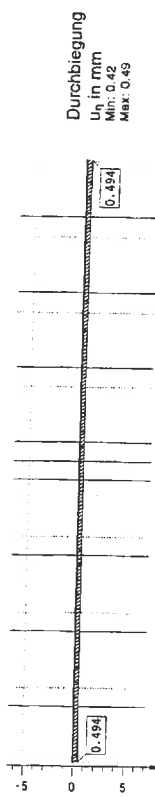
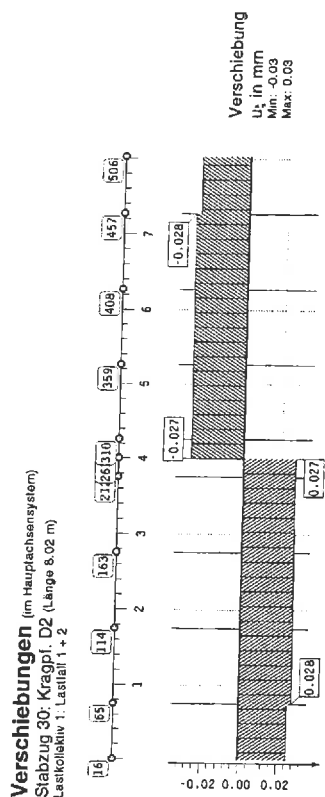


Bauteil:  
Pos.10.2 / Gebrauchszust.  
Block:  
Busbahnsteig 4/5  
Vorgang:

Archiv Nr.:  
Seite: 9

Verfasser:  
**Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programmiert: 4H-FRAP 11/97 / pcae-GmbH / kre9503758  
Bauwerk: 9813 - 2.00

ASB Nr.:  
Datum: 12.03.99

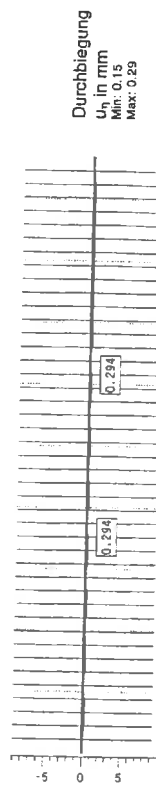
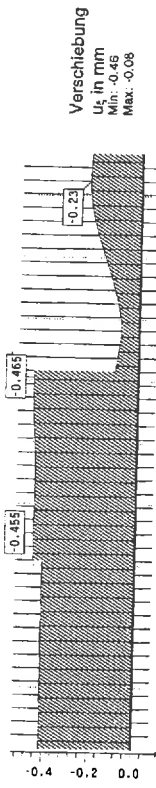
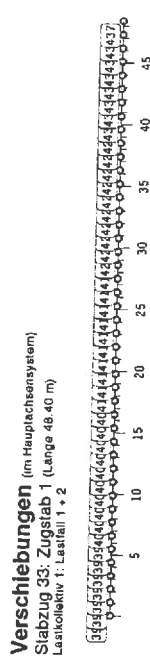
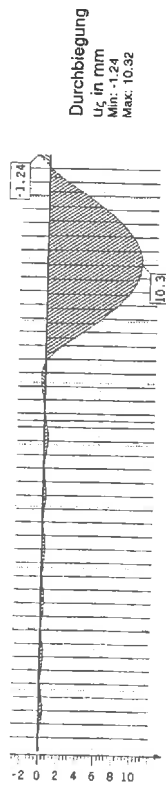
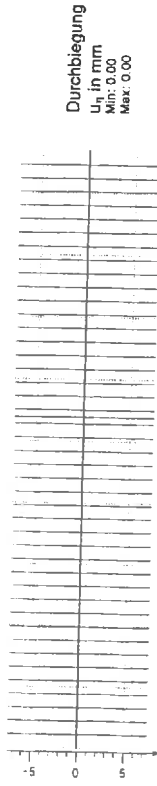
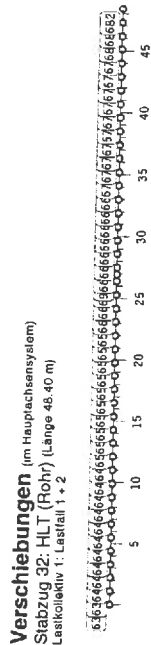


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Block:  
Busbahnsteig 4/5  
Vorgang:

Archiv Nr.:  
Seite: 10

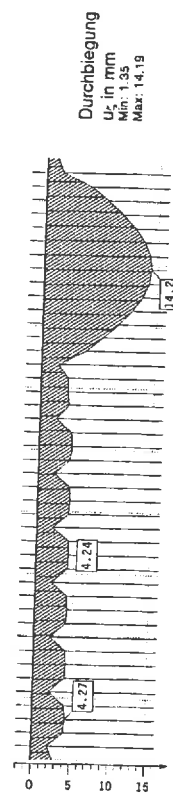
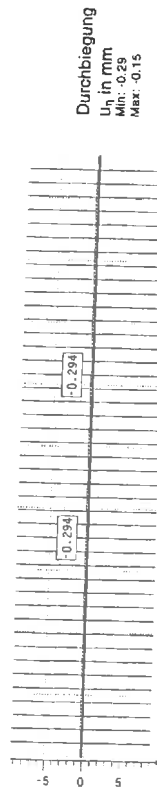
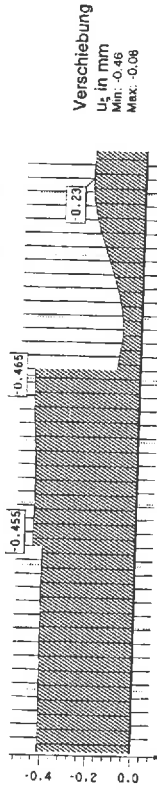
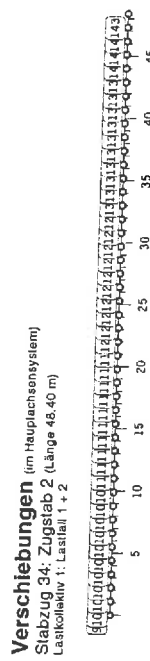
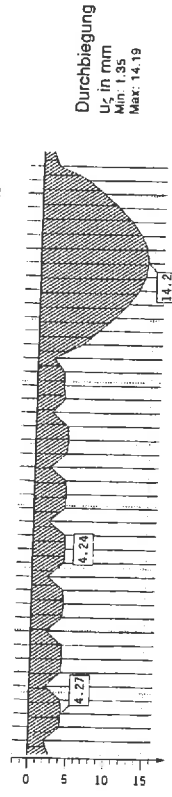
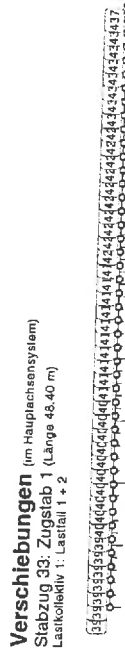
21108

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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Bauteil: Busbalmstieg 4/5	Pos. 10.2 / Gebrauchszust.	Archiv Nr.:
Block:	Seite: 11	
Vorgang:		

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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Bauteil: Busbalmstieg 4/5	Pos. 10.2 / Gebrauchszust.	Archiv Nr.:
Block:	Seite: 12	
Vorgang:		



Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programmiert: 4H-FRAP 11/97 / pcac-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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### LASTKOLLEKTIV 2: LASTFALL 3 - 12

**Verschiebungen** (im Hauptachsensystem)  
Stabzug 1: Oberquert HLT (H-J) (Länge 15.40 m)  
Lastkollektiv 2: Lastfall 3 - 12



**Verschiebung**  
 $u_x$  in mm  
Min: -0.29  
Max: 0.16

**Durchbiegung**  
 $u_z$  in mm  
Min: 0.00  
Max: 0.00

**Durchbiegung**  
 $u_z$  in mm  
Min: 0.00  
Max: 4.16

**Verschiebung**  
 $u_x$  in mm  
Min: 0.00  
Max: 0.03

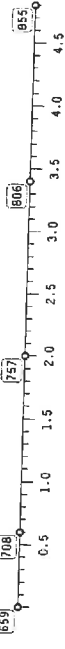
**Verschiebungen** (im Hauptachsensystem)  
Stabzug 7: Stütze Achse F (Länge 4.80 m)  
Lastkollektiv 2: Lastfall 3 - 12



Bauteil: Pos.10.2 / Gebrauchszust. Block: Busbahnhalt 4/5 Vorgang:	Archiv Nr.:	Seite: 13
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Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programmiert: 4H-FRAP 11/97 / pcac-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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**Verschiebungen** (im Hauptachsensystem)  
Stabzug 7: Stütze Achse F (Länge 4.80 m)  
Lastkollektiv 2: Lastfall 3 - 12



**Durchbiegung**  
 $u_z$  in mm  
Min: 0.00  
Max: 0.00

**Durchbiegung**  
 $u_z$  in mm  
Min: 0.00  
Max: 0.17

**Verschiebungen** (im Hauptachsensystem)  
Stabzug 8: Stütze Achse G (Länge 4.80 m)  
Lastkollektiv 2: Lastfall 3 - 12

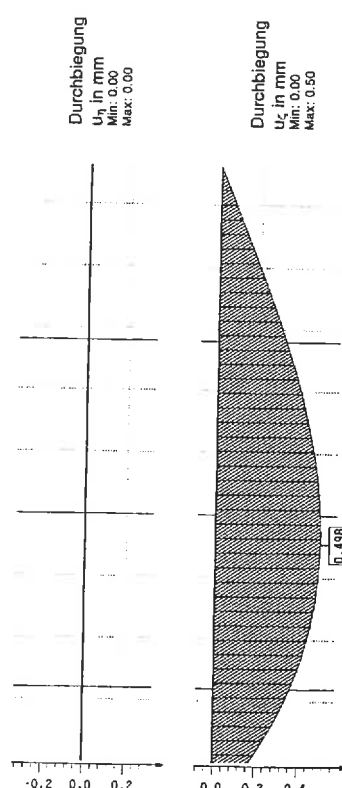
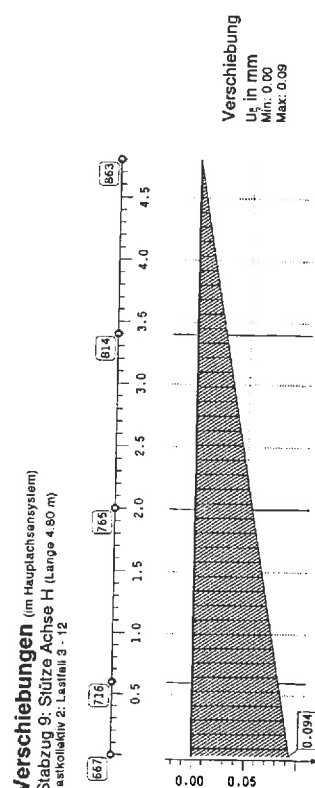
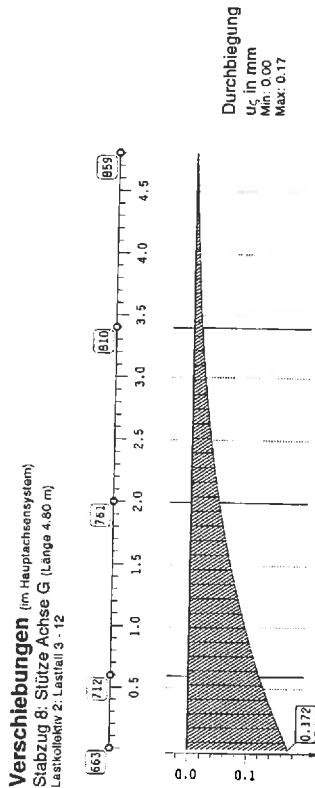


**Verschiebung**  
 $u_x$  in mm  
Min: 0.00  
Max: 0.02

**Durchbiegung**  
 $u_z$  in mm  
Min: 0.00  
Max: 0.00

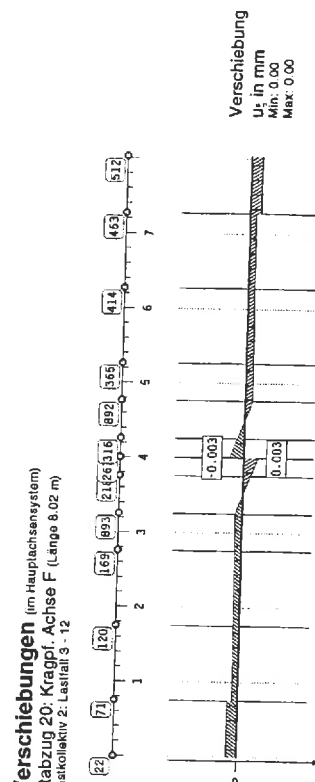
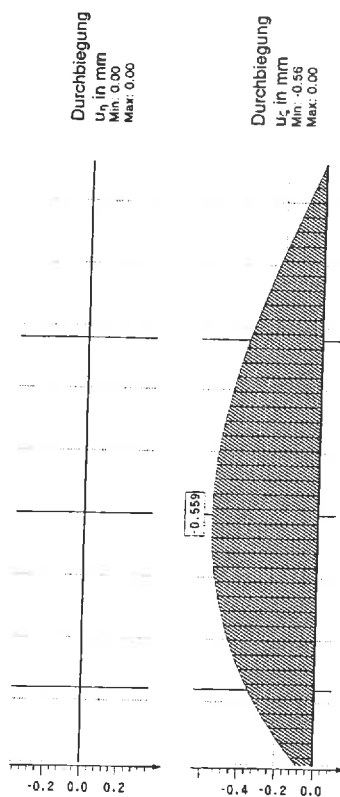
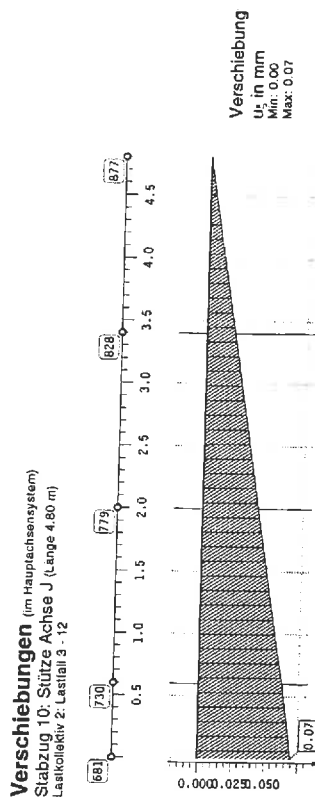
Bauteil: Pos.10.2 / Gebrauchszust. Block: Busbahnhalt 4/5 Vorgang:	Archiv Nr.:	Seite: 14
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<b>Verfasser:</b> <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		<b>Datum:</b> 12.03.99	
<b>Programm:</b> 4H-FRAP 11/97 / pcas-GmbH / kren9509756		<b>ASB Nr.:</b>	
<b>Bauwerk:</b> 9813 - 2.00			



<b>Bauteil:</b> Pos.10.2 / Gebrauchszust. Busbahnsteig 4/5		<b>Archiv Nr.:</b>	
<b>Block:</b>		<b>Seite:</b> 15	
<b>Vorgang:</b>			

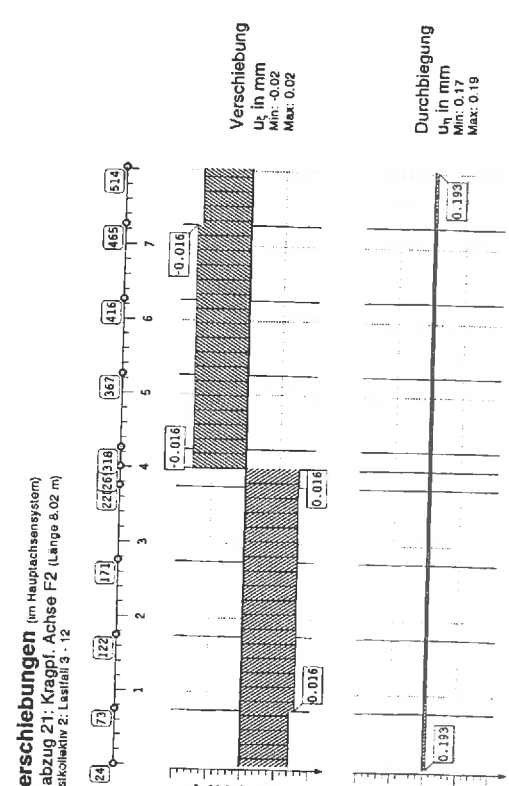
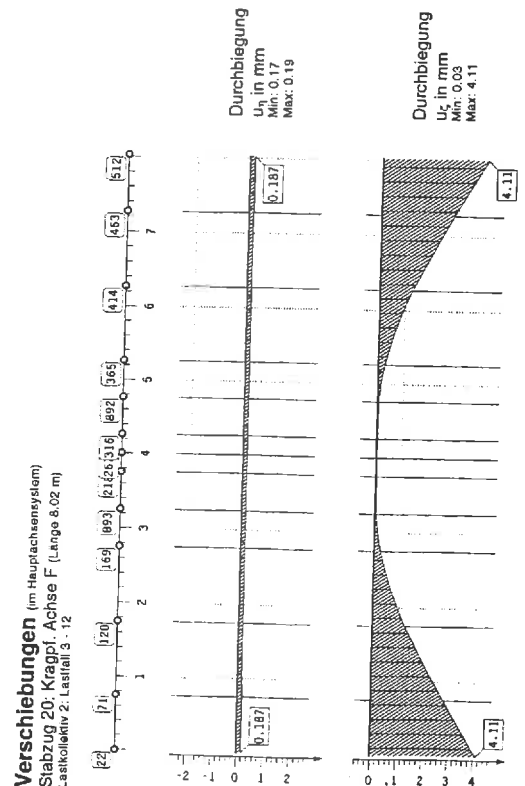
<b>Verfasser:</b> <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		<b>Datum:</b> 12.03.99	
<b>Programm:</b> 4H-FRAP 11/97 / pcas-GmbH / kren9509756		<b>ASB Nr.:</b>	
<b>Bauwerk:</b> 9813 - 2.00			



<b>Bauteil:</b> Pos.10.2 / Gebrauchszust. Busbahnsteig 4/5		<b>Archiv Nr.:</b>	
<b>Block:</b>		<b>Seite:</b> 16	
<b>Vorgang:</b>			

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 Tel. 030 - 809977-0  
 Programm: 4H-FRAP 11/97 / pcas GmbH / kren9509756  
 Bauwerk: 9813 - 2.00

ASB Nr.: \_\_\_\_\_ Datum: 12.03.99

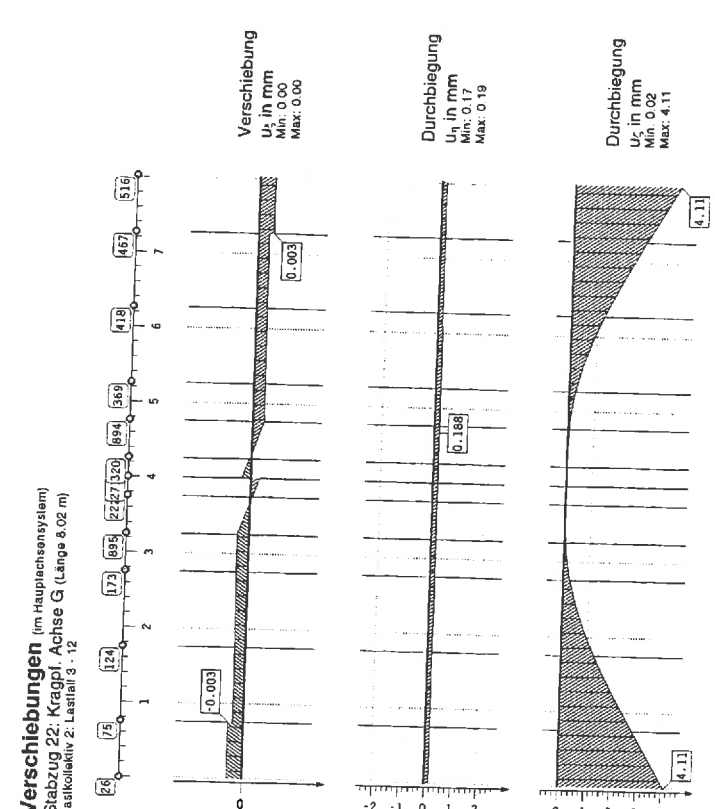
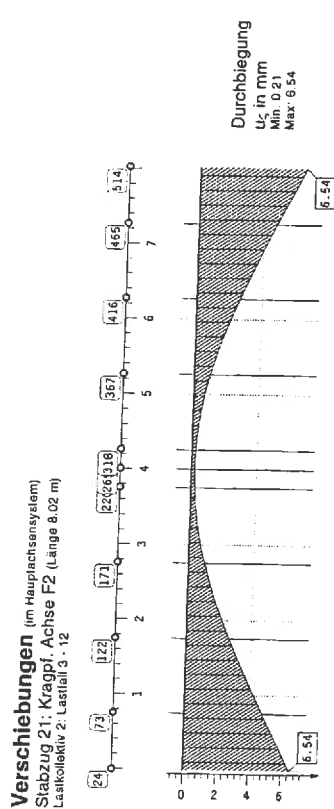


Bauteil: Pos. 10.2 / Gebrauchszust.  
 Block: Busbahnsteig 4/5  
 Vorgang: \_\_\_\_\_

Archiv Nr.: \_\_\_\_\_ Seite: 17

Verfasser: **Ingenieurbüro Krentel GmbH**  
 Forststr. 26 14163 Berlin - Zehlendorf  
 Tel. 030 - 809977-0  
 Programm: 4H-FRAP 11/97 / pcas GmbH / kren9509756  
 Bauwerk: 9813 - 2.00

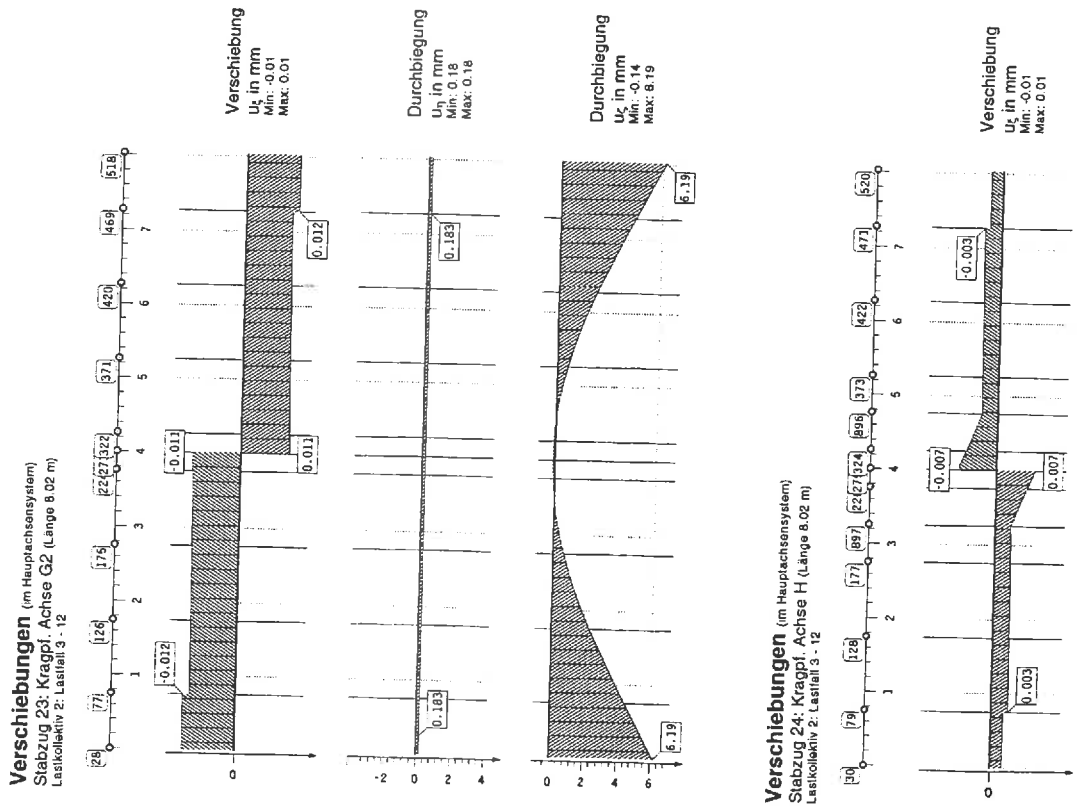
ASB Nr.: \_\_\_\_\_ Datum: 12.03.99



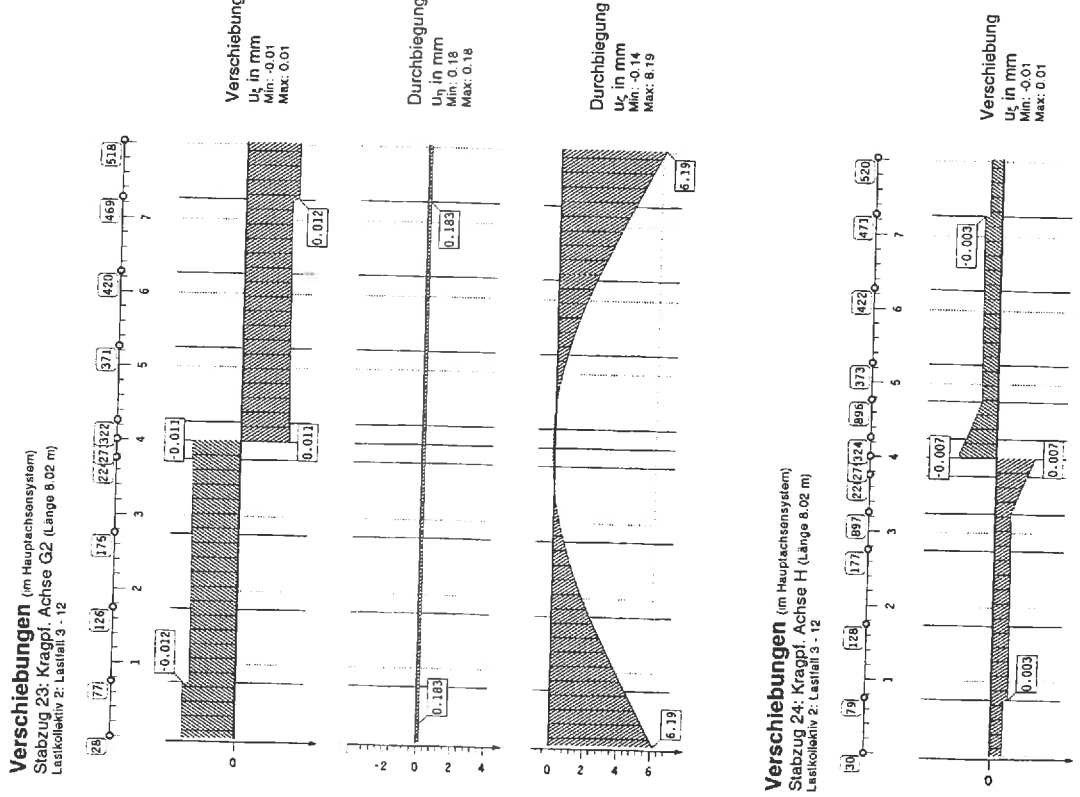
Bauteil: Pos. 10.2 / Gebrauchszust.  
 Block: Busbahnsteig 4/5  
 Vorgang: \_\_\_\_\_

Archiv Nr.: \_\_\_\_\_ Seite: 18

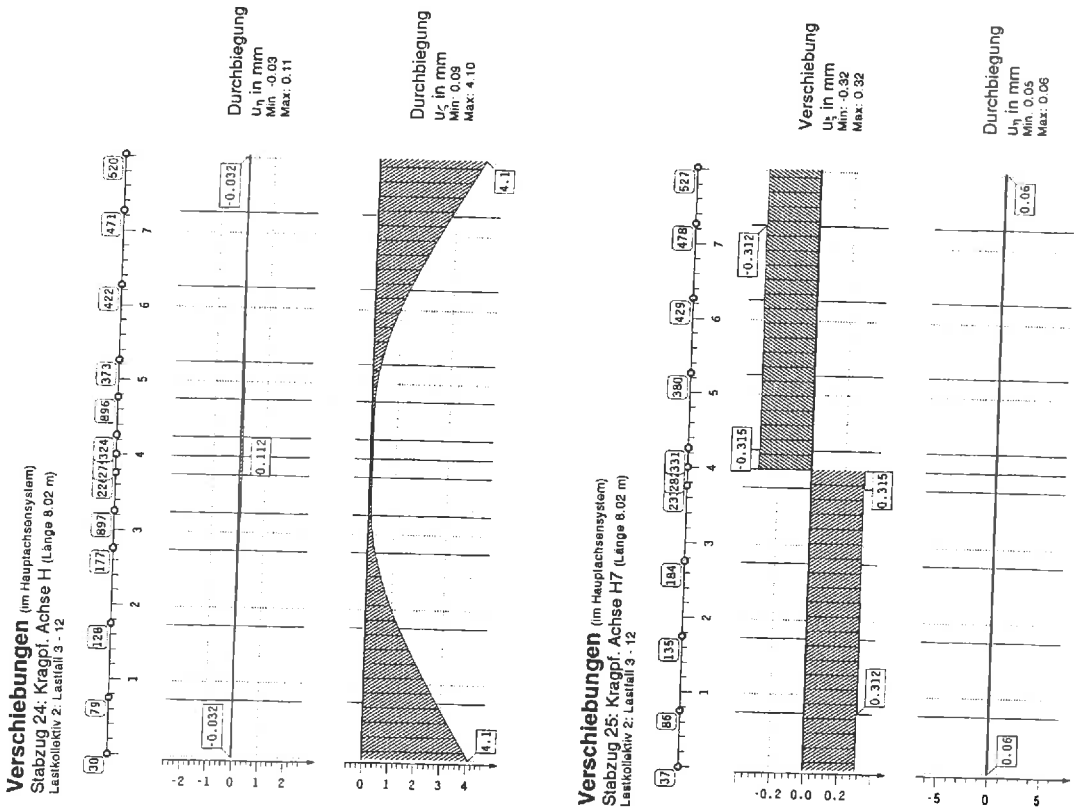
Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		Datum: 12.03.99	
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		ASB Nr.:	
Bauwerk: 9813 - 2.00			



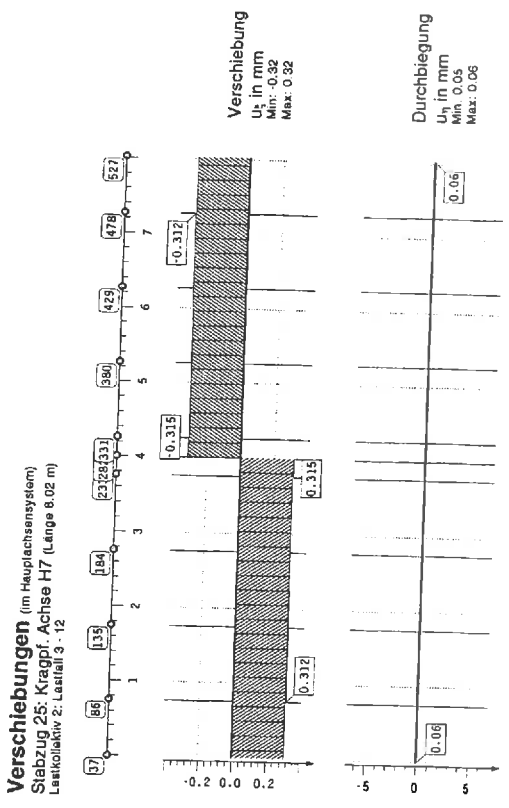
Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		Datum: 12.03.99	
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		ASB Nr.:	
Bauwerk: 9813 - 2.00			



Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		Datum: 12.03.99	
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		ASB Nr.:	
Bauwerk: 9813 - 2.00			

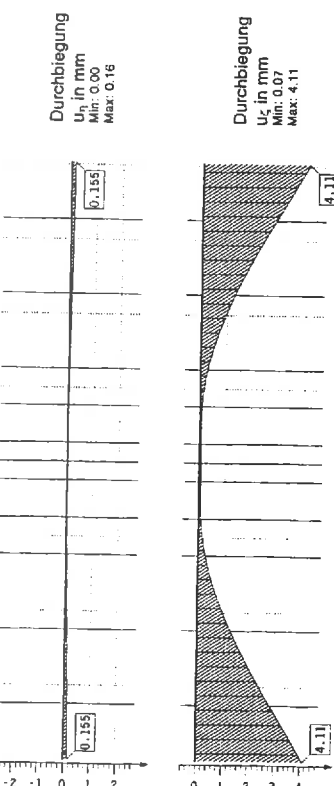
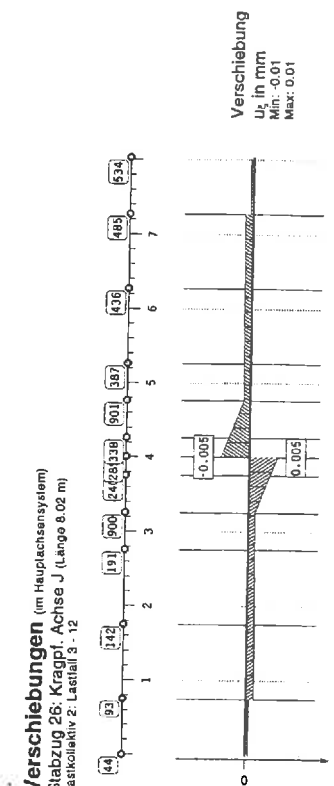
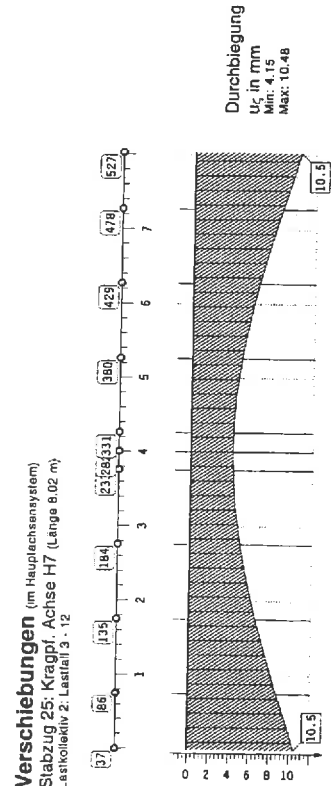


Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		Datum: 12.03.99	
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		ASB Nr.:	
Bauwerk: 9813 - 2.00			



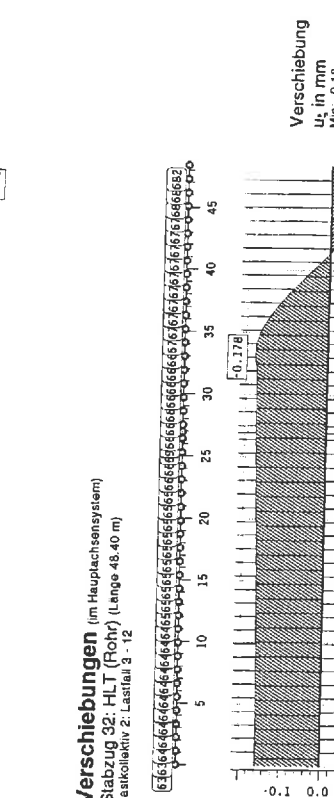
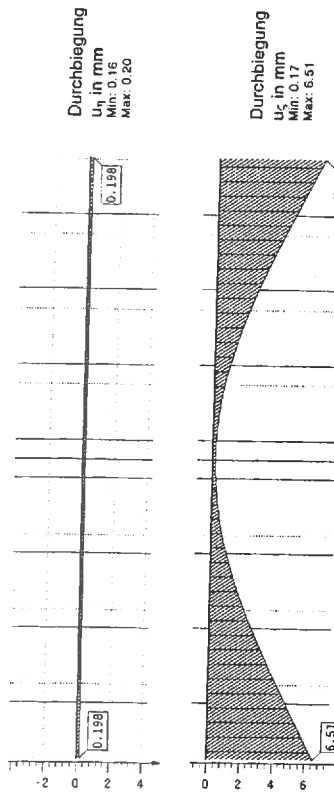
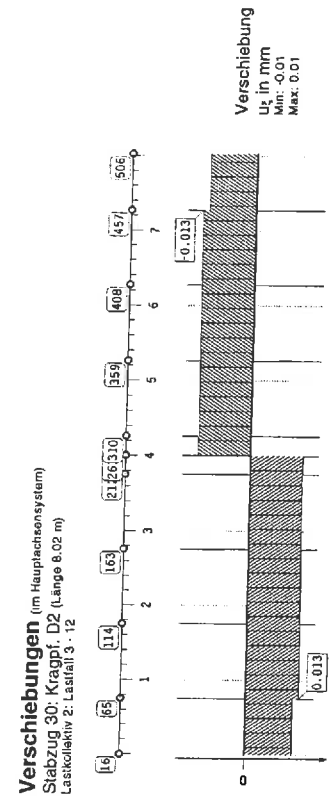


Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	ASB Nr.:	Datum: 12.03.99
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		
Bauwerk: 9813 - 2.00		



Bauteil: Pos.10.2 / Gebrauchszust.	Archiv Nr.:
Block: Busbahnsteig 4/5	Seite: 21
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	ASB Nr.:	Datum: 12.03.99
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		
Bauwerk: 9813 - 2.00		

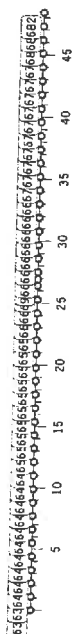


Bauteil: Pos.10.2 / Gebrauchszust.	Archiv Nr.:
Block: Busbahnsteig 4/5	Seite: 22
Vorgang:	

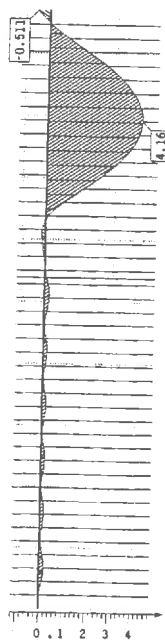
Verlässler:	<b>Ingenleurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0	
Programm:	4H-FRAP 11/97 / pc4e-GmbH / kuen9509756	
Bauwerk:	9813 - 2.00	ASB Nr.: Datum: 12.03.99

## Verschiebungen (im Hauptachsensystem)

**Stabzug 32: HLT (Rohr)** (Länge 48,40 m)  
Lastkollektiv 2: Lastfall 3 - 12

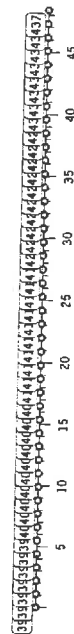


Durchbiegung  
 $U_{\eta}$  in mm  
Min: 0.00  
Max: 0.00

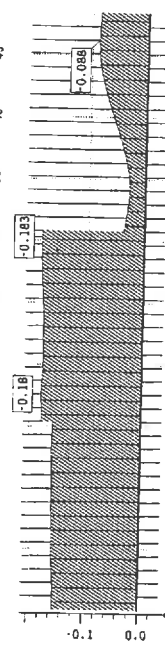


### Verschiebungen (im Hauptachsensystem)

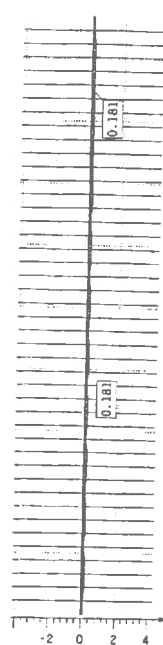
**Verschleibungen** (im Hauptachsensystem)  
Stabzug 33; Zugstab 1 (Länge 48,40 m)



Verschiebung  
 $u_x$  in mm  
Min: -0.18  
Max: -0.03

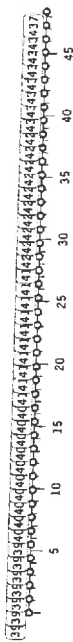


Durchbiegung  
 $u_{\eta}$  in mm  
Min: 0,09  
Max: 0,18

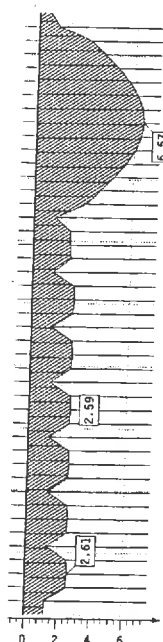


## Verschleibungen (im Hauptlachsensystem)

**Verschleibungen** (im Hauptachsensystem)  
Stabzug 33: Zugstab 1 (Länge 48,40 m)  
Lasikollktiv 2: Lasifall 3 - 12

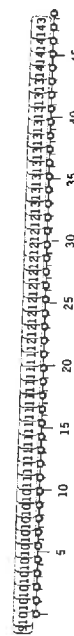


Durchbiegung  
 $u_5$  in mm  
 Min: 0.69  
 Max: 6.57

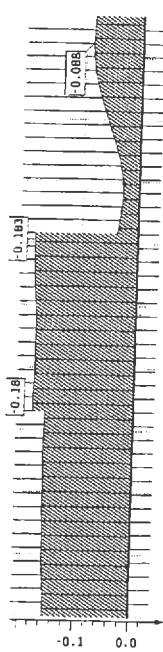


## Verschiebungen (im Hauptachsensystem)

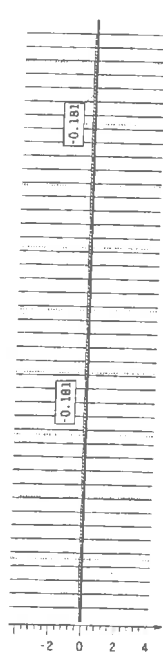
**Verschiebungen** (im Hauptachsensystem)  
Stabzug 34: Zugstab 2 (Länge 48,40 m)



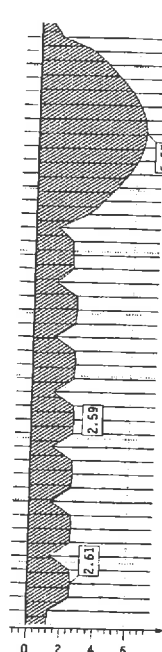
**Verschiebung**  
 $u_z$  in mm  
 Min: -0.18  
 Max: -0.03



Durchbiegung  
U<sub>η</sub> in mm  
Min: -0.18  
Max: -0.09



Durchbiegung  
 $u_z$  in mm  
Min: 0.69  
Max: 6.57



**Bauteil:** Pos.10.2 / Gebrauchszust.,  
Busbahnsteig 4/5

Block:

**Vorgang:** ...

Archiv Nr.:

Seite: 23

**Bauteil:** Pos.10.2 / Gebrauchszust.  
Busbahnsteig 4/5

**Block:**

**Vorgang:**

Archiv Nr.:

Seite: 24

Verfasser:	<b>Arbeitsgemeinschaft "Bahnhofsumfeld Goslar"</b> Ingrid Hentschel - Prof. Axel Oestreich Architekten BDA Rheinstr. 45 - 12161 Berlin	Ingenieurbüro Krentel GmbH Beratender Ingenieur für Bauwesen Forststr. 13 - 14163 Berlin	Seite : 2116
Bauwerk:	Baumaßnahme : Umgestaltung des Bahnhofsumfeldes		Pos. : .....

### 10.3 Grafik der extremalen Verformungen im Gebrauchszustand

#### Beschreibung der Lastfälle

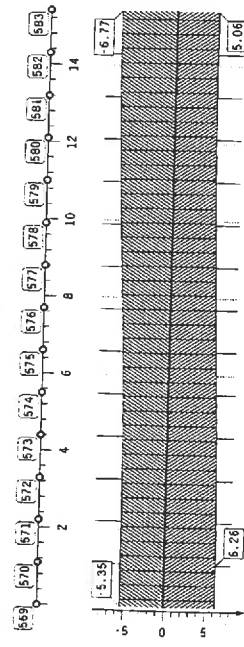
Lastfall	Bezeichnung	Teilsicherheitsbeiwert
1	Eigengewicht Stahlkonstruktion	1,00
2	Eigengewicht Glasdach	1,00
3	Schnee, Achse A-B / M-N	1,00
4	Schnee, Achse A-B / L-M	1,00
5	Schnee, Achse B-D / M-N	1,00
6	Schnee, Achse B-D / L-M	1,00
7	Schnee, Achse D-F / M-N	1,00
8	Schnee, Achse D-F / L-M	1,00
9	Schnee, Achse F-H / M-N	1,00
10	Schnee, Achse F-H / L-M	1,00
11	Schnee, Achse H-J / M-N	1,00
12	Schnee, Achse H-J / L-M	1,00
15	Wind in Querrichtung : (+Y)	1,00
16	Wind in Querrichtung : (-Y)	1,00
17	Wind in Längsrichtung : (+X)	1,00
18	Wind in Längsrichtung : (-X)	1,00

Bauteil: Pos. 2.00 Busbahnsteig 4 + 5	Archiv-Nr.:
Block:	
Vorgang:  Datum : 01.02.1999	

<b>Verfasser:</b> Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 <b>Programm:</b> 4H-FRAP 11/97 / pcas-GmbH / Ken9509756 <b>Bauwerk:</b> 9813 - 2.00		<b>ASB Nr.:</b>	<b>Datum:</b> 12.03.99
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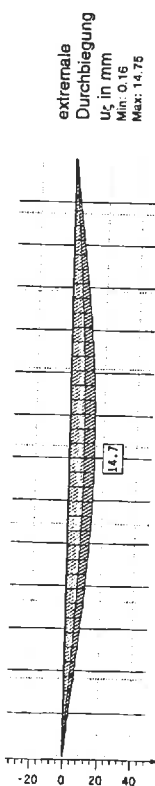
### BEMESSUNG

**Verschiebungen** (im Hauptachsensystem)  
 Stabzug 1: Übergurt HLT (H-J) (Länge 15.40 m)



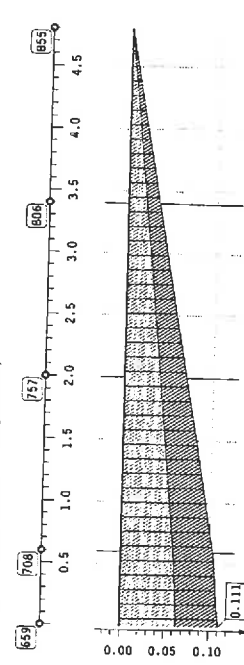
extremale  
Verschiebung  
 $u_z$  in mm  
Min: -6.77  
Max: 6.26

extremale  
Durchbiegung  
 $u_z$  in mm  
Min: -31.72  
Max: 31.72



extremale  
Verschiebung  
 $u_z$  in mm  
Min: 0.16  
Max: 14.75

**Verschiebungen** (im Hauptachsensystem)  
 Stabzug 7: Stütze Achse F (Länge 4.80 m)

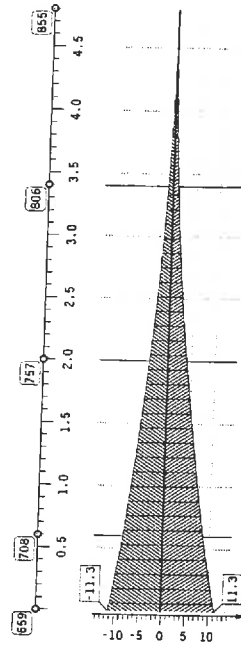


extremale  
Verschiebung  
 $u_z$  in mm  
Min: 0.00  
Max: 0.11

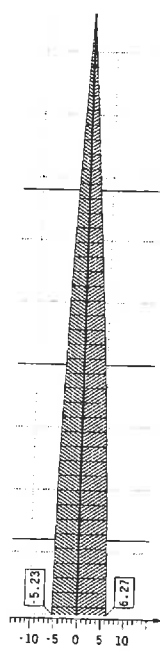
<b>Bauteil:</b> Pos.10.3 / Gebrauchszust. Busbahnhof 4/5	<b>Archiv Nr.:</b>
<b>Block:</b>	<b>Seite:</b> 1
<b>Vorgang:</b>	

<b>Verfasser:</b> Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 <b>Programm:</b> 4H-FRAP 11/97 / pcas-GmbH / Ken9509756 <b>Bauwerk:</b> 9813 - 2.00		<b>ASB Nr.:</b>	<b>Datum:</b> 12.03.99
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**Verschiebungen** (im Hauptachsensystem)  
 Stabzug 7: Stütze Achse F (Länge 4.80 m)

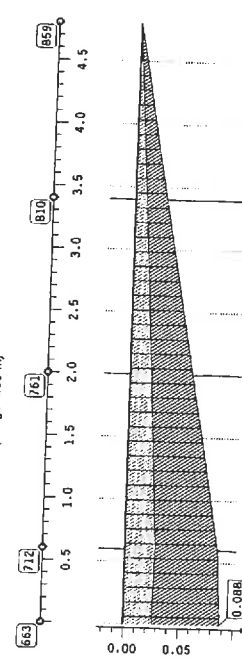


extremale  
Durchbiegung  
 $u_z$  in mm  
Min: -11.28  
Max: 11.28

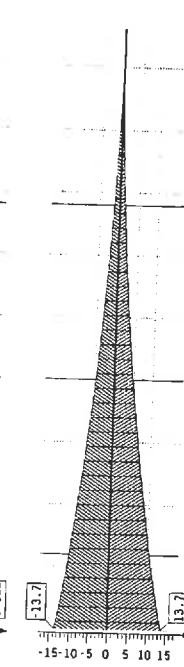


extremale  
Durchbiegung  
 $u_z$  in mm  
Min: -5.23  
Max: 5.27

**Verschiebungen** (im Hauptachsensystem)  
 Stabzug 8: Stütze Achse G (Länge 4.80 m)



extremale  
Verschiebung  
 $u_z$  in mm  
Min: 0.00  
Max: 0.09

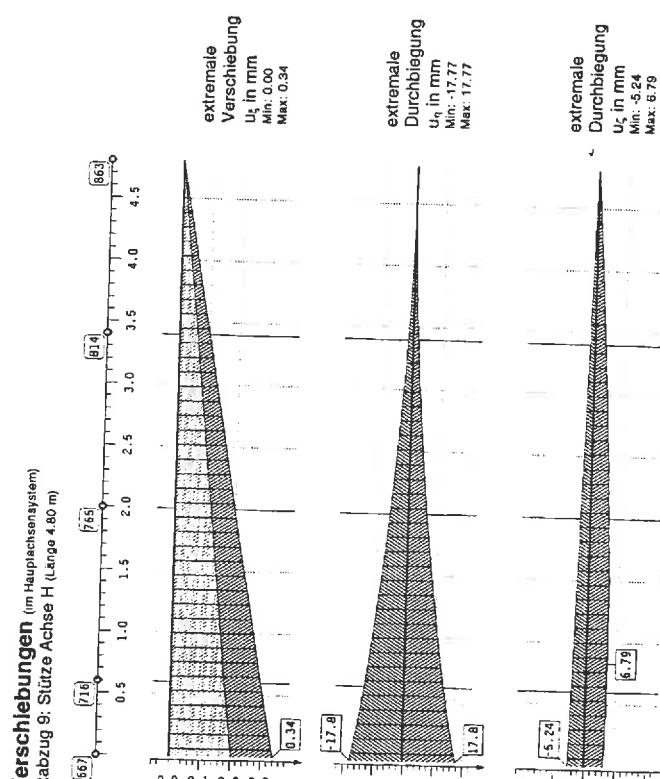
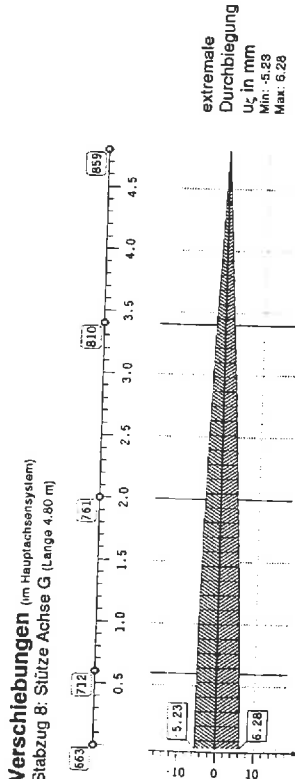


extremale  
Durchbiegung  
 $u_z$  in mm  
Min: -13.73  
Max: 13.73

<b>Bauteil:</b> Pos.10.3 / Gebrauchszust. Busbahnhof 4/5	<b>Archiv Nr.:</b>
<b>Block:</b>	<b>Seite:</b> 2
<b>Vorgang:</b>	

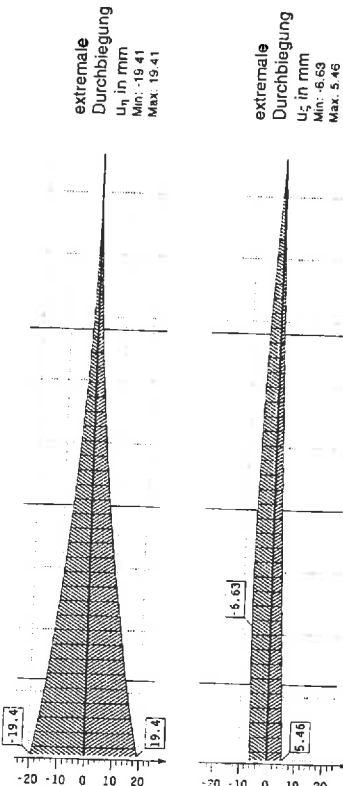
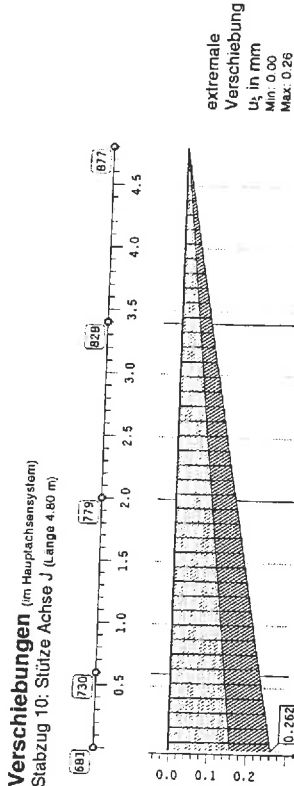
21117

<b>Verfasser:</b> Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809577-0		<b>Datum:</b> 12.03.99	
<b>Programm:</b> 4H-FRAP 11/97 / pcae-GmbH / kren9509756		<b>ASB Nr.:</b>	
<b>Bauwerk:</b> 9813 - 2.00			



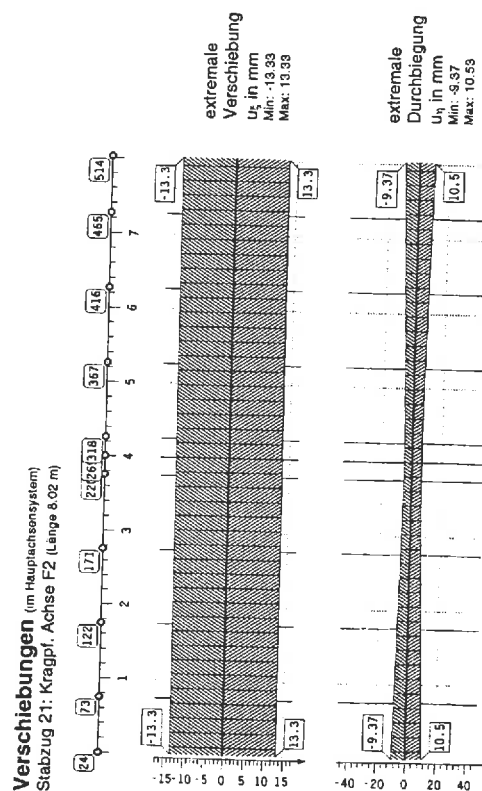
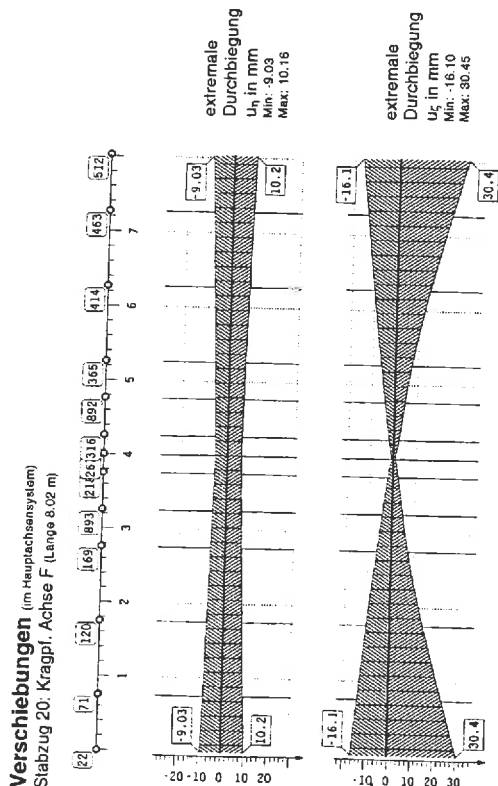
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<b>Block:</b>		<b>Seite:</b> 3	
<b>Vorgang:</b>			

<b>Verfasser:</b> Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809577-0		<b>Datum:</b> 12.03.99	
<b>Programm:</b> 4H-FRAP 11/97 / pcae-GmbH / kren9509756		<b>ASB Nr.:</b>	
<b>Bauwerk:</b> 9813 - 2.00			



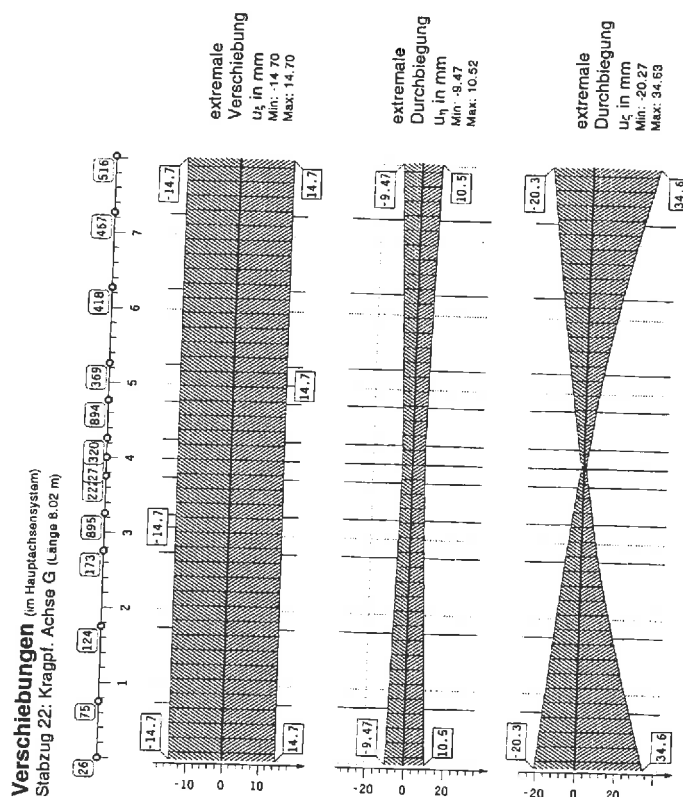
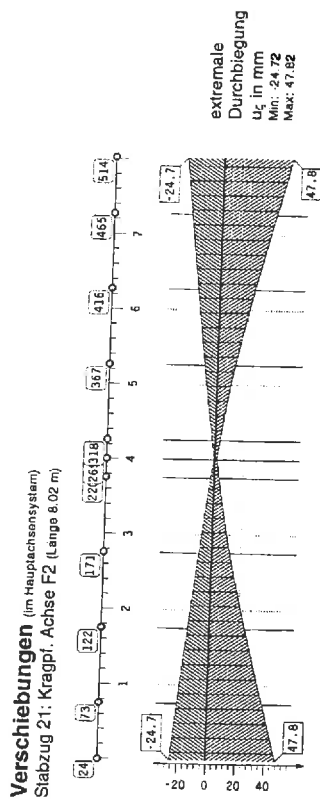
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<b>Block:</b>		<b>Seite:</b> 4	
<b>Vorgang:</b>			

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programm: 4H-FRAP 11/97 / pcas-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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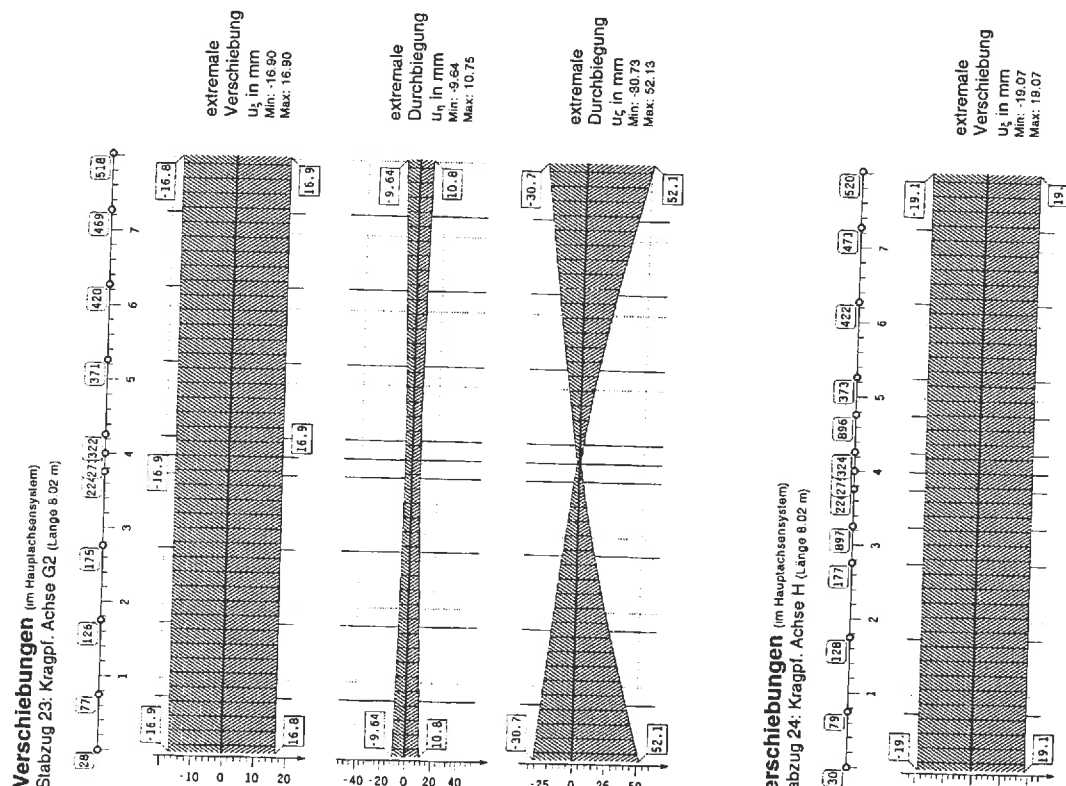
Bauteil: Pos. 10.3 / Gebrauchszust. Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 5
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0 Programm: 4H-FRAP 11/97 / pcas-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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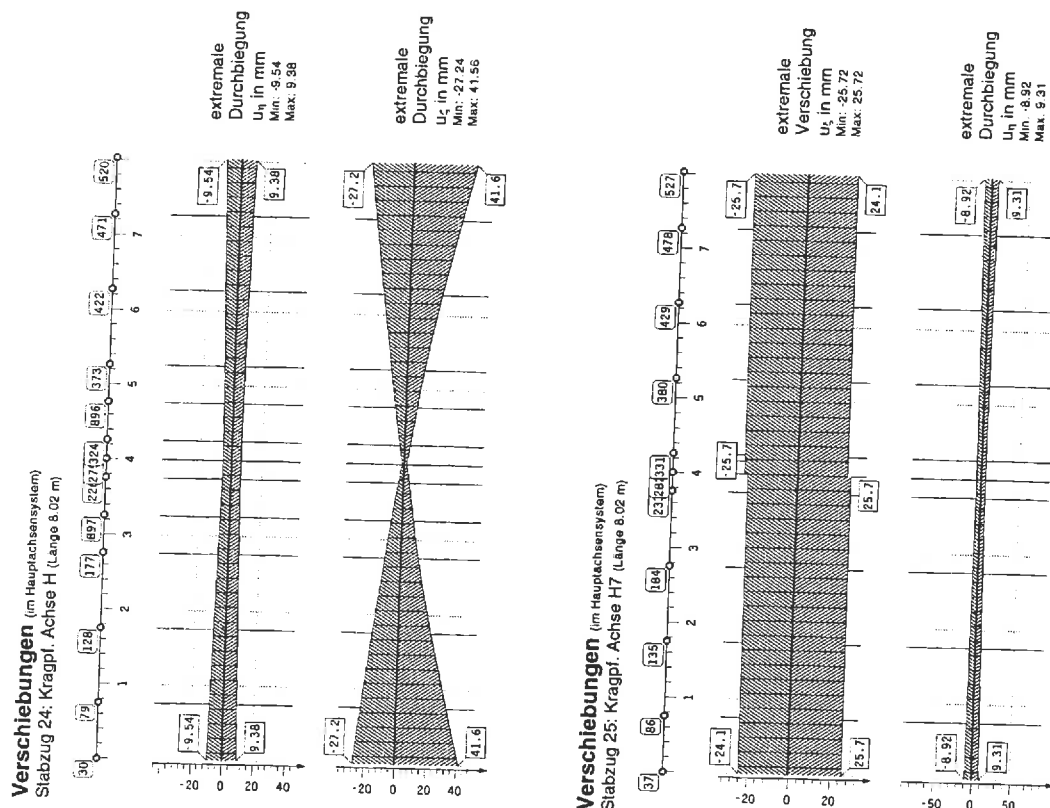
Bauteil: Pos. 10.3 / Gebrauchszust. Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 6
Vorgang:	

<b>Verfasser:</b> <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0		<b>Datum:</b> 12.03.99	
<b>Programm:</b> 4H-FRAP 11/97 / pcae-GmbH / kren9509756		<b>ASB Nr.:</b>	
<b>Bauwerk:</b> 9813 - 2.00			



<b>Bauteil:</b> Pos.10.3 / Gebrauchszust. Busbannaleg 4/5		<b>Archiv Nr.:</b>	
<b>Block:</b>		<b>Seite:</b> 7	
<b>Vorgang:</b>			

<b>Verfasser:</b> <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0		<b>Datum:</b> 12.03.99	
<b>Programm:</b> 4H-FRAP 11/97 / pcae-GmbH / kren9509756		<b>ASB Nr.:</b>	
<b>Bauwerk:</b> 9813 - 2.00			

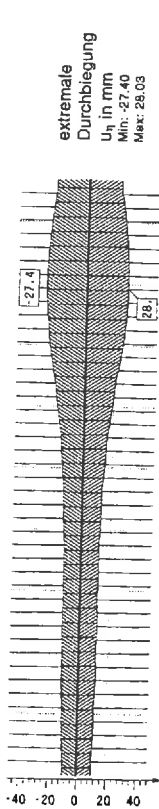
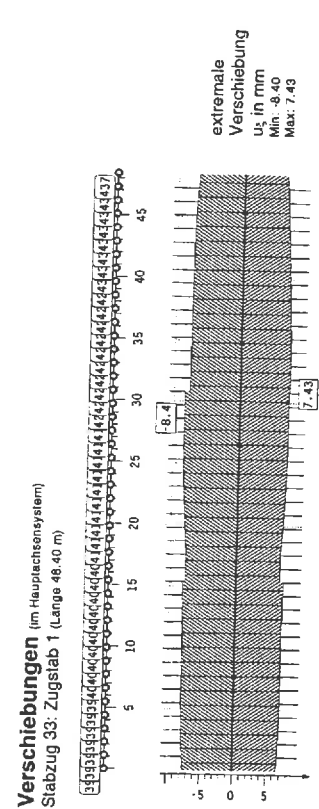
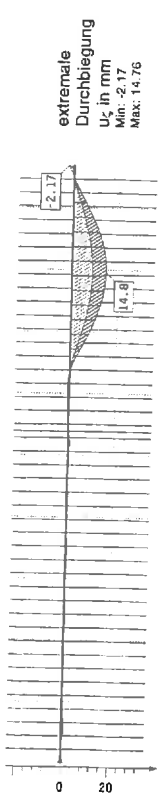
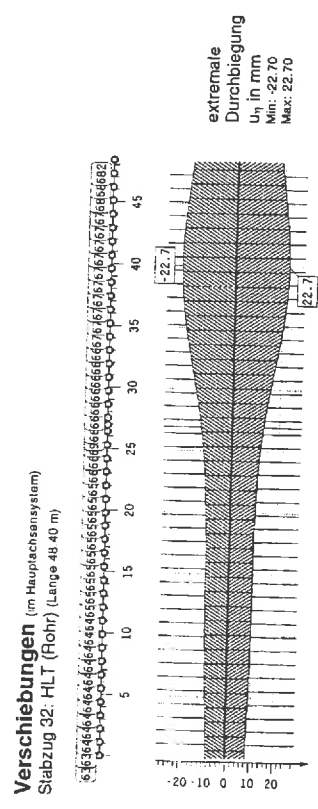


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<b>Block:</b>		<b>Seite:</b> 8	
<b>Vorgang:</b>			



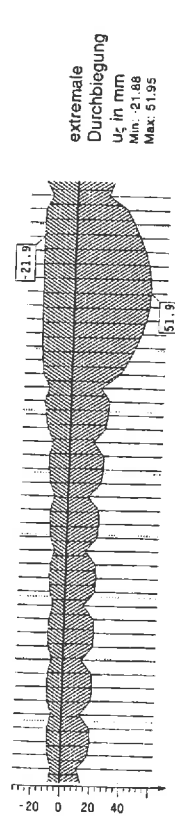
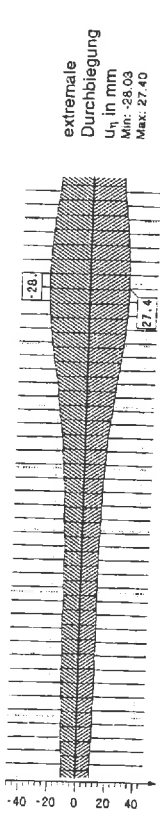
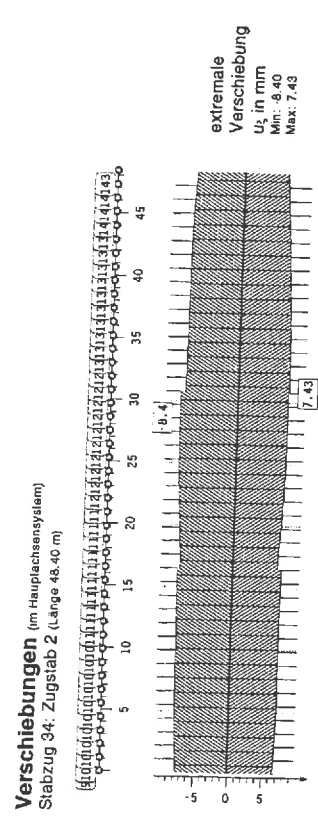
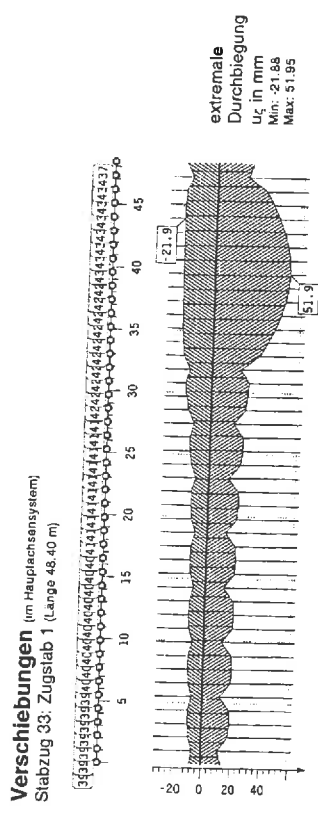


Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	ASB Nr.:	Datum: 12.03.99
Programm:	4H-FRAP 11/97 / pcas-GmbH / kern9509756		
Bauwerk:	9813 - 2.00		



Bauteil:	Pos.10.3 / Gebrauchsuzst. Busbahnhaltg 4/5	Archiv Nr.:	
Block:		Seite:	11
Vorgang:			

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	ASB Nr.:	Datum: 12.03.99
Programm:	4H-FRAP 11/97 / pcas-GmbH / kern9509756		
Bauwerk:	9813 - 2.00		



Bauteil:	Pos.10.3 / Gebrauchsuzst. Busbahnhaltg 4/5	Archiv Nr.:	
Block:		Seite:	12
Vorgang:			

Verfasser:	<b>Arbeitsgemeinschaft "Bahnhofsumfeld Goslar"</b> Ingrid Hentschel - Prof. Axel Oestreich Architekten BDA Rheinstr. 45 - 12161 Berlin	Ingenieurbüro Krentel GmbH Beratender Ingenieur für Bauwesen Forststr. 13 - 14163 Berlin	Seite : 2 / 123
Bauwerk:	Baumaßnahme : Umgestaltung des Bahnhofsumfeldes		Pos. : .....

#### 10.4 Grafik der extremalen Momente für den Bemessungslastfall

**Lastfallfaktoren: Teilsicherheitsbeiwerte nach DIN 18800, Element 710**

**Kombinationsbeiwerte :  $\psi = 1,00$**

Die Kombinationsbeiwerte werden auf der sicheren Seite liegend mit 1,00 angesetzt.

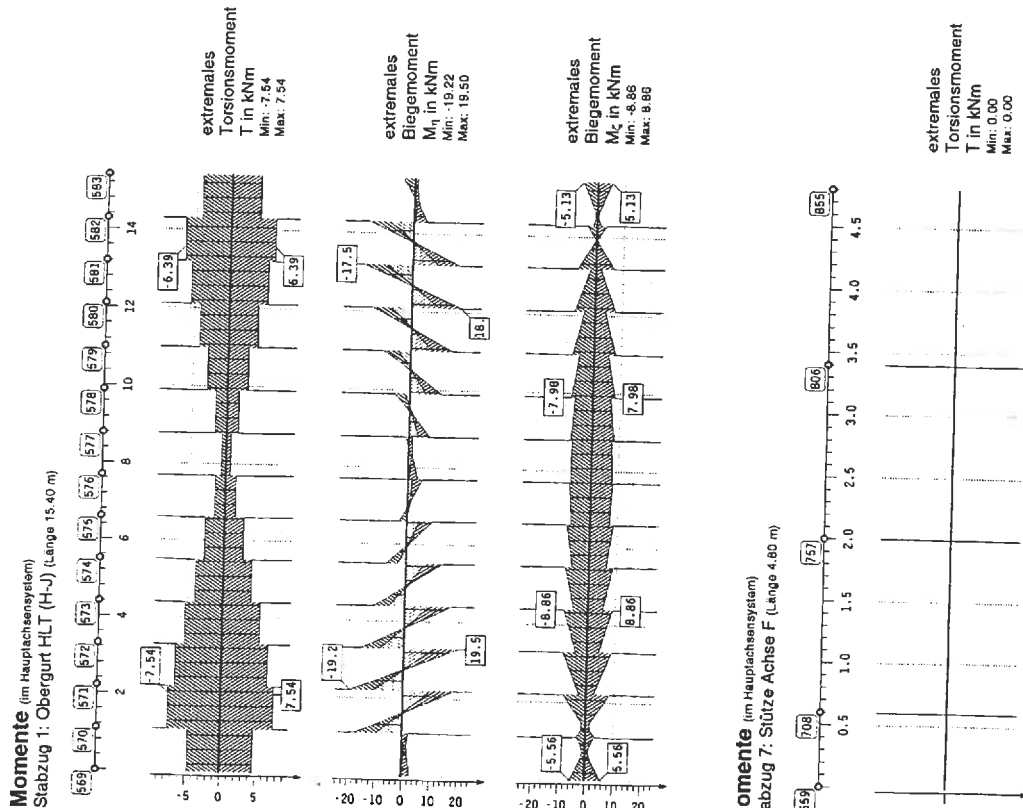
#### Beschreibung der Lastfälle :

Lastfall	Bezeichnung	Teilsicherheitsbeiwert
1	Eigengewicht Stahlkonstruktion	1,35
2	Eigengewicht Glasdach	1,35
3	Schnee, Achse A-B / M-N	1,5
4	Schnee, Achse A-B / L-M	1,5
5	Schnee, Achse B-D / M-N	1,5
6	Schnee, Achse B-D / L-M	1,5
7	Schnee, Achse D-F / M-N	1,5
8	Schnee, Achse D-F / L-M	1,5
9	Schnee, Achse F-H / M-N	1,5
10	Schnee, Achse F-H / L-M	1,5
11	Schnee, Achse H-J / M-N	1,5
12	Schnee, Achse H-J / L-M	1,5
15	Wind in Querrichtung : (+Y)	1,5
16	Wind in Querrichtung : (- Y)	1,5
17	Wind in Längsrichtung : (+X)	1,5
18	Wind in Längsrichtung : (-X)	1,5

Bauteil: Pos. 2.00 Busbahnsteig 4 + 5	Archiv-Nr.:
Block:	
Vorgang:  Datum : 01.02.1999	

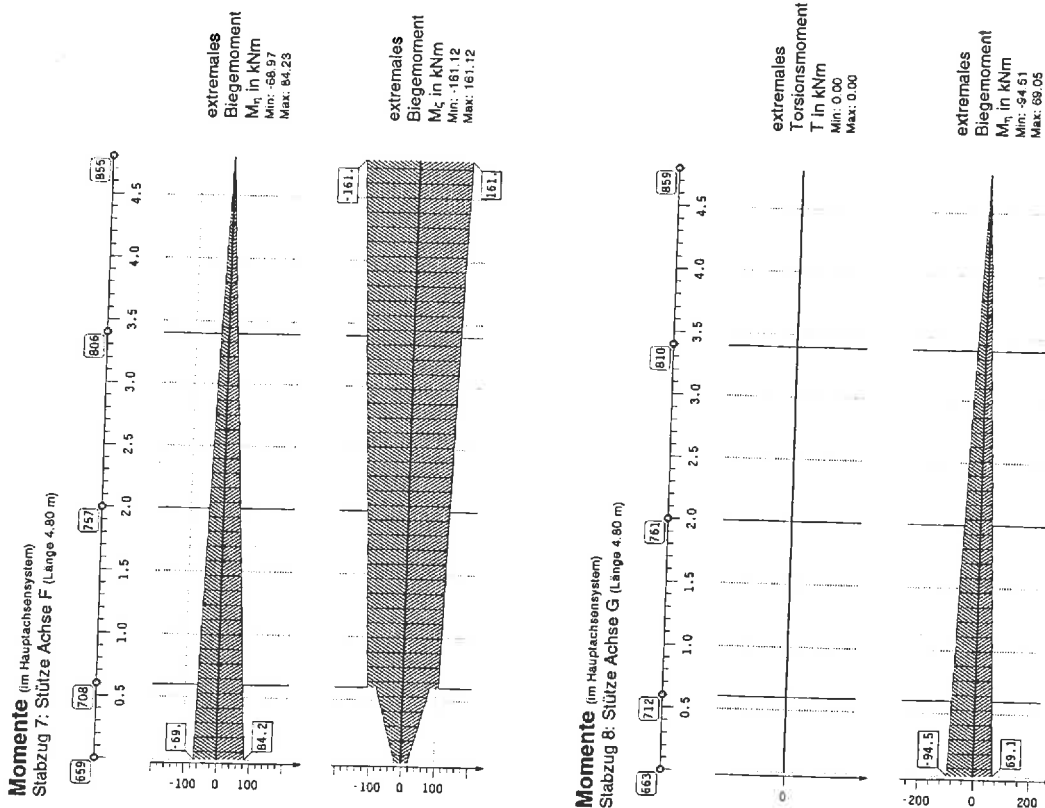
Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	Datum:	12.03.99
Programm:	4H-FRAP 11/97 / pcae-GmbH / kren9509756	ASB Nr.:	
Bauwerk:	9813 - 2.00		

# BEMESSUNG



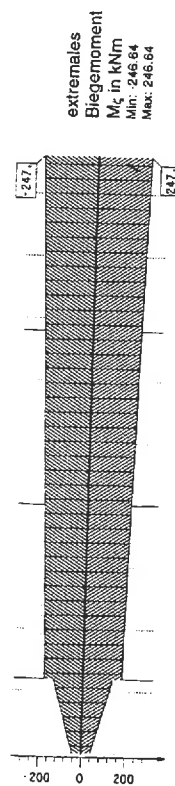
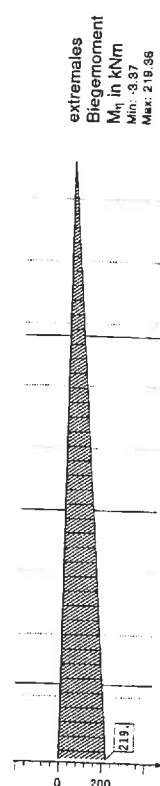
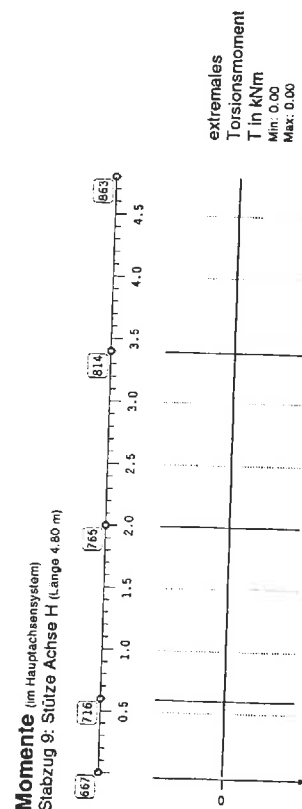
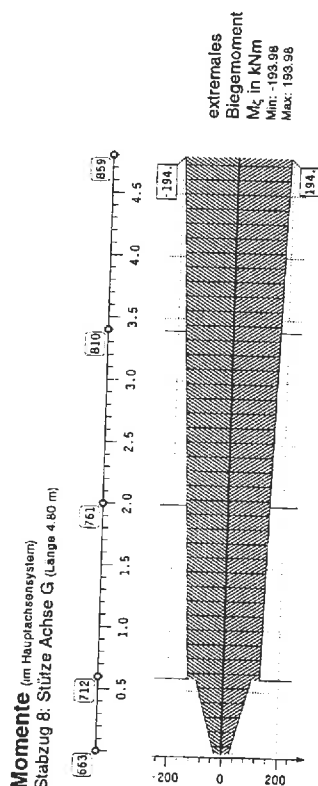
Bauteil:	Pos. 10.4 / extr. Momente	Archiv Nr.:	
Block:	Busbahnsteig 4/5	Seite:	1
Vorgang:			

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	Datum:	12.03.99
Programm:	4H-FRAP 11/97 / pcae-GmbH / kren9509758	ASB Nr.:	
Bauwerk:	9813 - 2.00		



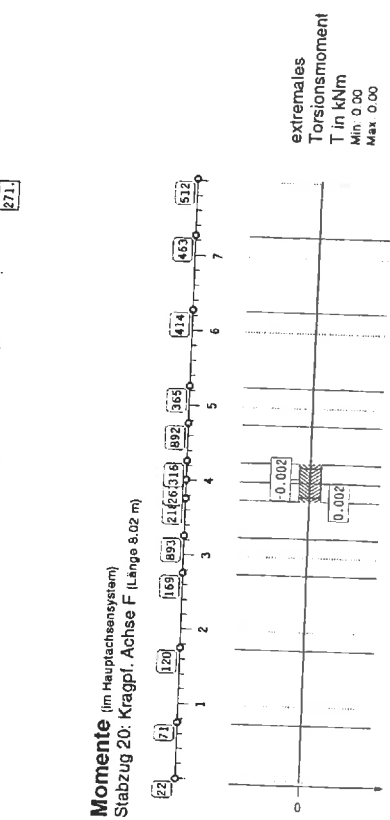
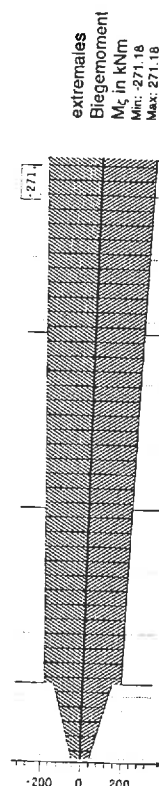
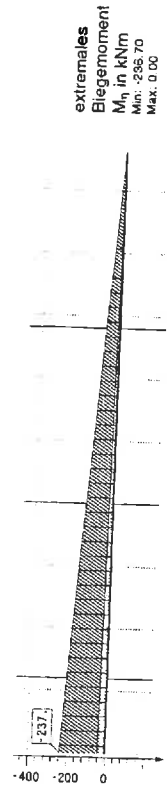
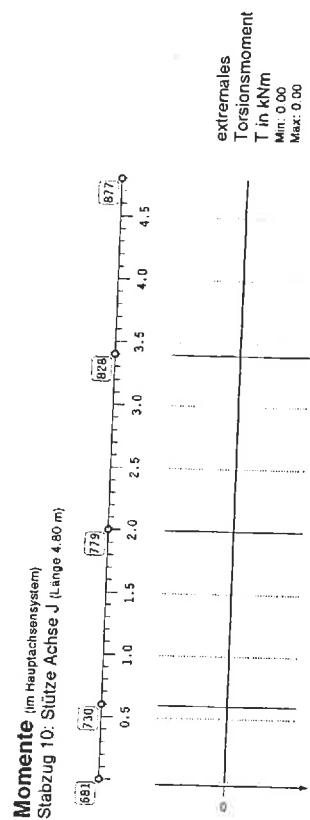
Bauteil:	Pos. 10.4 / extr. Momente	Archiv Nr.:	
Block:	Busbahnsteig 4/5	Seite:	2
Vorgang:			

Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		Datum: 12.03.99	
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		ASB Nr.:	
Bauwerk: 9813 - 2.00			



Bauteil: Pos.10.4 / extr. Momente Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 3
Vorgang:	

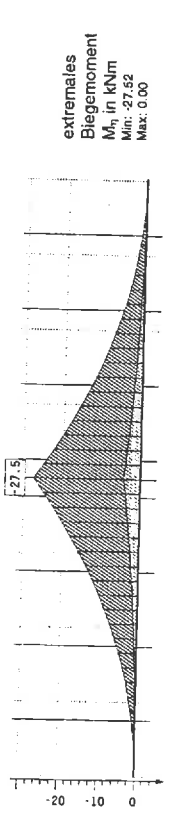
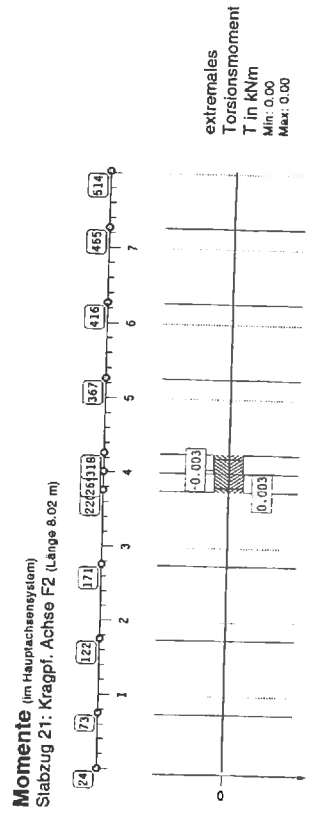
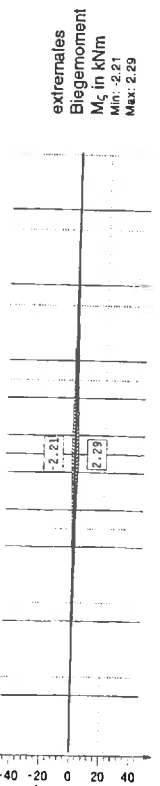
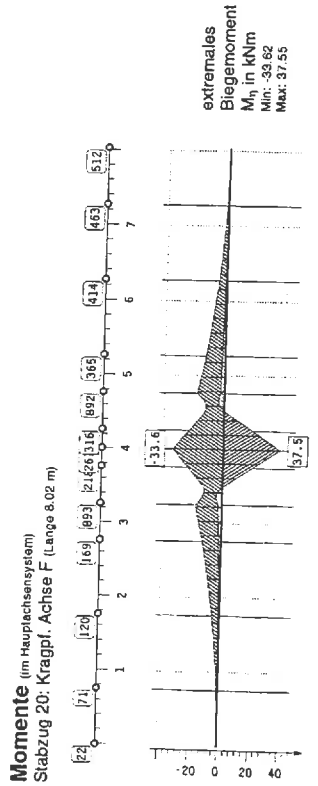
Verfasser: Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		Datum: 12.03.99	
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		ASB Nr.:	
Bauwerk: 9813 - 2.00			



Bauteil: Pos.10.4 / extr. Momente Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 4
Vorgang:	

Verfasser:  
**Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcas-GmbH / kren9509756  
Bauwerk: 9813 - 2.00

ASB Nr.:  
Datum: 12.03.99

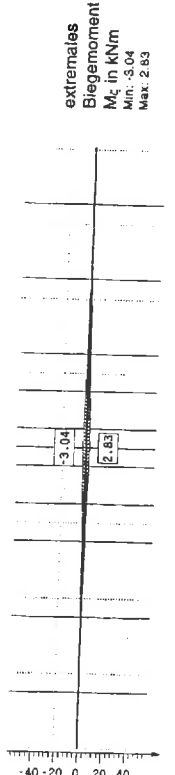
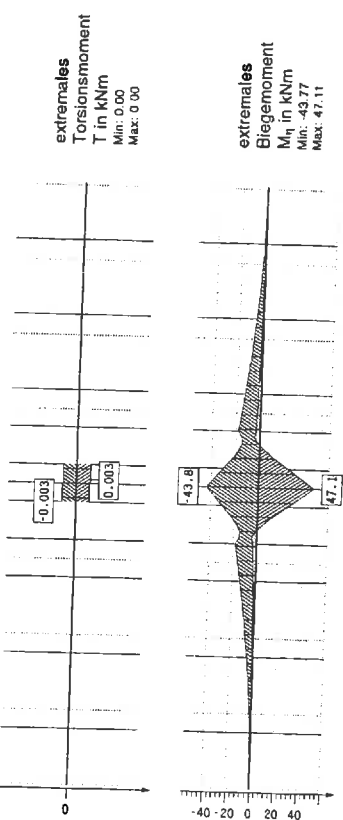
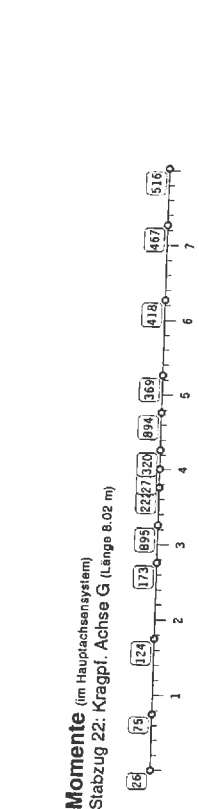
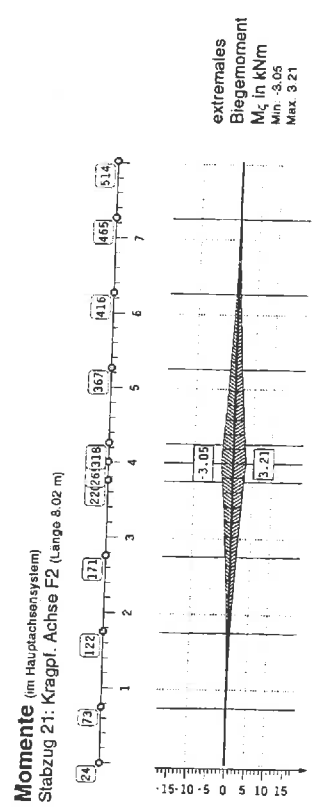


Bauteil: Pos.10.4 / extr. Momente  
Block: Busbahnsteig 4/5

Archiv Nr.:  
Seite: 5  
Vorgang:

Verfasser:  
**Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcas-GmbH / kren9509756  
Bauwerk: 9813 - 2.00

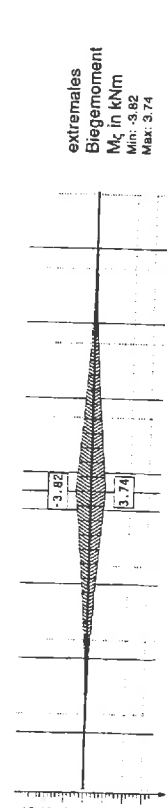
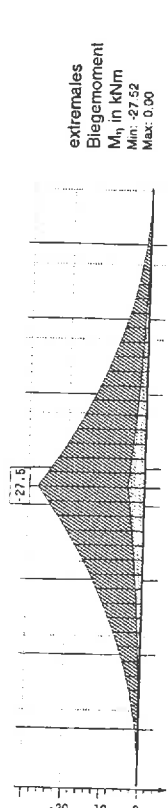
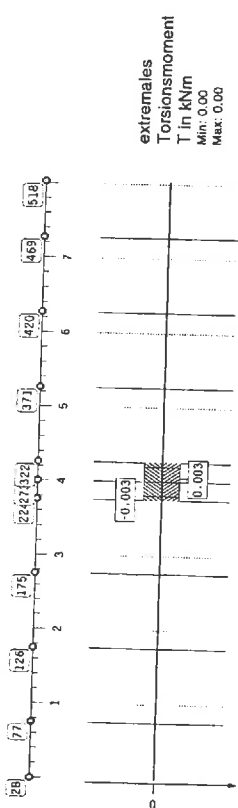
ASB Nr.:  
Datum: 12.03.99



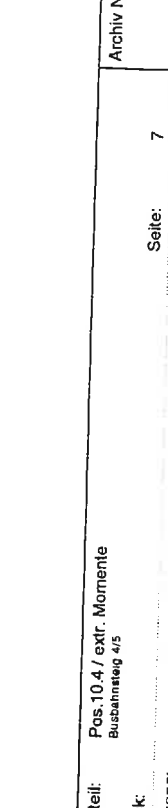
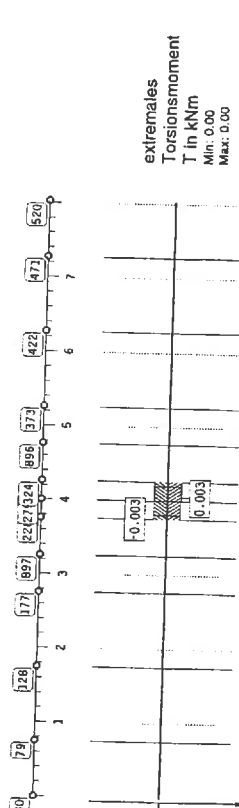
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Block: Busbahnsteig 4/5

Archiv Nr.:  
Seite: 6  
Vorgang:

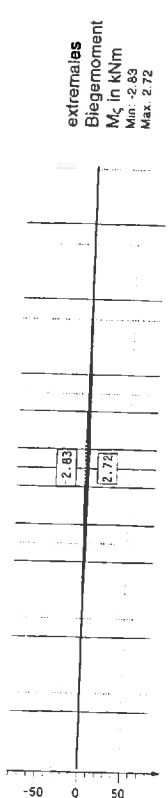
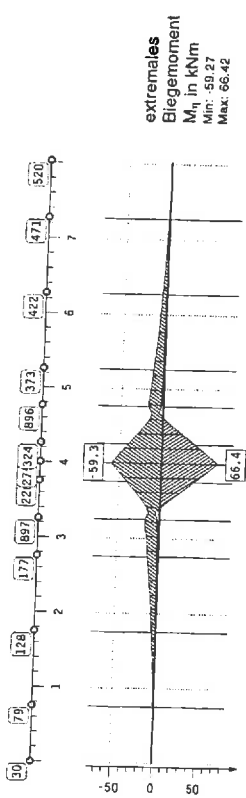
**Momente** (im Hauptachsensystem)  
 Stabzug 23: Kragpf. Achse G2 (Länge 8.02 m)



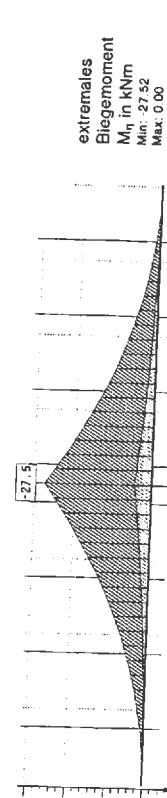
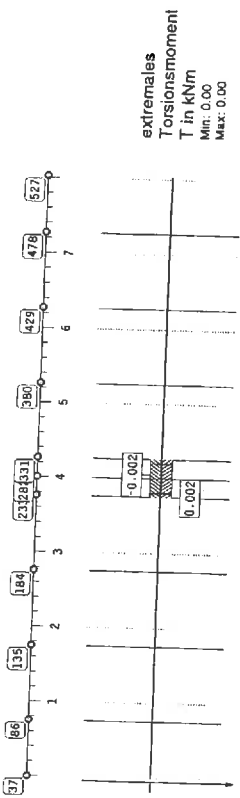
**Momente** (im Hauptachsensystem)  
 Stabzug 24: Kragpf. Achse H (Länge 8.02 m)



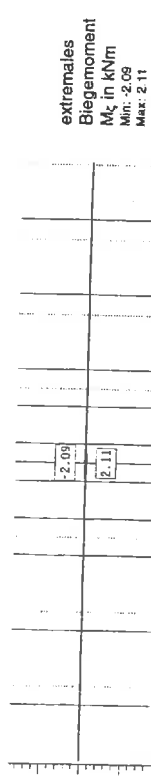
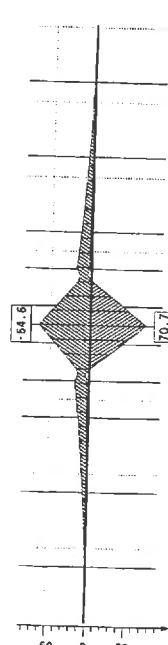
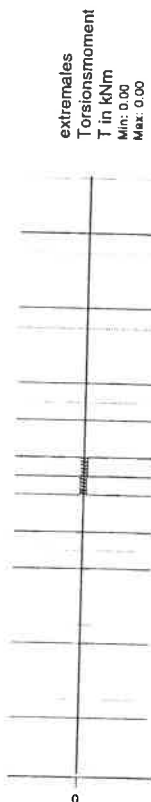
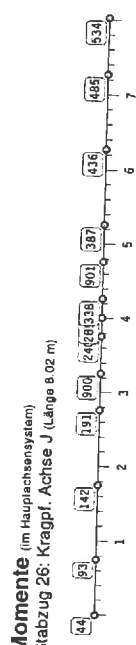
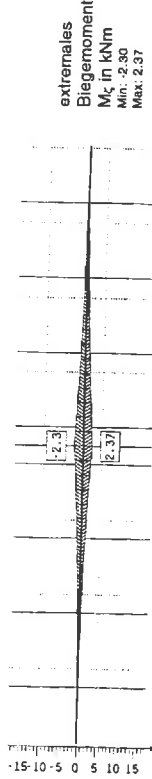
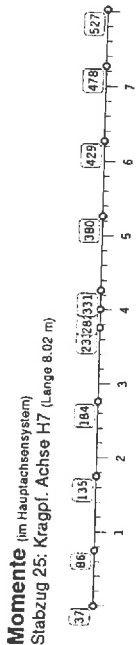
**Momente** (im Hauptachsensystem)  
 Stabzug 24: Kragpf. Achse H (Länge 8.02 m)



**Momente** (im Hauptachsensystem)  
 Stabzug 25: Kragpf. Achse H7 (Länge 8.02 m)

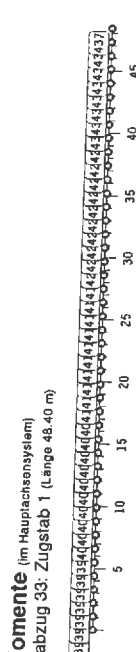
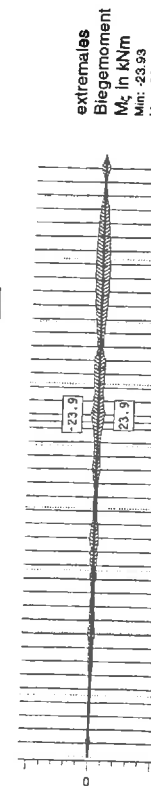
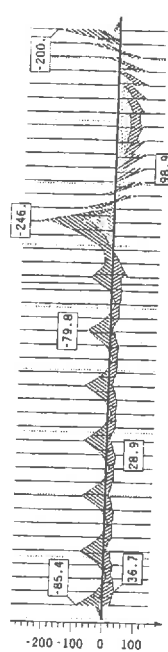
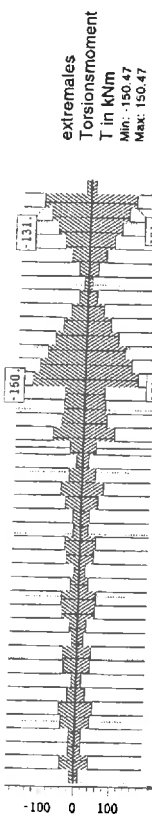
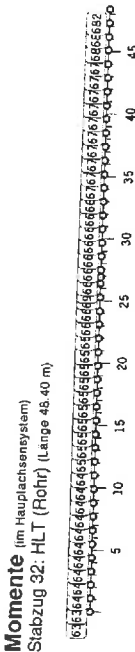


Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0 Programm: 4H-FRAP 11/97 / pcae-gmbh / ken9503756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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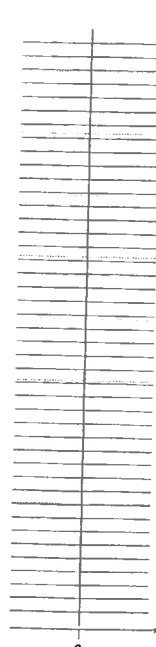
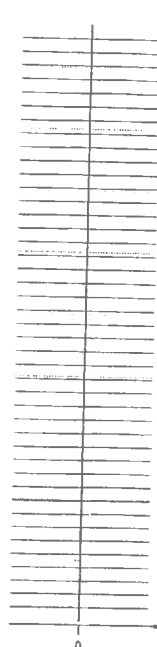
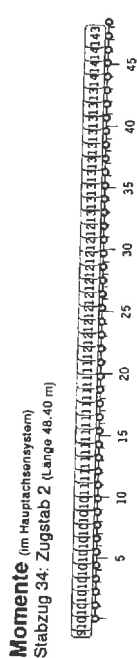
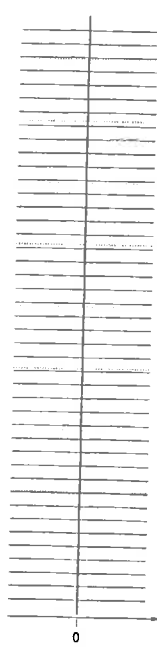
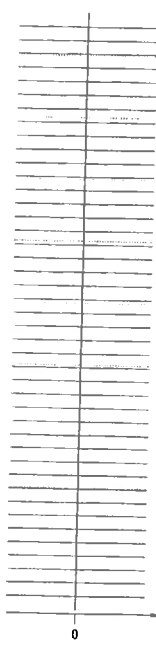
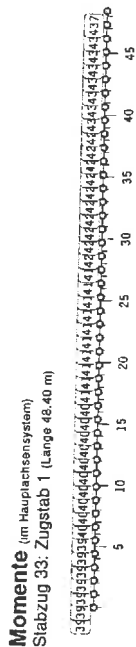
Bauteil: Pos.10.4 / extr. Momente Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 9
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809377-0 Programm: 4H-FRAP 11/97 / pcae-gmbh / ken9503756 Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99
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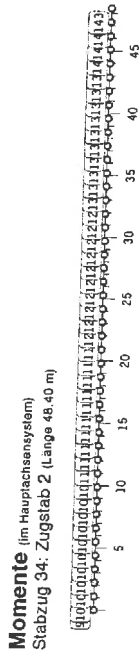
Bauteil: Pos.10.4 / extr. Momente Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 10
Vorgang:	

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	Datum:	12.03.99
Programm:	4H-FRAP 11/97 / pcas-GmbH / kren9509756	ASB Nr.:	
Bauwerk:	9813 - 2.00		



Bauteil:	Pos. 10.4 / extr. Momente Busbahnsteig 4/5	Archiv Nr.:	
Block:		Seite:	11
Vorgang:			

Verfasser:	Ingenieurbüro Krentel GmbH Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	Datum:	12.03.99
Programm:	4H-FRAP 11/97 / pcas-GmbH / kren9509756	ASB Nr.:	
Bauwerk:	9813 - 2.00		



Bauteil:	Pos. 10.4 / extr. Momente Busbahnsteig 4/5	Archiv Nr.:	
Block:		Seite:	12
Vorgang:			



Verfasser:	<b>Arbeitsgemeinschaft "Bahnhofsumfeld Goslar"</b> Ingrid Hentschel - Prof. Axel Oestreich Architekten BDA Rheinstr. 45 - 12161 Berlin	Ingenieurbüro Krentel GmbH Beratender Ingenieur für Bauwesen Forststr. 13 - 14163 Berlin	Seite : 2 / 130
Bauwerk:	Baumaßnahme : Umgestaltung des Bahnhofsumfeldes		Pos. : .....

## 10.5 Grafik der Spannungsausnutzung für den Bemessungslastfall

**Lastfallfaktoren:** Teilsicherheitsbeiwerte nach DIN 18800, Element 710  
**Kombinationsbeiwerte :  $\psi = 1,00$**

Die Kombinationsbeiwerte werden auf der sicheren Seite liegend mit 1,00 angesetzt.

### Beschreibung der Lastfälle :

Lastfall	Bezeichnung	Teilsicherheitsbeiwert
1	Eigengewicht Stahlkonstruktion	1,35
2	Eigengewicht Glasdach	1,35
3	Schnee, Achse A-B / M-N	1,5
4	Schnee, Achse A-B / L-M	1,5
5	Schnee, Achse B-D / M-N	1,5
6	Schnee, Achse B-D / L-M	1,5
7	Schnee, Achse D-F / M-N	1,5
8	Schnee, Achse D-F / L-M	1,5
9	Schnee, Achse F-H / M-N	1,5
10	Schnee, Achse F-H / L-M	1,5
11	Schnee, Achse H-J / M-N	1,5
12	Schnee, Achse H-J / L-M	1,5
15	Wind in Querrichtung : (+Y)	1,5
16	Wind in Querrichtung : (- Y)	1,5
17	Wind in Längsrichtung : (+X)	1,5
18	Wind in Längsrichtung : (-X)	1,5

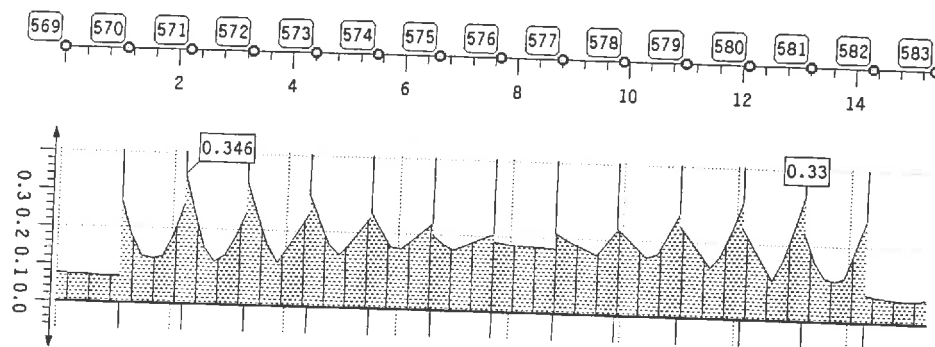
Bauteil: Pos. 2.00 Busbahnsteig 4 + 5	Archiv-Nr.:
Block:	
Vorgang:  Datum : 01.02.1999	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	21131
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756	
Bauwerk: 9813 - 2.00	ASB Nr.: Datum: 12.03.99

## BEMESSUNG

### Ausnutzung

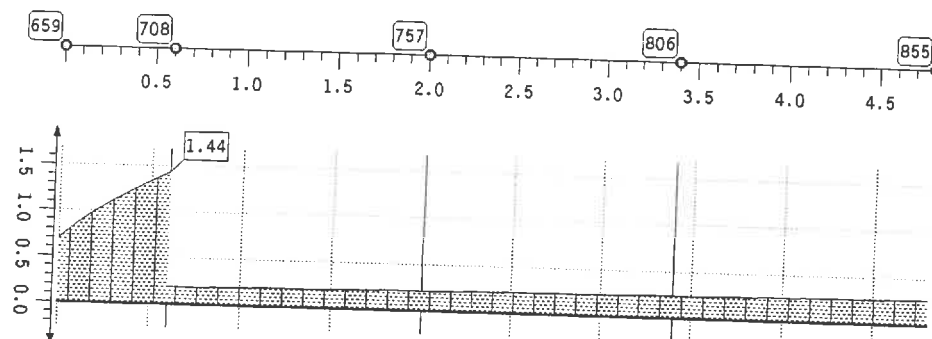
Stabzug 1: Obergurt HLT (H-J) (Länge 15.40 m)



Ausnutzung  
Max: 0.35

### Ausnutzung

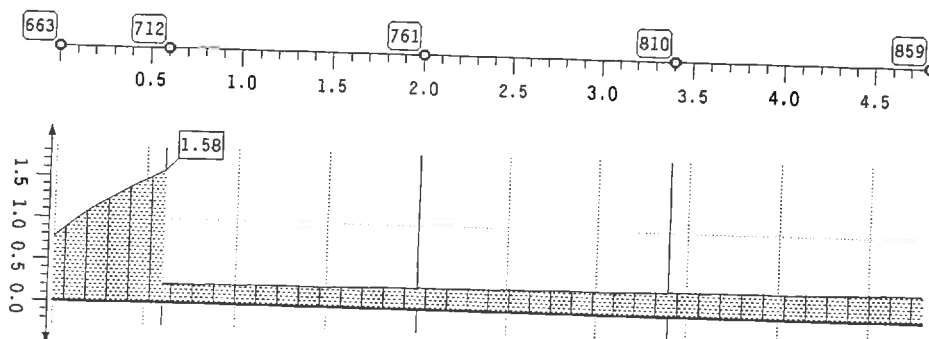
Stabzug 7: Stütze Achse F (Länge 4.80 m)



Ausnutzung  
Max: 1.44

### Ausnutzung

Stabzug 8: Stütze Achse G (Länge 4.80 m)



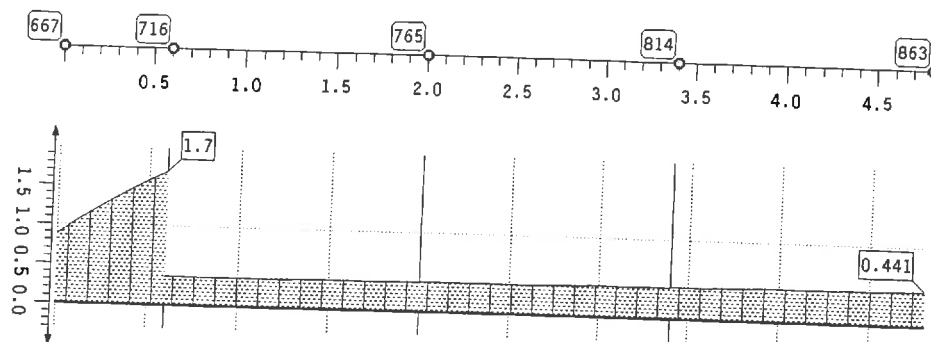
Ausnutzung  
Max: 1.58

Bauteil:	Pos.10.5 / Ausnutzung Busbahnsteig 4/5	Archiv Nr.:
Block:		
Vorgang:		
Seite: 1		

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0	21132
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756 Bauwerk: 9813 - 2.00	ASB Nr.: Datum: 12.03.99

### Ausnutzung

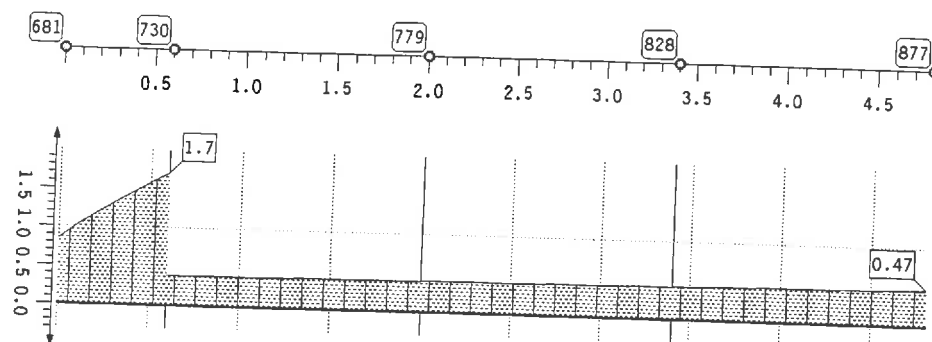
Stabzug 9: Stütze Achse H (Länge 4.80 m)



Ausnutzung  
Max: 1.70

### Ausnutzung

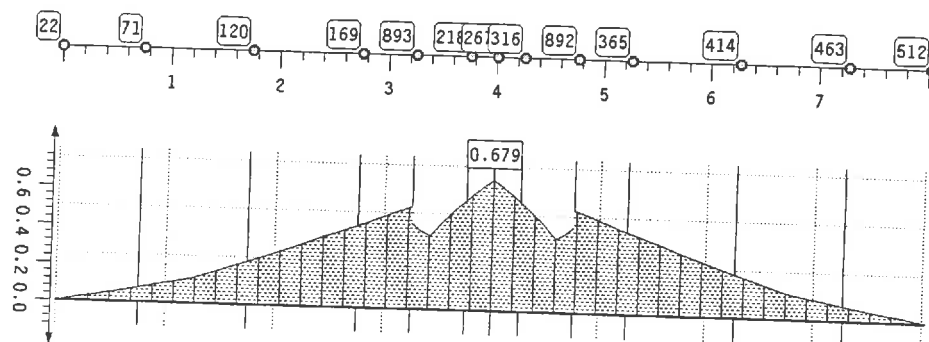
Stabzug 10: Stütze Achse J (Länge 4.80 m)



Ausnutzung  
Max: 1.70

### Ausnutzung

Stabzug 20: Kragpf. Achse F (Länge 8.02 m)



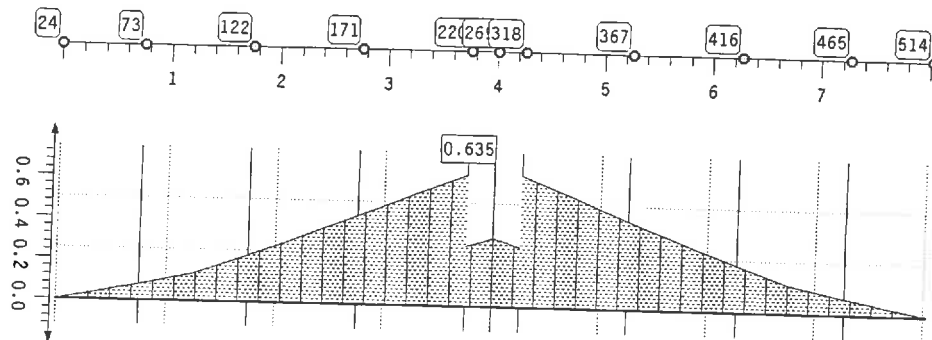
Ausnutzung  
Max: 0.68

Bauteil: Pos.10.5 / Ausnutzung Busbahnsteig 4/5	Archiv Nr.:
Block:	Seite: 2
Vorgang:	

Verfasser: <b>Ingenieurbüro Krentel GmbH</b> Forststr. 26 14163 Berlin - Zehlendorf Tel. 030 - 809977-0		21133
Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756		
Bauwerk: 9813 - 2.00	ASB Nr.:	Datum: 12.03.99

### Ausnutzung

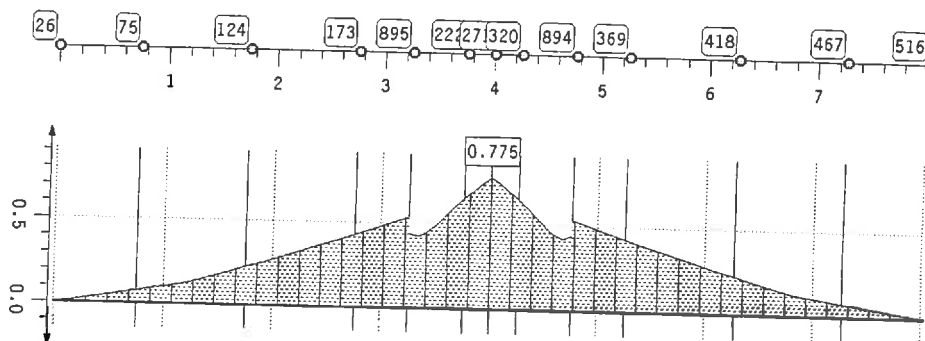
Stabzug 21: Kragpf. Achse F2 (Länge 8.02 m)



Ausnutzung  
Max: 0.64

### Ausnutzung

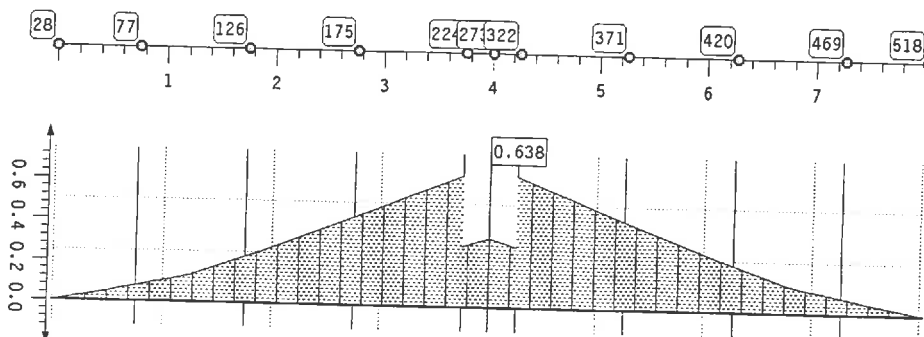
Stabzug 22: Kragpf. Achse G (Länge 8.02 m)



Ausnutzung  
Max: 0.78

### Ausnutzung

Stabzug 23: Kragpf. Achse G2 (Länge 8.02 m)



Ausnutzung  
Max: 0.64

Bauteil:	Pos.10.5 / Ausnutzung Busbahnsteig 4/5	Archiv Nr.:
Block:		
Vorgang:		
Seite: 3		

Verfasser: **Ingenieurbüro Krentel GmbH**

Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0

Programm: 4H-FRAP 11/97 / pcae-GmbH / kren9509756

Bauwerk: 9813 - 2.00

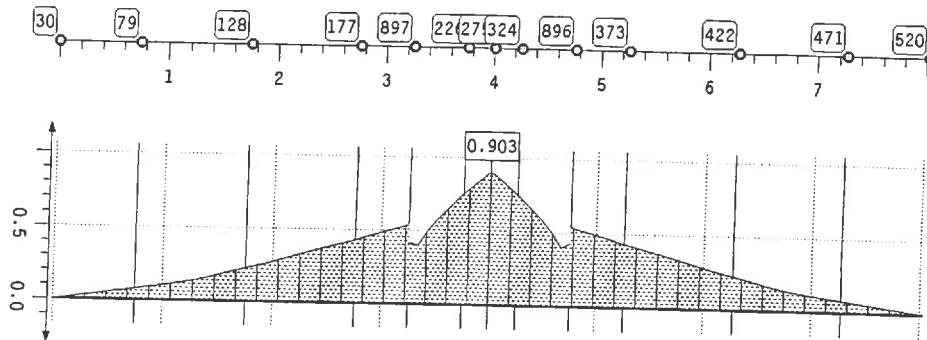
ASB Nr.:

Datum: 12.03.99

21134

### Ausnutzung

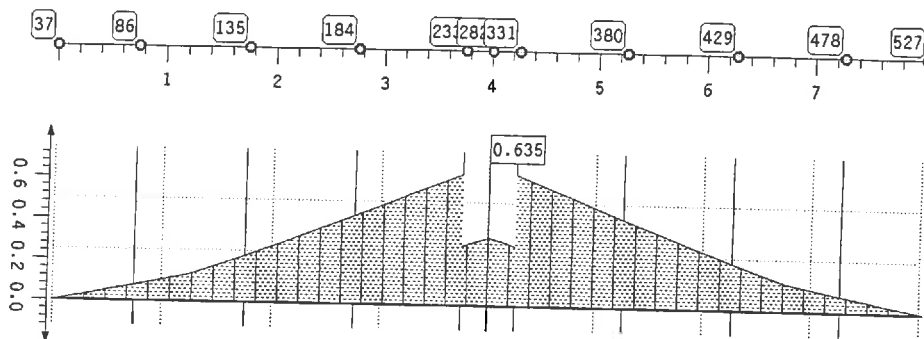
Stabzug 24: Kragpf. Achse H (Länge 8.02 m)



Ausnutzung  
Max: 0.90

### Ausnutzung

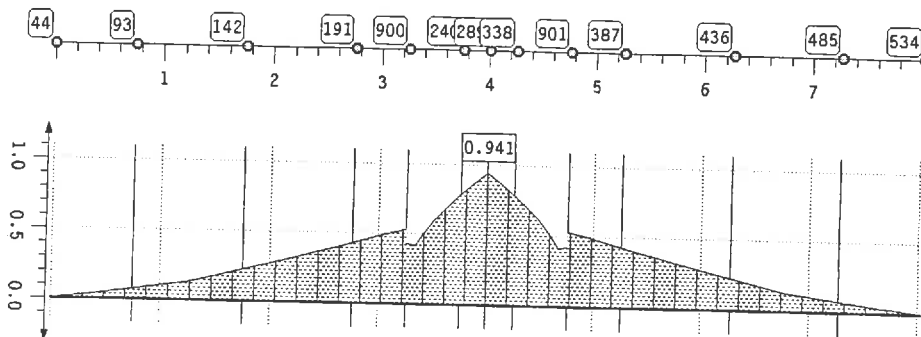
Stabzug 25: Kragpf. Achse H7 (Länge 8.02 m)



Ausnutzung  
Max: 0.64

### Ausnutzung

Stabzug 26: Kragpf. Achse J (Länge 8.02 m)



Ausnutzung  
Max: 0.94

Bauteil: Pos.10.5 / Ausnutzung  
Busbahnsteig 4/5

Block:

Seite: 4

Vorgang:

Archiv Nr.:



Verfasser:	<b>Arbeitsgemeinschaft "Bahnhofsumfeld Goslar"</b> Ingrid Hentschel - Prof. Axel Oestreich Architekten BDA Rheinstr. 45 - 12161 Berlin	Ingenieurbüro Krentel GmbH Beratender Ingenieur für Bauwesen Forststr. 13 - 14163 Berlin	Seite : 2/136
Bauwerk:	Baumaßnahme : Umgestaltung des Bahnhofsumfeldes		Pos. : .....

## 10.6 Tabelle der extremalen Schnittgrößen für den Bemessungslastfall

**Lastfallfaktoren: Teilsicherheitsbeiwerte nach DIN 18800, Element 710**

**Kombinationsbeiwerte :  $\psi = 1,00$**

Die Kombinationsbeiwerte werden auf der sicheren Seite liegend mit 1,00 angesetzt.

### Beschreibung der Lastfälle :

Lastfall	Bezeichnung	Teilsicherheitsbeiwert
1	Eigengewicht Stahlkonstruktion	1,35
2	Eigengewicht Glasdach	1,35
3	Schnee, Achse A-B / M-N	1,5
4	Schnee, Achse A-B / L-M	1,5
5	Schnee, Achse B-D / M-N	1,5
6	Schnee, Achse B-D / L-M	1,5
7	Schnee, Achse D-F / M-N	1,5
8	Schnee, Achse D-F / L-M	1,5
9	Schnee, Achse F-H / M-N	1,5
10	Schnee, Achse F-H / L-M	1,5
11	Schnee, Achse H-J / M-N	1,5
12	Schnee, Achse H-J / L-M	1,5
15	Wind in Querrichtung : (+Y)	1,5
16	Wind in Querrichtung : (- Y)	1,5
17	Wind in Längsrichtung : (+X)	1,5
18	Wind in Längsrichtung : (-X)	1,5

Bauteil: Pos. 2.00 Busbahnsteig 4 + 5	Archiv-Nr.:
Block:	
Vorgang:  Datum : 01.02.1999	

Verfasser: **Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809377-0

Programm: 4H-FRAP 11/97 / pcae-GmbH / ken9509756

Bauwerk: 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

**BEMESSUNG**

**extremale Schnittgrößen**  
(im Hauptachsensystem)

Knorr	s	Typ	M	Q <sub>1</sub>	Q <sub>2</sub>	T	M <sub>0</sub>	M <sub>1</sub>
			kN	kN	kN	kNm	kNm	kNm
569	0.00	MIn	33.8	-7.50	-1.69	-4.64	-0.5	-5.6
	Max		107.7	7.50	3.30	4.64	2.8	5.6
	0.18	MIn	33.8	-7.50	-2.04	-4.64	0.0	-4.3
	Max		107.7	7.50	2.94	4.64	0.4	4.3
570	0.37	MIn	33.8	-7.50	-2.40	-4.64	0.4	-2.9
	Max		107.7	7.50	2.59	4.64	2.2	2.9
	0.55	MIn	33.8	-7.50	-2.76	-4.64	0.8	-1.6
	Max		107.7	7.50	2.23	4.64	1.8	1.6
571	0.73	MIn	33.8	-7.50	-3.11	-4.64	1.6	-1.0
	Max		107.7	7.50	1.87	4.64	1.1	1.0
	0.92	MIn	33.8	-7.50	-3.47	-4.64	0.2	-1.7
	Max		107.7	7.50	1.52	4.64	1.9	1.7
572	1.10	MIn	33.8	-7.50	-3.83	-4.64	0.5	-3.1
	Max		107.7	7.50	1.16	4.64	2.2	3.1
	1.28	MIn	33.8	-7.50	-4.19	-4.64	1.7	-3.4
	Max		107.7	7.50	0.87	4.64	2.5	3.4
573	1.47	MIn	33.8	-7.50	-4.54	-4.64	1.1	-2.1
	Max		107.7	7.50	0.52	4.64	2.8	2.1
	1.65	MIn	33.8	-7.50	-4.90	-4.64	0.4	-3.0
	Max		107.7	7.50	0.20	4.64	3.1	3.0
574	1.83	MIn	33.8	-7.50	-5.25	-4.64	0.9	-3.7
	Max		107.7	7.50	0.11	4.64	3.4	3.7
	2.02	MIn	33.8	-7.50	-5.61	-4.64	0.2	-4.8
	Max		107.7	7.50	0.19	4.64	4.1	4.8
575	2.20	MIn	33.8	-7.50	-5.96	-4.64	0.8	-5.5
	Max		107.7	7.50	0.10	4.64	4.4	5.5
	2.38	MIn	33.8	-7.50	-6.32	-4.64	0.1	-6.6
	Max		107.7	7.50	0.02	4.64	4.7	6.6
576	2.57	MIn	33.8	-7.50	-6.67	-4.64	0.7	-7.7
	Max		107.7	7.50	0.05	4.64	5.0	7.7
	2.75	MIn	33.8	-7.50	-7.03	-4.64	0.0	-8.8
	Max		107.7	7.50	0.03	4.64	5.3	8.8
577	2.93	MIn	33.8	-7.50	-7.38	-4.64	0.6	-9.9
	Max		107.7	7.50	0.01	4.64	5.6	9.9
	3.12	MIn	33.8	-7.50	-7.74	-4.64	0.0	-11.0
	Max		107.7	7.50	0.00	4.64	5.9	11.0
578	3.30	MIn	33.8	-7.50	-8.09	-4.64	0.5	-12.1
	Max		107.7	7.50	0.00	4.64	6.2	12.1
	3.48	MIn	33.8	-7.50	-8.45	-4.64	0.0	-13.2
	Max		107.7	7.50	0.00	4.64	6.5	13.2
579	3.67	MIn	33.8	-7.50	-8.80	-4.64	0.4	-14.3
	Max		107.7	7.50	0.00	4.64	6.8	14.3
	3.85	MIn	33.8	-7.50	-9.16	-4.64	0.0	-15.4
	Max		107.7	7.50	0.00	4.64	7.1	15.4
580	4.03	MIn	33.8	-7.50	-9.51	-4.64	0.3	-16.5
	Max		107.7	7.50	0.00	4.64	7.4	16.5
	4.22	MIn	33.8	-7.50	-9.87	-4.64	0.0	-17.6
	Max		107.7	7.50	0.00	4.64	7.7	17.6
581	4.40	MIn	33.8	-7.50	-10.22	-4.64	0.2	-18.7
	Max		107.7	7.50	0.00	4.64	8.0	18.7
	4.58	MIn	33.8	-7.50	-10.58	-4.64	0.0	-19.8
	Max		107.7	7.50	0.00	4.64	8.3	19.8
582	4.77	MIn	33.8	-7.50	-10.93	-4.64	0.1	-20.9
	Max		107.7	7.50	0.00	4.64	8.6	20.9
	4.95	MIn	33.8	-7.50	-11.29	-4.64	0.0	-22.0
	Max		107.7	7.50	0.00	4.64	8.9	22.0

Bauteil: Pos.10.6 / extrem. Schn.  
Busbahnsteig 4/s

Block:

Vorgang:

ASB Nr.:

Archiv Nr.:

Seite: 1

Verfasser: **Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809377-0

Programm: 4H-FRAP 11/97 / pcae-GmbH / ken9509756

Bauwerk: 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

**extremale Schnittgrößen**  
(im Hauptachsensystem)

Knorr	s	Typ	M	Q <sub>1</sub>	Q <sub>2</sub>	T	M <sub>0</sub>	M <sub>1</sub>
			kN	kN	kN	kNm	kNm	kNm
574	4.95	MIn	-749.5	-3.48	11.87	-4.02	0.7	-7.0
	Max		-418.2	3.48	22.35	4.02	1.2	7.0
	5.13	MIn	-749.5	-3.48	11.52	-4.02	0.9	-7.6
	Max		-418.2	3.48	21.99	4.02	1.2	7.6
575	5.32	MIn	-749.5	-3.48	11.16	-4.02	0.9	-8.1
	Max		-418.2	3.48	21.63	4.02	0.9	8.1
	5.50	MIn	-749.5	-3.48	10.81	-4.02	0.7	-8.8
	Max		-418.2	3.48	21.28	4.02	0.7	8.8
576	5.88	MIn	-749.5	-3.48	10.46	-4.02	0.7	-9.5
	Max		-418.2	3.48	20.95	4.02	0.7	9.5
	6.06	MIn	-749.5	-3.48	10.11	-4.02	0.6	-10.2
	Max		-418.2	3.48	20.44	4.02	0.6	10.2
577	6.44	MIn	-749.5	-3.48	9.76	-4.02	0.6	-10.9
	Max		-418.2	3.48	20.00	4.02	0.6	10.9
	6.62	MIn	-749.5	-3.48	9.41	-4.02	0.4	-11.6
	Max		-418.2	3.48	19.54	4.02	0.4	11.6
578	6.99	MIn	-749.5	-3.48	9.06	-4.02	0.4	-12.3
	Max		-418.2	3.48	19.18	4.02	0.4	12.3
	7.17	MIn	-749.5	-3.48	8.71	-4.02	0.3	-13.0
	Max		-418.2	3.48	18.81	4.02	0.3	13.0
579	7.33	MIn	-749.5	-3.48	8.36	-4.02	0.3	-13.7
	Max		-418.2	3.48	18.43	4.02	0.3	13.7
	7.52	MIn	-749.5	-3.48	8.01	-4.02	0.2	-14.4
	Max		-418.2	3.48	18.06	4.02	0.2	14.4
580	7.70	MIn	-749.5	-3.48	7.66	-4.02	0.2	-15.1
	Max		-418.2	3.48	17.69	4.02	0.2	15.1
	7.88	MIn	-749.5	-3.48	7.31	-4.02	0.1	-15.8
	Max		-418.2	3.48	17.32	4.02	0.1	15.8
581	8.07	MIn	-749.5	-3.48	6.96	-4.02	0.1	-16.5
	Max		-418.2	3.48	16.95	4.02	0.1	16.5
	8.25	MIn	-749.5	-3.48	6.61	-4.02	0.0	-17.2
	Max		-418.2	3.48	16.58	4.02	0.0	17.2
582	8.43	MIn	-749.5	-3.48	6.26	-4.02	0.0	-17.9
	Max		-418.2	3.48	16.23	4.02	0.0	17.9
	8.62	MIn	-749.5	-3.48	5.91	-4.02	0.0	-18.6
	Max		-418.2	3.48	15.90	4.02	0.0	18.6
583	8.80	MIn	-749.5	-3.48	5.56	-4.02	0.0	-19.3
	Max		-418.2	3.48	15.57	4.02	0.0	19.3
	8.98	MIn	-749.5	-3.48	5.21	-4.02	0.0	-20.0
	Max		-418.2	3.48	15.24	4.02	0.0	20.0
584	9.17	MIn	-749.5	-3.48	4.86	-4.02	0.0	-20.7
	Max		-418.2	3.48	14.91	4.02	0.0	20.7
	9.35	MIn	-749.5	-3.48	4.51	-4.02	0.0	-21.4
	Max		-418.2	3.48	14.56	4.02	0.0	21.4
585	9.53	MIn	-749.5	-3.48	4.16	-4.02	0.0	-22.1
	Max		-418.2	3.48	14.21	4.02	0.0	22.1
	9.72	MIn	-749.5	-3.48	3.81	-4.02	0.0	-22.8
	Max		-418.2	3.48	13.86	4.02	0.0	22.8
586	9.90	MIn	-749.5	-3.48	3.46	-4.02	0.0	-23.5
	Max		-418.2	3.48	13.51	4.02	0.0	23.5
	10.08	MIn	-749.5	-3.48	3.11	-4.02	0.0	-24.2
	Max		-418.2	3.48	13.16	4.02	0.0	24.2

Bauteil: Pos.10.6 / extrem. Schn.  
Busbahnsteig 4/s

Block:

Vorgang:

ASB Nr.:

Archiv Nr.:

Seite: 2



Verfasser: Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcas-GmbH / kren9509756  
Bauwerk: 9813 - 2.00

ASB Nr.: Datum: 12.03.99

**extremale Schnittgrößen**  
(im Hauptachsensystem)  
Stabzug 1: Obergurt HLT (H-J)

Knoten	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>z</sub>	M <sub>x</sub>
	m		kN	kN	kN	kNm	kNm	kNm
10.27 Min	Max	-454.3	2.78	-9.14	2.87	8.1	7.5	
10.27 Min	Max	-841.1	-2.78	-18.92	-2.87	2.6	-7.0	
10.45 Min	Max	-454.3	2.78	-9.50	2.87	4.7	7.0	
10.45 Min	Max	-841.1	-2.78	-19.27	-2.87	0.8	-6.5	
10.53 Min	Max	-454.3	2.78	-9.86	2.87	1.4	6.5	
10.53 Min	Max	-841.1	-2.78	-19.63	-2.87	-2.4	-6.0	
10.82 Min	Max	-454.3	2.78	-10.21	2.87	-0.9	6.0	
10.82 Min	Max	-841.1	-2.78	-19.98	-2.87	-6.0	-5.6	
11.00 Min	Max	-454.3	2.78	-10.57	2.87	-2.8	5.6	
11.00 Min	Max	-841.1	-2.78	-20.34	-2.87	-9.7	-5.1	
11.18 Min	Max	-454.3	2.78	-10.93	2.87	-4.7	5.1	
11.18 Min	Max	-841.1	-2.78	-20.71	-2.87	-8.1	-7.8	
11.37 Min	Max	-454.3	2.78	-11.30	2.87	-4.15	15.1	7.8
11.37 Min	Max	-841.1	-2.78	-21.08	-2.87	-4.15	5.7	7.1
11.55 Min	Max	-454.3	2.78	-11.66	2.87	-4.15	10.5	7.1
11.55 Min	Max	-841.1	-2.78	-21.44	-2.87	-4.15	3.2	-6.4
11.73 Min	Max	-454.3	2.78	-12.03	2.87	-4.15	5.7	6.4
11.73 Min	Max	-841.1	-2.78	-21.81	-2.87	-4.15	0.6	-5.7
11.92 Min	Max	-454.3	2.78	-12.40	2.87	-4.15	1.1	5.7
11.92 Min	Max	-841.1	-2.78	-22.19	-2.87	-4.15	-4.0	-5.0
12.10 Min	Max	-454.3	2.78	-12.77	2.87	-4.15	-8.9	-4.4
12.10 Min	Max	-841.1	-2.78	-22.57	-2.87	-4.15	-4.7	4.4
12.28 Min	Max	-454.3	2.78	-13.14	2.87	-4.15	-13.9	-3.7
12.28 Min	Max	-841.1	-2.78	-22.95	-2.87	-4.15	-7.4	3.7
12.47 Min	Max	-454.3	2.78	-13.51	2.87	-4.15	-18.8	-7.5
12.47 Min	Max	-841.1	-2.78	-23.33	-2.87	-4.15	-16.8	7.5
12.65 Min	Max	-454.3	2.78	-13.88	2.87	-4.15	-23.3	-6.5
12.65 Min	Max	-841.1	-2.78	-23.71	-2.87	-4.15	-12.3	6.5
12.83 Min	Max	-454.3	2.78	-14.25	2.87	-4.15	-28.2	-5.5
12.83 Min	Max	-841.1	-2.78	-24.04	-2.87	-4.15	-8.4	5.5
13.02 Min	Max	-454.3	2.78	-14.62	2.87	-4.15	-33.1	-4.5
13.02 Min	Max	-841.1	-2.78	-24.42	-2.87	-4.15	-4.4	4.5
13.20 Min	Max	-454.3	2.78	-15.00	2.87	-4.15	-38.0	-3.6
13.20 Min	Max	-841.1	-2.78	-24.80	-2.87	-4.15	-2.8	3.6
13.39 Min	Max	-454.3	2.78	-15.37	2.87	-4.15	-42.9	-2.7
13.39 Min	Max	-841.1	-2.78	-25.18	-2.87	-4.15	-1.8	2.7
13.57 Min	Max	-454.3	2.78	-15.75	2.87	-4.15	-47.8	-1.8
13.57 Min	Max	-841.1	-2.78	-25.56	-2.87	-4.15	-0.8	1.8
13.75 Min	Max	-454.3	2.78	-16.12	2.87	-4.15	-52.7	-0.8
13.75 Min	Max	-841.1	-2.78	-25.94	-2.87	-4.15	0.2	0.8
13.93 Min	Max	-454.3	2.78	-16.50	2.87	-4.15	-57.6	0.2
13.93 Min	Max	-841.1	-2.78	-26.32	-2.87	-4.15	1.1	1.7
14.12 Min	Max	-454.3	2.78	-16.87	2.87	-4.15	-62.5	1.1
14.12 Min	Max	-841.1	-2.78	-26.70	-2.87	-4.15	1.7	1.7
14.30 Min	Max	-454.3	2.78	-17.25	2.87	-4.15	-67.4	1.7
14.30 Min	Max	-841.1	-2.78	-27.08	-2.87	-4.15	2.4	1.7
14.48 Min	Max	-454.3	2.78	-17.62	2.87	-4.15	-72.3	2.4
14.48 Min	Max	-841.1	-2.78	-27.50	-2.87	-4.15	3.1	2.4
14.67 Min	Max	-454.3	2.78	-18.00	2.87	-4.15	-77.2	3.1
14.67 Min	Max	-841.1	-2.78	-27.88	-2.87	-4.15	3.8	3.1
14.85 Min	Max	-454.3	2.78	-18.37	2.87	-4.15	-82.1	3.8
14.85 Min	Max	-841.1	-2.78	-28.26	-2.87	-4.15	4.5	3.8
15.03 Min	Max	-454.3	2.78	-18.75	2.87	-4.15	-87.0	4.5
15.03 Min	Max	-841.1	-2.78	-28.64	-2.87	-4.15	5.2	4.5
15.22 Min	Max	-454.3	2.78	-19.12	2.87	-4.15	-91.9	5.2
15.22 Min	Max	-841.1	-2.78	-29.02	-2.87	-4.15	5.9	5.2
15.40 Min	Max	-454.3	2.78	-19.50	2.87	-4.15	-96.8	5.9
15.40 Min	Max	-841.1	-2.78	-29.40	-2.87	-4.15	6.6	5.9

Bauteil: Pos.10.6 / extrem. Schn.  
Busbahnsteig 4/5

Block: 3

Vorgang: Archiv Nr.: 3

Verfasser: Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcas-GmbH / kren9509756  
Bauwerk: 9813 - 2.00

ASB Nr.: Datum: 12.03.99

**extremale Schnittgrößen**  
(im Hauptachsensystem)  
Stabzug 1: Obergurt HLT (H-J)

Knoten	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>z</sub>	M <sub>x</sub>
	m		kN	kN	kN	kNm	kNm	kNm
Min	0.00 Min	-952.5	-10.19	-33.35	-7.54	-19.2	-8.9	
Max	15.40 Max	107.7	10.19	36.26	7.54	19.5	8.9	

**extremale Schnittgrößen**  
(im Hauptachsensystem)  
Stabzug 7: Stütze Achse F

Knoten	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>z</sub>	M <sub>x</sub>
	m		kN	kN	kN	kNm	kNm	kNm
659	0.00 Min	-38.1	-101.47	-16.14	0.00	-69.0	-20.0	
	Max	25.2	101.47	16.14	0.00	84.2	20.0	
	0.10 Min	-38.2	-101.53	-16.16	0.00	-67.7	-30.2	
	Max	25.4	101.53	16.16	0.00	82.6	30.2	
	0.20 Min	-38.4	-101.59	-16.26	0.00	-66.4	-40.3	
	Max	25.5	101.59	16.26	0.00	81.0	40.3	
	0.30 Min	-38.5	-101.65	-16.32	0.00	-65.1	-50.5	
	Max	25.6	101.65	16.32	0.00	79.4	50.5	
	0.40 Min	-38.6	-101.71	-16.38	0.00	-63.7	-60.7	
	Max	25.7	101.71	16.38	0.00	77.7	60.7	
	0.50 Min	-38.7	-101.76	-16.44	0.00	-62.4	-70.8	
	Max	25.9	101.76	16.44	0.00	76.1	70.8	
	0.60 Min	-38.9	-101.82	-16.50	0.00	-61.1	-81.0	
	Max	26.0	101.82	16.50	0.00	74.1	81.0	
	0.83 Min	-116.3	-12.56	-16.50	0.00	-61.1	-107.5	
	Max	61.2	12.56	16.50	0.00	74.1	107.5	
	0.85 Min	-116.8	-12.80	-16.63	0.00	-58.0	-110.2	
	Max	61.6	12.80	16.63	0.00	70.6	110.2	
	1.07 Min	-117.2	-12.94	-16.77	0.00	-54.8	-112.9	
	Max	62.0	12.94	16.77	0.00	66.7	112.9	
	1.30 Min	-117.6	-13.07	-16.91	0.00	-51.6	-115.7	
	Max	62.4	13.07	16.91	0.00	62.8	115.7	
	1.53 Min	-118.0	-13.21	-17.04	0.00	-48.4	-118.5	
	Max	62.8	13.21	17.04	0.00	58.8	118.5	
	1.77 Min	-118.4	-13.34	-17.18	0.00	-45.2	-121.3	
	Max	63.3	13.34	17.18	0.00	54.8	121.3	
	2.00 Min	-118.9	-13.48	-17.31	0.00	-41.9	-124.2	
	Max	63.7	13.48	17.31	0.00	50.8	124.2	
	2.23 Min	-119.3	-13.62	-17.45	0.00	-38.6	-127.1	
	Max	64.1	13.62	17.45	0.00	46.7	127.1	
	2.47 Min	-119.7	-13.75	-17.59	0.00	-35.2	-130.0	
	Max	64.5	13.75	17.59	0.00	42.6	130.0	
	2.70 Min	-120.1	-13.89	-17.72	0.00	-31.8	-133.0	
	Max	64.9	13.89	17.72	0.00	38.5	133.0	
	2.93 Min	-120.5	-14.03	-17.86	0.00	-28.4	-136.0	
	Max	65.4	14.03	17.86	0.00	34.4	136.0	
	3.17 Min	-120.9	-14.18	-18.00	0.00	-25.0	-139.0	
	Max	65.8	14.18	18.00	0.00	30.2	139.0	
	3.40 Min	-121.4	-14.30	-18.13	0.00	-21.5	-142.1	
	Max	66.2	14.30	18.13	0.00	26.0	142.1	
	3.63 Min	-121.8	-14.44	-18.27	0.00	-18.0	-145.2	
	Max	66.6	14.44	18.27	0.00	21.7	145.2	
	3.87 Min	-122.2	-14.57	-18.41	0.00	-14.5	-148.3	
	Max	67.0	14.57	18.41	0.00	17.4	148.3	
	4.10 Min	-122.6	-14.71	-18.54	0.00	-10.9	-151.5	
	Max	67.4	14.71	18.54	0.00	13.1	151.5	
	4.33 Min	-123.0	-14.85	-18.68	0.00	-7.3	-154.6	
	Max	67.9	14.85	18.68	0.00	8.8	154.6	
	4.57 Min	-123.5	-14.99	-18.82	0.00	-3.7	-157.9	
	Max	68.3	14.99	18.82	0.00	4.4	157.9	
	4.80 Min	-123.9	-15.12	-18.95	0.00	0.0	-161.1	
	Max	68.7	15.12	18.95	0.00	0.0	161.1	
	0.00 Min	-123.9	-101.82	-18.95	0.00	-69.0	-161.1	

Bauteil: Pos.10.6 / extrem. Schn.  
Busbahnsteig 4/5

Block: 4

Vorgang: Archiv Nr.: 4

Verfasser:  
**Ingenieurbüro Krentel GmbH**  
Forsitr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0

Programm:  
4H-FRAP 11/97 / pcaw-GmbH / kren509756

Bauwerk:  
9813 - 2.00

ASB Nr.:

Datum: 12.03.99

**extremale Schnittgrößen** (im Hauptachsensystem)  
Stabzug 7: Stütze Achse F

Knotenr	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>z</sub>
m	m		kN	kN	kN	kNm	kNm	kNm
Max	4.80	Max	-25.2	101.82	15.77	0.00	84.2	161.1

**extremale Schnittgrößen** (im Hauptachsensystem)  
Stabzug 8: Stütze Achse G

Knotenr	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>z</sub>
m	m		kN	kN	kN	kNm	kNm	kNm
Max	4.80	Max	-17.7	122.06	12.98	0.00	94.5	27.9

0.10 Min	-17.9	-122.12	-13.04	0.00	0.00	0.00	0.00	27.9
Max	13.8	122.12	18.34	0.00	67.8	40.1	0.00	-92.7
0.20 Min	-18.0	-122.18	-13.10	0.00	67.8	40.1	0.00	67.8
Max	13.7	122.18	18.40	0.00	90.8	-52.3	0.00	-90.8
0.30 Min	-18.1	-122.24	-13.16	0.00	66.4	52.3	0.00	66.4
Max	13.5	122.24	18.46	0.00	89.0	-64.6	0.00	-89.0
0.40 Min	-18.2	-122.30	-13.22	0.00	65.1	64.6	0.00	65.1
Max	13.4	122.30	18.52	0.00	87.1	-76.8	0.00	-87.1
0.50 Min	-18.3	-122.36	-13.27	0.00	63.8	76.8	0.00	63.8
Max	13.3	122.36	18.58	0.00	85.3	-89.0	0.00	-85.3
0.60 Min	-18.4	-122.42	-13.33	0.00	62.5	89.0	0.00	62.5
Max	13.2	122.42	18.64	0.00	83.4	-101.3	0.00	-83.4
0.70 Min	-18.5	-122.48	-13.39	0.00	61.2	101.3	0.00	61.2
Max	13.1	122.48	18.64	0.00	83.4	-133.3	0.00	-83.4
0.80 Min	-18.6	-122.54	-13.45	0.00	58.0	133.3	0.00	58.0
Max	13.0	122.54	18.71	0.00	85.1	-145.8	0.00	-85.1
0.90 Min	-18.7	-122.60	-13.51	0.00	55.7	145.8	0.00	55.7
Max	12.9	122.60	18.82	0.00	87.4	-158.9	0.00	-87.4
1.00 Min	-18.8	-122.66	-13.57	0.00	53.4	158.9	0.00	53.4
Max	12.8	122.66	18.93	0.00	89.7	-172.0	0.00	-89.7
1.10 Min	-18.9	-122.72	-13.63	0.00	51.7	172.0	0.00	51.7
Max	12.7	122.72	19.05	0.00	91.9	-185.1	0.00	-91.9
1.20 Min	-19.0	-122.78	-13.69	0.00	49.5	185.1	0.00	49.5
Max	12.6	122.78	19.33	0.00	94.8	-198.2	0.00	-94.8
1.30 Min	-19.1	-122.84	-13.75	0.00	47.2	198.2	0.00	47.2
Max	12.5	122.84	19.61	0.00	97.9	-211.3	0.00	-97.9
1.40 Min	-19.2	-122.90	-13.81	0.00	44.9	211.3	0.00	44.9
Max	12.4	122.90	19.93	0.00	100.0	-224.4	0.00	-100.0
1.50 Min	-19.3	-122.96	-13.87	0.00	42.6	224.4	0.00	42.6
Max	12.3	122.96	20.21	0.00	103.1	-237.5	0.00	-103.1
1.60 Min	-19.4	-123.02	-13.93	0.00	40.3	237.5	0.00	40.3
Max	12.2	123.02	20.53	0.00	106.2	-250.6	0.00	-106.2
1.70 Min	-19.5	-123.08	-13.99	0.00	38.0	250.6	0.00	38.0
Max	12.1	123.08	20.85	0.00	109.3	-263.7	0.00	-109.3
1.80 Min	-19.6	-123.14	-14.05	0.00	35.7	263.7	0.00	35.7
Max	12.0	123.14	21.17	0.00	112.4	-276.8	0.00	-112.4
1.90 Min	-19.7	-123.20	-14.11	0.00	33.4	276.8	0.00	33.4
Max	11.9	123.20	21.49	0.00	115.5	-289.9	0.00	-115.5
2.00 Min	-19.8	-123.26	-14.17	0.00	31.1	289.9	0.00	31.1
Max	11.8	123.26	21.81	0.00	118.6	-303.0	0.00	-118.6
2.10 Min	-19.9	-123.32	-14.23	0.00	28.8	303.0	0.00	28.8
Max	11.7	123.32	22.13	0.00	121.7	-316.1	0.00	-121.7
2.20 Min	-20.0	-123.38	-14.29	0.00	26.5	316.1	0.00	26.5
Max	11.6	123.38	22.45	0.00	124.8	-329.2	0.00	-124.8
2.30 Min	-20.1	-123.44	-14.35	0.00	24.2	329.2	0.00	24.2
Max	11.5	123.44	22.77	0.00	127.9	-342.3	0.00	-127.9
2.40 Min	-20.2	-123.50	-14.41	0.00	21.9	342.3	0.00	21.9
Max	11.4	123.50	23.09	0.00	131.0	-355.4	0.00	-131.0
2.50 Min	-20.3	-123.56	-14.47	0.00	19.6	355.4	0.00	19.6
Max	11.3	123.56	23.41	0.00	134.1	-368.5	0.00	-134.1
2.60 Min	-20.4	-123.62	-14.53	0.00	17.3	368.5	0.00	17.3
Max	11.2	123.62	23.73	0.00	137.2	-381.6	0.00	-137.2
2.70 Min	-20.5	-123.68	-14.59	0.00	15.0	381.6	0.00	15.0
Max	11.1	123.68	24.05	0.00	140.3	-394.7	0.00	-140.3
2.80 Min	-20.6	-123.74	-14.65	0.00	12.7	394.7	0.00	12.7
Max	11.0	123.74	24.37	0.00	143.4	-407.8	0.00	-143.4
2.90 Min	-20.7	-123.80	-14.71	0.00	10.4	407.8	0.00	10.4
Max	10.9	123.80	24.69	0.00	146.5	-420.9	0.00	-146.5
3.00 Min	-20.8	-123.86	-14.77	0.00	8.1	420.9	0.00	8.1
Max	10.8	123.86	25.01	0.00	149.6	-434.0	0.00	-149.6
3.10 Min	-20.9	-123.92	-14.83	0.00	5.8	434.0	0.00	5.8
Max	10.7	123.92	25.33	0.00	152.7	-447.1	0.00	-152.7
3.20 Min	-21.0	-123.98	-14.89	0.00	3.5	447.1	0.00	3.5
Max	10.6	123.98	25.65	0.00	155.8	-460.2	0.00	-155.8
3.30 Min	-21.1	-124.04	-14.95	0.00	1.2	460.2	0.00	1.2
Max	10.5	124.04	25.97	0.00	158.9	-473.3	0.00	-158.9
3.40 Min	-21.2	-124.10	-15.01	0.00	-1.1	473.3	0.00	-1.1
Max	10.4	124.10	26.29	0.00	162.0	-486.4	0.00	-162.0
3.50 Min	-21.3	-124.16	-15.07	0.00	-3.4	486.4	0.00	-3.4
Max	10.3	124.16	26.61	0.00	165.1	-499.5	0.00	-165.1
3.60 Min	-21.4	-124.22	-15.13	0.00	-5.7	499.5	0.00	-5.7
Max	10.2	124.22	26.93	0.00	168.2	-512.6	0.00	-168.2
3.70 Min	-21.5	-124.28	-15.19	0.00	-8.0	512.6	0.00	-8.0
Max	10.1	124.28	27.25	0.00	171.3	-525.7	0.00	-171.3
3.80 Min	-21.6	-124.34	-15.25	0.00	-10.3	525.7	0.00	-10.3
Max	10.0	124.34	27.57	0.00	174.4	-538.8	0.00	-174.4
3.90 Min	-21.7	-124.40	-15.31	0.00	-12.6	538.8	0.00	-12.6
Max	9.9	124.40	27.89	0.00	177.5	-551.9	0.00	-177.5
4.00 Min	-21.8	-124.46	-15.37	0.00	-14.9	551.9	0.00	-14.9
Max	9.8	124.46	28.21	0.00	180.6	-565.0	0.00	-180.6
4.10 Min	-21.9	-124.52	-15.43	0.00	-17.2	565.0	0.00	-17.2
Max	9.7	124.52	28.53	0.00	183.7	-578.1	0.00	-183.7
4.20 Min	-22.0	-124.58	-15.49	0.00	-19.5	578.1	0.00	-19.5
Max	9.6	124.58	28.85	0.00	186.8	-591.2	0.00	-186.8
4.30 Min	-22.1	-124.64	-15.55	0.00	-21.8	591.2	0.00	-21.8
Max	9.5	124.64	29.17	0.00	189.9	-604.3	0.00	-189.9
4.40 Min	-22.2	-124.70	-15.61	0.00	-24.1	604.3	0.00	-24.1
Max	9.4	124.70	29.49	0.00	193.0	-617.4	0.00	-193.0
4.50 Min	-22.3	-124.76	-15.67	0.00	-26.4	617.4	0.00	-26.4
Max	9.3	124.76	29.81	0.00	196.1	-630.5	0.00	-196.1
4.60 Min	-22.4	-124.82	-15.73	0.00	-28.7	630.5	0.00	-28.7
Max	9.2	124.82	30.13	0.00	199.2	-643.6	0.00	-199.2
4.70 Min	-22.5	-124.88	-15.79	0.00	-31.0	643.6	0.00	-31.0
Max	9.1	124.88	30.45	0.00	202.3	-656.7	0.00	-202.3
4.80 Min	-22.6	-124.94	-15.85	0.00	-33.3	656.7	0.00	-33.3
Max	9.0	124.94	30.77	0.00	205.4	-669.8	0.00	-205.4
4.90 Min	-22.7	-125.00	-15.91	0.00	-35.6	669.8	0.00	-35.6
Max	8.9	125.00	31.09	0.00	208.5	-682.9	0.00	-208.5
5.00 Min	-22.8	-125.06	-15.97	0.00	-37.9	682.9	0.00	-37.9
Max	8.8	125.06	31.41	0.00	211.6	-696.0	0.00	-211.6
5.10 Min	-22.9	-125.12	-16.03	0.00	-40.2	696.0	0.00	-40.2
Max	8.7	125.12	31.73	0.00	214.7	-709.1	0.00	-214.7
5.20 Min	-23.0	-125.18	-16.09	0.00	-42.5	709.1	0.00	-42.5
Max	8.6	125.18	32.05	0.00	217.8	-722.2	0.00	-217.8
5.30 Min	-23.1	-125.24	-16.15	0.00	-44.8	722.2	0.00	-44.8
Max	8.5	125.24	32.37	0.00	220.9	-735.3	0.00	-220.9
5.40 Min	-23.2	-125.30	-16.21	0.00	-47.1	735.3	0.00	-47.1
Max	8.4	125.30	32.69	0.00	224.0	-748.4	0.00	-224.0
5.50 Min	-23.3	-125.36	-16.27	0.00	-49.4	748.4	0.00	-49.4
Max	8.3	125.36	33.01	0.00	227.1	-761.5	0.00	-227.1
5.60 Min	-23.4	-125.42	-16.33	0.00	-51.7	761.5	0.00	-51.7
Max	8.2	125.42	33.33	0.00	230.2	-774.6	0.00	-230.2
5.70 Min	-23.5	-125.48	-16.39	0.00	-54.0	774.6	0.00	-54.0
Max	8.1	125.48	33.65	0.00	233.3	-787.7	0.00	-233.3
5.80 Min	-23.6	-125.54	-16.45	0.00	-56.3	787.7	0.00	-56.3
Max	8.0	125.54	33.97	0.00	236.4	-800.8	0.00	-236.4
5.90 Min	-23.7	-125.60	-16.51	0.00	-58.6	800.8	0.00	-58.6
Max	7.9	125.60	34.29	0.00	239.5	-813.9	0.00	-239.5
6.00 Min	-23.8	-125.66	-16.57	0.00	-60.9	813.9	0.00	-60.9
Max	7.8	125.66	34.61	0.00	242.6	-827.0	0.00	-242.6
6.10 Min	-23.9	-125.72	-16.63	0.00	-63.2	827.0	0.00	-63.2
Max	7.7	125.72	34.93	0.00	245.7	-840.1	0.00	-245.7
6.20 Min	-24.0	-125.78	-16.69	0.00	-65.5	840.1	0.00	-65.5
Max	7.6	125.78	35.25	0.00	248.8	-853.2	0.00	-248.8
6.30 Min	-24.1	-125.84	-16.75	0.00	-67.8	853.2	0.00	-67.8
Max	7.5	125.84	35.57	0.00	251.9	-866.3	0.00	-251.9
6.40 Min	-24.2	-125.90	-16.81	0.00	-70.1	866.3	0.00	-70.1
Max	7.4	125.90	35.89	0.00	255.0	-879.4	0.00	-255.0
6.50 Min	-24.3	-125.96	-16.87	0.00	-72.4	879.4	0.00	-72.4
Max	7.3	125.96	36.21	0.00	258.1	-892.5	0.00	-258.1
6.60 Min	-24.4	-126.02	-16.93	0.00	-74.7	892.5	0.00	-74.7
Max	7.2	126.02	36.53	0.00	261.2	-905.6	0.00	-261.2
6.70 Min	-24.5	-126.08	-16.99	0.00	-77.0	905.6	0.00	-77.0
Max	7.1	126.08	36.85	0.00	264.3	-918.7	0.00	-264.3
6.80 Min	-24.6	-126.14	-17.05	0.00	-79.3	918.7	0.00	-79.3
Max	7.0	126.14	37.17	0.00	267.4	-931.8	0.00	-267.4
6.90 Min	-24.7	-126.20	-17.11	0.00	-81.6	931.8	0.00	-81.6
Max	6.9	126.20	37.49	0.00	270.5	-944.9	0.00	-270.5
7.00 Min	-24.8	-126.26	-17.17	0.00	-83.9	944.9	0.00	-83.9
Max	6.8	126.26	37.81	0.00	273.6	-958.0	0.00	-273.6
7.1								

Verfasser:  
Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programmiert: 4H-FRAP 11/97 / pcas-GmbH / kren9509756  
Bauwerk: 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

extremale Schnittgrößen  
Stabzug 10: Stütze Achse J

Knorr	s	Typ	N	Q <sub>1</sub>	Q <sub>2</sub>	T	N <sub>1</sub>	N <sub>2</sub>
681	0.00	M/n	-179.9	-169.23	9.66	0.00	-236.7	-45.1
	Max		-109.5	169.23	47.91	0.00	-39.6	45.1
	0.10	M/n	-180.0	-169.29	9.60	0.00	-231.9	62.1
	Max		-109.6	169.29	47.97	0.00	-38.7	62.1
	0.20	M/n	-180.1	-169.35	9.54	0.00	-227.1	79.0
	Max		-109.7	169.35	48.03	0.00	-37.7	79.0
	0.30	M/n	-180.2	-169.41	9.49	0.00	-222.3	95.9
	Max		-109.8	169.41	48.08	0.00	-36.8	95.9
	0.40	M/n	-180.4	-169.47	9.43	0.00	-217.5	112.9
	Max		-110.0	169.47	48.14	0.00	-35.8	112.9
	0.50	M/n	-180.5	-169.53	9.37	0.00	-212.7	129.8
	Max		-110.1	169.53	48.20	0.00	-34.9	129.8
	0.60	M/n	-180.6	-169.58	9.31	0.00	-207.8	146.8
	Max		-110.2	169.58	48.26	0.00	-33.9	146.8
	0.70	M/n	-180.7	-169.64	9.26	0.00	-202.9	163.8
	Max		-110.3	169.64	48.31	0.00	-33.0	163.8
	0.80	M/n	-180.8	-169.69	9.21	0.00	-198.0	180.8
	Max		-110.4	169.69	48.36	0.00	-32.1	180.8
	0.90	M/n	-180.9	-169.75	9.16	0.00	-193.1	197.7
	Max		-110.5	169.75	48.41	0.00	-31.2	197.7
	1.00	M/n	-181.0	-169.80	9.11	0.00	-188.2	214.7
	Max		-110.6	169.80	48.46	0.00	-30.3	214.7
	1.10	M/n	-181.1	-169.86	9.06	0.00	-183.3	231.7
	Max		-110.7	169.86	48.51	0.00	-29.4	231.7
	1.20	M/n	-181.2	-169.91	9.01	0.00	-178.4	248.7
	Max		-110.8	169.91	48.56	0.00	-28.5	248.7
	1.30	M/n	-181.3	-169.97	8.96	0.00	-173.5	265.7
	Max		-110.9	169.97	48.61	0.00	-27.6	265.7
	1.40	M/n	-181.4	-169.99	8.91	0.00	-168.6	282.7
	Max		-111.0	169.99	48.66	0.00	-26.7	282.7
	1.50	M/n	-181.5	-169.99	8.86	0.00	-163.7	299.7
	Max		-111.1	169.99	48.71	0.00	-25.8	299.7
	1.60	M/n	-181.6	-169.99	8.81	0.00	-158.8	316.7
	Max		-111.2	169.99	48.76	0.00	-24.9	316.7
	1.70	M/n	-181.7	-169.99	8.76	0.00	-153.9	333.7
	Max		-111.3	169.99	48.81	0.00	-24.0	333.7
	1.80	M/n	-181.8	-169.99	8.71	0.00	-149.0	350.7
	Max		-111.4	169.99	48.86	0.00	-23.1	350.7
	1.90	M/n	-181.9	-169.99	8.66	0.00	-144.1	367.7
	Max		-111.5	169.99	48.91	0.00	-22.2	367.7
	2.00	M/n	-182.0	-169.99	8.61	0.00	-139.2	384.7
	Max		-111.6	169.99	48.96	0.00	-21.3	384.7
	2.10	M/n	-182.1	-169.99	8.56	0.00	-134.3	401.7
	Max		-111.7	169.99	49.01	0.00	-20.4	401.7
	2.20	M/n	-182.2	-169.99	8.51	0.00	-129.4	418.7
	Max		-111.8	169.99	49.06	0.00	-19.5	418.7
	2.30	M/n	-182.3	-169.99	8.46	0.00	-124.5	435.7
	Max		-111.9	169.99	49.11	0.00	-18.6	435.7
	2.40	M/n	-182.4	-169.99	8.41	0.00	-119.6	452.7
	Max		-112.0	169.99	49.16	0.00	-17.7	452.7
	2.50	M/n	-182.5	-169.99	8.36	0.00	-114.7	469.7
	Max		-112.1	169.99	49.21	0.00	-16.8	469.7
	2.60	M/n	-182.6	-169.99	8.31	0.00	-109.8	486.7
	Max		-112.2	169.99	49.26	0.00	-15.9	486.7
	2.70	M/n	-182.7	-169.99	8.26	0.00	-104.9	503.7
	Max		-112.3	169.99	49.31	0.00	-15.0	503.7
	2.80	M/n	-182.8	-169.99	8.21	0.00	-100.0	520.7
	Max		-112.4	169.99	49.36	0.00	-14.1	520.7
	2.90	M/n	-182.9	-169.99	8.16	0.00	-95.1	537.7
	Max		-112.5	169.99	49.41	0.00	-13.2	537.7
	3.00	M/n	-183.0	-169.99	8.11	0.00	-90.2	554.7
	Max		-112.6	169.99	49.46	0.00	-12.3	554.7
	3.10	M/n	-183.1	-169.99	8.06	0.00	-85.3	571.7
	Max		-112.7	169.99	49.51	0.00	-11.4	571.7
	3.20	M/n	-183.2	-169.99	8.01	0.00	-80.4	588.7
	Max		-112.8	169.99	49.56	0.00	-10.5	588.7
	3.30	M/n	-183.3	-169.99	7.96	0.00	-75.5	605.7
	Max		-112.9	169.99	49.61	0.00	-9.6	605.7
	3.40	M/n	-183.4	-169.99	7.91	0.00	-70.6	622.7
	Max		-113.0	169.99	49.66	0.00	-8.7	622.7
	3.50	M/n	-183.5	-169.99	7.86	0.00	-65.7	639.7
	Max		-113.1	169.99	49.71	0.00	-7.8	639.7
	3.60	M/n	-183.6	-169.99	7.81	0.00	-60.8	656.7
	Max		-113.2	169.99	49.76	0.00	-6.9	656.7
	3.70	M/n	-183.7	-169.99	7.76	0.00	-55.9	673.7
	Max		-113.3	169.99	49.81	0.00	-6.0	673.7
	3.80	M/n	-183.8	-169.99	7.71	0.00	-51.0	690.7
	Max		-113.4	169.99	49.86	0.00	-5.1	690.7
	3.90	M/n	-183.9	-169.99	7.66	0.00	-46.1	707.7
	Max		-113.5	169.99	49.91	0.00	-4.2	707.7
	4.00	M/n	-184.0	-169.99	7.61	0.00	-41.2	724.7
	Max		-113.6	169.99	49.96	0.00	-3.3	724.7
	4.10	M/n	-184.1	-169.99	7.56	0.00	-36.3	741.7
	Max		-113.7	169.99	50.01	0.00	-2.4	741.7
	4.20	M/n	-184.2	-169.99	7.51	0.00	-31.4	758.7
	Max		-113.8	169.99	50.06	0.00	-1.5	758.7
	4.30	M/n	-184.3	-169.99	7.46	0.00	-26.5	775.7
	Max		-113.9	169.99	50.11	0.00	-0.6	775.7
	4.40	M/n	-184.4	-169.99	7.41	0.00	-21.6	792.7
	Max		-114.0	169.99	50.16	0.00	0.3	792.7
	4.50	M/n	-184.5	-169.99	7.36	0.00	-16.7	809.7
	Max		-114.1	169.99	50.21	0.00	1.4	809.7
	4.60	M/n	-184.6	-169.99	7.31	0.00	-11.8	826.7
	Max		-114.2	169.99	50.26	0.00	2.5	826.7
	4.70	M/n	-184.7	-169.99	7.26	0.00	-6.9	843.7
	Max		-114.3	169.99	50.31	0.00	3.6	843.7
	4.80	M/n	-184.8	-169.99	7.21	0.00	-1.9	860.7
	Max		-114.4	169.99	50.36	0.00	4.7	860.7
	4.90	M/n	-184.9	-169.99	7.16	0.00	0.0	877.7
	Max		-114.5	169.99	50.41	0.00	5.8	877.7
	5.00	M/n	-185.0	-169.99	7.11	0.00	0.0	894.7
	Max		-114.6	169.99	50.46	0.00	6.9	894.7
	5.10	M/n	-185.1	-169.99	7.06	0.00	0.0	911.7
	Max		-114.7	169.99	50.51	0.00	8.0	911.7
	5.20	M/n	-185.2	-169.99	7.01	0.00	0.0	928.7
	Max		-114.8	169.99	50.56	0.00	9.1	928.7
	5.30	M/n	-185.3	-169.99	6.96	0.00	0.0	945.7
	Max		-114.9	169.99	50.61	0.00	10.2	945.7
	5.40	M/n	-185.4	-169.99	6.91	0.00	0.0	962.7
	Max		-115.0	169.99	50.66	0.00	11.3	962.7
	5.50	M/n	-185.5	-169.99	6.86	0.00	0.0	979.7
	Max		-115.1	169.99	50.71	0.00	12.4	979.7
	5.60	M/n	-185.6	-169.99	6.81	0.00	0.0	996.7
	Max		-115.2	169.99	50.76	0.00	13.5	996.7
	5.70	M/n	-185.7	-169.99	6.76	0.00	0.0	1013.7
	Max		-115.3	169.99	50.81	0.00	14.6	1013.7
	5.80	M/n	-185.8	-169.99	6.71	0.00	0.0	1030.7
	Max		-115.4	169.99	50.86	0.00	15.7	1030.7
	5.90	M/n	-185.9	-169.99	6.66	0.00	0.0	1047.7
	Max		-115.5	169.99	50.91	0.00	16.8	1047.7
	6.00	M/n	-186.0	-169.99	6.61	0.00	0.0	1064.7
	Max		-115.6	169.99	50.96	0.00	17.9	1064.7
	6.10	M/n	-186.1	-169.99	6.56	0.00	0.0	1081.7
	Max		-115.7	169.99	51.01	0.00	19.0	1081.7
	6.20	M/n	-186.2	-169.99	6.51	0.00	0.0	1098.7
	Max		-115.8	169.99	51.06	0.00	20.1	1098.7
	6.30	M/n	-186.3	-169.99	6.46	0.00	0.0	1115.7
	Max		-115.9	169.99	51.11	0.00	21.2	1115.7
	6.40	M/n	-186.4	-169.99	6.41	0.00	0.0	1132.7
	Max		-116.0	169.99	51.16	0.00	22.3	1132.7
	6.50	M/n	-186.5	-169.99	6.36	0.00	0.0	1149.7
	Max		-116.1	169.99	51.21	0.00	23.4	1149.7
	6.60	M/n	-186.6	-169.99	6.31	0.00	0.0	1166.7
	Max		-116.2	169.99	51.26	0.00	24.5	1166.7
	6.70	M/n	-186.7	-169.99	6.26	0.00	0.0	1183.7
	Max		-116.3	169.99	51.31	0.00	25.6	1183.7
	6.80	M/n	-186.8	-169.99	6.21	0.00	0.0	1200.7
	Max		-116.4	169.99	51.36	0.00	26.7	1200.7
	6.90	M/n	-186.9	-169.99	6.16	0.00	0.0	1217.7
	Max		-116.5	169.99	51.41	0.00	27.8	1217.7
	7.00	M/n	-187.0	-169.99	6.11	0.00	0.0	1234.7
	Max		-116.6	169.99	51.46	0.00	28.9	1234.7
	7.10	M/n	-187.1	-169.99	6.06	0.00	0.0	1251.7
	Max		-116.7	169.99	51.51	0.00	30.0	1251.7
	7.20	M/n	-187.2	-169.99	6.01	0.00	0.0	1268.7
	Max		-116.8	169.99	51.56	0.00	31.1	1268.7
	7.30	M/n	-187.3	-169.99	5.96	0.00	0.0	1285.7
	Max		-116.9	169.99	51.61	0.00	32.2	1285.7
	7.40	M/n	-187.4	-169.99	5.91	0.00	0.0	1302.7
	Max		-117.0	169.99	51.66	0.00	33.3	1302.7
	7.50	M/n	-187.5	-169.99	5.86	0.00	0.0	1319.7
	Max		-117.1	169.99	51.71	0.00	34.4	1319.7

Verfasser: **Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Program: 4H-FRAP 11/97 / pcae-GmbH / Ken9509756  
Bauwerk: 9813 - 2.00

ASB Nr.:  
Datum: 12.03.99

**extremale Schnittgrößen** (im Hauptachsensystem)  
Stabzug 20: Kragpf. Achse F

Knostr	s	Typ	N	Q <sub>y</sub>	Q <sub>z</sub>	T	M <sub>y</sub>	M <sub>z</sub>
	m		kN	kN	kN	kNm	kNm	kNm
218	Max	3.76 Min	68.5	1.02	73.77	0.00	13.1	1.9
	Min	-31.6	-1.08	-41.12	0.00	-23.3	-1.9	
218	Max	3.76 Min	68.5	1.04	73.68	0.00	19.3	2.0
	Min	-31.6	-1.08	-41.09	0.00	-23.3	-1.9	
	Max	3.80 Min	68.5	1.04	73.17	0.00	19.3	2.0
	Min	-31.6	-1.09	-41.12	0.00	-25.0	-2.0	
	Max	3.84 Min	68.5	1.06	73.26	0.00	22.3	2.1
	Min	-31.6	-1.10	-41.15	0.00	-26.7	-2.0	
	Max	3.89 Min	68.5	1.07	73.11	0.00	25.4	2.1
	Min	-31.6	-1.12	-41.17	0.00	-28.4	-2.1	
	Max	3.93 Min	68.5	1.08	72.96	0.00	28.4	2.1
	Min	-31.6	-1.13	-41.20	0.00	-30.2	-2.1	
	Max	3.97 Min	68.5	1.10	72.81	0.00	31.5	2.2
	Min	-31.6	-1.15	-41.23	0.00	-31.5	-2.2	
	Max	4.01 Min	68.5	1.11	72.67	0.00	34.5	2.2
	Min	-31.7	-1.16	-41.26	0.00	-34.5	-2.2	
	Max	4.05 Min	68.5	1.13	72.52	0.00	37.5	2.3
	Min	-31.7	-1.13	-41.27	0.00	-37.5	-2.3	
	Max	4.09 Min	68.5	1.15	72.37	0.00	40.5	2.3
	Min	-31.6	-1.10	-41.28	0.00	-40.5	-2.3	
	Max	4.14 Min	68.5	1.13	72.22	0.00	43.5	2.4
	Min	-31.6	-1.08	-41.29	0.00	-43.5	-2.4	
	Max	4.18 Min	68.5	1.12	72.07	0.00	46.5	2.4
	Min	-31.6	-1.07	-41.31	0.00	-46.5	-2.4	
	Max	4.22 Min	68.5	1.10	71.92	0.00	49.5	2.5
	Min	-31.6	-1.06	-41.32	0.00	-49.5	-2.5	
	Max	4.26 Min	68.5	1.09	71.77	0.00	52.5	2.5
	Min	-31.6	-1.04	-41.33	0.00	-52.5	-2.5	
	Max	4.30 Min	68.5	1.08	71.62	0.00	55.5	2.6
	Min	-31.6	-1.03	-41.34	0.00	-55.5	-2.6	
	Max	4.34 Min	68.5	1.07	71.47	0.00	58.5	2.6
	Min	-31.6	-1.02	-41.35	0.00	-58.5	-2.6	
	Max	4.38 Min	68.5	1.06	71.32	0.00	61.5	2.7
	Min	-31.6	-1.01	-41.36	0.00	-61.5	-2.7	
	Max	4.42 Min	68.5	1.05	71.17	0.00	64.5	2.7
	Min	-31.6	-1.00	-41.37	0.00	-64.5	-2.7	
	Max	4.46 Min	68.5	1.04	71.02	0.00	67.5	2.8
	Min	-31.6	-0.99	-41.38	0.00	-67.5	-2.8	
	Max	4.50 Min	68.5	1.03	70.87	0.00	70.5	2.8
	Min	-31.6	-0.98	-41.39	0.00	-70.5	-2.8	
	Max	4.54 Min	68.5	1.02	70.72	0.00	73.5	2.9
	Min	-31.6	-0.97	-41.40	0.00	-73.5	-2.9	
	Max	4.58 Min	68.5	1.01	70.57	0.00	76.5	2.9
	Min	-31.6	-0.96	-41.41	0.00	-76.5	-2.9	
	Max	4.62 Min	68.5	1.00	70.42	0.00	79.5	3.0
	Min	-31.6	-0.95	-41.42	0.00	-79.5	-3.0	
	Max	4.66 Min	68.5	0.99	70.27	0.00	82.5	3.0
	Min	-31.6	-0.94	-41.43	0.00	-82.5	-3.0	
	Max	4.70 Min	68.5	0.98	70.12	0.00	85.5	3.1
	Min	-31.6	-0.93	-41.44	0.00	-85.5	-3.1	
	Max	4.74 Min	68.5	0.97	69.97	0.00	88.5	3.1
	Min	-31.6	-0.92	-41.45	0.00	-88.5	-3.1	
	Max	4.78 Min	68.5	0.96	69.82	0.00	91.5	3.2
	Min	-31.6	-0.91	-41.46	0.00	-91.5	-3.2	
	Max	4.82 Min	68.5	0.95	69.67	0.00	94.5	3.2
	Min	-31.6	-0.90	-41.47	0.00	-94.5	-3.2	
	Max	4.86 Min	68.5	0.94	69.52	0.00	97.5	3.3
	Min	-31.6	-0.89	-41.48	0.00	-97.5	-3.3	
	Max	4.90 Min	68.5	0.93	69.37	0.00	100.5	3.3
	Min	-31.6	-0.88	-41.49	0.00	-100.5	-3.3	
	Max	4.94 Min	68.5	0.92	69.22	0.00	103.5	3.4
	Min	-31.6	-0.87	-41.50	0.00	-103.5	-3.4	
	Max	4.98 Min	68.5	0.91	69.07	0.00	106.5	3.4
	Min	-31.6	-0.86	-41.51	0.00	-106.5	-3.4	
	Max	5.02 Min	68.5	0.90	68.92	0.00	109.5	3.5
	Min	-31.6	-0.85	-41.52	0.00	-109.5	-3.5	
	Max	5.06 Min	68.5	0.89	68.77	0.00	112.5	3.5
	Min	-31.6	-0.84	-41.53	0.00	-112.5	-3.5	
	Max	5.10 Min	68.5	0.88	68.62	0.00	115.5	3.6
	Min	-31.6	-0.83	-41.54	0.00	-115.5	-3.6	
	Max	5.14 Min	68.5	0.87	68.47	0.00	118.5	3.6
	Min	-31.6	-0.82	-41.55	0.00	-118.5	-3.6	
	Max	5.18 Min	68.5	0.86	68.32	0.00	121.5	3.7
	Min	-31.6	-0.81	-41.56	0.00	-121.5	-3.7	
	Max	5.22 Min	68.5	0.85	68.17	0.00	124.5	3.7
	Min	-31.6	-0.80	-41.57	0.00	-124.5	-3.7	
	Max	5.26 Min	68.5	0.84	68.02	0.00	127.5	3.8
	Min	-31.6	-0.79	-41.58	0.00	-127.5	-3.8	
	Max	5.30 Min	68.5	0.83	67.87	0.00	130.5	3.8
	Min	-31.6	-0.78	-41.59	0.00	-130.5	-3.8	
	Max	5.34 Min	68.5	0.82	67.72	0.00	133.5	3.9
	Min	-31.6	-0.77	-41.60	0.00	-133.5	-3.9	
	Max	5.38 Min	68.5	0.81	67.57	0.00	136.5	3.9
	Min	-31.6	-0.76	-41.61	0.00	-136.5	-3.9	
	Max	5.42 Min	68.5	0.80	67.42	0.00	139.5	4.0
	Min	-31.6	-0.75	-41.62	0.00	-139.5	-4.0	
	Max	5.46 Min	68.5	0.79	67.27	0.00	142.5	4.0
	Min	-31.6	-0.74	-41.63	0.00	-142.5	-4.0	
	Max	5.50 Min	68.5	0.78	67.12	0.00	145.5	4.1
	Min	-31.6	-0.73	-41.64	0.00	-145.5	-4.1	
	Max	5.54 Min	68.5	0.77	66.97	0.00	148.5	4.1
	Min	-31.6	-0.72	-41.65	0.00	-148.5	-4.1	
	Max	5.58 Min	68.5	0.76	66.82	0.00	151.5	4.2
	Min	-31.6	-0.71	-41.66	0.00	-151.5	-4.2	
	Max	5.62 Min	68.5	0.75	66.67	0.00	154.5	4.2
	Min	-31.6	-0.70	-41.67	0.00	-154.5	-4.2	
	Max	5.66 Min	68.5	0.74	66.52	0.00	157.5	4.3
	Min	-31.6	-0.69	-41.68	0.00	-157.5	-4.3	
	Max	5.70 Min	68.5	0.73	66.37	0.00	160.5	4.3
	Min	-31.6	-0.68	-41.69	0.00	-160.5	-4.3	
	Max	5.74 Min	68.5	0.72	66.22	0.00	163.5	4.4
	Min	-31.6	-0.67	-41.70	0.00	-163.5	-4.4	
	Max	5.78 Min	68.5	0.71	66.07	0.00	166.5	4.4
	Min	-31.6	-0.66	-41.71	0.00	-166.5	-4.4	
	Max	5.82 Min	68.5	0.70	65.92	0.00	169.5	4.5
	Min	-31.6	-0.65	-41.72	0.00	-169.5	-4.5	
	Max	5.86 Min	68.5	0.69	65.77	0.00	172.5	4.5
	Min	-31.6	-0.64	-41.73	0.00	-172.5	-4.5	
	Max	5.90 Min	68.5	0.68	65.62	0.00	175.5	4.6
	Min	-31.6	-0.63	-41.74	0.00	-175.5	-4.6	
	Max	5.94 Min	68.5	0.67	65.47	0.00	178.5	4.6
	Min	-31.6	-0.62	-41.75	0.00	-178.5	-4.6	
	Max	5.98 Min	68.5	0.66	65.32	0.00	181.5	4.7
	Min	-31.6	-0.61	-41.76	0.00	-181.5	-4.7	
	Max	6.02 Min	68.5	0.65	65.17	0.00	184.5	4.7
	Min	-31.6	-0.60	-41.77	0.00	-184.5	-4.7	
	Max	6.06 Min	68.5	0.64	65.02	0.00	187.5	4.8
	Min	-31.6	-0.59	-41.78	0.00	-187.5	-4.8	
	Max	6.10 Min	68.5	0.63	64.87	0.00	190.5	4.8
	Min	-31.6	-0.58	-41.79	0.00	-190.5	-4.8	
	Max	6.14 Min	68.5	0.62	64.72	0.00	193.5	4.9
	Min	-31.6	-0.57	-41.80	0.00	-193.5	-4.9	
	Max	6.18 Min	68.5	0.61	64.57	0.00	196.5	4.9
	Min	-31.6	-0.56	-41.81	0.00	-196.5	-4.9	
	Max	6.22 Min	68.5	0.60	64.42	0.00	199.5	5.0
	Min	-31.6	-0.55	-41.82	0.00	-199.5	-5.0	
	Max	6.26 Min	68.5	0.59	64.27	0.00	202.5	5.0
	Min	-31.6	-0.54	-41.83	0.00	-202.5	-5.0	
	Max	6.30 Min	68.5	0.58	64.12	0.00	205.5	5.1
	Min	-31.6	-0.53	-41.84	0.00	-205.5	-5.1	
	Max	6.34 Min	68.5	0.57	63.97	0.00	208.5	5.1
	Min	-31.6	-0.52	-41.85	0.00	-208.5	-5.1	
	Max	6.38 Min	68.5	0.56	63.82	0.00	211.5	5.2
	Min	-31.6	-0.51	-41.86	0.00	-211.5	-5.2	
	Max	6.42 Min	68.5	0.55	63.67	0.00	214.5	5.2
	Min	-31.6	-0.50	-41.87	0.00	-214.5	-5.2	
	Max	6.46 Min	68.5	0.54	63.52	0.00	217.5	5.3
	Min	-31.6	-0.49	-41.88	0.00	-217.5	-5.3	
	Max	6.50 Min	68.5	0.53	63.37	0.00	220.5	5.3
	Min	-31.6	-0.48	-41.89	0.00	-220.5	-5.3	
	Max	6.54 Min	68.5	0.52	63.22	0.00	223.5	5.4
	Min	-31.6	-0.47	-41.90	0.00	-223.5	-5.4	
	Max	6.58 Min	68.5	0.51	63.07	0.00	226.5	5.4
	Min	-31.6	-0.46	-41.91	0.00	-226.5	-5.4	
	Max	6.62 Min	68.5	0.50	62.92	0.00	229.5	5.5
	Min	-31.6	-0.45	-41.92	0.00	-229.5	-5.5	
	Max	6.66 Min	68.5	0.49	62.77	0.00	232.5	5.5
	Min	-31.6	-0.44	-41.93	0.00	-232.5	-5.5	
	Max	6.70 Min	68.5	0.48	62.62	0.00	235.5	5.6
	Min	-31.6	-0.43	-41.94	0.00	-235.5	-5.6	
	Max	6.74 Min	68.5	0.47	62.47	0.00	238.5	5.6
	Min	-31.6	-0.42	-41.95	0.00	-238.5	-5.6	
	Max	6.78 Min	68.5	0.46	62.32	0.00	241.5	5.7
	Min	-31.6	-0.41	-41.96	0.00	-241.5	-5.7	
	Max	6.82 Min	68.5	0.45	62.17	0.00	244.5	5.7
	Min	-31.6	-0.40	-41.97	0.00	-244.5	-5.7	
	Max	6.86 Min	68.5	0.44	62.02	0.00	247.5	5.8
	Min	-31.6	-0.39	-41.98	0.00	-247.5	-5.8	
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Verfasser: Ingenieurbüro Krentel GmbH  
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Tel. 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcac-GmbH / kren509756  
Bauwerk: 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

extremale Schnittgrößen  
Stabzug 21: Kragpf. Achse F2

Knoten	s	Typ	N	Q <sub>z</sub>	Q <sub>y</sub>	T	M <sub>x</sub>	M <sub>y</sub>
	m		kN	kN	kN	kNm	kNm	kNm
122	1.59	Min	0.0	-0.46	-0.74	0.00	-0.5	0.3
	Max							
122	1.75	Min	0.0	-0.52	-0.40	0.00	-4.3	-0.4
	Max							
122	1.75	Min	0.0	-0.57	-0.93	0.00	-5.2	-0.5
	Max							
122	1.92	Min	0.0	-0.53	-0.93	0.00	-5.2	-0.5
	Max							
2.09	Min		0.0	-0.69	-0.54	0.00	-6.3	-0.6
	Max							
2.22	Min		0.0	-0.81	-1.02	0.00	-0.9	0.6
	Max							
2.42	Min		0.0	-0.87	-1.12	0.00	-1.1	0.8
	Max							
2.42	Min		0.0	-1.05	-1.22	0.00	-1.3	1.0
	Max							
2.59	Min		0.0	-0.98	-1.32	0.00	-1.5	1.1
	Max							
2.76	Min		0.0	-1.10	-1.42	0.00	-1.8	1.3
	Max							
2.76	Min		0.0	-1.15	-1.43	0.00	-1.8	1.3
	Max							
2.92	Min		0.0	-1.21	-1.52	0.00	-2.0	1.5
	Max							
3.09	Min		0.0	-1.27	-1.60	0.00	-2.3	1.7
	Max							
3.26	Min		0.0	-1.32	-1.73	0.00	-2.6	1.9
	Max							
3.43	Min		0.0	-1.38	-1.84	0.00	-3.0	2.1
	Max							
3.59	Min		0.0	-1.43	-1.95	0.00	-3.2	2.2
	Max							
3.76	Min		0.0	-1.49	-2.06	0.00	-3.5	2.6
	Max							
3.76	Min		0.0	-1.49	-2.17	0.00	-3.8	2.8
	Max							
3.80	Min		0.0	-1.50	-2.24	0.00	-4.0	3.0
	Max							
3.84	Min		0.0	-1.51	-2.31	0.00	-4.3	3.1
	Max							
3.89	Min		0.0	-1.53	-2.39	0.00	-4.6	3.4
	Max							
3.93	Min		0.0	-1.54	-2.45	0.00	-4.9	3.7
	Max							
3.97	Min		0.0	-1.56	-2.53	0.00	-5.2	4.0
	Max							
4.01	Min		0.0	-1.57	-2.61	0.00	-5.5	4.3
	Max							
4.01	Min		0.0	-1.58	-2.69	0.00	-5.8	4.6
	Max							
4.05	Min		0.0	-1.59	-2.76	0.00	-6.1	4.9
	Max							
4.09	Min		0.0	-1.60	-2.84	0.00	-6.4	5.2
	Max							
4.14	Min		0.0	-1.61	-2.91	0.00	-6.7	5.5
	Max							
4.18	Min		0.0	-1.62	-2.98	0.00	-7.0	5.8
	Max							
4.22	Min		0.0	-1.63	-3.05	0.00	-7.3	6.1
	Max							
4.26	Min		0.0	-1.64	-3.12	0.00	-7.6	6.4
	Max							
4.26	Min		0.0	-1.65	-3.19	0.00	-7.9	6.7
	Max							
4.33	Min		0.0	-1.66	-3.26	0.00	-8.2	7.0
	Max							
4.40	Min		0.0	-1.67	-3.33	0.00	-8.5	7.3
	Max							
4.43	Min		0.0	-1.68	-3.40	0.00	-8.8	7.6
	Max							
4.43	Min		0.0	-1.69	-3.47	0.00	-9.1	7.9
	Max							
4.43	Min		0.0	-1.70	-3.54	0.00	-9.4	8.2
	Max							
4.43	Min		0.0	-1.71	-3.61	0.00	-9.7	8.5
	Max							
4.43	Min		0.0	-1.72	-3.68	0.00	-10.0	8.8
	Max							
4.43	Min		0.0	-1.73	-3.75	0.00	-10.3	9.1
	Max							
4.43	Min		0.0	-1.74	-3.82	0.00	-10.6	9.4
	Max							
4.43	Min		0.0	-1.75	-3.89	0.00	-10.9	9.7
	Max							
4.43	Min		0.0	-1.76	-3.96	0.00	-11.2	10.0
	Max							
4.43	Min		0.0	-1.77	-4.03	0.00	-11.5	10.3
	Max							
4.43	Min		0.0	-1.78	-4.10	0.00	-11.8	10.6
	Max							
4.43	Min		0.0	-1.79	-4.17	0.00	-12.1	10.9
	Max							
4.43	Min		0.0	-1.80	-4.24	0.00	-12.4	11.2
	Max							
4.43	Min		0.0	-1.81	-4.31	0.00	-12.7	11.5
	Max							
4.43	Min		0.0	-1.82	-4.38	0.00	-13.0	11.8
	Max							
4.43	Min		0.0	-1.83	-4.45	0.00	-13.3	12.1
	Max							
4.43	Min		0.0	-1.84	-4.52	0.00	-13.6	12.4
	Max							
4.43	Min		0.0	-1.85	-4.59	0.00	-13.9	12.7
	Max							
4.43	Min		0.0	-1.86	-4.66	0.00	-14.2	13.0
	Max							
4.43	Min		0.0	-1.87	-4.73	0.00	-14.5	13.3
	Max							
4.43	Min		0.0	-1.88	-4.80	0.00	-14.8	13.6
	Max							
4.43	Min		0.0	-1.89	-4.87	0.00	-15.1	13.9
	Max							
4.43	Min		0.0	-1.90	-4.94	0.00	-15.4	14.2
	Max							
4.43	Min		0.0	-1.91	-5.01	0.00	-15.7	14.5
	Max							
4.43	Min		0.0	-1.92	-5.08	0.00	-16.0	14.8
	Max							
4.43	Min		0.0	-1.93	-5.15	0.00	-16.3	15.1
	Max							
4.43	Min		0.0	-1.94	-5.22	0.00	-16.6	15.4
	Max							
4.43	Min		0.0	-1.95	-5.29	0.00	-16.9	15.7
	Max							
4.43	Min		0.0	-1.96	-5.36	0.00	-17.2	16.0
	Max							
4.43	Min		0.0	-1.97	-5.43	0.00	-17.5	16.3
	Max							
4.43	Min		0.0	-1.98	-5.50	0.00	-17.8	16.6
	Max							
4.43	Min		0.0	-1.99	-5.57	0.00	-18.1	16.9
	Max							
4.43	Min		0.0	-2.00	-5.64	0.00	-18.4	17.2
	Max							
4.43	Min		0.0	-2.01	-5.71	0.00	-18.7	17.5
	Max							
4.43	Min		0.0	-2.02	-5.78	0.00	-19.0	17.8
	Max							
4.43	Min		0.0	-2.03	-5.85	0.00	-19.3	18.1
	Max							
4.43	Min		0.0	-2.04	-5.92	0.00	-19.6	18.4
	Max							
4.43	Min		0.0	-2.05	-5.99	0.00	-19.9	18.7
	Max							
4.43	Min		0.0	-2.06	-6.06	0.00	-20.2	19.0
	Max							
4.43	Min		0.0	-2.07	-6.13	0.00	-20.5	19.3
	Max							
4.43	Min		0.0	-2.08	-6.20	0.00	-20.8	19.6
	Max							
4.43	Min		0.0	-2.09	-6.27	0.00	-21.1	19.9
	Max							
4.43	Min		0.0	-2.10	-6.34	0.00	-21.4	20.2
	Max							
4.43	Min		0.0	-2.11	-6.41	0.00	-21.7	20.5
	Max							
4.43	Min		0.0	-2.12	-6.48	0.00	-22.0	20.8
	Max							
4.43	Min		0.0	-2.13	-6.55	0.00	-22.3	21.1
	Max							
4.43	Min		0.0	-2.14	-6.62	0.00	-22.6	21.4
	Max							
4.43	Min		0.0	-2.15	-6.69	0.00	-22.9	21.7
	Max							
4.43	Min		0.0	-2.16	-6.76	0.00	-23.2	22.0
	Max							
4.43	Min		0.0	-2.17	-6.83	0.00	-23.5	22.3
	Max							
4.43	Min		0.0	-2.18	-6.90	0.00	-23.8	22.6
	Max							
4.43	Min		0.0	-2.19	-6.97	0.00	-24.1	22.9
	Max							
4.43	Min		0.0	-2.20	-7.04	0.00	-24.4	23.2
	Max							
4.43	Min		0.0	-2.21	-7.11	0.00	-24.7	23.5
	Max							
4.43	Min		0.0	-2.22	-7.18	0.00	-25.0	23.8
	Max							
4.43	Min		0.0	-2.23	-7.25	0.00	-25.3	24.1
	Max							
4.43	Min		0.0	-2.24	-7.32	0.00	-25.6	24.4
	Max							
4.43	Min		0.0	-2.25	-7.39	0.00	-25.9	24.7
	Max							
4.43	Min		0.0	-2.26	-7.46	0.00	-26.2	25.0
	Max							
4.43	Min		0.0	-2.27	-7.53	0.00	-26.5	25.3
	Max							
4.43	Min		0.0	-2.28	-7.60	0.00	-26.8	25.6
	Max							
4.43	Min		0.0	-2.29	-7.67	0.00	-27.1	25.9
	Max							
4.43	Min		0.0	-2.30	-7.74	0.00	-27.4	26.2
	Max							
4.43	Min		0.0	-2.31	-7.81	0.00	-27.7	26.5
	Max							
4.43	Min		0.0	-2.32	-7.88	0.00	-28.0	26.8
	Max							
4.43	Min		0.0	-2.33	-7.95	0.00	-28.3	27.1
	Max							
4.43	Min		0.0	-2.34	-8.02	0.00	-28.6	27.4
	Max							
4.43	Min		0.0	-2.35	-8.09	0.00	-28.9	27.7
	Max							
4.43</								

**Verfasser:** Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Bortlin - Zehlendorf  
Tel. 030 - 809877-0

**Programm:** 4H-FRAP 11/97 / pcac-GmbH / kren5509756

**Bauwerk:** 9813 - 2.00

ASB Nr.:

Datum: 12 03 99

**extremale Schnittgrößen** (im Hauptachsensystem)  
Stabzug 22: Kragpl. Achse G

Сонин	s	Type	N	Q <sub>0</sub>	Q <sub>1</sub>	T	M <sub>0</sub>	M <sub>1</sub>
	m		кН	кН	кН	кН	кН	кН
75	75	Max	0.1	0.12	-0.17	0.00	0.0	0.0
		0.50 Min	-0.3	-0.16	-1.70	0.00	0.0	0.0
		Max	0.1	0.16	-0.24	0.00	-0.1	0.0
		0.63 Min	-0.4	-0.20	-2.12	0.00	-0.7	-0.1
75	75	Max	0.1	0.20	-0.30	0.00	-0.1	0.1
		Max	-0.4	-0.25	-2.55	0.00	-1.0	-0.1
		Max	0.1	0.25	-0.37	0.00	-0.1	0.1
		Max	-0.4	-0.25	-2.55	0.00	-0.1	-0.1
75	75	Max	0.1	0.25	-0.37	0.00	-0.1	0.1
		Max	-0.4	-0.25	-2.55	0.00	-0.1	-0.1
		Max	0.1	0.25	-0.37	0.00	-0.1	0.1
		Max	-0.4	-0.25	-2.55	0.00	-0.1	-0.1
124	124	Max	0.0	0.30	-3.12	0.00	-1.4	0.1
		Max	-0.4	-0.30	-3.68	0.00	-2.0	-0.2
		Max	-0.5	-0.36	-3.68	0.00	-2.0	-0.2
		Max	0.0	0.36	-5.55	0.00	-3.1	0.2
124	124	Max	-0.5	-0.41	-4.25	0.00	-2.7	-0.3
		Max	0.0	0.41	-0.64	0.00	-0.4	0.3
		Max	-0.5	-0.46	-4.82	0.00	-3.4	-0.3
		Max	0.0	0.46	-0.74	0.00	-0.5	0.3
124	124	Max	-0.6	-0.52	-5.40	0.00	-4.3	-0.4
		Max	-0.6	-0.52	-5.40	0.00	-4.3	-0.4
		Max	-0.6	-0.52	-5.40	0.00	-4.3	-0.4
		Max	-0.6	-0.52	-5.40	0.00	-4.3	-0.4
75	75	Max	-0.6	-0.57	-5.97	0.00	-5.2	-0.5
		Max	-0.6	-0.57	-5.97	0.00	-5.2	-0.5
		Max	-0.6	-0.57	-5.97	0.00	-5.2	-0.5
		Max	-0.6	-0.57	-5.97	0.00	-5.2	-0.5
75	75	Max	-0.6	-0.58	-6.08	0.00	-5.3	-0.5
		Max	-0.6	-0.58	-6.08	0.00	-5.3	-0.5
		Max	-0.6	-0.58	-6.08	0.00	-5.3	-0.5
		Max	-0.6	-0.58	-6.08	0.00	-5.3	-0.5
75	75	Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
		Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
		Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
		Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
75	75	Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
		Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
		Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
		Max	-0.7	-0.68	-7.12	0.00	-6.3	-0.6
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
75	75	Max	-0.8	-0.87	-8.27	0.00	-7.4	-0.8
		Max</						

**Bauteil:** Pos.10.6 / extrem. Schn.

Seite:

Archiv Nr.:

**Ingenieurbüro v. Krentel GmbH**  
Forststr. 26 14183 Berlin - Zehlendorf  
Tel. 030 - 8093771-0

**Verfasser:**

**Programm:** 4H-FRAP 11/97 / pcae-GmbH / Men9509756

**Bauwerk:** 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

**extremale Schnittgrößen**  
Stabzug 22: Kragpl. Achse G  
(im Hauptachsensystem)

Order	s	Type	N km	Q <sub>W</sub> km	Q <sub>T</sub> km	T min	R <sub>W</sub> km	R <sub>T</sub> km
271	3.64	Min	-42.4	-1.35	-54.70	0.00	-34.6	0.00
	Max	78.7	1.44	85.76	0.00	32.8	0.00	
	3.89	Min	-42.1	-1.36	-54.73	0.00	-36.9	0.00
	Max	78.7	1.45	85.61	0.00	36.4	0.00	
	3.93	Min	-42.4	-1.38	-54.76	0.00	-39.2	0.00
	Max	78.7	1.46	85.46	0.00	40.0	0.00	
	3.97	Min	-42.4	-1.39	-54.79	0.00	-41.5	0.00
	Max	78.7	1.48	85.31	0.00	43.5	0.00	
	4.01	Min	-42.4	-1.40	-54.82	0.00	-43.8	0.00
	Max	78.7	1.49	85.16	0.00	47.1	0.00	
	4.05	Min	-42.4	-1.40	-54.82	0.00	-43.8	0.00
	Max	78.7	1.49	85.16	0.00	47.1	0.00	
272	4.09	Min	-42.4	-1.48	-55.31	0.00	-41.5	0.00
	Max	78.7	1.38	84.79	0.00	43.5	0.00	
	4.14	Min	-42.4	-1.45	-55.61	0.00	-39.2	0.00
	Max	78.7	1.38	84.76	0.00	40.0	0.00	
	4.18	Min	-42.4	-1.44	-55.73	0.00	-36.9	0.00
	Max	78.7	1.35	84.76	0.00	36.4	0.00	
	4.22	Min	-42.4	-1.42	-55.93	0.00	-32.3	0.00
	Max	78.7	1.33	84.67	0.00	29.2	0.00	
	4.26	Min	-42.4	-1.41	-56.05	0.00	-30.1	0.00
	Max	78.7	1.32	84.64	0.00	25.6	0.00	
	4.30	Min	-42.3	-1.41	-56.32	0.00	-30.1	0.00
	Max	78.7	1.32	84.59	0.00	23.6	0.00	
273	4.35	Min	-42.3	-1.38	-56.52	0.00	-25.5	0.00
	Max	78.7	1.29	84.54	0.00	18.4	0.00	
	4.43	Min	-42.3	-1.36	-56.82	0.00	-20.9	0.00
	Max	78.7	1.26	84.48	0.00	14.1	0.00	
	4.51	Min	-42.3	-1.33	-57.11	0.00	-11.2	0.00
	Max	78.7	1.24	84.42	0.00	-7.1	0.00	
	4.60	Min	-42.3	-1.30	-57.41	0.00	-4.5	0.00
	Max	78.7	1.21	84.36	0.00	-1.5	0.00	
	4.68	Min	-42.3	-1.27	-57.71	0.00	-0.7	0.00
	Max	78.7	1.18	84.30	0.00	-0.4	0.00	
	4.70	Min	-42.3	-1.25	-58.00	0.00	-0.8	0.00
	Max	78.8	1.15	84.25	0.00	-1.0	0.00	
274	4.76	Min	-43.0	-1.25	-58.54	0.00	-1.9	0.00
	Max	-0.3	1.15	11.18	0.00	-2.8	0.00	
	4.85	Min	-0.9	-1.22	-1.79	0.00	-2.7	0.00
	Max	-0.3	1.13	10.89	0.00	-2.7	0.00	
	4.93	Min	-0.9	-1.19	-1.73	0.00	-16.3	0.00
	Max	-0.3	1.10	10.60	0.00	-2.5	0.00	
	5.01	Min	-0.9	-1.17	-1.68	0.00	-15.4	0.00
	Max	-0.2	1.07	10.31	0.00	-2.4	0.00	
	5.10	Min	-0.9	-1.14	-1.63	0.00	-14.6	0.00
	Max	-0.2	1.04	10.02	0.00	-2.3	0.00	
	5.18	Min	-0.9	-1.11	-1.58	0.00	-13.7	0.00
	Max	-0.2	1.02	9.72	0.00	-2.1	0.00	
275	5.26	Min	-0.8	-1.08	-1.52	0.00	-12.9	0.00
	Max	-0.2	0.99	9.43	0.00	-2.0	0.00	
	5.26	Min	-0.8	-1.08	-1.52	0.00	-12.9	0.00
	Max	-0.2	0.99	9.43	0.00	-2.0	0.00	
	5.43	Min	-0.8	-1.03	-1.42	0.00	-11.4	0.00
	Max	-0.2	0.94	8.85	0.00	-1.8	0.00	
	5.60	Min	-0.8	-0.97	-1.32	0.00	-10.1	0.00
	Max	-0.2	0.88	8.27	0.00	-1.5	0.00	
	5.77	Min	-0.7	-0.97	-1.22	0.00	-8.7	0.00
	Max	-0.1	0.88	7.70	0.00	-1.3	0.00	
	5.93	Min	-0.7	-0.97	-1.12	0.00	-7.4	0.00
	Max	-0.1	0.88	7.12	0.00	-1.1	0.00	
276	6.10	Min	-0.6	-0.97	-1.02	0.00	-6.3	0.00
	Max	-0.1	0.88	6.54	0.00	-0.9	0.00	
	6.27	Min	-0.6	-0.97	-0.93	0.00	-5.2	0.00
	Max	-0.1	0.88	5.97	0.00	-0.8	0.00	
	6.27	Min	-0.6	-0.97	-0.93	0.00	-5.2	0.00
	Max	-0.1	0.88	5.97	0.00	-0.8	0.00	

Bauteil: Pos.10.6 / extrem. Schn.

Block:

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Archiv Nr.:

Verfasser: Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcse-GmbH / kren509756  
Bauwerk: 9813 - 2.00

ASB Nr.:  
Datum: 12.03.99

extremale Schnittgrößen  
Stabzug 22: Kragpf. Achse G

Knoten	s	Typ	N	Q <sub>y</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>
	m		kN	kN	kN	kNm	kNm	kNm
487	Max	-0.1	0.57	5.97	0.00	0.00	-0.8	0.5
	Min	-0.6	-0.52	0.83	0.00	0.00	-4.3	-0.4
	Max	0.0	0.52	5.40	0.00	0.00	-0.6	0.4
487	Max	-0.5	-0.46	0.74	0.00	0.00	-3.4	-0.3
	Min	-0.5	-0.41	0.64	0.00	0.00	-0.5	0.3
	Max	0.0	0.41	4.25	0.00	0.00	-2.7	-0.3
487	Max	-0.5	-0.36	0.55	0.00	0.00	-0.4	0.3
	Min	-0.5	-0.30	0.45	0.00	0.00	-0.3	0.2
	Max	-0.4	-0.30	0.45	0.00	0.00	-1.4	-0.1
487	Max	-0.4	-0.25	0.37	0.00	0.00	-0.2	0.1
	Min	-0.4	-0.25	0.37	0.00	0.00	-0.9	-0.1
487	Max	-0.4	-0.25	0.37	0.00	0.00	-1.0	0.1
	Min	-0.4	-0.25	0.37	0.00	0.00	-0.1	0.1
	Max	0.1	0.25	2.55	0.00	0.00	-0.7	-0.1
487	Max	0.1	0.20	2.12	0.00	0.00	-0.1	0.1
	Min	-0.3	-0.16	0.24	0.00	0.00	-0.4	0.1
487	Max	-0.3	-0.12	0.17	0.00	0.00	-0.2	0.0
	Min	-0.3	-0.12	0.17	0.00	0.00	-0.2	0.0
487	Max	-0.3	-0.08	0.11	0.00	0.00	-0.1	0.0
	Min	-0.3	-0.08	0.11	0.00	0.00	-0.1	0.0
487	Max	-0.2	-0.04	0.05	0.00	0.00	0.0	0.0
	Min	-0.2	-0.04	0.05	0.00	0.00	0.0	0.0
487	Max	0.1	0.04	0.43	0.00	0.00	0.0	0.0
	Min	0.1	0.04	0.43	0.00	0.00	0.0	0.0
487	Max	0.2	0.00	-0.02	0.00	0.00	0.0	0.0
	Min	0.2	0.00	-0.02	0.00	0.00	0.0	0.0
487	Max	-1.49	-88.00	0.00	0.00	0.00	-43.8	-3.0
	Min	-1.49	-88.00	0.00	0.00	0.00	-43.8	-3.0
487	Max	1.49	88.00	0.00	0.00	0.00	47.1	2.8

extremale Schnittgrößen  
Stabzug 23: Kragpf. Achse G2

Knoten	s	Typ	N	Q <sub>y</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>
	m		kN	kN	kN	kNm	kNm	kNm
28	0.00 Min	-0.2	0.00	-0.01	0.00	0.00	0.0	0.0
	Max	0.2	0.00	0.02	0.00	0.00	0.0	0.0
28	0.13 Min	-0.2	-0.04	-0.43	0.00	0.00	0.0	0.0
	Max	0.1	0.04	0.43	0.00	0.00	0.0	0.0
28	0.25 Min	-0.3	-0.08	-0.86	0.00	0.00	0.0	0.0
	Max	0.1	0.08	0.86	0.00	0.00	0.0	0.0
28	0.38 Min	-0.3	-0.12	-1.28	0.00	0.00	0.0	0.0
	Max	0.1	0.12	1.28	0.00	0.00	0.0	0.0
28	0.50 Min	-0.3	-0.16	-1.70	0.00	0.00	0.0	0.0
	Max	0.1	0.16	1.70	0.00	0.00	0.0	0.0
28	0.63 Min	-0.4	-0.20	-2.12	0.00	0.00	0.0	0.0
	Max	0.1	0.20	2.12	0.00	0.00	0.0	0.0
77	0.75 Min	-0.4	-0.25	-2.55	0.00	0.00	0.0	0.0
	Max	0.1	0.25	2.55	0.00	0.00	0.0	0.0
77	0.75 Min	-0.4	-0.25	-2.55	0.00	0.00	0.0	0.0
	Max	0.1	0.25	2.55	0.00	0.00	0.0	0.0
77	0.92 Min	-0.4	-0.30	-3.12	0.00	0.00	0.0	0.0
	Max	0.1	0.30	3.12	0.00	0.00	0.0	0.0
77	1.09 Min	-0.5	-0.36	-3.68	0.00	0.00	0.0	0.0
	Max	0.1	0.36	3.68	0.00	0.00	0.0	0.0
77	1.25 Min	-0.5	-0.41	-4.25	0.00	0.00	0.0	0.0
	Max	0.1	0.41	4.25	0.00	0.00	0.0	0.0
77	1.42 Min	-0.5	-0.46	-4.82	0.00	0.00	0.0	0.0
	Max	0.1	0.46	4.82	0.00	0.00	0.0	0.0
77	1.59 Min	-0.6	-0.52	-5.40	0.00	0.00	0.0	0.0
	Max	0.1	0.52	5.40	0.00	0.00	0.0	0.0
126	1.75 Min	-0.6	-0.57	-5.97	0.00	0.00	0.0	0.0
	Max	0.1	0.57	5.97	0.00	0.00	0.0	0.0
126	1.75 Min	-0.6	-1.35	-5.97	0.00	0.00	0.0	0.0
	Max	-0.3	1.38	-0.93	0.00	0.00	0.0	0.0

Bauteil: Pos.10.6 / extrem. Schn.  
Busbahnsteig 4/5

Block:

Vorgang:

Archiv Nr.:  
Seite: 15

Verfasser: Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcse-GmbH / kren509756  
Bauwerk: 9813 - 2.00

ASB Nr.:  
Datum: 12.03.99

extremale Schnittgrößen  
Stabzug 23: Kragpf. Achse G2

Knoten	s	Typ	N	Q <sub>y</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>
	m		kN	kN	kN	kNm	kNm	kNm
175	1.92 Min	-0.6	-1.35	-6.54	0.00	0.00	-6.3	-0.7
	Max	-0.1	1.38	-1.02	0.00	0.00	-0.9	-0.7
175	2.09 Min	-0.7	-1.35	-7.12	0.00	0.00	-7.4	-0.9
	Max	-0.1	1.38	-1.12	0.00	0.00	-1.1	-0.9
175	2.26 Min	-0.7	-1.35	-7.70	0.00	0.00	-8.7	-1.1
	Max	-0.1	1.38	-1.22	0.00	0.00	-1.3	-1.1
175	2.42 Min	-0.8	-1.35	-8.27	0.00	0.00	-10.0	-1.3
	Max	-0.2	1.38	-1.32	0.00	0.00	-1.5	-1.3
175	2.59 Min	-0.8	-1.35	-8.85	0.00	0.00	-11.4	-1.5
	Max	-0.2	1.38	-1.42	0.00	0.00	-1.8	-1.5
175	2.76 Min	-0.8	-1.39	-9.43	0.00	0.00	-12.9	-1.8
	Max	-0.2	1.43	-1.52	0.00	0.00	-2.0	-1.7
175	2.76 Min	-0.8	-1.39	-9.43	0.00	0.00	-12.9	-1.8
	Max	-0.2	1.43	-1.52	0.00	0.00	-2.0	-1.7
175	2.92 Min	-0.9	-1.45	-10.02	0.00	0.00	-14.6	-2.0
	Max	-0.2	1.48	-1.63	0.00	0.00	-2.3	-2.0
175	3.09 Min	-0.9	-1.50	-10.60	0.00	0.00	-16.3	-2.3
	Max	-0.3	1.54	-1.73	0.00	0.00	-2.5	-2.2
175	3.26 Min	-1.0	-1.56	-11.18	0.00	0.00	-18.1	-2.5
	Max	-0.3	1.59	-1.84	0.00	0.00	-2.8	-2.5
175	3.43 Min	-1.0	-1.61	-11.77	0.00	0.00	-20.0	-2.8
	Max	-0.3	1.65	-1.95	0.00	0.00	-3.2	-2.7
175	3.59 Min	-1.0	-1.66	-12.35	0.00	0.00	-22.0	-3.1
	Max	-0.3	1.70	-2.06	0.00	0.00	-3.5	-3.0
175	3.76 Min	-1.1	-1.72	-12.94	0.00	0.00	-24.2	-3.4
	Max	-0.4	1.76	-2.17	0.00	0.00	-3.8	-3.3
175	3.76 Min	-1.1	-1.72	-12.94	0.00	0.00	-24.2	-3.4
	Max	-0.4	1.76	-2.17	0.00	0.00	-3.8	-3.3
175	3.80 Min	-1.1	-1.73	-13.09	0.00	0.00	-24.7	-3.4
	Max	-0.4	1.77	-2.19	0.00	0.00	-3.9	-3.4
175	3.84 Min	-1.1	-1.75	-13.24	0.00	0.00	-25.3	-3.5
	Max	-0.4	1.78	-2.22	0.00	0.00	-4.0	-3.4
175	3.89 Min	-1.1	-1.76	-13.39	0.00	0.00	-25.9	-3.6
	Max	-0.4	1.80	-2.25	0.00	0.00	-4.1	-3.5
175	3.93 Min	-1.1	-1.77	-13.53	0.00	0.00	-26.4	-3.7
	Max	-0.4	1.81	-2.28	0.00	0.00	-4.2	-3.6
175	3.97 Min	-1.1	-1.79	-13.68	0.00	0.00	-27.0	-3.7
	Max	-0.4	1.82	-2.31	0.00	0.00	-4.3	-3.7
175	4.01 Min	-1.1	-1.80	-13.83	0.00	0.00	-27.5	-3.8
	Max	-0.4	1.84	-2.34	0.00	0.00	-4.4	-3.7
175	4.01 Min	-1.1	-1.80	-13.83	0.00	0.00	-27.5	-3.8
	Max	-0.4	1.84	-2.34	0.00	0.00	-4.4	-3.7
175	4.05 Min	-1.1	-1.82	-14.00	0.00	0.00	-28.1	-3.9
	Max	-0.4	1.86	-2.37	0.00	0.00	-4.5	-3.8
175	4.09 Min	-1.1	-1.84	-14.16	0.00	0.00	-28.7	-4.0
	Max	-0.4	1.88	-2.40	0.00	0.00	-4.6	-3.9
175	4.14 Min	-1.1	-1.86	-14.32	0.00	0.00	-29.3	-4.1
	Max	-0.4	1.90	-2.43	0.00	0.00	-4.7	-4.0
175	4.18 Min	-1.1	-1.88	-14.48	0.00	0.00	-29.9	-4.2
	Max	-0.4	1.92	-2.46	0.00	0.00	-4.8	-4.1
175	4.22 Min	-1.1	-1.90	-14.64	0.00	0.00	-30.5	-4.3
	Max	-0.4	1.94	-2.49	0.00	0.00	-4.9	-4.2
175	4.26 Min	-1.1	-1.92	-14.80	0.00	0.00	-31.1	-4.4
	Max	-0.4	1.96	-2.52	0.00	0.00	-5.0	-4.3
175	4.26 Min	-1.1	-1.92	-14.80	0.00	0.00	-31.1	-4.4
	Max	-0.4	1.96	-2.52	0.00	0.00	-5.0	-4.3
175	4.30 Min	-1.1	-1.94	-14.96	0.00	0.00	-31.7	-4.5
	Max	-0.4	1.98	-2.55	0.00	0.00	-5.1	-4.4
175	4.34 Min	-1.1	-1.96	-15.12	0.00	0.00	-32.3	-4.6
	Max	-0.4	2.00	-2.58	0.00	0.00	-5.2	-4.5
175	4.38 Min	-1.1	-1.98	-15.28	0.00	0.00	-32.9	-4.7
	Max	-0.4	2.02	-2.61	0.00	0.00	-5.3	-4.6
175	4.42 Min	-1.1	-1.99	-15.44	0.00	0.00	-33.5	-4.8
	Max	-0.4	2.04	-2.64	0.00	0.00	-5.4	-4.7
175	4.46 Min	-1.1	-2.00	-15.60	0.00	0.00	-34.1	-4.9
	Max	-0.4	2.06	-2.67	0.00	0.00	-5.5	-4.8
175	4.50 Min	-1.1	-2.02	-15.76	0.00	0.00	-34.7	-5.0
	Max	-0.4	2.08	-2.70	0.00	0.00	-5.6	-4.9
175	4.54 Min	-1.1	-2.04	-15.92	0.00	0.00	-35.3	-5.1
	Max	-0.4	2.10	-2.73	0.00	0.00	-5.7	-5.0
175	4.58 Min	-1.1	-2.06	-16.08	0.00	0.00	-35.9	-5.2
	Max	-0.4	2.12	-2.76	0.00	0.00	-5.8	-5.1
175	4.62 Min	-1.1	-2.08	-16.24	0.00	0.00	-36.5	-5.3
	Max	-0.4	2.14	-2.79	0.00	0.00	-5.9	-5.2
175	4.66 Min	-1.1	-2.10	-16.40	0.00	0.00	-37.1	-5.4
	Max	-0.4	2.16	-2.82	0.00	0.00	-6.0	-5.3
175	4.70 Min	-1.1	-2.12	-16.56	0.00	0.00	-37.7	-5.5
	Max	-0.4	2.18	-2.85	0.00	0.00	-6.1	-5.4
175	4.74 Min	-1.1	-2.14	-16.72	0.00	0.00	-38.3	-5.6
	Max	-0.4	2.20	-2.88	0.00	0.00	-6.2	-5.5
175	4.78 Min	-1.1	-2.16	-16.88	0.00	0.00	-38.9	-5.7
	Max	-0.4	2.22	-2.91	0.00	0.00	-6.3	-5.6
175	4.82 Min	-1.1	-2.18	-17.04	0.00	0.00	-39.5	-5.8
	Max	-0.4	2.24	-2.94	0.00	0.00	-6.4	-5.7
175	4.86 Min	-1.1	-2.20	-17.20	0.00	0.00	-40.1	-5.9
	Max	-0.4	2.26	-2.97	0.00	0.00	-6.5	-5.8

Verfasser:  
**Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel 030 - 809377-0

Programm:  
4H-FRAP 11/97 / pcse-GmbH / kren9509758

Bauwerk:  
9813 - 2.00

ASB Nr.:

Datum: 12.03.99

**extremale Schnittgrößen**  
(im Hauptachsensystem)

Stabzug 23: Kragpl. Achse G2

	m	κN	kN	kN	kN	kN	kN	kN
371	Max	-0.2	1.39	9.43	0.00	2.0	1.7	1.7
	5.26 Min	-0.8	-1.43	1.52	0.00	-12.9	-1.8	-1.8
	Max	-0.2	1.39	9.43	0.00	-2.0	1.7	1.7
	5.43 Min	-0.8	-1.38	1.42	0.00	-11.4	-1.5	-1.5
	Max	-0.2	1.35	8.85	0.00	-1.8	1.5	1.5
420	Max	-0.8	-1.38	1.32	0.00	-10.0	-1.3	-1.3
	5.60 Min	-0.8	-1.38	1.32	0.00	-8.7	-1.1	-1.1
	Max	-0.7	-1.38	1.22	0.00	-7.4	-0.9	-0.9
	5.77 Min	-0.7	-1.35	1.12	0.00	-6.3	-0.7	-0.7
	Max	-0.7	-1.35	1.02	0.00	-5.2	-0.5	-0.5
420	Max	-0.6	-1.35	1.02	0.00	-4.3	-0.4	-0.4
	6.10 Min	-0.6	-1.35	0.93	0.00	-3.4	-0.3	-0.3
	Max	-0.6	-1.38	1.12	0.00	-2.7	-0.3	-0.3
	6.27 Min	-0.6	-1.35	0.85	0.00	-2.0	-0.2	-0.2
	Max	-0.5	-1.35	0.75	0.00	-1.4	-0.1	-0.1
469	Max	-0.5	-1.35	0.65	0.00	-0.8	0.0	0.0
	6.27 Min	-0.5	-1.35	0.57	0.00	-0.8	0.0	0.0
	Max	-0.1	-0.57	0.93	0.00	-5.2	-0.5	-0.5
	6.43 Min	-0.6	-0.52	0.83	0.00	-4.3	-0.4	-0.4
	Max	0.0	0.52	0.40	0.00	-0.6	0.4	0.4
469	Max	-0.5	-0.48	0.74	0.00	-3.4	-0.3	-0.3
	6.60 Min	0.0	0.48	4.82	0.00	-0.5	0.3	0.3
	Max	-0.5	-0.41	0.64	0.00	-2.7	-0.3	-0.3
	6.77 Min	-0.5	-0.41	4.25	0.00	-0.4	0.3	0.3
	Max	-0.5	-0.36	0.55	0.00	-2.0	-0.2	-0.2
469	Max	-0.4	-0.30	0.46	0.00	-1.4	-0.1	-0.1
	7.10 Min	-0.4	-0.30	3.12	0.00	-0.2	0.1	0.1
	Max	0.0	0.30	0.37	0.00	-1.0	-0.1	-0.1
	7.27 Min	-0.4	0.25	2.55	0.00	-1.0	-0.1	-0.1
	Max	0.1	0.25	2.55	0.00	-1.0	-0.1	-0.1
469	Max	-0.4	0.25	0.37	0.00	-1.0	-0.1	-0.1
	7.40 Min	-0.4	0.20	0.30	0.00	-0.7	-0.1	-0.1
	Max	0.1	0.20	2.12	0.00	-0.1	0.1	0.1
	7.57 Min	-0.3	0.16	0.24	0.00	-0.4	0.0	0.0
	Max	0.1	0.16	1.70	0.00	-0.1	0.0	0.0
469	Max	-0.3	-0.12	1.28	0.00	-0.2	0.0	0.0
	7.65 Min	-0.3	0.12	1.28	0.00	-0.2	0.0	0.0
	Max	0.1	0.12	1.28	0.00	0.0	0.0	0.0
	7.77 Min	-0.3	-0.09	0.11	0.00	-0.1	0.0	0.0
	Max	0.1	0.08	0.86	0.00	0.0	0.0	0.0
469	Max	-0.2	-0.04	0.05	0.00	0.0	0.0	0.0
	7.90 Min	-0.2	0.04	0.43	0.00	0.0	0.0	0.0
	Max	0.1	0.04	0.00	0.00	0.0	0.0	0.0
	8.02 Min	0.2	0.00	-0.02	0.00	0.0	0.0	0.0
	Max	-0.1	-1.84	-13.83	0.00	0.0	0.0	0.0
469	Min	-1.84	-13.83	0.00	-27.5	-3.8	-3.8	-3.8
	Max	0.1	1.84	13.83	0.00	0.0	0.0	0.0



**Verfasser:** Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809177-0

**Programm:** 4H-FRAP 11/97 / pcae-GmbH / kren9509756

**Bauwerk:** 9813 - 2.00

Datum: 12.03.99

ASB Nr.:

**extremale Schnittgrößen** (im Hauptachsensystem)  
Stabzug 24; Kragpl. Achse H

Point	s	Type	H m	Q <sub>g</sub> kN	Q <sub>l</sub> kN	Y m	H <sub>g</sub> m	H <sub>l</sub> m
275	Max		99.2	1.39	110.98	0.00	61.8	2.7
	4.01 Min		-58.9	-1.35	-75.42	0.00	-59.3	-2.8
275	Max		99.2	1.40	110.83	0.00	66.4	2.7
	4.01 Min		-58.9	-1.35	-110.83	0.00	-59.3	-2.8
4.05	Max		99.2	1.35	75.42	0.00	66.4	2.7
	4.05 Min		-58.9	-1.39	-110.98	0.00	-56.1	-2.8
4.09	Max		99.2	1.34	75.39	0.00	61.8	2.7
	4.09 Min		-58.9	-1.38	-113.13	0.00	-53.0	-2.7
4.14	Max		99.2	1.32	75.29	0.00	57.1	2.6
	4.14 Min		-58.9	-1.36	-112.25	0.00	-49.8	-2.7
4.18	Max		99.2	1.31	75.23	0.00	52.5	2.6
	4.18 Min		-58.9	-1.35	-111.42	0.00	-46.7	-2.6
4.22	Max		99.2	1.29	75.70	0.00	47.8	2.5
	4.22 Min		-58.9	-1.33	-111.67	0.00	-43.5	-2.5
4.26	Max		99.2	1.28	75.27	0.00	43.2	2.4
	4.26 Min		-58.9	-1.32	-111.72	0.00	-40.4	-2.5
4.26	Max		99.2	1.27	75.24	0.00	38.5	2.4
	4.26 Min		-58.8	-1.32	-111.91	0.00	-40.4	-2.5
4.35	Max		99.1	1.27	75.21	0.00	38.1	2.4
	4.35 Min		-58.8	-1.29	-112.20	0.00	-34.1	-2.4
4.43	Max		99.1	1.24	75.15	0.00	29.2	2.3
	4.43 Min		-58.7	-1.26	-112.50	0.00	-27.8	-2.3
4.51	Max		99.2	1.22	75.09	0.00	19.8	2.2
	4.51 Min		-58.7	-1.24	-112.80	0.00	-21.6	-2.2
4.60	Max		99.2	1.19	75.04	0.00	10.4	2.1
	4.60 Min		-58.7	-1.21	-113.09	0.00	-16.3	-2.1
4.68	Max		99.2	1.16	74.98	0.00	16.3	2.1
	4.68 Min		-58.7	-1.18	-113.39	0.00	-12.9	-2.0
4.76	Max		99.2	1.13	74.92	0.00	11.4	2.1
	4.76 Min		-58.7	-1.15	-113.69	0.00	-8.0	-1.9
4.85	Max		99.2	1.11	74.86	0.00	2.8	1.8
	4.85 Min		-58.7	-1.13	-113.99	0.00	-2.8	-1.9
4.93	Max		99.2	1.09	10.89	0.00	-2.7	-1.9
	4.93 Min		-58.7	-1.13	-113.13	0.00	-16.3	-1.7
5.01	Max		99.2	1.09	10.60	0.00	-2.5	-1.6
	5.01 Min		-58.7	-1.13	-113.13	0.00	-15.4	-1.6
5.10	Max		99.2	1.09	10.31	0.00	-2.4	-1.5
	5.10 Min		-58.7	-1.13	-113.13	0.00	-14.6	-1.5
5.18	Max		99.2	1.09	10.02	0.00	-2.3	-1.4
	5.18 Min		-58.7	-1.13	-113.13	0.00	-13.7	-1.4
5.26	Max		99.2	1.09	9.72	0.00	-2.1	-1.4
	5.26 Min		-58.8	-1.13	-113.13	0.00	-11.4	-1.2
5.36	Max		99.2	1.09	8.85	0.00	-1.8	-1.1
	5.36 Min		-58.8	-1.13	-113.13	0.00	-10.0	-1.0
5.77	Max		99.2	1.09	8.27	0.00	-1.5	-1.0
	5.77 Min		-58.7	-1.13	-113.13	0.00	-8.7	-0.9
5.93	Max		99	1.09	7.70	0.00	-1.3	-0.9
	5.93 Min		-58.7	-1.13	-112.72	0.00	-7.4	-0.7
6.10	Max		99.2	1.12	7.12	0.00	-1.1	-0.7
	6.10 Min		-58.7	-1.13	-112.00	0.00	-6.3	-0.6
6.27	Max		99.1	1.09	6.54	0.00	-0.9	-0.6
	6.27 Min		-58.7	-1.13	-111.93	0.00	-5.2	-0.5
6.27	Max		99.1	1.09	5.97	0.00	-0.8	-0.5
	6.27 Min		-58.7	-1.07	-111.93	0.00	-5.2	-0.5
6.43	Max		99.1	1.09	5.97	0.00	-0.8	-0.5
	6.43 Min		-58.7	-1.07	-111.93	0.00	-4.3	-0.4
6.60	Max		99.1	1.09	5.40	0.00	-0.6	-0.4
	6.60 Min		-58.7	-1.07	-111.93	0.00	-3.4	-0.3
6.77	Max		99.1	1.09	4.82	0.00	-0.5	-0.3
	6.77 Min		-58.7	-1.07	-111.93	0.00	-2.7	-0.3
6.77	Max		99.1	1.09	4.25	0.00	-0.4	-0.3
	6.77 Min		-58.7	-1.07	-111.93	0.00	-2.7	-0.3

**Bauteil:** Pos.10.6 / extrem. Schn.  
Busbahnsleig 4/5

Seite: 19

**Vorgang:** .....

**Ingenieurbüro Krentel GmbH**  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programmiert: 4H-FRAP 11/97 / pcae-GmbH / kre-9509756  
Bauwerk: 9813 - 2.00

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ASB Nr.:

**extremale Schnittgrößen**  
(im Hauptachsensystem)  
Stabzug 24; Kragpf. Achse H

Door	s	Type	N	Q <sub>h</sub>	Q <sub>t</sub>	T	M <sub>0</sub>	M <sub>1</sub>
	m		kN	kN	kN	kNm	kNm	kNm
471	6.94	Min	-0.5	-0.36	0.55	0.00	-2.0	-0.2
		Max	0.4	0.36	3.68	0.00	-0.3	0.0
	7.10	Min	-0.4	-0.30	0.46	0.00	-1.4	-0.1
471	7.27	Min	-0.4	-0.25	0.37	0.00	-0.2	0.1
		Max	0.4	0.25	2.55	0.00	-1.0	-0.1
	7.27	Min	-0.4	-0.25	0.37	0.00	-1.0	-0.1
471	7.40	Min	-0.4	-0.25	2.55	0.00	-1.0	-0.1
		Max	0.4	0.25	2.55	0.00	-1.0	-0.1
	7.40	Min	-0.4	-0.20	0.30	0.00	-0.7	-0.1
471	7.52	Min	-0.3	-0.20	2.12	0.00	-0.1	0.1
		Max	0.3	0.16	1.70	0.00	-0.4	0.0
	7.55	Min	-0.3	-0.12	1.37	0.00	-0.1	0.0
471	7.77	Min	-0.3	-0.12	1.28	0.00	-0.2	0.0
		Max	0.3	0.08	0.11	0.00	0.0	0.0
	7.90	Min	-0.2	-0.08	0.96	0.00	-0.1	0.0
520	8.02	Min	-0.2	-0.04	0.05	0.00	0.0	0.0
		Max	0.2	0.00	0.43	0.00	0.0	0.0
	8.02	Min	-0.2	0.00	-0.02	0.00	0.0	0.0
471	8.02	Min	-0.2	0.00	0.01	0.00	0.0	0.0
		Max	0.2	0.00	0.00	0.00	0.0	0.0
	8.02	Min	-58.9	-1.40	113.69	0.00	-59.3	-2.8
471	8.02	Max	99.2	1.40	113.69	0.00	66.4	2.7

**extremale Schnittgrößen**  
(im Hauptachsensystem)

Monr	s	Type	M	Q <sub>m</sub>	Q <sub>g</sub>	T	M <sub>g</sub>	M <sub>h</sub>
			kN	kN	kN	K/min	K/min	K/min
37	0.00 Min	-0.2	0.00	-0.01	0.00	0.0	0.0	0.0
	Max	0.2	0.00	0.02	0.00	0.0	0.0	0.0
	0.13 Min	-0.2	-0.04	-0.43	0.00	0.0	0.0	0.0
	Max	0.1	0.00	-0.05	0.00	0.0	0.0	0.0
	0.25 Min	-0.3	-0.06	-0.96	0.00	-0.1	0.0	0.0
	Max	0.1	0.08	-0.11	0.00	0.0	0.0	0.0
	0.38 Min	-0.3	-0.12	-1.28	0.00	-0.2	0.0	0.0
	Max	0.1	0.12	-1.70	0.00	0.0	0.0	0.0
	0.50 Min	-0.3	-0.16	-1.70	0.00	-0.4	0.0	0.0
	Max	0.1	0.18	-2.12	0.00	-0.1	0.0	0.0
	0.63 Min	-0.4	-0.20	-2.30	0.00	-0.7	-0.1	0.1
	Max	0.1	0.20	-3.00	0.00	-0.1	0.1	0.1
86	0.75 Min	-0.4	-0.25	-2.55	0.00	-1.0	-0.1	0.1
	Max	0.1	0.25	-3.37	0.00	-0.1	0.1	0.1
86	0.75 Min	-0.4	-0.25	-2.55	0.00	-1.0	-0.1	0.1
	Max	0.1	0.25	-3.37	0.00	-1.0	-0.1	0.1
	0.92 Min	-0.4	-0.30	-3.12	0.00	-1.4	-0.1	0.1
	Max	0.0	0.30	-0.46	0.00	-0.2	0.1	0.1
	1.09 Min	-0.5	-0.36	-3.68	0.00	-1.2	0.1	0.1
	Max	0.0	0.36	-0.65	0.00	-0.9	-0.2	0.2
	1.25 Min	-0.5	-0.41	-4.25	0.00	-2.7	-0.3	0.3
	Max	0.0	0.41	-0.64	0.00	-0.4	-0.3	0.3
	1.42 Min	-0.5	-0.46	-4.82	0.00	-3.4	-0.4	0.4
	Max	0.0	0.46	-0.74	0.00	-0.5	0.3	0.3
	1.59 Min	-0.6	-0.52	-5.40	0.00	-4.3	-0.4	0.4
	Max	0.0	0.52	-0.83	0.00	-0.6	0.4	0.4
	1.75 Min	-0.6	-0.57	-5.97	0.00	-5.2	-0.5	0.5
	Max	0.0	0.57	-0.93	0.00	-0.8	0.5	0.5
	1.75 Min	-0.6	-0.56	-5.97	0.00	-5.2	-0.5	0.5
	Max	-0.1	0.43	-0.93	0.00	-0.8	0.5	0.5
	1.92 Min	-0.6	-0.52	-6.54	0.00	-6.3	-0.6	0.6
	Max	-0.1	0.56	-1.02	0.00	-0.9	0.6	0.6
	2.09 Min	-0.7	-0.57	-7.12	0.00	-7.4	-0.7	0.7
	Max	-0.1	0.57	-1.12	0.00	-1.1	0.7	0.7
	2.26 Min	-0.7	-0.62	-7.70	0.00	-8.7	-0.8	0.8
	Max	-0.1	0.59	-1.22	0.00	-1.3	0.8	0.8
	2.42 Min	-0.8	-0.68	-8.27	0.00	-10.0	-0.9	0.9
	Max	-0.1	0.68	-1.27	0.00	-1.4	0.9	0.9

Bauteil: Pos.10.6 / extrem. Schn.  
Busbahnsteig 4/5

1

Archiv Nr.

extremale Schnittgrößen Stabzug 25: Kragpf. Achse H7 (im Hauptachsensystem)											
Knoten	s	Typ	N	Q <sub>y</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>	M <sub>z</sub>	M <sub>z</sub>	M <sub>z</sub>
	m		kN	kN	kN	kNm	kNm	kNm	kNm	kNm	kNm
184	2.59	Max	-0.2	0.65	-1.32	0.00	-1.5	0.9			
		Min	-0.8	-0.73	-8.85	0.00	-11.4	-1.0			
		Max	-0.2	0.70	-1.42	0.00	-1.8	-1.0			
		Min	-0.8	-0.79	-9.43	0.00	-12.9	-1.1			
184	2.76	Max	-0.2	0.76	-1.52	0.00	-2.0	1.1			
		Min	-0.8	-0.79	-9.43	0.00	-12.9	-1.1			
		Max	-0.2	0.76	-1.52	0.00	-2.0	1.1			
		Min	-0.8	-0.79	-9.43	0.00	-12.9	-1.1			
233	3.09	Max	-0.2	0.81	-1.63	0.00	-2.3	1.3			
		Min	-0.9	-0.84	-10.02	0.00	-14.6	-1.2			
		Max	-0.2	0.81	-1.63	0.00	-2.3	1.3			
		Min	-0.9	-0.84	-10.02	0.00	-14.6	-1.2			
233	3.36	Max	-0.2	0.86	-1.73	0.00	-2.5	1.4			
		Min	-1.0	-0.95	-11.18	0.00	-16.3	-1.4			
		Max	-0.2	0.86	-1.73	0.00	-2.5	1.4			
		Min	-1.0	-0.95	-11.18	0.00	-16.3	-1.4			
282	3.76	Max	-0.2	0.97	-1.95	0.00	-3.2	1.7			
		Min	-1.1	-1.01	-11.77	0.00	-20.0	-1.7			
		Max	-0.2	0.97	-1.95	0.00	-3.2	1.7			
		Min	-1.1	-1.01	-11.77	0.00	-20.0	-1.7			
282	4.01	Max	-0.2	1.03	-2.06	0.00	-3.5	1.9			
		Min	-1.1	-1.08	-12.35	0.00	-24.2	-1.9			
		Max	-0.2	1.03	-2.06	0.00	-3.5	1.9			
		Min	-1.1	-1.08	-12.35	0.00	-24.2	-1.9			
331	4.26	Max	-0.2	1.12	-2.28	0.00	-4.2	2.3			
		Min	-1.1	-1.17	-13.53	0.00	-26.4	-2.3			
		Max	-0.2	1.12	-2.28	0.00	-4.2	2.3			
		Min	-1.1	-1.17	-13.53	0.00	-26.4	-2.3			
331	4.43	Max	-0.2	1.15	-2.31	0.00	-4.4	2.4			
		Min	-1.1	-1.20	-13.83	0.00	-27.5	-2.4			
		Max	-0.2	1.15	-2.31	0.00	-4.4	2.4			
		Min	-1.1	-1.20	-13.83	0.00	-27.5	-2.4			
380	4.60	Max	-0.2	1.17	-2.34	0.00	-4.4	2.4			
		Min	-1.1	-1.22	-14.13	0.00	-28.6	-2.4			
		Max	-0.2	1.17	-2.34	0.00	-4.4	2.4			
		Min	-1.1	-1.22	-14.13	0.00	-28.6	-2.4			
390	4.76	Max	-0.2	1.20	-2.40	0.00	-4.6	2.5			
		Min	-1.1	-1.25	-14.43	0.00	-29.8	-2.5			
		Max	-0.2	1.20	-2.40	0.00	-4.6	2.5			
		Min	-1.1	-1.25	-14.43	0.00	-29.8	-2.5			
390	4.93	Max	-0.2	1.23	-2.46	0.00	-4.8	2.6			
		Min	-1.1	-1.28	-14.73	0.00	-31.0	-2.6			
		Max	-0.2	1.23	-2.46	0.00	-4.8	2.6			
		Min	-1.1	-1.28	-14.73	0.00	-31.0	-2.6			
390	5.10	Max	-0.2	1.26	-2.52	0.00	-5.0	2.7			
		Min	-1.1	-1.31	-15.03	0.00	-32.2	-2.7			
		Max	-0.2	1.26	-2.52	0.00	-5.0	2.7			
		Min	-1.1	-1.31	-15.03	0.00	-32.2	-2.7			
390	5.26	Max	-0.2	1.29	-2.58	0.00	-5.2	2.8			
		Min	-1.1	-1.34	-15.33	0.00	-33.4	-2.8			
		Max	-0.2	1.29	-2.58	0.00	-5.2	2.8			
		Min	-1.1	-1.34	-15.33	0.00	-33.4	-2.8			
390	5.43	Max	-0.2	1.32	-2.64	0.00	-5.4	2.9			
		Min	-1.1	-1.37	-15.63	0.00	-34.6	-2.9			
		Max	-0.2	1.32	-2.64	0.00	-5.4	2.9			
		Min	-1.1	-1.37	-15.63	0.00	-34.6	-2.9			
390	5.60	Max	-0.2	1.35	-2.70	0.00	-5.6	3.0			
		Min	-1.1	-1.40	-15.93	0.00	-35.8	-3.0			
		Max	-0.2	1.35	-2.70	0.00	-5.6	3.0			
		Min	-1.1	-1.40	-15.93	0.00	-35.8	-3.0			

extremale Schnittgrößen Stabzug 25: Kragpf. Achse H7 (im Hauptachsensystem)											
Knoten	s	Typ	N	Q <sub>y</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>	M <sub>z</sub>	M <sub>z</sub>	M <sub>z</sub>
	m		kN	kN	kN	kNm	kNm	kNm	kNm	kNm	kNm
429	5.77	Max	-0.7	-0.59	1.22	0.00	-9.7	0.8			
		Min	-0.1	0.62	7.70	0.00	-1.3	0.8			
		Max	-0.7	-0.54	1.12	0.00	-7.4	0.7			
		Min	-0.1	0.57	7.12	0.00	-1.1	0.7			
429	6.10	Max	-0.6	-0.48	1.02	0.00	-6.3	0.6			
		Min	-0.1	0.52	6.54	0.00	-0.9	0.6			
		Max	-0.6	-0.43	0.93	0.00	-5.2	0.5			
		Min	-0.1	0.46	5.97	0.00	-0.8	0.5			
429	6.27	Max	-0.6	-0.57	0.93	0.00	-5.2	0.5			
		Min	-0.1	0.57	5.97	0.00	-0.8	0.5			
		Max	-0.6	-0.52	0.83	0.00	-4.3	0.4			
		Min	-0.1	0.52	5.40	0.00	-0.6	0.4			
478	6.60	Max	-0.5	-0.46	0.74	0.00	-3.4	0.3			
		Min	-0.1	0.46	4.82	0.00	-0.5	0.3			
		Max	-0.5	-0.41	0.64	0.00	-2.7	0.3			
		Min	-0.1	0.41	4.25	0.00	-0.4	0.3			
478	6.94	Max	-0.5	-0.36	0.55	0.00	-2.0	0.2			
		Min	-0.1	0.36	3.63	0.00	-0.3	0.2			
		Max	-0.4	-0.30	0.46	0.00	-1.4	0.1			
		Min	-0.1	0.30	3.12	0.00	-0.2	0.1			
478	7.27	Max	-0.4	-0.25	0.37	0.00	-1.0	0.1			
		Min	-0.1	0.25	2.55	0.00	-0.1	0.1			
		Max	-0.4	-0.25	0.37	0.00	-1.0	0.1			
		Min	-0.1	0.25	2.55	0.00	-0.1	0.1			
527	7.40	Max	-0.4	-0.20	0.30	0.00	-0.7	0.1			
		Min	-0.1	0.20	2.12	0.00	-0.1	0.1			
		Max	-0.4	-0.16	0.24	0.00	-0.4	0.0			
		Min	-0.1	0.16	1.70	0.00	-0.1	0.0			
527	7.65	Max	-0.3	-0.12	0.17	0.00	-0.2	0.0			
		Min	-0.1	0.12	1.28	0.00	0.0	0.0			
		Max	-0.3	-0.08	0.11	0.00	0.0	0.0			
		Min	-0.1	0.08	0.86	0.00	0.0	0.0			
527	7.90	Max	-0.2	-0.04	0.03	0.00	0.0	0.0			
		Min	-0.1	0.04	0.93	0.00	0.0	0.0			
		Max	-0.2	0.00	-0.02	0.00	0.0	0.0			
		Min	-0.1	0.00	0.01	0.00	0.0	0.0			
527	8.02	Max	-0.2	0.00	-0.01	0.00	0.0	0.0			
		Min	-0.1	0.00	0.00	0.00	0.0	0.0			
		Max	-0.2	0.00	-0.01	0.00	0.0	0.0			
		Min	-0.1	0.00	0.00	0.00	0.0	0.0			
527	8.02	Max	-0.2	0.00	-0.01	0.00	0.0	0.0			
		Min	-0.1	0.00	0.00	0.00	0.0	0.0			
		Max	-0.2	0.00	-0.01	0.00	0.0	0.0			
		Min	-0.1	0.00	0.00	0.00	0.0	0.0			

Verfasser: Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Programm: 4H-FRAP 11/97 / pcas-GmbH / ken9509756  
Bauwerk: 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

extremale Schnittgrößen (im Hauptachsensystem)

Knoten	s	Typ	N	Q <sub>x</sub>	Q <sub>y</sub>	T	M <sub>x</sub>	M <sub>y</sub>
			kN	kN	kN	kNm	kNm	kNm
		Max	0.0	0.41	-0.64	0.00	-0.4	0.3
		Min	-0.5	-0.46	-4.82	0.00	-3.4	-0.3
		Max	0.0	0.46	-0.74	0.00	-0.5	0.3
		Min	-0.6	-0.52	-5.40	0.00	-0.4	-0.4
142		Max	0.0	0.52	-0.83	0.00	-0.6	0.4
		Min	-0.5	-0.57	-5.97	0.00	-0.5	-0.5
142		Max	-0.1	0.57	-0.93	0.00	-0.8	0.5
		Min	-0.6	-0.35	-5.97	0.00	-0.5	-0.5
		Max	-0.1	0.37	-0.93	0.00	-0.8	0.5
		Min	-0.5	-0.31	-6.54	0.00	-0.6	-0.3
		Max	-0.1	0.32	-1.02	0.00	-0.9	0.5
		Min	-0.7	-0.31	-7.12	0.00	-0.7	-0.4
2.09		Max	-0.1	0.32	-1.12	0.00	-1.1	0.4
		Min	-0.7	-0.32	-7.70	0.00	-0.8	-0.4
2.26		Max	-0.1	0.32	-1.22	0.00	-1.3	0.4
		Min	-0.8	-0.32	-8.32	0.00	-1.0	-0.4
2.42		Max	-0.1	0.32	-1.32	0.00	-1.5	0.4
		Min	-0.8	-0.31	-8.95	0.00	-1.1	-0.4
2.59		Max	-0.2	0.32	-1.42	0.00	-1.8	0.4
		Min	-0.9	-0.31	-9.43	0.00	-1.2	-0.4
2.76		Max	-0.2	0.32	-1.52	0.00	-2.0	0.4
		Min	-0.9	-0.31	-9.91	0.00	-1.3	-0.4
2.91		Max	-0.2	0.32	-1.62	0.00	-2.2	0.4
		Min	-0.9	-0.31	-10.43	0.00	-1.4	-0.4
3.01		Max	-0.2	0.32	-1.72	0.00	-2.4	0.4
		Min	-0.9	-0.31	-10.91	0.00	-1.5	-0.4
3.09		Max	-0.2	0.32	-1.82	0.00	-2.6	0.4
		Min	-0.9	-0.31	-11.43	0.00	-1.6	-0.4
3.18		Max	-0.2	0.32	-1.92	0.00	-2.8	0.4
		Min	-0.9	-0.31	-11.91	0.00	-1.7	-0.4
3.26		Max	-0.2	0.32	-2.02	0.00	-3.0	0.4
		Min	-0.9	-0.31	-12.43	0.00	-1.8	-0.4
3.34		Max	-0.2	0.32	-2.12	0.00	-3.2	0.4
		Min	-0.9	-0.31	-12.91	0.00	-1.9	-0.4
3.43		Max	-0.2	0.32	-2.22	0.00	-3.4	0.4
		Min	-0.9	-0.31	-13.43	0.00	-2.0	-0.4
3.51		Max	-0.2	0.32	-2.32	0.00	-3.6	0.4
		Min	-0.9	-0.31	-13.91	0.00	-2.1	-0.4
3.59		Max	-0.2	0.32	-2.42	0.00	-3.8	0.4
		Min	-0.9	-0.31	-14.43	0.00	-2.2	-0.4
3.68		Max	-0.2	0.32	-2.52	0.00	-4.0	0.4
		Min	-0.9	-0.31	-14.91	0.00	-2.3	-0.4
3.76		Max	-0.2	0.32	-2.62	0.00	-4.2	0.4
		Min	-0.9	-0.31	-15.43	0.00	-2.4	-0.4
3.84		Max	-0.2	0.32	-2.72	0.00	-4.4	0.4
		Min	-0.9	-0.31	-15.91	0.00	-2.5	-0.4
3.93		Max	-0.2	0.32	-2.82	0.00	-4.6	0.4
		Min	-0.9	-0.31	-16.43	0.00	-2.6	-0.4
4.01		Max	-0.2	0.32	-2.92	0.00	-4.8	0.4
		Min	-0.9	-0.31	-16.91	0.00	-2.7	-0.4
4.09		Max	-0.2	0.32	-3.02	0.00	-5.0	0.4
		Min	-0.9	-0.31	-17.43	0.00	-2.8	-0.4
4.18		Max	-0.2	0.32	-3.12	0.00	-5.2	0.4
		Min	-0.9	-0.31	-17.91	0.00	-2.9	-0.4
4.27		Max	-0.2	0.32	-3.22	0.00	-5.4	0.4
		Min	-0.9	-0.31	-18.43	0.00	-3.0	-0.4
4.36		Max	-0.2	0.32	-3.32	0.00	-5.6	0.4
		Min	-0.9	-0.31	-18.91	0.00	-3.1	-0.4
4.45		Max	-0.2	0.32	-3.42	0.00	-5.8	0.4
		Min	-0.9	-0.31	-19.43	0.00	-3.2	-0.4
4.54		Max	-0.2	0.32	-3.52	0.00	-6.0	0.4
		Min	-0.9	-0.31	-19.91	0.00	-3.3	-0.4
4.63		Max	-0.2	0.32	-3.62	0.00	-6.2	0.4
		Min	-0.9	-0.31	-20.43	0.00	-3.4	-0.4
4.72		Max	-0.2	0.32	-3.72	0.00	-6.4	0.4
		Min	-0.9	-0.31	-20.91	0.00	-3.5	-0.4
4.81		Max	-0.2	0.32	-3.82	0.00	-6.6	0.4
		Min	-0.9	-0.31	-21.43	0.00	-3.6	-0.4
4.90		Max	-0.2	0.32	-3.92	0.00	-6.8	0.4
		Min	-0.9	-0.31	-21.91	0.00	-3.7	-0.4
5.00		Max	-0.2	0.32	-4.02	0.00	-7.0	0.4
		Min	-0.9	-0.31	-22.43	0.00	-3.8	-0.4
5.09		Max	-0.2	0.32	-4.12	0.00	-7.2	0.4
		Min	-0.9	-0.31	-22.91	0.00	-3.9	-0.4
5.18		Max	-0.2	0.32	-4.22	0.00	-7.4	0.4
		Min	-0.9	-0.31	-23.43	0.00	-4.0	-0.4
5.27		Max	-0.2	0.32	-4.32	0.00	-7.6	0.4
		Min	-0.9	-0.31	-23.91	0.00	-4.1	-0.4
5.36		Max	-0.2	0.32	-4.42	0.00	-7.8	0.4
		Min	-0.9	-0.31	-24.43	0.00	-4.2	-0.4
5.45		Max	-0.2	0.32	-4.52	0.00	-8.0	0.4
		Min	-0.9	-0.31	-24.91	0.00	-4.3	-0.4
5.54		Max	-0.2	0.32	-4.62	0.00	-8.2	0.4
		Min	-0.9	-0.31	-25.43	0.00	-4.4	-0.4
5.63		Max	-0.2	0.32	-4.72	0.00	-8.4	0.4
		Min	-0.9	-0.31	-25.91	0.00	-4.5	-0.4
5.72		Max	-0.2	0.32	-4.82	0.00	-8.6	0.4
		Min	-0.9	-0.31	-26.43	0.00	-4.6	-0.4
5.81		Max	-0.2	0.32	-4.92	0.00	-8.8	0.4
		Min	-0.9	-0.31	-26.91	0.00	-4.7	-0.4
5.90		Max	-0.2	0.32	-5.02	0.00	-9.0	0.4
		Min	-0.9	-0.31	-27.43	0.00	-4.8	-0.4
6.00		Max	-0.2	0.32	-5.12	0.00	-9.2	0.4
		Min	-0.9	-0.31	-27.91	0.00	-4.9	-0.4
6.09		Max	-0.2	0.32	-5.22	0.00	-9.4	0.4
		Min	-0.9	-0.31	-28.43	0.00	-5.0	-0.4
6.18		Max	-0.2	0.32	-5.32	0.00	-9.6	0.4
		Min	-0.9	-0.31	-28.91	0.00	-5.1	-0.4
6.27		Max	-0.2	0.32	-5.42	0.00	-9.8	0.4
		Min	-0.9	-0.31	-29.43	0.00	-5.2	-0.4
6.36		Max	-0.2	0.32	-5.52	0.00	-10.0	0.4
		Min	-0.9	-0.31	-29.91	0.00	-5.3	-0.4
6.45		Max	-0.2	0.32	-5.62	0.00	-10.2	0.4
		Min	-0.9	-0.31	-30.43	0.00	-5.4	-0.4
6.54		Max	-0.2	0.32	-5.72	0.00	-10.4	0.4
		Min	-0.9	-0.31	-30.91	0.00	-5.5	-0.4
6.63		Max	-0.2	0.32	-5.82	0.00	-10.6	0.4
		Min	-0.9	-0.31	-31.43	0.00	-5.6	-0.4
6.72		Max	-0.2	0.32	-5.92	0.00	-10.8	0.4
		Min	-0.9	-0.31	-31.91	0.00	-5.7	-0.4
6.81		Max	-0.2	0.32	-6.02	0.00	-11.0	0.4
		Min	-0.9	-0.31	-32.43	0.00	-5.8	-0.4
6.90		Max	-0.2	0.32	-6.12	0.00	-11.2	0.4
		Min	-0.9	-0.31	-32.91	0.00	-5.9	-0.4
7.00		Max	-0.2	0.32	-6.22	0.00	-11.4	0.4
		Min	-0.9	-0.31	-33.43	0.00	-6.0	-0.4
7.09		Max	-0.2	0.32	-6.32	0.00	-11.6	0.4
		Min	-0.9	-0.31	-33.91	0.00	-6.1	-0.4
7.18		Max	-0.2	0.32	-6.42	0.00	-11.8	0.4
		Min	-0.9	-0.31	-34.43	0.00	-6.2	-0.4
7.27		Max	-0.2	0.32	-6.52	0.00	-12.0	0.4
		Min	-0.9	-0.31	-34.91	0.00	-6.3	-0.4
7.36		Max	-0.2	0.32	-6.62	0.00	-12.2	0.4
		Min	-0.9	-0.31	-35.43	0.00	-6.4	-0.4
7.45		Max	-0.2	0.32	-6.72	0.00	-12.4	0.4
		Min	-0.9	-0.31	-35.91	0.00	-6.5	-0.4
7.54		Max	-0.2	0.32	-6.82	0.00	-12.6	0.4
		Min	-0.9	-0.31	-36.43	0.00	-6.6	-0.4
7.63		Max	-0.2	0.32	-6.92	0.00	-12.8	0.4
		Min	-0.9	-0.31	-36.91	0.00	-6.7	-0.4
7.72		Max	-0.2	0.32	-7.02	0.00	-13.0	0.4
		Min	-0.9	-0.31	-37.43	0.00	-6.8	-0.4
7.81		Max	-0.2	0.32	-7.12	0.00	-13.2	0.4
		Min	-0.9	-0.31	-37.91	0.00	-6.9	-0.4
7.90		Max	-0.2	0.32	-7.22	0.00	-13.4	0.4
		Min	-0.9	-0.31	-38.43	0.00	-7.0	-0.4
8.00		Max	-0.2	0.32	-7.32	0.00	-13.6	0.4
		Min	-0.9	-0.31	-38.91	0.00	-7.1	-0.4
8.09		Max	-0.2	0.32	-7.42	0.00	-13.8	0.4
		Min	-0.9	-0.31	-39.43	0.00	-7.2	-0.4
8.18		Max	-0.2	0.32	-7.52	0.00	-14.0	0.4
		Min	-0.9	-0.31	-39.91	0.00	-7.3	-0.4
8.27		Max	-0.2	0.32	-7.62	0.00	-14.2	0.4
		Min	-0.9	-0.31	-40.43	0.00	-7.4	-0.4
8.36		Max	-0.2	0.32	-7.72	0.00	-14.4	0.4
		Min	-0.9	-0.31	-40.91	0.00	-7.5	-0.4
8.45		Max	-0.2	0.32	-7.82	0.00	-14.6	0.4
		Min	-0.9	-0.31	-41.43	0.00	-7.6	-0.4
8.54		Max	-0.2	0.32	-7.92	0.00	-14.8	0.4
		Min	-0.9	-0.31	-41.91	0.00	-7.7	-0.4
8.63		Max	-0.2	0.32	-8.02	0.00	-15.0	0.4
		Min	-0.9	-0.31	-42.43	0.00	-7.8	-0.4
8.72		Max	-0.2	0.32	-8.12	0.00	-15.2	0.4
		Min	-0.9	-0.31	-42.91	0.00	-7.9	-0.4
8.81		Max	-0.2	0.32	-8.22	0.00	-15.4	0.4
		Min	-0.9	-0.31	-43.43	0.00	-8.0	-0.4
8.90		Max	-0.2	0.32	-8.32	0.00	-15.6	0.4
		Min	-0.9	-0.31	-43.91	0.00	-8.1	-0.4
9.00		Max	-0.2	0.32	-8.42	0.00	-15.8	0.4
		Min	-0.9	-0.31	-44.43	0.00	-8.2	-0.4
9.09		Max	-0.2	0.32	-8.52	0.00	-16.0	0.4
		Min	-0.9	-0.31	-44.91	0.00	-8.3	-0.4
9.18		Max	-0.2	0.32	-8.62	0.00	-16.2	0.4
		Min	-0.9	-0.31	-45.43	0.00	-8.4	-0.4
9.27		Max	-0.2	0.32	-8.72	0.00	-16.4	0.4
		Min	-0.9	-0.31	-45.91	0.00	-8.5	-0.4
9.36		Max	-0.2	0.32	-8.			

Verfasser: Ingenieurbüro Krentel GmbH  
Forststr. 26 14163 Berlin - Zehlendorf  
Tel. 030 - 809977-0  
Program: 4H-FRAP 11/97 / pcse-GmbH / kren509756  
Bauwerk: 9813 - 2.00

ASB Nr.:

Datum: 12.03.99

extremale Schnittgrößen  
Stabzug 26: Kragpf. Achse J

Knurr	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>
			kN	kN	kN	kNm	kNm	kNm
	7.40	Min	0.1	0.25	2.55	0.00	-0.1	0.1
		Max	-0.4	-0.20	0.32	0.00	-0.7	-0.1
	7.52	Min	0.1	0.20	2.12	0.00	-0.1	0.1
		Max	-0.3	-0.16	0.26	0.00	-0.4	0.0
	7.65	Min	0.1	0.16	1.70	0.00	-0.1	0.0
		Max	-0.3	-0.12	0.17	0.00	-0.2	0.0
	7.77	Min	0.1	0.12	1.28	0.00	0.0	0.0
		Max	-0.3	-0.08	0.11	0.00	-0.1	0.0
	7.90	Min	0.1	0.08	0.86	0.00	0.0	0.0
		Max	-0.2	-0.04	0.05	0.00	0.0	0.0
	8.02	Min	0.1	0.04	0.43	0.00	0.0	0.0
		Max	-0.2	-0.00	-0.02	0.00	0.0	0.0
	8.00	Min	0.2	0.00	0.01	0.00	0.0	0.0
		Max	-0.1	-0.00	-0.01	0.00	-0.1	-0.1
	8.02	Max	103.8	6.19	119.35	0.00	64.6	2.1

extremale Schnittgrößen  
Stabzug 32: HLT (Rohr)

Knurr	s	Typ	N	Q <sub>z</sub>	Q <sub>x</sub>	T	M <sub>y</sub>	M <sub>x</sub>
			kN	kN	kN	kNm	kNm	kNm
638	0.00	Min	-0.8	-4.36	-18.11	-12.05	-0.2	-0.3
		Max	0.7	4.36	18.11	12.05	0.2	0.3
	0.18	Min	-0.8	-4.57	-18.38	-12.05	-0.3	-1.0
		Max	0.7	4.57	18.38	12.05	0.3	1.0
	0.37	Min	-0.8	-4.78	-18.65	-12.05	-1.7	-1.8
		Max	0.7	4.78	18.65	12.05	1.7	1.8
	0.55	Min	-0.8	-5.00	-18.92	-12.05	-3.7	-3.7
		Max	0.7	5.00	18.92	12.05	3.7	3.7
	0.73	Min	-0.8	-5.21	-19.18	-12.05	-10.4	-10.4
		Max	0.7	5.21	19.18	12.05	10.4	10.4
	0.92	Min	-0.8	-5.43	-19.45	-12.05	-13.8	-13.8
		Max	0.7	5.43	19.45	12.05	13.8	13.8
639	1.10	Min	-0.8	-5.64	-19.72	-12.05	-17.4	-17.4
		Max	0.7	5.64	19.72	12.05	17.4	17.4
	1.28	Min	-0.8	-5.89	-20.00	-12.05	-21.0	-21.0
		Max	0.7	5.89	20.00	12.05	21.0	21.0
	1.47	Min	-0.9	-6.14	-20.28	-12.05	-24.6	-24.6
		Max	0.7	6.14	20.28	12.05	24.6	24.6
	1.65	Min	-1.0	-6.40	-20.56	-12.05	-28.2	-28.2
		Max	0.7	6.40	20.56	12.05	28.2	28.2
	1.83	Min	-1.0	-6.64	-20.84	-12.05	-31.8	-31.8
		Max	0.7	6.64	20.84	12.05	31.8	31.8
	2.02	Min	-1.0	-6.89	-21.12	-12.05	-35.4	-35.4
		Max	0.7	6.89	21.12	12.05	35.4	35.4
639	2.20	Min	-1.0	-7.13	-21.40	-12.05	-39.0	-39.0
		Max	0.7	7.13	21.40	12.05	39.0	39.0
	2.38	Min	-1.0	-7.37	-21.68	-12.05	-42.6	-42.6
		Max	0.7	7.37	21.68	12.05	42.6	42.6
	2.57	Min	-1.0	-7.61	-21.96	-12.05	-46.2	-46.2
		Max	0.7	7.61	21.96	12.05	46.2	46.2
	2.75	Min	-1.0	-7.85	-22.24	-12.05	-49.8	-49.8
		Max	0.7	7.85	22.24	12.05	49.8	49.8
	2.93	Min	-1.0	-8.09	-22.52	-12.05	-53.4	-53.4
		Max	0.7	8.09	22.52	12.05	53.4	53.4
	3.12	Min	-1.0	-8.33	-22.80	-12.05	-57.0	-57.0
		Max	0.7	8.33	22.80	12.05	57.0	57.0