Internal support test for downward load

JID 137/310 Cont - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	348,7	N/mm²
slope of web ϕ =	66,0	°
width of rib b_R =	310	mm

b_v = 0,620 m
f_{yb} = 348,7 N/mm² g = 0,097 kN/m² P_{vor} = 0 kN epsilon = 1

IS-135-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
60-75-80-1	0,704	0,704	1,500	348,7	0,800	10,59	10,590	1,0052	**16,465**	3,295	22,503
60-75-80-2	0,704	0,704	1,500	348,7	0,800	10,48	10,480	0,9948			
60-75-240-1	0,704	0,704	2,800	348,7	2,400	6,69	6,690	0,9809	10,659	**6,463**	12,280
60-75-240-2	0,704	0,704	2,800	348,7	2,400	6,95	6,950	1,0191			
								4,0000			
							number	16		s	0,0161
					c-value for family with 16 tests			c= 1,92		(1-c·s)	0,9690

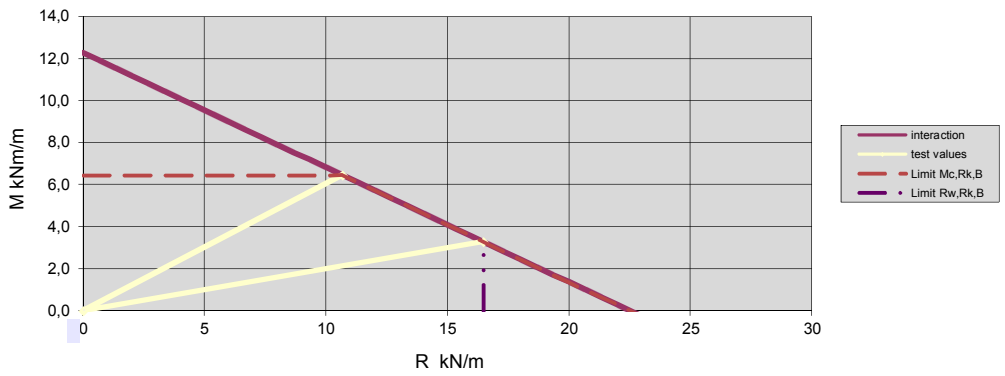
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	16,47	3,29
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	10,66	6,46

Used test spans no.	R(i)	M(i)
1	16,465	3,295
5	10,659	6,463

Parameter epsilon =			1
$R^0_{Rk,B}$	22,503	$R_{w,Rk,B}$	16,465
$M^0_{Rk,B}$	12,280	$M_{c,Rk,B}$	6,463



Internal support test for downward load

JID 137/310 Cont - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	348,7	N/mm²

b_v = 0,620 m

f_{yb} = 348,7 N/mm² g= 0,0970 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
160-75-80-1	0,704	0,704	1,500	348,7	0,800	12,91	12,910	0,9908	**20,393**	4,080	27,749
160-75-80-2	0,704	0,704	1,500	348,7	0,800	13,15	13,150	1,0092			
160-75-240-1	0,704	0,704	2,800	348,7	2,400	8,34	8,340	0,9835	13,272	**8,031**	15,394
160-75-240-2	0,704	0,704	2,800	348,7	2,400	8,62	8,620	1,0165			
								4,0000			
							number	16		s	0,0154
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9704

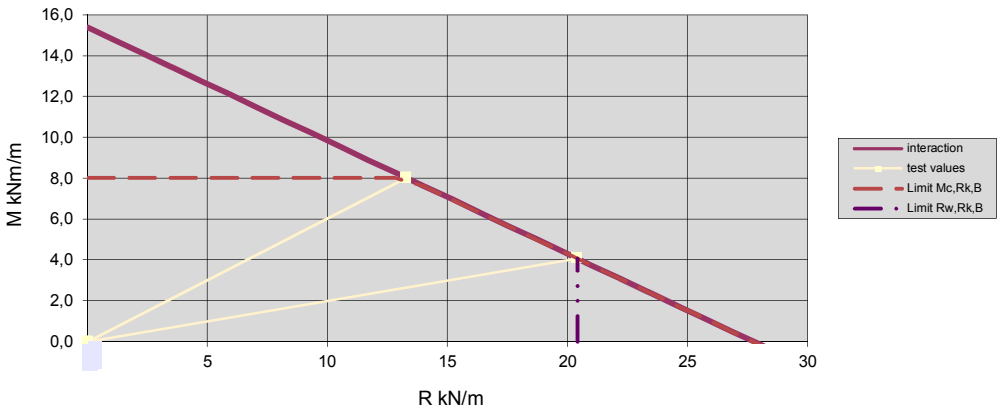
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	20,39	4,08
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	13,27	8,03

Used test spans no.	R(i)	M(i)
1	20,393	4,080
5	13,272	8,031

Parameter epsilon =			1
$R^0_{Rk,B}$	27,749	$R_{w,Rk,B}$	20,393
$M^0_{Rk,B}$	15,394	$M_{c,Rk,B}$	8,031



Internal support test for downward load

JID 137/310 Cont - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m

f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
60-100-80-1	0,956	0,956	1,500	327,3	0,800	18,09	18,090	1,0036	**28,631**	5,729	44,574
60-100-80-2	0,956	0,956	1,500	327,3	0,800	17,96	17,960	0,9964			
60-100-280-1	0,956	0,956	3,200	327,3	2,800	9,53	9,530	1,0090	15,002	**10,625**	16,016
60-100-280-2	0,956	0,956	3,200	327,3	2,800	9,36	9,360	0,9910			
								4,0000			
							number	16		s	0,0079
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9848

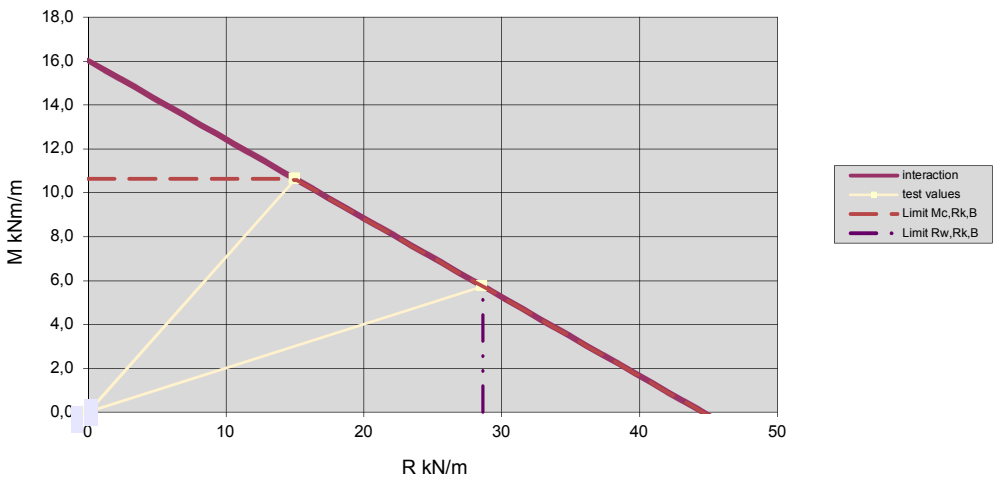
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	28,63	5,73
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	15,00	10,63

Used test spans no.	R(i)	M(i)
1	28,631	5,729
5	15,002	10,625

Parameter epsilon =			1
$R^0_{Rk,B}$	44,574	$R_{w,Rk,B}$	28,631
$M^0_{Rk,B}$	16,016	$M_{c,Rk,B}$	10,625



Internal support test for downward load

JID 137/310 Cont - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m
f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
160-100-80-1	0,956	0,956	1,500	327,3	0,800	22,49	22,490	1,0036	**35,596**	7,122	55,444
160-100-80-2	0,956	0,956	1,500	327,3	0,800	22,33	22,330	0,9964			
160-100-280-1	0,956	0,956	3,200	327,3	2,800	11,55	11,550	0,9826	18,672	**13,194**	19,893
160-100-280-2	0,956	0,956	3,200	327,3	2,800	11,96	11,960	1,0174			
								4,0000			
							number	16		s	0,0145
				c-value for family with 16 tests				c= 1,92		(1-c·s)	0,9721

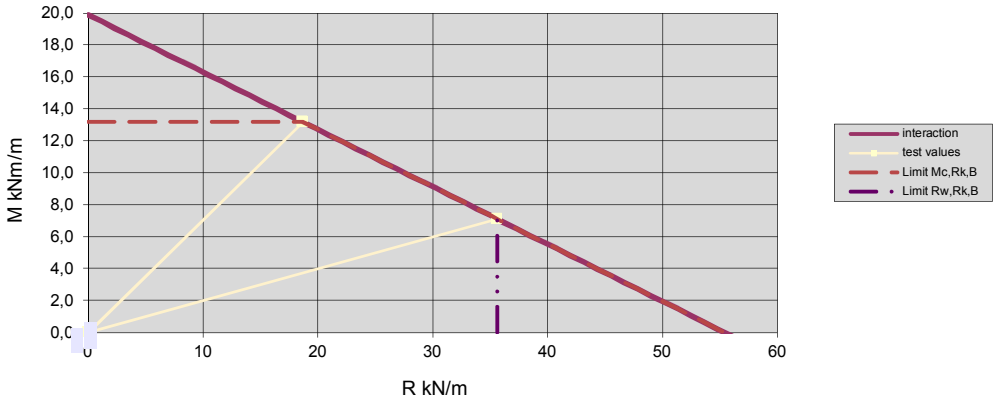
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	35,60	7,12
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	18,67	13,19

Used test spans no.	R(i)	M(i)
1	35,596	7,122
5	18,672	13,194

Parameter epsilon =			1
$R^0_{Rk,B}$	55,444	$R_{w,Rk,B}$	35,596
$M^0_{Rk,B}$	19,893	$M_{c,Rk,B}$	13,194



Internal support test for downward load

JID 137/310 DIN - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	348,7	N/mm²
slope of web ϕ =	66,0	°
width of rib b_R =	310	mm

b_v = 0,620 m
f_{yb} = 348,7 N/mm² g = 0,097 kN/m² P_{vor} = 0 kN epsilon = 1

IS-135-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-75-80-1	0,704	0,704	1,500	348,7	0,800	16,89	16,890	1,0126	**26,372**	5,276	236,410	0,500	10,553	1,790
60-75-80-2	0,704	0,704	1,500	348,7	0,800	16,47	16,470	0,9874						
60-75-240-1	0,704	0,704	2,800	348,7	2,400	5,94	5,940	1,0000	9,392	**5,703**	5,939	0,500	11,406	1,935
60-75-240-2	0,704	0,704	2,800	348,7	2,400	5,94	5,940	1,0000						
								4,0000						
							number	16		s	0,0103			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9803			

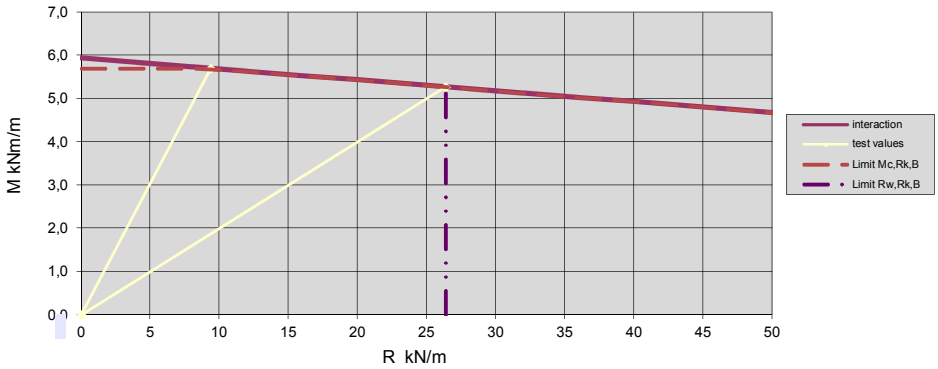
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	26,37	5,28
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	9,39	5,70

Used test spans no.	R(i)	M(i)
1	26,372	5,276
5	9,392	5,703

Parameter epsilon =			1
$R^0_{Rk,B}$	236,410	$R_{w,Rk,B}$	26,372
$M^0_{Rk,B}$	5,939	$M_{c,Rk,B}$	5,703



Internal support test for downward load

JID 137/310 DIN - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	348,7	N/mm²

b_v = 0,620 m

f_{yb} = 348,7 N/mm² g= 0,0970 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,704	0,704	1,500	348,7	0,800	17,16	17,160	0,9882	**25,804**	5,163	152,524	0,500	10,325	1,752
160-75-80-2	0,704	0,704	1,500	348,7	0,800	17,57	17,570	1,0118						
160-75-240-1	0,704	0,704	2,800	348,7	2,400	6,77	6,770	1,0488	9,592	**5,823**	6,214	0,500	11,646	1,976
160-75-240-2	0,704	0,704	2,800	348,7	2,400	6,14	6,140	0,9512						
								4,0000						
							number	16		s	0,0410			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9213			

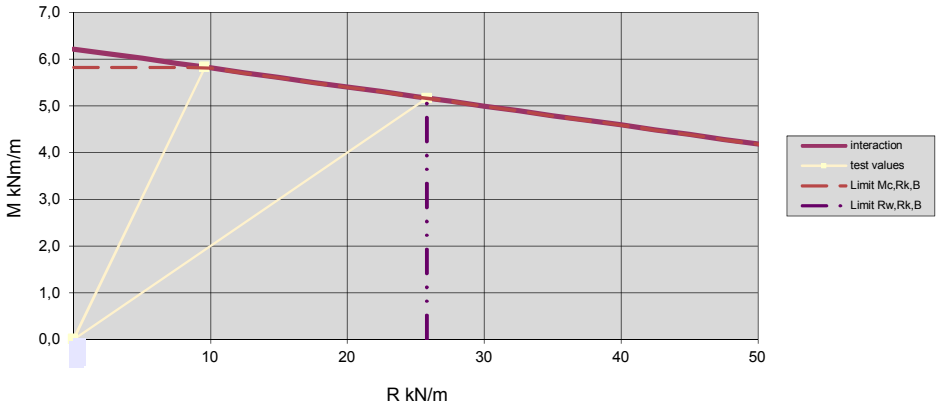
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	25,80	5,16
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	9,59	5,82

Used test spans no.	R(i)	M(i)
1	25,804	5,163
5	9,592	5,823

Parameter epsilon =			1
$R^0_{Rk,B}$	152,524	$R_{w,Rk,B}$	25,804
$M^0_{Rk,B}$	6,214	$M_{c,Rk,B}$	5,823



Internal support test for downward load

JID 137/310 DIN - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m

f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-100-80-1	0,956	0,956	1,500	327,3	0,800	27,69	27,690	1,0108	**43,339**	8,670	99,657	0,500	17,341	2,942
60-100-80-2	0,956	0,956	1,500	327,3	0,800	27,10	27,100	0,9892						
60-100-280-1	0,956	0,956	3,200	327,3	2,800	11,33	11,330	1,0058	17,821	**12,599**	15,342	0,500	25,198	4,275
60-100-280-2	0,956	0,956	3,200	327,3	2,800	11,20	11,200	0,9942						
								4,0000						
							number	16		s	0,0100			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9808			

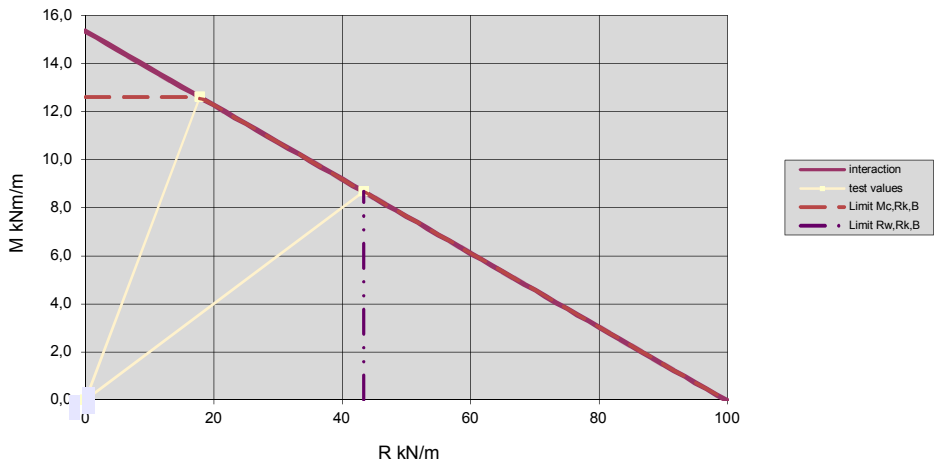
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	43,34	8,67
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	17,82	12,60

Used test spans no.	R(i)	M(i)
1	43,339	8,670
5	17,821	12,599

Parameter epsilon =			1
$R^0_{Rk,B}$	99,657	$R_{w,Rk,B}$	43,339
$M^0_{Rk,B}$	15,342	$M_{c,Rk,B}$	12,599



Internal support test for downward load

JID 137/310 DIN - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m
f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,956	0,956	1,500	327,3	0,800	30,09	30,090	1,0012	**47,547**	9,512	110,564	0,500	19,024	3,228
160-100-80-2	0,956	0,956	1,500	327,3	0,800	30,02	30,020	0,9988						
160-100-280-1	0,956	0,956	3,200	327,3	2,800	12,49	12,490	1,0150	19,467	**13,751**	16,689	0,500	27,501	4,666
160-100-280-2	0,956	0,956	3,200	327,3	2,800	12,12	12,120	0,9850						
								4,0000						
							number	16		s	0,0123			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9764			

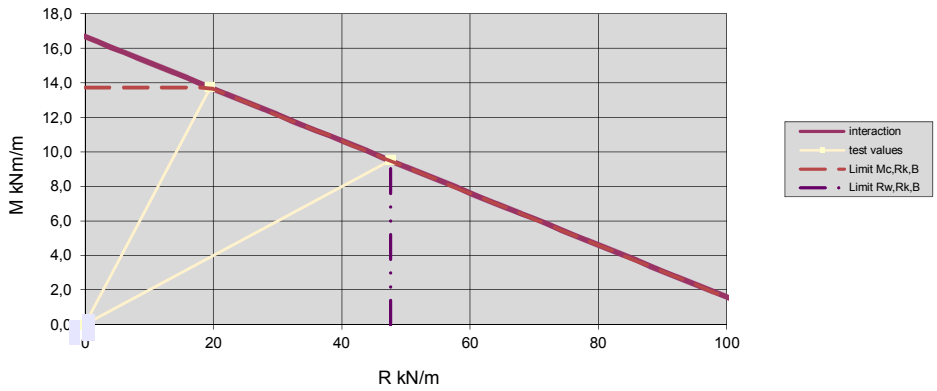
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	47,55	9,51
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	19,47	13,75

Used test spans no.	R(i)	M(i)
1	47,547	9,512
5	19,467	13,751

Parameter epsilon =			1
$R^0_{Rk,B}$	110,564	$R_{w,Rk,B}$	47,547
$M^0_{Rk,B}$	16,689	$M_{c,Rk,B}$	13,751



Internal support test for downward load

JID 137/310 DIN extended - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	348,7	N/mm²

b_v = 0,620 m

f_{yb} = 348,7 N/mm² g= 0,0970 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,704	0,704	1,500	348,7	0,800	17,16	17,160	0,9882	**25,699**	5,142	47,427	0,500	10,283	1,745
160-75-80-2	0,704	0,704	1,500	348,7	0,800	17,57	17,570	1,0118						
160-75-240-11	0,704	0,700	2,800	341,3	2,400	8,85	8,997	0,9986	13,333	**8,068**	11,223	**0,700**	11,525	1,955
160-75-240-12	0,704	0,700	2,800	341,3	2,400	9,60	9,759	1,0832						
160-75-240-13	0,704	0,700	2,800	341,3	2,400	8,34	8,478	0,9410						
160-75-240-14	0,704	0,700	2,800	341,3	2,400	8,66	8,803	0,9772						
								6,0000						

number 18 s 0,0429

c-value for family with 18 tests c= 1,92 (1-c·s) 0,9175

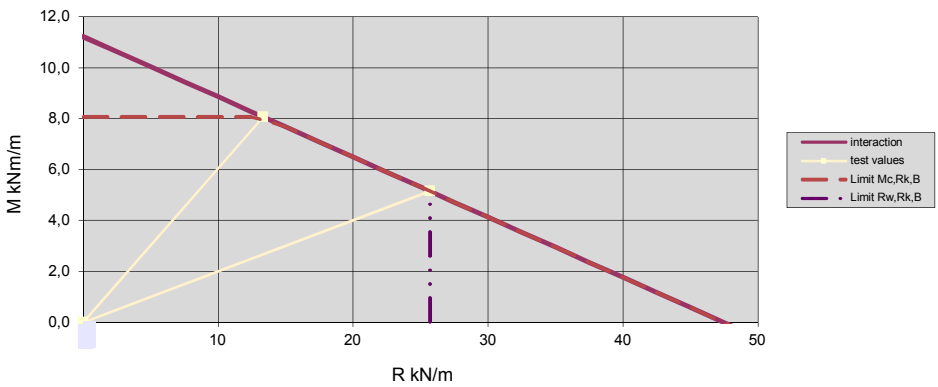
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	25,70	5,14
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	13,33	8,07

Used test spans no.	R(i)	M(i)
1	25,699	5,142
5	13,333	8,068

Parameter epsilon =			1
$R^0_{Rk,B}$	47,427	$R_{w,Rk,B}$	25,699
$M^0_{Rk,B}$	11,223	$M_{c,Rk,B}$	8,068



Internal support test for downward load

JID 137/310 Overlap - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	348,7	N/mm²
slope of web ϕ =	66,0	°
width of rib b_R =	310	mm

b_v = 0,620 m
f_{yb} = 348,7 N/mm² g = 0,097 kN/m² P_{vor} = 0 kN epsilon = 1

IS-135-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-75-80-1	0,704	0,704	1,500	348,7	0,800	20,84	20,840	1,0046	**33,092**	6,620	48,143	0,500	6,620	1,123
60-75-80-2	0,704	0,704	1,500	348,7	0,800	20,65	20,650	0,9954						
60-75-130-1	0,704	0,704	1,500	348,7	1,300	17,87	17,870	1,0000	28,506	9,284	0,000	0,500	9,284	1,575
60-75-240-1	0,704	0,704	2,800	348,7	2,400	12,64	12,640	0,9933	20,299	**12,247**	21,175	0,500	12,247	2,078
60-75-240-2	0,704	0,704	2,800	348,7	2,400	12,81	12,810	1,0067						
								5,0000						
							number	18		s	0,0057			
							c-value for family with 18 tests	c= 1,92		(1-c·s)	0,9890			

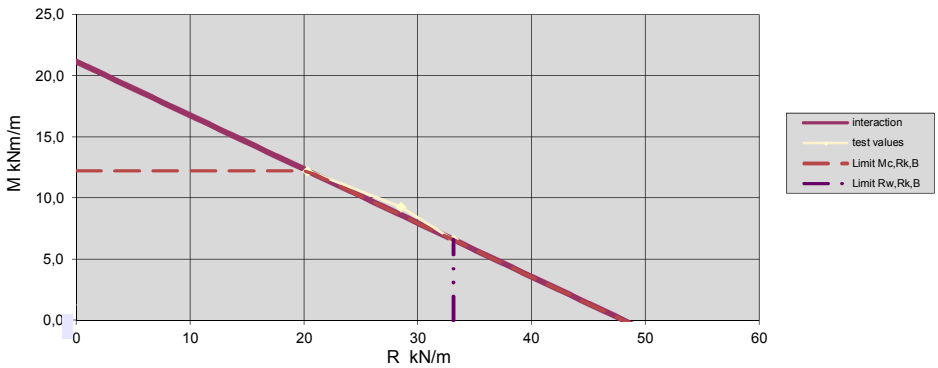
(test spans no. 2, 3 and 4 are not used)

M/R-interaction

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	33,09	6,62
2	1,30	28,51	9,28
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	20,30	12,25

Used test spans no.	R(i)	M(i)
1	33,092	6,620
5	20,299	12,247

Parameter epsilon =			1
$R^0_{Rk,B}$	48,143	$R_{w,Rk,B}$	33,092
$M^0_{Rk,B}$	21,175	$M_{c,Rk,B}$	12,247



Internal support test for downward load

JID 137/310 Overlap - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	348,7	N/mm²

b_v = 0,620 m

f_{yb} = 348,7 N/mm² g= 0,0970 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,704	0,704	1,500	348,7	0,800	25,81	25,810	0,9919	**41,252**	8,252	74,501	0,500	8,252	1,400
160-75-80-2	0,704	0,704	1,500	348,7	0,800	26,23	26,230	1,0081						
160-75-240-1	0,704	0,704	2,800	348,7	2,400	13,80	13,800	1,0073	21,720	**13,100**	18,490	0,500	13,100	2,223
160-75-240-2	0,704	0,704	2,800	348,7	2,400	13,60	13,600	0,9927						
								4,0000						
							number	18		s	0,0089			
						c-value for family with 18 tests		c= 1,92		(1-c·s)	0,9829			

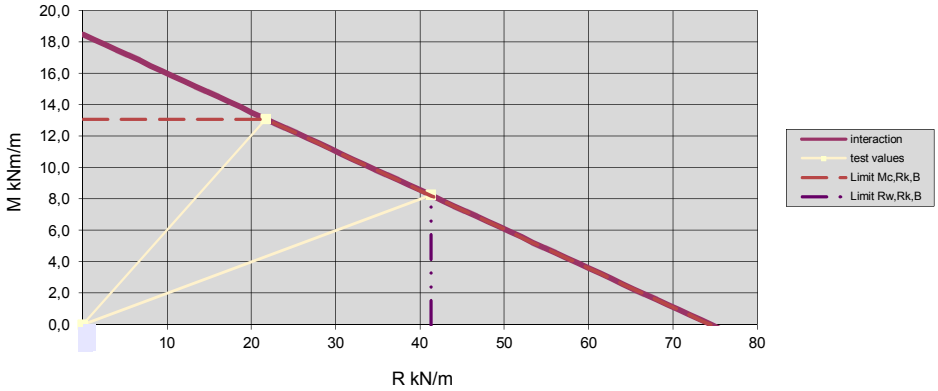
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	41,25	8,25
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	21,72	13,10

Used test spans no.	R(i)	M(i)
1	41,252	8,252
5	21,720	13,100

Parameter epsilon =			1
$R^0_{Rk,B}$	74,501	$R_{w,Rk,B}$	41,252
$M^0_{Rk,B}$	18,490	$M_{c,Rk,B}$	13,100



Internal support test for downward load

JID 137/310 Overlap - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m

f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-100-80-1	0,956	0,956	1,500	327,3	0,800	35,38	35,380	0,9880	**54,659**	10,934	84,971	0,500	10,934	1,855
60-100-80-2	0,956	0,956	1,500	327,3	0,800	37,39	37,390	1,0441						
60-100-80-3	0,956	0,956	1,500	327,3	0,800	34,66	34,660	0,9679						
60-100-280-1	0,956	0,956	3,200	327,3	2,800	18,87	18,870	1,0008	28,780	**20,270**	30,651	0,500	20,270	3,439
60-100-280-2	0,956	0,956	3,200	327,3	2,800	18,84	18,840	0,9992						
								5,0000						
							number	18		s	0,0279			
						c-value for family with 18 tests		c= 1,92		(1-c·s)	0,9463			

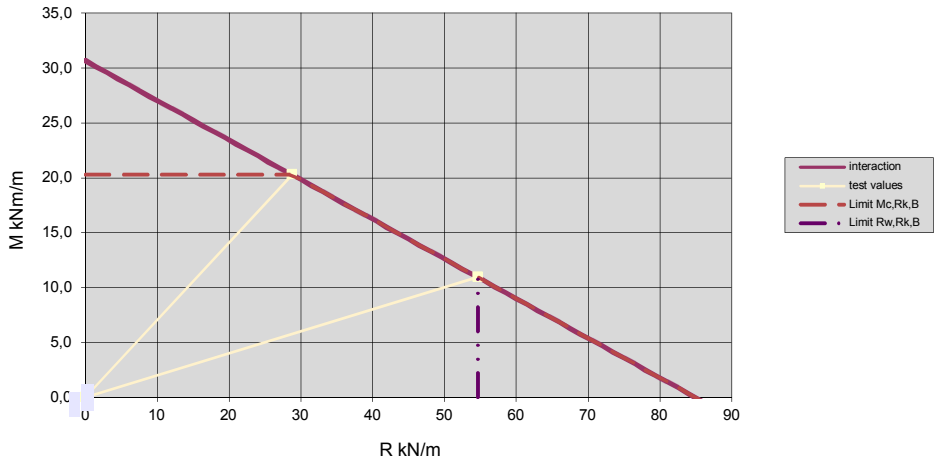
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	54,66	10,93
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	28,78	20,27

Used test spans no.	R(i)	M(i)
1	54,659	10,934
5	28,780	20,270

Parameter epsilon =			1
$R^0_{Rk,B}$	84,971	$R_{w,Rk,B}$	54,659
$M^0_{Rk,B}$	30,651	$M_{c,Rk,B}$	20,270



Internal support test for downward load

JID 137/310 Overlap - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m
f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,956	0,956	1,500	327,3	0,800	43,95	43,950	1,0023	**66,931**	13,389	133,513	0,500	13,389	2,272
160-100-80-2	0,956	0,956	1,500	327,3	0,800	43,75	43,750	0,9977						
160-100-280-1	0,956	0,956	3,200	327,3	2,800	19,35	19,350	0,9959	29,657	**20,884**	26,848	0,500	20,884	3,543
160-100-280-2	0,956	0,956	3,200	327,3	2,800	19,51	19,510	1,0041						
								4,0000						
							number	18		s	0,0038			
						c-value for family with 18 tests		c= 1,92		(1-c·s)	0,9926			

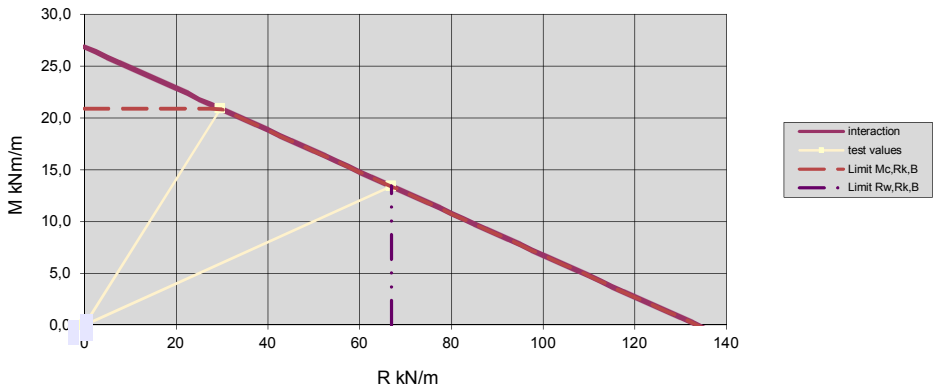
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	66,93	13,39
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	29,66	20,88

Used test spans no.	R(i)	M(i)
1	66,931	13,389
5	29,657	20,884

Parameter epsilon =			1
$R^0_{Rk,B}$	133,513	$R_{w,Rk,B}$	66,931
$M^0_{Rk,B}$	26,848	$M_{c,Rk,B}$	20,884



Internal support test for downward load

JID 137/310 Overlap extended - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	348,7	N/mm²

b_v = 0,620 m

f_{yb} = 348,7 N/mm² g= 0,0970 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,704	0,704	1,500	348,7	0,800	25,81	25,810	0,9919	**41,380**	8,278	60,613	0,500	8,278	1,404
160-75-80-2	0,704	0,704	1,500	348,7	0,800	26,23	26,230	1,0081						
160-75-240-11	0,704	0,700	2,800	341,3	2,400	15,56	15,818	0,9962	25,252	**15,219**	26,087	**0,700**	10,871	1,844
160-75-240-12	0,704	0,700	2,800	341,3	2,400	15,68	15,940	1,0038						
								4,0000						
							number	18		s	0,0073			
						c-value for family with 18 tests		c= 1,92		(1-c·s)	0,9860			

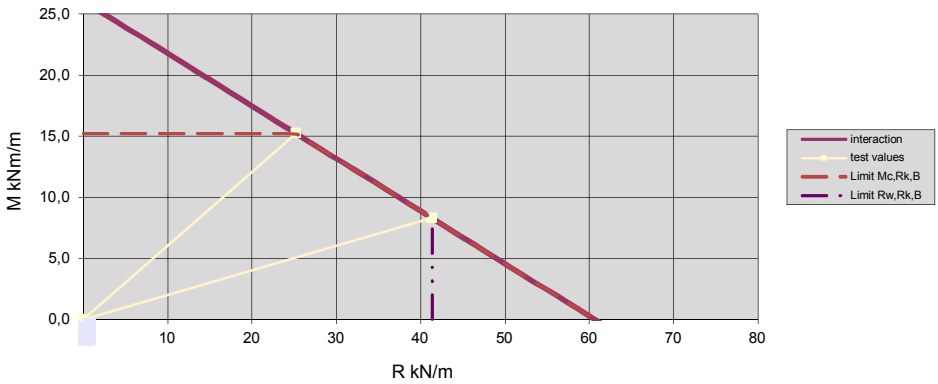
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	41,38	8,28
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	25,25	15,22

Used test spans no.	R(i)	M(i)
1	41,380	8,278
5	25,252	15,219

Parameter epsilon =			1
$R^0_{Rk,B}$	60,613	$R_{w,Rk,B}$	41,380
$M^0_{Rk,B}$	26,087	$M_{c,Rk,B}$	15,219



Internal support test for downward load

JID 137/310 Overlap extended - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m
f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,956	0,956	1,500	327,3	0,800	43,95	43,950	1,0023	**66,931**	13,389	109,128	0,500	13,389	2,272
160-100-80-2	0,956	0,956	1,500	327,3	0,800	43,75	43,750	0,9977						
160-100-280-11	0,956	0,955	3,200	328,0	2,800	21,83	21,830	0,9824	33,915	**23,864**	34,625	**0,700**	17,046	2,892
160-100-280-12	0,956	0,955	3,200	328,0	2,800	22,61	22,610	1,0176						
								4,0000						
							number	18		s	0,0145			
						c-value for family with 18 tests		c= 1,92		(1-c·s)	0,9723			

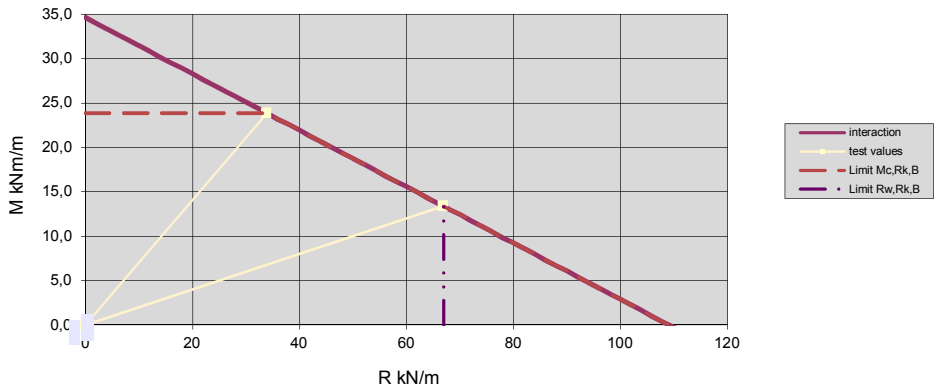
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	66,93	13,39
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	33,92	23,86

Used test spans no.	R(i)	M(i)
1	66,931	13,389
5	33,915	23,864

Parameter epsilon =			1
$R^0_{Rk,B}$	109,128	$R_{w,Rk,B}$	66,931
$M^0_{Rk,B}$	34,625	$M_{c,Rk,B}$	23,864



Internal support test for downward load

JID 137/310 cont-reinforced - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	348,7	N/mm²
slope of web ϕ =	66,0	°
width of rib b_R =	310	mm

b_v = 0,620 m
f_{yb} = 348,7 N/mm² g = 0,097 kN/m² P_{vor} = 0 kN epsilon = 1

IS-135-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-75-80-1	0,704	0,704	1,500	348,7	0,800	20,96	20,960	1,0017	**33,542**	6,710	49,678	0,500	6,710	1,139
60-75-80-2	0,704	0,704	1,500	348,7	0,800	20,89	20,890	0,9983						
60-75-240-1	0,704	0,704	2,800	348,7	2,400	12,60	12,600	0,9964	20,269	**12,230**	20,659	0,500	12,230	2,075
60-75-240-2	0,704	0,704	2,800	348,7	2,400	12,69	12,690	1,0036						
								4,0000						
							number	16		s	0,0032			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9938			

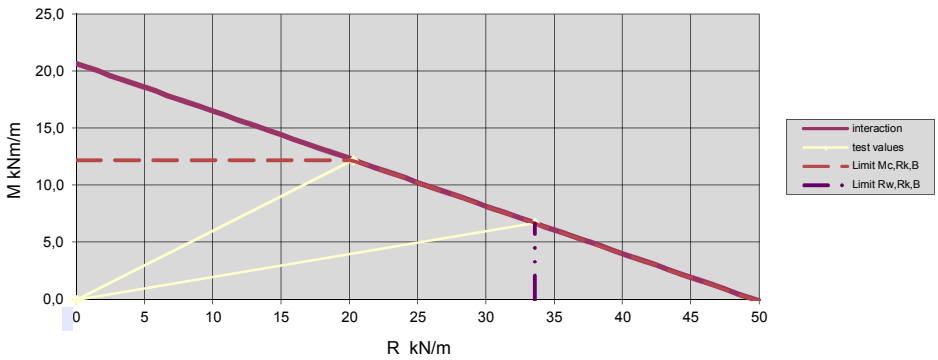
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	33,54	6,71
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	20,27	12,23

Used test spans no.	R(i)	M(i)
1	33,542	6,710
5	20,269	12,230

Parameter epsilon =			1
$R^0_{Rk,B}$	49,678	$R_{w,Rk,B}$	33,542
$M^0_{Rk,B}$	20,659	$M_{c,Rk,B}$	12,230



Internal support test for downward load

JID 137/310 cont-reinforced - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	348,7	N/mm²

b_v = 0,620 m

f_{yb} = 348,7 N/mm² g= 0,0970 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,704	0,704	1,500	348,7	0,800	26,05	26,050	0,9987	**41,941**	8,390	77,044	0,500	8,390	1,424
160-75-80-2	0,704	0,704	1,500	348,7	0,800	26,12	26,120	1,0013						
160-75-240-1	0,704	0,704	2,800	348,7	2,400	13,62	13,620	1,0015	21,867	**13,188**	18,415	0,500	13,188	2,238
160-75-240-2	0,704	0,704	2,800	348,7	2,400	13,58	13,580	0,9985						
								4,0000						
							number	16		s	0,0016			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9969			

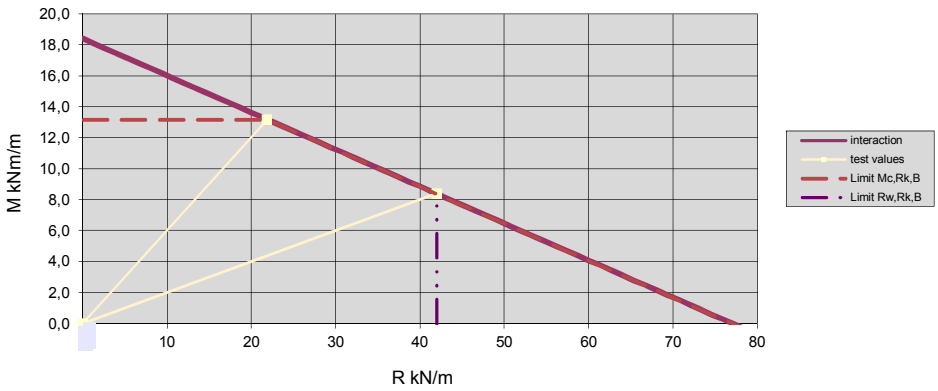
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	41,94	8,39
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,40	21,87	13,19

Used test spans no.	R(i)	M(i)
1	41,941	8,390
5	21,867	13,188

Parameter epsilon =			1
$R^0_{Rk,B}$	77,044	$R_{w,Rk,B}$	41,941
$M^0_{Rk,B}$	18,415	$M_{c,Rk,B}$	13,188



Internal support test for downward load

JID 137/310 cont-reinforced - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m

f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-100-80-1	0,956	0,956	1,500	327,3	0,800	37,25	37,250	0,9995	**59,502**	11,903	99,170	0,500	11,903	2,020
60-100-80-2	0,956	0,956	1,500	327,3	0,800	37,29	37,290	1,0005						
60-100-280-1	0,956	0,956	3,200	327,3	2,800	18,44	18,440	0,9935	29,631	**20,866**	29,757	0,500	20,866	3,540
60-100-280-2	0,956	0,956	3,200	327,3	2,800	18,68	18,680	1,0065						
								4,0000						
							number	16		s	0,0053			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9898			

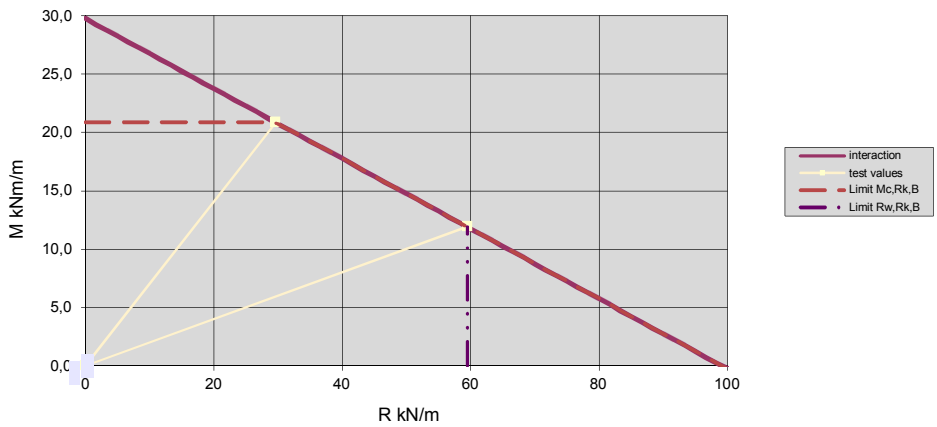
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	59,50	11,90
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	29,63	20,87

Used test spans no.	R(i)	M(i)
1	59,502	11,903
5	29,631	20,866

Parameter epsilon =			1
$R^0_{Rk,B}$	99,170	$R_{w,Rk,B}$	59,502
$M^0_{Rk,B}$	29,757	$M_{c,Rk,B}$	20,866



Internal support test for downward load

JID 137/310 cont-reinforced - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	327,3	N/mm²

b_v = 0,620 m
f_{yb} = 327,3 N/mm² g= 0,1290 kN/m² P_{vor} = 0 kN epsilon 1

IS-135-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,956	0,956	1,500	327,3	0,800	43,88	43,880	1,0016	**69,943**	13,991	134,638	0,500	13,991	2,374
160-100-80-2	0,956	0,956	1,500	327,3	0,800	43,74	43,740	0,9984						
160-100-280-1	0,956	0,956	3,200	327,3	2,800	19,47	19,470	0,9823	31,643	**22,274**	29,117	0,500	22,274	3,779
160-100-280-2	0,956	0,956	3,200	327,3	2,800	20,17	20,170	1,0177						
								4,0000						
							number	16		s	0,0145			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9722			

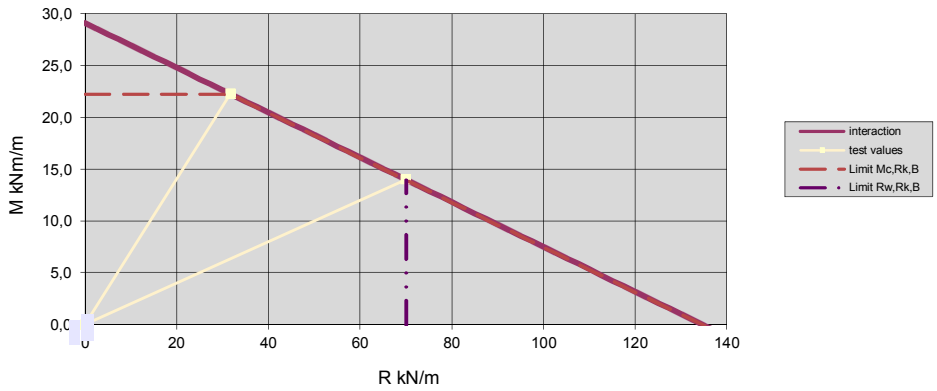
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	69,94	13,99
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	31,64	22,27

Used test spans no.	R(i)	M(i)
1	69,943	13,991
5	31,643	22,274

Parameter epsilon =			1
$R^0_{Rk,B}$	134,638	$R_{w,Rk,B}$	69,943
$M^0_{Rk,B}$	29,117	$M_{c,Rk,B}$	22,274



Internal support test for downward load

JID 158/250 Cont - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	346,0	N/mm²
slope of web ϕ =	73,9	°
width of rib b_R =	250	mm

b_v = 0,500 m
f_{yb} = 346,0 N/mm² g = 0,120 kN/m² P_{vor} = 0 kN epsilon = 1

IS-158-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
60-75-80-1	0,702	0,702	1,500	346,0	0,800	10,74	10,740	0,9949	**21,114**	4,225	26,138
60-75-80-2	0,702	0,702	1,500	346,0	0,800	10,85	10,850	1,0051			
60-75-280-1	0,702	0,702	3,200	346,0	2,800	7,35	7,350	1,0131	14,190	**10,048**	21,983
60-75-280-2	0,702	0,702	3,200	346,0	2,800	7,16	7,160	0,9869			
								4,0000			
							number	17		s	0,0115
					c-value for family with 17 tests			c= 1,92		(1-c·s)	0,9780

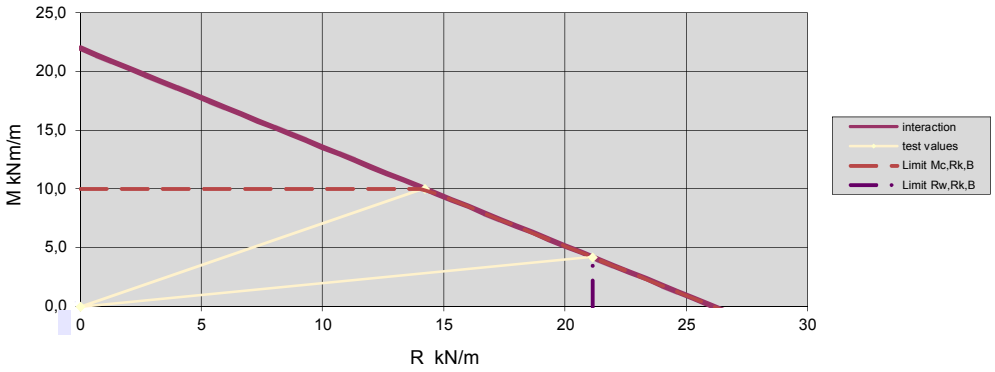
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	21,11	4,23
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	14,19	10,05

Used test spans no.	R(i)	M(i)
1	21,114	4,225
5	14,190	10,048

Parameter epsilon =			1
$R^0_{Rk,B}$	26,138	$R_{w,Rk,B}$	21,114
$M^0_{Rk,B}$	21,983	$M_{c,Rk,B}$	10,048



Internal support test for downward load

JID 158/250 Cont - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	346,0	N/mm²

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g= 0,1200 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
160-75-80-1	0,702	0,702	1,500	346,0	0,800	17,67	17,670	1,0048	**34,810**	6,964	54,971
160-75-80-2	0,702	0,702	1,500	346,0	0,800	17,50	17,500	0,9952			
160-75-280-1	0,702	0,702	3,200	346,0	2,800	9,08	9,080	0,9956	18,053	**12,753**	18,989
160-75-280-2	0,702	0,702	3,200	346,0	2,800	9,16	9,160	1,0044			
								4,0000			
							number	17		s	0,0053
						c-value for family with 17 tests		c= 1,92		(1-c·s)	0,9898

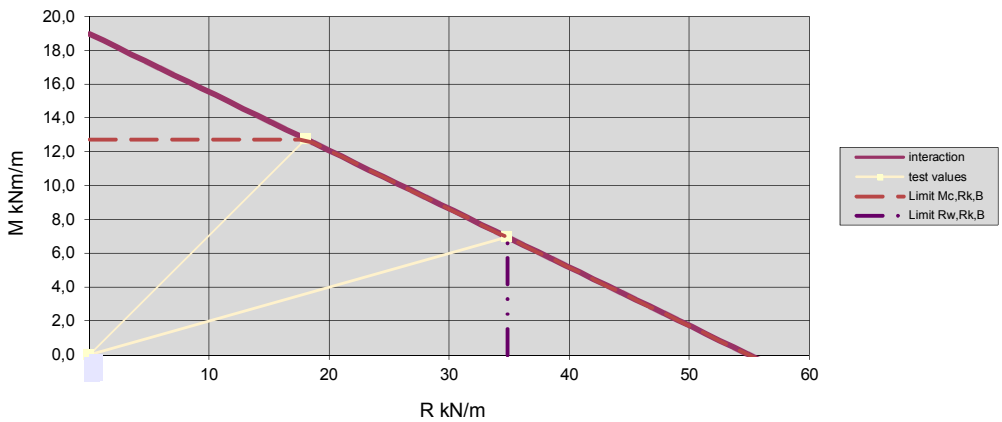
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	34,81	6,96
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	18,05	12,75

Used test spans no.	R(i)	M(i)
1	34,810	6,964
5	18,053	12,753

Parameter epsilon =			1
$R^0_{Rk,B}$	54,971	$R_{w,Rk,B}$	34,810
$M^0_{Rk,B}$	18,989	$M_{c,Rk,B}$	12,753



Internal support test for downward load

JID 158/250 Cont - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m

f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
60-100-80-1	0,962	0,962	1,500	355,3	0,800	19,79	19,790	0,9970	**39,496**	7,902	50,750
60-100-80-2	0,962	0,962	1,500	355,3	0,800	19,91	19,910	1,0030			
60-100-320-1	0,962	0,962	3,600	355,3	3,200	11,87	11,870	1,0013	23,588	**19,072**	35,635
60-100-320-2	0,962	0,962	3,600	355,3	3,200	11,84	11,840	0,9987			
								4,0000			
							number	17		s	0,0027
						c-value for family with 17 tests		c= 1,92		(1-c·s)	0,9949

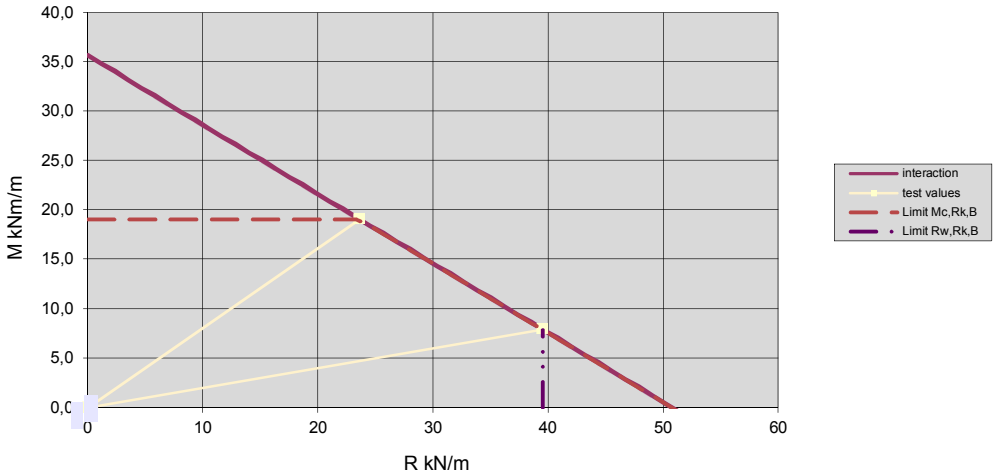
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	39,50	7,90
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	23,59	19,07

Used test spans no.	R(i)	M(i)
1	39,496	7,902
5	23,588	19,072

Parameter epsilon =			1
$R^0_{Rk,B}$	50,750	$R_{w,Rk,B}$	39,496
$M^0_{Rk,B}$	35,635	$M_{c,Rk,B}$	19,072



Internal support test for downward load

JID 158/250 Cont - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m

f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-C-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$
160-100-80-1	0,962	0,962	1,500	355,3	0,800	29,99	29,990	0,9531	**62,610**	12,525	106,166
160-100-80-2	0,962	0,962	1,500	355,3	0,800	32,31	32,310	1,0268			
160-100-80-2	0,962	0,962	1,500	355,3	0,800	32,10	32,100	1,0201			
160-100-320-1	0,962	0,962	3,600	355,3	3,200	13,83	13,830	0,9868	27,886	**22,510**	30,529
160-100-320-2	0,962	0,962	3,600	355,3	3,200	14,20	14,200	1,0132			
								5,0000			
							number	17		s	0,0303
				c-value for family with 17 tests				c= 1,92		(1-c·s)	0,9418

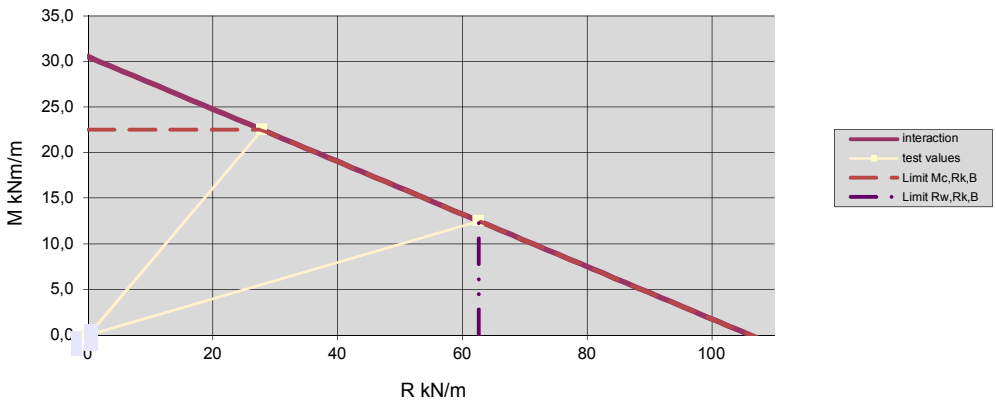
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	62,61	12,53
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	27,89	22,51

Used test spans no.	R(i)	M(i)
1	62,610	12,525
5	27,886	22,510

Parameter epsilon =			1
$R^0_{Rk,B}$	106,166	$R_{w,Rk,B}$	62,610
$M^0_{Rk,B}$	30,529	$M_{c,Rk,B}$	22,510



Internal support test for downward load

JID 158/250 DIN - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	346,0	N/mm²
slope of web ϕ =	73,9	°
width of rib b_R =	250	mm

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g = 0,120 kN/m² P_{vor} = 0 kN epsilon = 1

IS-158-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-75-80-1	0,702	0,702	1,500	346,0	0,800	19,24	19,240	1,0023	**38,103**	7,623	77,077	0,600	12,705	1,653
60-75-80-2	0,702	0,702	1,500	346,0	0,800	19,15	19,150	0,9977						
60-75-280-1	0,702	0,702	3,200	346,0	2,800	8,45	8,450	1,0042	16,704	**11,808**	15,075	0,600	19,680	2,560
60-75-280-2	0,702	0,702	3,200	346,0	2,800	8,38	8,380	0,9958						
								4,0000						
							number	16		s	0,0039			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9925			

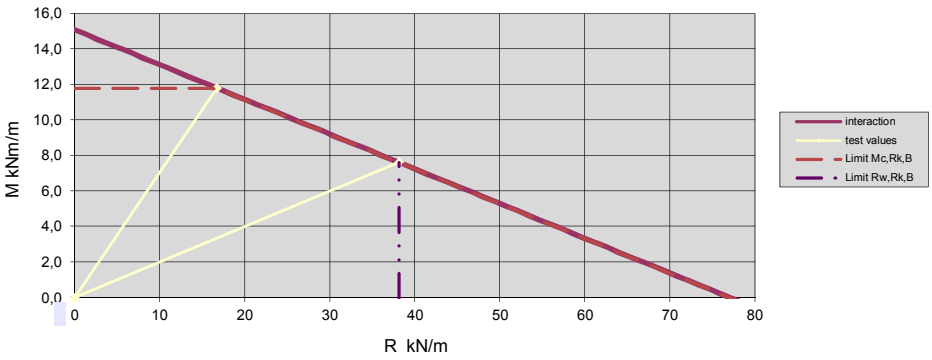
(test spans no. 2, 3 and 4 are not used)

M/R-interaction

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	38,10	7,62
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	16,70	11,81

Used test spans no.	R(i)	M(i)
1	38,103	7,623
5	16,704	11,808

Parameter epsilon =			1
$R^0_{Rk,B}$	77,077	$R_{w,Rk,B}$	38,103
$M^0_{Rk,B}$	15,075	$M_{c,Rk,B}$	11,808



Internal support test for downward load

JID 158/250 DIN - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	346,0	N/mm²

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g= 0,1200 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,702	0,702	1,500	346,0	0,800	24,27	24,270	1,0039	**46,637**	9,330	215,911	0,600	15,550	2,023
160-75-80-2	0,702	0,702	1,500	346,0	0,800	24,08	24,080	0,9961						
160-75-280-1	0,702	0,702	3,200	346,0	2,800	7,91	7,910	0,9778	15,607	**11,040**	11,900	0,600	18,400	2,393
160-75-280-2	0,702	0,702	3,200	346,0	2,800	8,27	8,270	1,0222						
								4,0000						
							number	16		s	0,0184			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9646			

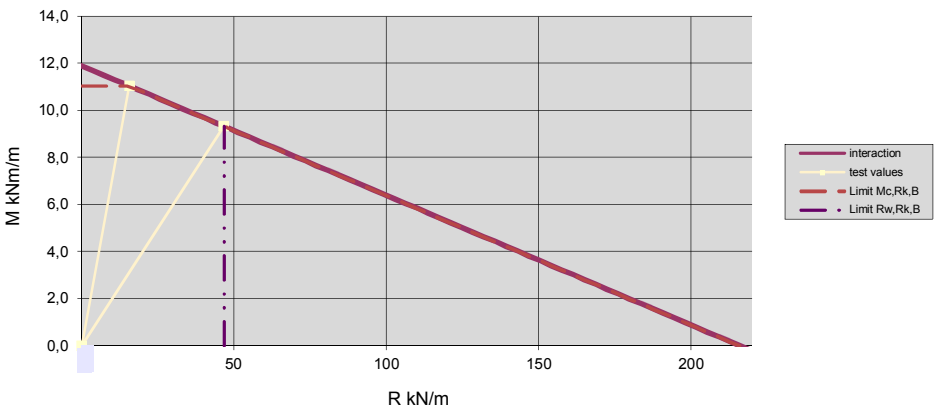
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	46,64	9,33
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	15,61	11,04

Used test spans no.	R(i)	M(i)
1	46,637	9,330
5	15,607	11,040

Parameter epsilon =			1
$R^0_{Rk,B}$	215,911	$R_{w,Rk,B}$	46,637
$M^0_{Rk,B}$	11,900	$M_{c,Rk,B}$	11,040



Internal support test for downward load

JID 158/250 DIN - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m

f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-100-80-1	0,962	0,962	1,500	355,3	0,800	34,73	34,730	0,9968	**68,057**	13,614	137,020	0,600	22,691	2,952
60-100-80-2	0,962	0,962	1,500	355,3	0,800	34,95	34,950	1,0032						
60-100-320-1	0,962	0,962	3,600	355,3	3,200	13,58	13,580	0,9855	26,918	**21,736**	27,050	0,600	36,227	4,712
60-100-320-2	0,962	0,962	3,600	355,3	3,200	13,98	13,980	1,0145						
								4,0000						
							number	16		s	0,0121			
							c-value for family with 16 tests	c= 1,92		(1-c·s)	0,9767			

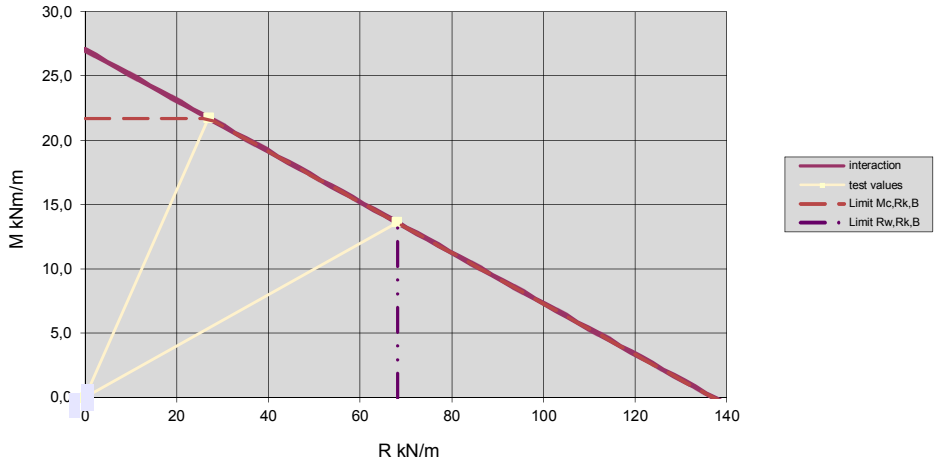
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	68,06	13,61
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	26,92	21,74

Used test spans no.	R(i)	M(i)
1	68,057	13,614
5	26,918	21,736

Parameter epsilon =			1
$R^0_{Rk,B}$	137,020	$R_{w,Rk,B}$	68,057
$M^0_{Rk,B}$	27,050	$M_{c,Rk,B}$	21,736



Internal support test for downward load

JID 158/250 DIN - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m
f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,962	0,962	1,500	355,3	0,800	41,55	41,550	1,0203	**79,553**	15,914	206,230	0,600	26,523	3,450
160-100-80-2	0,962	0,962	1,500	355,3	0,800	39,90	39,900	0,9797						
160-100-320-1	0,962	0,962	3,200	355,3	3,200	14,21	14,210	0,9996	27,768	**22,419**	25,908	0,600	37,365	4,860
160-100-320-2	0,962	0,962	3,200	355,3	3,200	14,22	14,220	1,0004						
								4,0000						
							number	16		s	0,0165			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9682			

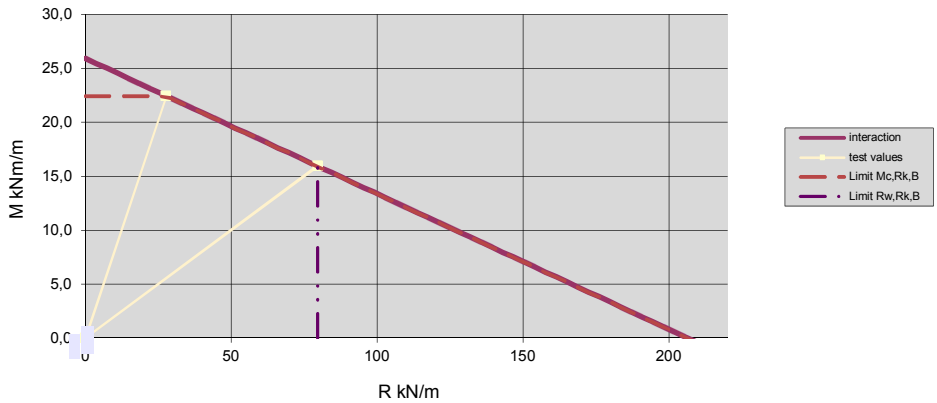
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	79,55	15,91
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	27,77	22,42

Used test spans no.	R(i)	M(i)
1	79,553	15,914
5	27,768	22,419

Parameter epsilon =			1
$R^0_{Rk,B}$	206,230	$R_{w,Rk,B}$	79,553
$M^0_{Rk,B}$	25,908	$M_{c,Rk,B}$	22,419



Internal support test for downward load

JID 158/250 DIN extended - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	346,0	N/mm²

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g= 0,1200 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-DIN-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,702	0,702	1,500	346,0	0,800	24,27	24,270	1,0039	**48,012**	9,605	123,942	0,600	16,008	2,082
160-75-80-2	0,702	0,702	1,500	346,0	0,800	24,08	24,080	0,9961						
160-75-280-11	0,702	0,700	3,200	345,7	2,800	9,43	9,461	0,9979	18,830	**13,296**	15,678	**0,800**	16,620	2,162
160-75-280-12	0,702	0,700	3,200	345,7	2,800	9,47	9,501	1,0021						
								4,0000						
							number	16		s	0,0036			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9930			

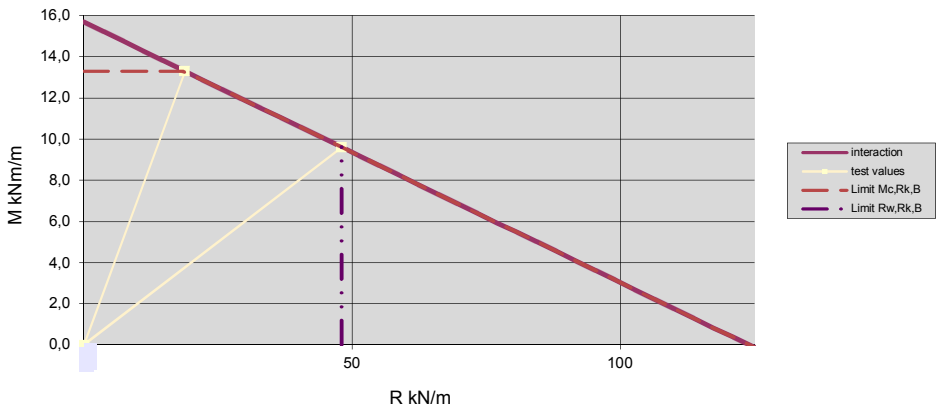
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	48,01	9,60
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	18,83	13,30

Used test spans no.	R(i)	M(i)
1	48,012	9,605
5	18,830	13,296

Parameter epsilon =			1
$R^0_{Rk,B}$	123,942	$R_{w,Rk,B}$	48,012
$M^0_{Rk,B}$	15,678	$M_{c,Rk,B}$	13,296



Internal support test for downward load

JID 158/250 Overlap - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	346,0	N/mm²
slope of web ϕ =	73,9	°
width of rib b_R =	250	mm

b_v = 0,500 m
f_{yb} = 346,0 N/mm² g = 0,120 kN/m² P_{vor} = 0 kN epsilon = 1

IS-158-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-75-80-1	0,702	0,702	1,500	346,0	0,800	22,58	22,580	0,9989	**45,132**	9,029	59,025	0,600	7,524	0,979
60-75-80-2	0,702	0,702	1,500	346,0	0,800	22,63	22,630	1,0011						
60-75-280-1	0,702	0,702	3,200	346,0	2,800	14,19	14,190	1,0000	28,331	**19,947**	38,358	0,600	16,622	2,162
60-75-280-2	0,702	0,702	3,200	346,0	2,800	14,19	14,190	1,0000						
								4,0000						
							number	17		s	0,0009			
						c-value for family with 17 tests		c= 1,92		(1-c·s)	0,9983			

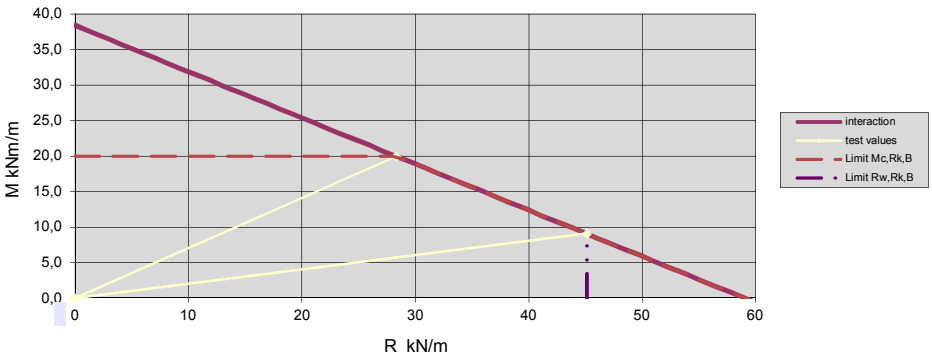
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	45,13	9,03
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	28,33	19,95

Used test spans no.	R(i)	M(i)
1	45,132	9,029
5	28,331	19,947

Parameter epsilon =			1
$R^0_{Rk,B}$	59,025	$R_{w,Rk,B}$	45,132
$M^0_{Rk,B}$	38,358	$M_{c,Rk,B}$	19,947



Internal support test for downward load

JID 158/250 Overlap - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	346,0	N/mm²

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g= 0,1200 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,702	0,702	1,500	346,0	0,800	34,40	34,400	0,9935	**64,006**	12,803	133,561	0,600	10,670	1,388
160-75-80-2	0,702	0,702	1,500	346,0	0,800	34,85	34,850	1,0065						
160-75-280-1	0,702	0,702	3,200	346,0	2,800	14,02	14,020	0,9363	27,679	**19,490**	24,586	0,600	16,242	2,113
160-75-280-2	0,702	0,702	3,200	346,0	2,800	15,53	15,530	1,0372						
160-75-280-3	0,702	0,702	3,200	346,0	2,800	15,37	15,370	1,0265						
								5,0000						
							number	17		s	0,0394			
						c-value for family with 17 tests		c= 1,92		(1-c·s)	0,9243			

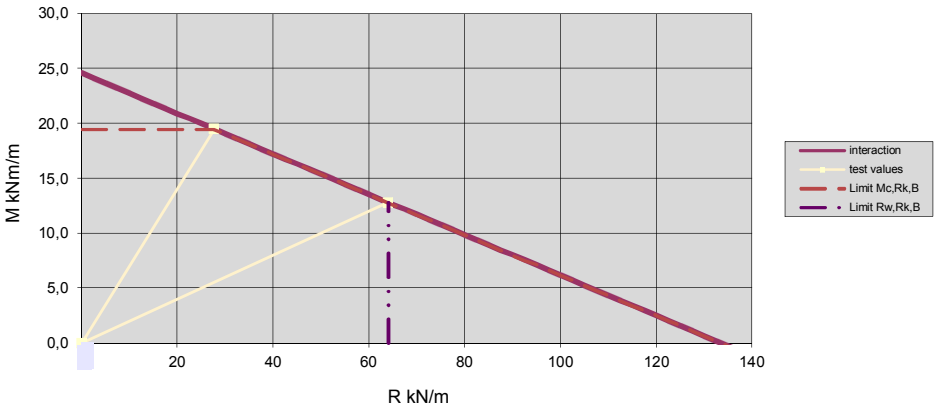
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	64,01	12,80
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	27,68	19,49

Used test spans no.	R(i)	M(i)
1	64,006	12,803
5	27,679	19,490

Parameter epsilon =			1
$R^0_{Rk,B}$	133,561	$R_{w,Rk,B}$	64,006
$M^0_{Rk,B}$	24,586	$M_{c,Rk,B}$	19,490



Internal support test for downward load

JID 158/250 Overlap - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m

f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-100-80-1	0,962	0,962	1,500	355,3	0,800	41,55	41,550	1,0034	**82,294**	16,462	114,734	0,600	13,718	1,784
60-100-80-2	0,962	0,962	1,500	355,3	0,800	41,27	41,270	0,9966						
60-100-320-1	0,962	0,962	3,600	355,3	3,200	22,28	22,280	0,9978	44,376	**35,702**	58,221	0,600	29,752	3,870
60-100-320-2	0,962	0,962	3,600	355,3	3,200	22,38	22,380	1,0022						
								4,0000						
							number	17		s	0,0033			
							c-value for family with 17 tests	c= 1,92		(1-c·s)	0,9936			

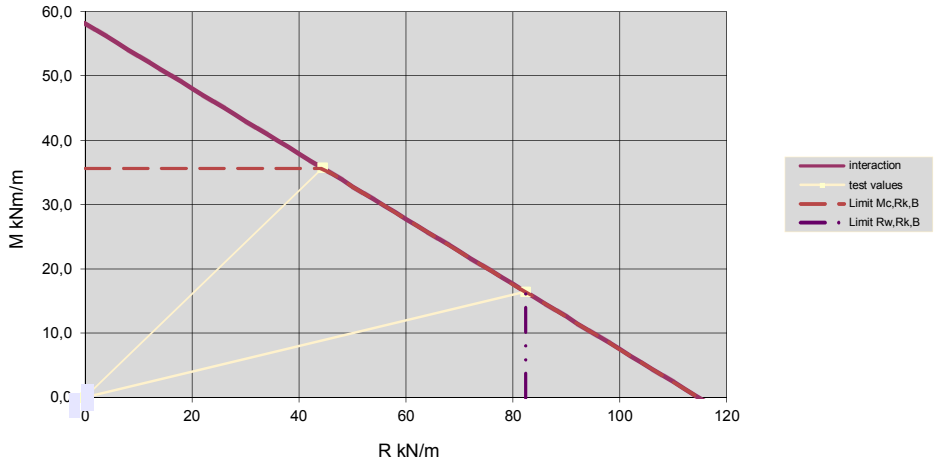
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	82,29	16,46
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	44,38	35,70

Used test spans no.	R(i)	M(i)
1	82,294	16,462
5	44,376	35,702

Parameter epsilon =			1
$R^0_{Rk,B}$	114,734	$R_{w,Rk,B}$	82,294
$M^0_{Rk,B}$	58,221	$M_{c,Rk,B}$	35,702



Internal support test for downward load

JID 158/250 Overlap - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m
f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,962	0,962	1,500	355,3	0,800	60,62	60,620	1,0126	**118,969**	23,797	248,654	0,600	19,831	2,580
160-100-80-2	0,962	0,962	1,500	355,3	0,800	59,11	59,110	0,9874						
160-100-320-1	0,962	0,962	3,200	355,3	3,200	23,33	23,330	1,0039	46,185	**37,152**	45,627	0,600	30,960	4,027
160-100-320-2	0,962	0,962	3,200	355,3	3,200	23,15	23,150	0,9961						
								4,0000						
							number	17		s	0,0108			
						c-value for family with 17 tests		c= 1,92		(1-c·s)	0,9793			

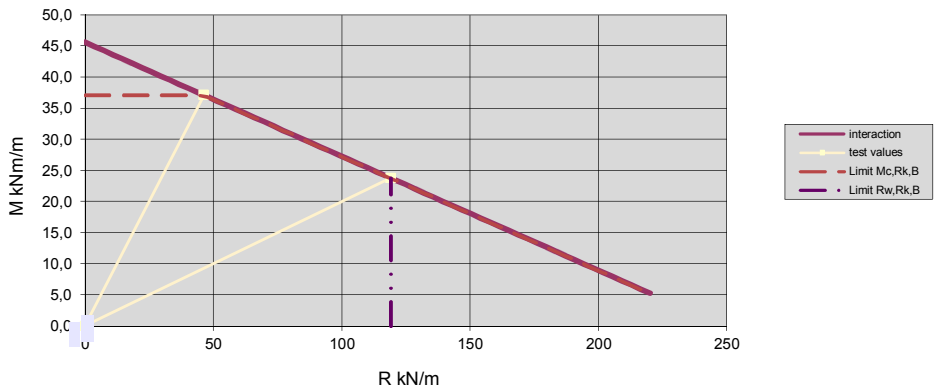
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	118,97	23,80
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	46,18	37,15

Used test spans no.	R(i)	M(i)
1	118,969	23,797
5	46,185	37,152

Parameter epsilon =			1
$R^0_{Rk,B}$	248,654	$R_{w,Rk,B}$	118,969
$M^0_{Rk,B}$	45,627	$M_{c,Rk,B}$	37,152



Internal support test for downward load

JID 158/250 Overlap extended - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	346,0	N/mm²

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g= 0,1200 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,702	0,702	1,500	346,0	0,800	34,40	34,400	0,9935	**68,503**	13,703	133,041	0,600	11,419	1,485
160-75-80-2	0,702	0,702	1,500	346,0	0,800	34,85	34,850	1,0065						
160-75-280-1	0,702	0,700	3,200	345,7	2,800	15,57	15,621	1,0023	30,836	**21,701**	28,248	**0,800**	13,563	1,764
160-75-280-2	0,702	0,700	3,200	345,7	2,800	15,50	15,551	0,9977						
								4,0000						
							number	16		s	0,0056			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9892			

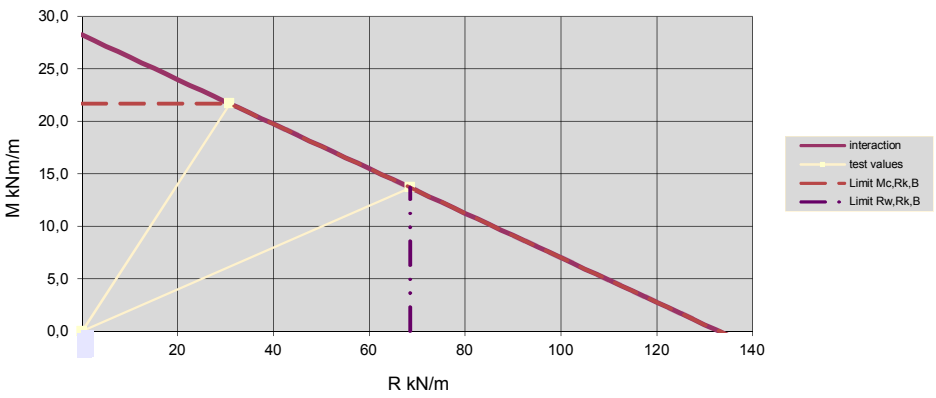
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	68,50	13,70
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	30,84	21,70

Used test spans no.	R(i)	M(i)
1	68,503	13,703
5	30,836	21,701

Parameter epsilon =			1
$R^0_{Rk,B}$	133,041	$R_{w,Rk,B}$	68,503
$M^0_{Rk,B}$	28,248	$M_{c,Rk,B}$	21,701



Internal support test for downward load

JID 158/250 Overlap extended - 1,00

Bending moment at support, support reaction
M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m
f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-OL-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,962	0,962	1,500	355,3	0,800	60,62	60,620	1,0126	**118,969**	23,797	234,624	0,600	19,831	2,580
160-100-80-2	0,962	0,962	1,500	355,3	0,800	59,11	59,110	0,9874						
160-100-320-11	0,962	0,955	3,200	327,0	3,200	22,76	23,898	0,9937	47,795	**38,441**	48,275	**0,800**	24,026	3,125
160-100-320-12	0,962	0,955	3,200	327,0	3,200	23,05	24,203	1,0063						
								4,0000						
							number	16		s	0,0115			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9779			

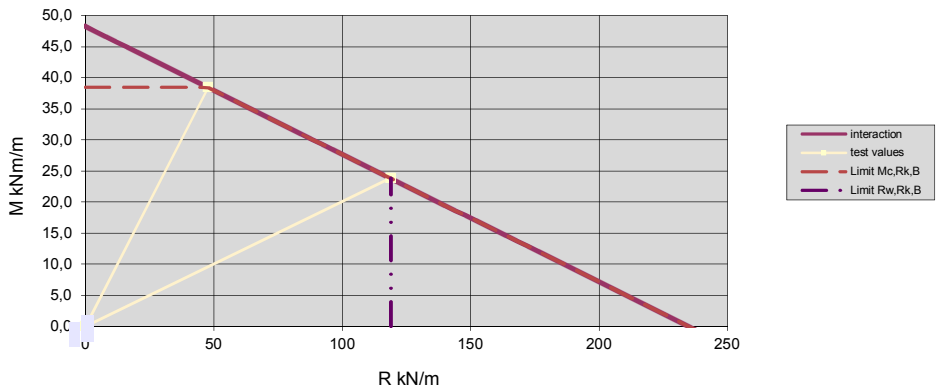
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	118,97	23,80
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	47,80	38,44

Used test spans no.	R(i)	M(i)
1	118,969	23,797
5	47,795	38,441

Parameter epsilon =			1
$R^0_{Rk,B}$	234,624	$R_{w,Rk,B}$	118,969
$M^0_{Rk,B}$	48,275	$M_{c,Rk,B}$	38,441



Internal support test for downward load

JID 158/250 cont-reinforced - 0,75

Bending moment at support, support reaction
M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	346,0	N/mm²
slope of web ϕ =	73,9	°
width of rib b_R =	250	mm

b_v = 0,500 m
f_{yb} = 346,0 N/mm² g = 0,120 kN/m² P_{vor} = 0 kN epsilon = 1

IS-158-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-75-80-1	0,702	0,702	1,500	346,0	0,800	22,52	22,520	1,0016	**44,500**	8,902	58,983	0,600	7,419	0,965
60-75-80-2	0,702	0,702	1,500	346,0	0,800	22,45	22,450	0,9984						
60-75-280-1	0,702	0,702	3,200	346,0	2,800	13,80	13,800	0,9935	27,490	**19,358**	36,255	0,600	16,132	2,098
60-75-280-2	0,702	0,702	3,200	346,0	2,800	13,98	13,980	1,0065						
								4,0000						
							number	16		s	0,0054			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9896			

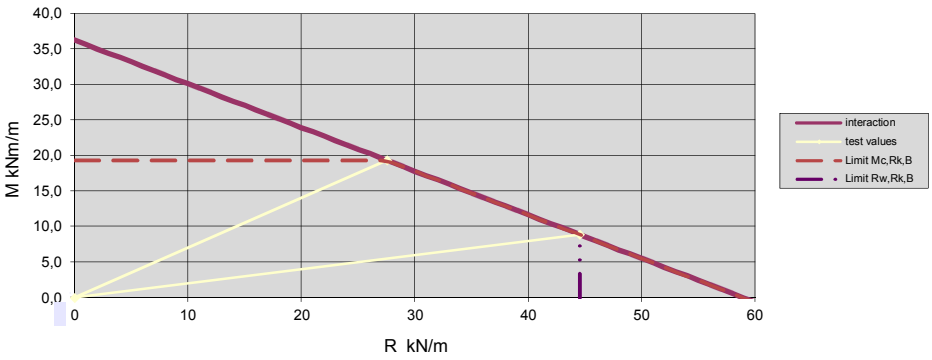
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	44,50	8,90
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	27,49	19,36

Used test spans no.	R(i)	M(i)
1	44,500	8,902
5	27,490	19,358

Parameter epsilon =			1
$R^0_{Rk,B}$	58,983	$R_{w,Rk,B}$	44,500
$M^0_{Rk,B}$	36,255	$M_{c,Rk,B}$	19,358



Internal support test for downward load

JID 158/250 cont-reinforced - 0,75

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	346,0	N/mm²

b_v = 0,500 m

f_{yb} = 346,0 N/mm² g= 0,1200 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-75-80-1	0,702	0,702	1,500	346,0	0,800	33,81	33,810	0,9925	**66,982**	13,399	127,056	0,600	11,165	1,452
160-75-80-2	0,702	0,702	1,500	346,0	0,800	34,32	34,320	1,0075						
160-75-280-1	0,702	0,702	3,200	346,0	2,800	15,67	15,670	1,0077	30,576	**21,518**	28,338	0,600	17,932	2,333
160-75-280-2	0,702	0,702	3,200	346,0	2,800	15,43	15,430	0,9923						
								4,0000						
							number	16		s	0,0088			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9831			

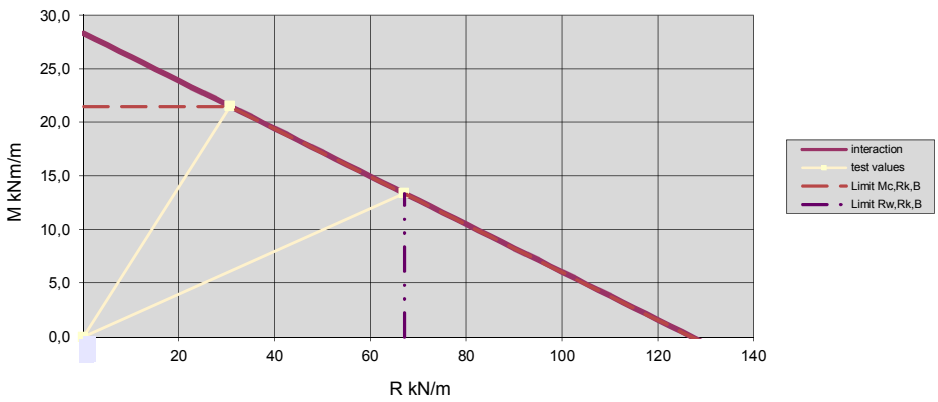
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	66,98	13,40
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	2,80	30,58	21,52

Used test spans no.	R(i)	M(i)
1	66,982	13,399
5	30,576	21,518

Parameter epsilon =			1
$R^0_{Rk,B}$	127,056	$R_{w,Rk,B}$	66,982
$M^0_{Rk,B}$	28,338	$M_{c,Rk,B}$	21,518



Internal support test for downward load

JID 158/250 cont-reinforced - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	60	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m

f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
60-100-80-1	0,962	0,962	1,500	355,3	0,800	41,16	41,160	1,0002	**82,257**	16,454	117,343	0,600	13,712	1,784
60-100-80-2	0,962	0,962	1,500	355,3	0,800	41,14	41,140	0,9998						
60-100-320-1	0,962	0,962	3,600	355,3	3,200	21,62	21,620	1,0002	43,207	**34,767**	55,030	0,600	28,973	3,769
60-100-320-2	0,962	0,962	3,600	355,3	3,200	21,61	21,610	0,9998						
								4,0000						
							number	16		s	0,0003			
							c-value for family with 16 tests	c= 1,92		(1-c·s)	0,9995			

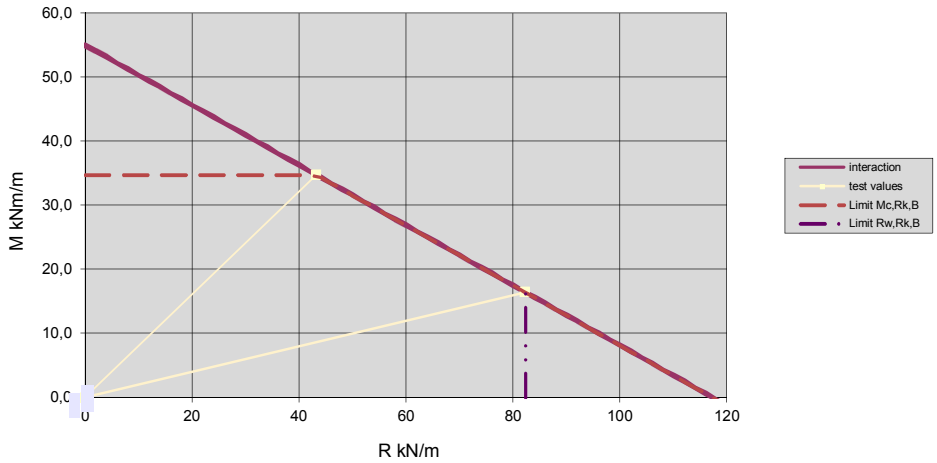
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	82,26	16,45
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	43,21	34,77

Used test spans no.	R(i)	M(i)
1	82,257	16,454
5	43,207	34,767

Parameter epsilon =			1
$R^0_{Rk,B}$	117,343	$R_{w,Rk,B}$	82,257
$M^0_{Rk,B}$	55,030	$M_{c,Rk,B}$	34,767



Internal support test for downward load

JID 158/250 cont-reinforced - 1,00

Bending moment at support, support reaction

M/R-interaction

support width l_a =	160	mm
nominal yield strength f_{yb} =	355,3	N/mm²

b_v = 0,500 m

f_{yb} = 355,3 N/mm² g= 0,1600 kN/m² P_{vor} = 0 kN epsilon 1

IS-158-CR-…	t_{cor} mm	$t_{cor,obs}$ mm	L_V m	$f_{yb,obs}$ N/mm²	L_E m	F_u kN	$F_{u,adj}$ kN	$F_{u,adj}/F_{u,M}$ -	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m	$R^0_{Rk,B}$ $M^0_{Rk,B}$	over-lap a [m]	connecting force kN/m	connecting force/web kN
160-100-80-1	0,962	0,962	1,500	355,3	0,800	60,01	60,010	1,0251	**117,018**	23,407	255,515	0,600	19,506	2,537
160-100-80-2	0,962	0,962	1,500	355,3	0,800	57,07	57,070	0,9749						
160-100-320-1	0,962	0,962	3,600	355,3	3,200	22,13	22,130	0,9973	44,357	**35,687**	43,183	0,600	29,739	3,868
160-100-320-2	0,962	0,962	3,600	355,3	3,200	22,25	22,250	1,0027						
								4,0000						
							number	16		s	0,0206			
						c-value for family with 16 tests		c= 1,92		(1-c·s)	0,9604			

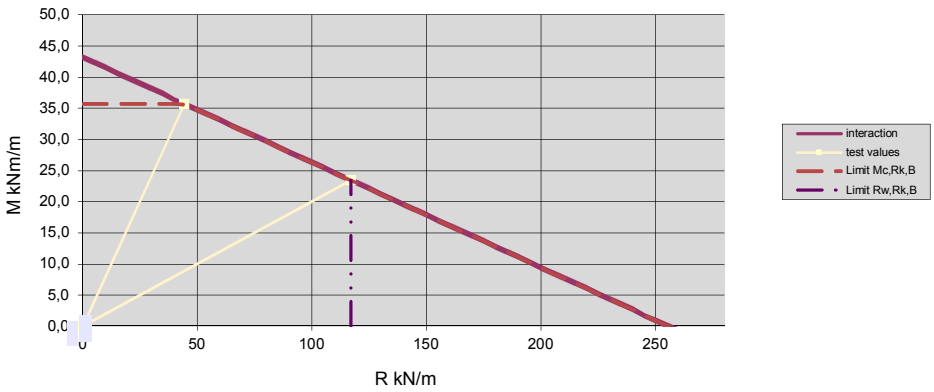
M/R-interaction

(test spans no. 2, 3 and 4 are not used)

data from test evaluation			
Nr	L m	$R_{w,Rk,B}$ kN/m	$M_{c,Rk,B}$ kNm/m
1	0,80	117,02	23,41
2	0,00	0,00	0,00
3	0,00	0,00	0,00
4	0,00	0,00	0,00
5	3,20	44,36	35,69

Used test spans no.	R(i)	M(i)
1	117,018	23,407
5	44,357	35,687

Parameter epsilon =			1
$R^0_{Rk,B}$	255,515	$R_{w,Rk,B}$	117,018
$M^0_{Rk,B}$	43,183	$M_{c,Rk,B}$	35,687

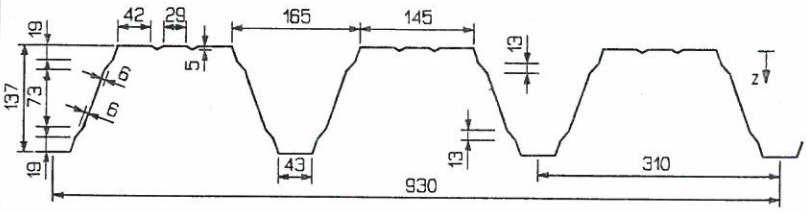


Stahl- Trapezprofil **JID 137.310.930**

Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Profiltafel in **Positivlage**

Maße in mm, Radien R= 5 mm



Anlage 1.1 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Maßgebende Querschnittswerte

Nenn-blech-dicke a)	Eigenlast	Biegung 11)		Normalkraftbeanspruchung						Grenzstützweiten 13)	
				nicht reduzierter Querschnitt			wirksamer Querschnitt 12)			Einfeld-träger	Mehrfeld-träger
t_N	g	I^+_{eff}	I^-_{eff}	A_g	i_g	z_g	A_{eff}	i_{eff}	z_{eff}	L_{gr}	L_{gr}
mm	kN/m²	cm⁴/m		cm²/m	cm		cm²/m	cm		m	
0,75	0,097	286,0	276,3	11,32	5,03	5,36	4,22	5,86	5,71	6,30	7,88
0,88	0,114	338,3	335,6	13,39	5,03	5,36	5,52	5,82	5,71	9,39	11,74
1,00	0,129	386,6	386,6	15,31	5,03	5,36	6,81	5,79	5,71	10,73	13,41
1,13	0,146	438,8	438,8	17,38	5,03	5,36	8,27	5,76	5,72	12,18	15,23
1,25	0,161	487,0	487,0	19,29	5,03	5,36	9,71	5,74	5,72	13,52	16,91
1,50	0,194	587,4	587,4	23,27	5,02	5,36	12,67	5,64	5,69	16,32	20,40

Schubfeldwerte

t_N	Grenzzustand der Gebrauchstauglichkeit 17)					Grenzzustand der Tragfähigkeit 18)						
										Lasteinleitung		
	$T_{b,Ck}$	K_1 14) 15)	K_2 14) 15)	K^*_1 15)	K^*_2 15)	$T_{Rk,g}$ 16)	L_R 16)	$T_{Rk,l}$	K_3 19)	$T_{t,Rk}$ 22)	$F_{t,Rk}$ 21) für a ≥ 130 mm	280 mm
mm	kN/m	10^{-4}·m/kN	10^{-4}·m²/kN	10^{-4}·1/kN	10^{-4}·m²/kN	kN/m	m	kN/m	-	kN/m	kN	kN
Normalbefestigung: Verbindung in jedem Untergurt												
0,75	1,65	0,274	55,59	3,763	2,170	13,30	7,00	18,70	0,512	2,53	14,88	19,80
0,88	2,51	0,232	36,51	3,763	2,170	17,11	7,00	30,97	0,557	3,26	17,60	23,42
1,00	3,51	0,203	26,15	3,763	2,170	20,91	7,00	46,23	0,595	3,98	20,12	26,77
1,13	4,82	0,179	19,04	3,763	2,170	25,29	7,00	67,68	0,634	4,82	22,84	30,39
1,25	6,26	0,161	14,66	3,763	2,170	29,57	7,00	92,58	0,668	5,64	25,36	33,74
1,50	10,00	0,133	9,167	3,763	2,170	39,18	7,00	116,8	0,734	7,47	30,59	40,71
Sonderbefestigung: Verbindung mit 2 Schrauben oder verstärkter Unterlegscheibe in jedem Untergurt 20)												
0,75	1,58	0,274	40,60	3,763	1,085	13,30	7,00	18,70	0,791	5,64	14,88	19,80
0,88	2,40	0,232	26,67	3,763	1,085	17,11	7,00	30,97	0,791	7,26	17,60	23,42
1,00	3,36	0,203	19,10	3,763	1,085	20,91	7,00	46,23	0,791	8,88	20,12	26,77
1,13	4,61	0,179	13,90	3,763	1,085	25,29	7,00	67,68	0,791	10,74	22,84	30,39
1,25	5,98	0,161	10,71	3,763	1,085	29,57	7,00	92,58	0,791	12,56	25,36	33,74
1,50	9,57	0,133	6,696	3,763	1,085	39,18	7,00	116,8	0,791	16,65	30,59	40,71

a) Blechdicke: Minustoleranz nach DIN EN 10143:2006, Tabelle 2 „Eingeschränkte Grenzabmaße (S)".

Weitere Fußnoten siehe Beiblatt 1/2 bzw. 2/2

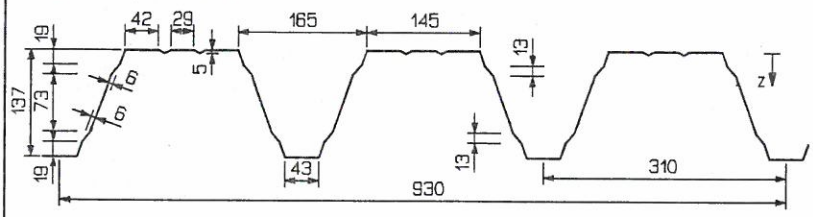
Stand: 31. Januar 2014

Stahl- Trapezprofil **JID 137.310.930**

Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Profiltafel in **Positivlage**

Maße in mm, Radien R= 5 mm



Anlage 1.2 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Charakteristische Tragfähigkeitswerte für andrückende Flächenbelastung [3)]

Nenn-blech-dicke	Feldmo-ment	Endauflagerkraft [6)]				Elastisch aufnehmbare Schnittgrößen an Zwischenauflagern [1) 2) 4) 5) 7)]								
						Quer-kraft	**Quadratische Interaktion**							
							Stützmomente				Zwischenauflagerkräfte			
		$l_{a,A1}$ = 40 mm	$l_{a,A2}$ = 90 mm	$l_{a,A1}$ = 40 mm	$l_{a,A2}$ = 90 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm	
t_N	$M_{c,Rk,F}$	$R_{T,w,Rk,A}$		$R_{G,w,Rk,A}$		$V_{w,Rk}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$
mm	kNm/m	kN/m				kN/m	kNm/m				kN/m			
0,75	9,66	9,86	11,34	7,14	9,42	n.m.	9,44	6,78	11,21	8,17	21,08	18,41	25,97	22,82
0,88	12,57	14,28	16,01	10,60	14,16		11,89	9,27	15,13	11,56	29,98	25,32	35,73	31,51
1,00	15,39	18,35	20,33	13,80	18,53		14,15	11,56	18,75	14,69	38,21	31,70	44,74	39,53
1,13	19,04	22,74	23,83	17,96	22,97		16,97	14,44	21,30	17,84	51,35	41,50	62,18	51,58
1,25	22,42	26,79	27,07	21,80	27,07		19,57	17,10	23,66	20,75	63,48	50,54	78,27	62,71
1,50	27,05	32,32	32,66	26,30	32,66		23,62	20,63	28,55	25,04	76,60	60,98	94,44	75,67

Reststützmomente [8)]

t_N	$l_{a,B}$ = 60 mm			$l_{a,B}$ = 160 mm			Reststützmomente $M_{R,Rk}$
	min L	**max L**	**max $M_{R,Rk}$**	**min L**	**max L**	**max $M_{R,Rk}$**	
mm	m	m	kNm/m	m	m	kNm/m	
0,75	5,18	5,91	2,27	5,29	6,01	2,23	$M_{R,Rk} = 0$ für $L \leq \min L$
0,88	5,03	5,76	3,12	5,16	5,89	3,03	
1,00	4,90	5,63	3,89	5,05	5,77	3,78	$M_{R,Rk} = \frac{L - \min L}{\max L - \min L} \cdot \max M_{R,Rk}$
1,13	5,68	6,40	4,12	4,83	5,56	4,94	
1,25	6,41	7,11	4,32	4,62	5,36	6,01	
1,50	6,41	7,11	5,22	4,62	5,36	7,25	$M_{R,Rk} = \max M_{R,k}$ für $L \geq \max L$

Charakteristische Tragfähigkeitswerte für abhebende Flächenbelastung [1) 2)]

Nenn-blech-dicke	Feldmo-ment	Verbindung in jedem anliegenden Gurt						Verbindung in jedem 2. anliegenden Gurt					
		Endauf-lagerkraft	**M/V- Interaktion**					Endauf-lagerkraft	**M/V- Interaktion**				
t_N	$M_{c,Rk,F}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$
mm	kNm/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m
0,75	8,30	28,49	-	9,66	-	-	28,49	14,24	-	4,83	-	-	14,24
0,88	10,90	45,43	-	12,26	-	-	45,43	22,72	-	6,13	-	-	22,72
1,00	13,43	65,91	-	14,77	-	-	65,91	32,95	-	7,39	-	-	32,95
1,13	16,19	93,98	-	17,57	-	-	93,98	46,99	-	8,79	-	-	46,99
1,25	18,55	121,14	-	20,23	-	-	121,14	60,57	-	10,11	-	-	60,57
1,50	22,54	173,22	-	26,11	-	-	173,22	86,61	-	13,06	-	-	86,61

Fußnoten siehe Beiblatt 1/2

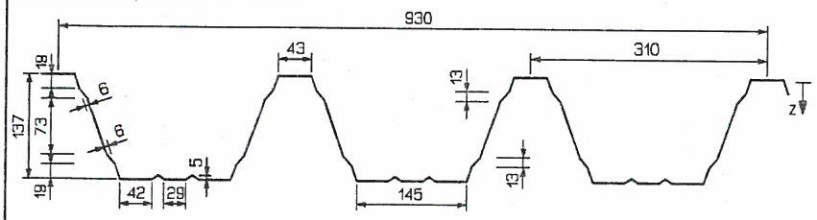
Stand: 31. Januar 2014

Stahl- Trapezprofil **JID 137.310.930**

Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Profiltafel in **Negativlage**

Maße in mm, Radien R= 5 mm



Anlage 1.3 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Maßgebende Querschnittswerte

Nenn-blech-dicke a)	Eigenlast	Biegung 11)		Normalkraftbeanspruchung						Grenzstützweiten 13)	
				nicht reduzierter Querschnitt			wirksamer Querschnitt 12)			Einfeld-träger	Mehrfeld-träger
t_N	g	I^+_{eff}	I^-_{eff}	A_g	i_g	z_g	A_{eff}	i_{eff}	z_{eff}	L_{gr}	L_{gr}
mm	kN/m²	cm⁴/m		cm²/m	cm		cm²/m	cm		m	
0,75	0,097	276,3	286,0	11,32	5,03	8,34	4,22	5,86	7,99		
0,88	0,114	335,6	338,3	13,39	5,03	8,34	5,52	5,82	7,99		
1,00	0,129	386,6	386,6	15,31	5,03	8,34	6,81	5,79	7,99		
1,13	0,146	438,8	438,8	17,38	5,03	8,34	8,27	5,76	7,98		
1,25	0,161	487,0	487,0	19,29	5,03	8,34	9,71	5,74	7,98		
1,50	0,194	587,4	587,4	23,27	5,02	8,34	12,67	5,64	8,01		

Schubfeldwerte

t_N	Grenzzustand der Gebrauchstauglichkeit 17)					Grenzzustand der Tragfähigkeit 18)						
										Lasteinleitung		
	$T_{b,Ck}$	K_1 14) 15)	K_2 14) 15)	K^*_1 15)	K^*_2 15)	$T_{Rk,g}$ 16)	L_R 16)	$T_{Rk,l}$	K_3 19)	$T_{t,Rk}$ 22)	$F_{t,Rk}$ 21) für a ≥ 130 mm	280 mm
mm	kN/m	10^{-4}·m/kN	10^{-4}·m²/kN	10^{-4}·1/kN	10^{-4}·m²/kN	kN/m	m	kN/m	-	kN/m	kN	kN
Normalbefestigung: Verbindung in jedem Untergurt												
0,75	1,48	0,274	77,79	3,763	2,170	13,30	7,00	18,70	0,253	3,67	23,08	23,08
0,88	2,25	0,232	51,09	3,763	2,170	17,11	7,00	30,97	0,275	4,72	27,30	27,30
1,00	3,14	0,203	36,59	3,763	2,170	20,91	7,00	46,23	0,294	5,77	31,20	31,20
1,13	4,31	0,179	26,64	3,763	2,170	25,29	7,00	67,68	0,313	6,98	35,43	35,43
1,25	5,60	0,161	20,52	3,763	2,170	29,57	7,00	92,58	0,330	8,17	39,33	39,33
1,50	8,95	0,133	12,83	3,763	2,170	39,18	7,00	116,8	0,363	10,83	47,46	47,46
Sonderbefestigung: Verbindung mit 2 Schrauben oder verstärkter Unterlegscheibe in jedem Untergurt 20)												
0,75	11,34	0,274	1,676	3,763	1,085	13,30	7,00	18,70	1,036	17,06	23,08	23,08
0,88	17,27	0,232	1,101	3,763	1,085	17,11	7,00	30,97	1,036	21,96	27,30	27,30
1,00	24,11	0,203	0,788	3,763	1,085	20,91	7,00	46,23	1,036	26,83	31,20	31,20
1,13	33,12	0,179	0,574	3,763	1,085	25,29	7,00	67,68	1,036	32,46	35,43	35,43
1,25	43,00	0,161	0,442	3,763	1,085	29,57	7,00	92,58	1,036	37,97	39,33	39,33
1,50	68,76	0,133	0,276	3,763	1,085	39,18	7,00	116,8	1,036	50,32	47,46	47,46

a) Blechdicke: Minustoleranz nach DIN EN 10143:2006, Tabelle 2 „Eingeschränkte Grenzabmaße (S)".

Weitere Fußnoten siehe Beiblatt 1/2 bzw. 2/2

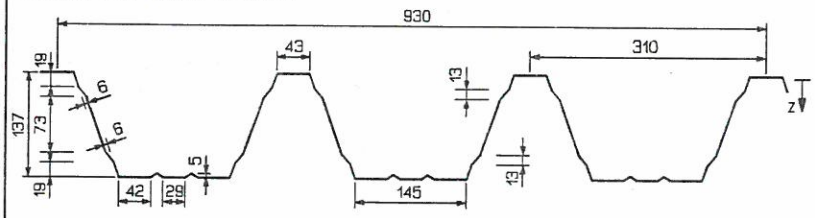
Stand: 31. Januar 2014

Stahl- Trapezprofil **JID 137.310.930**

Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Profiltafel in **Negativlage**

Maße in mm, Radien R= 5 mm



Anlage 1.4 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Charakteristische Tragfähigkeitswerte für andrückende Flächenbelastung [3)]

Nenn-blech-dicke	Feldmo-ment	Endauf-lagerkraft [6)]		Quer-kraft	Elastisch aufnehmbare Schnittgrößen an Zwischenauflagern [1) 2) 4) 5) 7)]											
					Lineare Interaktion											
					Stützmomente						Zwischenauflagerkräfte					
		l_{a1} = 10 mm	l_{a2} = 40 mm		$l_{a,B}$ = 10 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm		$l_{a,B}$ = 10 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm	
t_N	$M_{c,Rk,F}$	$R_{w,Rk,A}$		$V_{w,Rk}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$
mm	kNm/m	kN/m		kN/m	kNm/m						kN/m					
0,75	8,30	4,50	6,81	n.m.	12,07	9,66	12,07	9,66	12,07	9,66	11,24	8,99	19,64	15,71	28,61	22,89
0,88	10,90	6,36	9,50		15,32	12,26	15,32	12,26	15,32	12,26	15,90	12,72	27,28	21,82	39,46	31,57
1,00	13,43	8,42	12,43		18,46	14,77	18,46	14,77	18,46	14,77	21,04	16,83	35,60	28,48	51,17	40,93
1,13	16,19	11,05	16,15		21,96	17,57	21,96	17,57	21,96	17,57	27,62	22,10	46,10	36,88	65,86	52,69
1,25	18,55	13,89	20,12		25,29	20,23	25,29	20,23	25,29	20,23	34,73	27,79	57,31	45,85	81,47	65,17
1,50	22,54	21,28	30,34		32,64	26,11	32,64	26,11	32,64	26,11	53,21	42,57	86,02	68,82	121,11	96,89

Reststützmomente [8)]

t_N	$l_{a,B}$ = 10 mm			$l_{a,B}$ = 60 mm			$l_{a,B}$ = 160 mm			Reststützmomente $M_{R,Rk}$
	min L	**max L**	**max $M_{R,Rk}$**	**min L**	**max L**	**max $M_{R,Rk}$**	**min L**	**max L**	**max $M_{R,Rk}$**	
mm	m	m	kNm/m	m	m	kNm/m	m	m	kNm/m	
										$M_{R,Rk} = 0$ für $L \leq \min L$
										$M_{R,Rk} = \frac{L - \min L}{\max L - \min L} \cdot \max M_{R,Rk}$
										$M_{R,Rk} = \max M_{R,k}$ für $L \geq \max L$

Charakteristische Tragfähigkeitswerte für abhebende Flächenbelastung [1) 2)]

Nenn-blech-dicke	Feldmo-ment	Verbindung in jedem anliegenden Gurt						Verbindung in jedem 2. anliegenden Gurt					
		Endauf-lagerkraft	**M/V- Interaktion**					Endauf-lagerkraft	**M/V- Interaktion**				
t_N	$M_{c,Rk,F}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$
mm	kNm/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m
0,75	9,66	28,49	-	8,30	-	-	28,49	14,24	-	4,15	-	-	14,24
0,88	12,26	45,43	-	10,90	-	-	45,43	22,72	-	5,45	-	-	22,72
1,00	14,77	65,91	-	13,43	-	-	65,91	32,95	-	6,71	-	-	32,95
1,13	17,57	93,98	-	16,19	-	-	93,98	46,99	-	8,10	-	-	46,99
1,25	20,23	121,14	-	18,55	-	-	121,14	60,57	-	9,27	-	-	60,57
1,50	26,11	173,22	-	22,54	-	-	173,22	86,61	-	11,27	-	-	86,61

Fußnoten siehe Beiblatt 1/2

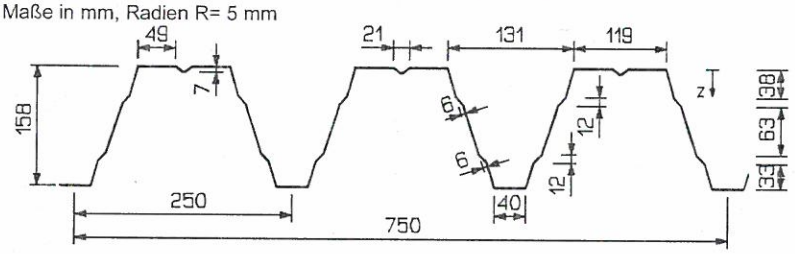
Stand: 31. Januar 2014

Stahl- Trapezprofil **JID 158.250.750**

Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Profiltafel in **Positivlage**

Maße in mm, Radien R= 5 mm



Anlage 3.1 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Maßgebende Querschnittswerte

Nenn-blech-dicke a)	Eigenlast	Biegung 11)		Normalkraftbeanspruchung						Grenzstützweiten 13)	
				nicht reduzierter Querschnitt			wirksamer Querschnitt 12)			Einfeld-träger	Mehrfeld-träger
t_N	g	I^+_{eff}	I^-_{eff}	A_g	i_g	z_g	A_{eff}	i_{eff}	z_{eff}	L_{gr}	L_{gr}
mm	kN/m²	cm⁴/m		cm²/m	cm		cm²/m	cm		m	
0,75	0,120	446,0	438,0	13,95	5,65	6,58	5,83	6,45	7,06	7,52	9,40
0,88	0,141	527,6	527,6	16,50	5,65	6,58	7,85	6,41	7,02	8,90	11,12
1,00	0,160	597,6	602,8	18,86	5,65	6,58	9,90	6,36	6,99	10,17	12,71
1,13	0,181	684,2	684,2	21,41	5,65	6,58	12,21	6,31	6,93	11,54	14,43
1,25	0,200	759,3	759,3	23,76	5,65	6,58	14,34	6,26	6,86	12,81	16,02
1,50	0,240	915,6	915,6	28,67	5,65	6,58	19,08	6,14	6,73	15,46	19,33

Schubfeldwerte

t_N	Grenzzustand der Gebrauchstauglichkeit 17)					Grenzzustand der Tragfähigkeit 18)						
										Lasteinleitung		
	$T_{b,Ck}$	K_1 14) 15)	K_2 14) 15)	K^*_1 15)	K^*_2 15)	$T_{Rk,g}$ 16)	L_R 16)	$T_{Rk,l}$	K_3 19)	$T_{t,Rk}$ 22)	$F_{t,Rk}$ 21) für a ≥ 130 mm	280 mm
mm	kN/m	10^{-4}·m/kN	10^{-4}·m²/kN	10^{-4}·1/kN	10^{-4}·m²/kN	kN/m	m	kN/m	-	kN/m	kN	kN
Normalbefestigung: Verbindung in jedem Untergurt												
0,75	1,73	0,340	66,99	4,667	1,750	13,47	8,00	15,56	0,696	2,65	14,88	19,80
0,88	2,63	0,288	44,00	4,667	1,750	17,33	8,00	25,77	0,757	3,41	17,60	23,42
1,00	3,67	0,252	31,51	4,667	1,750	21,16	8,00	38,46	0,809	4,16	20,12	26,77
1,13	5,04	0,222	22,94	4,667	1,750	25,60	8,00	56,30	0,862	5,04	22,84	30,39
1,25	6,54	0,200	17,67	4,667	1,750	29,94	8,00	77,02	0,908	5,89	25,36	33,74
1,50	10,47	0,165	11,05	4,667	1,750	39,66	8,00	116,8	0,998	7,81	30,59	40,71
Sonderbefestigung: Verbindung mit 2 Schrauben oder verstärkter Unterlegscheibe in jedem Untergurt 20)												
0,75	1,63	0,340	46,12	4,667	0,875	13,47	8,00	15,56	1,127	5,94	14,88	19,80
0,88	2,48	0,288	30,29	4,667	0,875	17,33	8,00	25,77	1,127	7,64	17,60	23,42
1,00	3,47	0,252	21,69	4,667	0,875	21,16	8,00	38,46	1,127	9,33	20,12	26,77
1,13	4,76	0,222	15,79	4,667	0,875	25,60	8,00	56,30	1,127	11,29	22,84	30,39
1,25	6,18	0,200	12,16	4,667	0,875	29,94	8,00	77,02	1,127	13,21	25,36	33,74
1,50	9,89	0,165	7,605	4,667	0,875	39,66	8,00	116,8	1,127	17,51	30,59	40,71

a) Blechdicke: Minustoleranz nach DIN EN 10143:2006, Tabelle 2 „Eingeschränkte Grenzabmaße (S)".

Weitere Fußnoten siehe Beiblatt 1/2 bzw. 2/2

Stand: 31. Januar 2014

Stahl- Trapezprofil **JID 158.250.750**

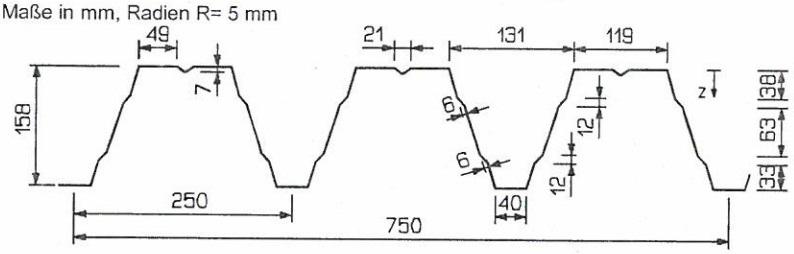
Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Anlage 3.2 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Profiltafel in **Positivlage**

Maße in mm, Radien R= 5 mm



Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Charakteristische Tragfähigkeitswerte für andrückende Flächenbelastung [3)]

Nenn-blech-dicke	Feldmo-ment	Endauflagerkraft [6)]				Elastisch aufnehmbare Schnittgrößen an Zwischenauflagern [1) 2) 4) 5) 7)]								
						Quer-kraft	Quadratische Interaktion							
							Stützmomente				Zwischenauflagerkräfte			
		$l_{a,A1}$ = 40 mm	$l_{a,A2}$ = 90 mm	$l_{a,A1}$ = 40 mm	$l_{a,A2}$ = 90 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm	
t_N	$M_{c,Rk,F}$	$R_{T,w,Rk,A}$		$R_{G,w,Rk,A}$		$V_{w,Rk}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$
mm	kNm/m	kN/m				kN/m	kNm/m				kN/m			
0,75	15,27	12,70	13,79	11,26	13,76	n.m.	13,33	9,89	16,63	12,83	27,49	23,99	37,97	37,59
0,88	20,58	17,64	21,41	16,81	21,40		17,18	13,68	19,98	16,85	39,81	32,36	58,42	49,39
1,00	25,49	22,19	28,46	21,94	28,46		20,73	17,17	23,06	20,56	51,19	40,08	77,30	60,29
1,13	30,90	27,24	33,87	27,12	33,87		24,28	20,96	27,17	24,70	68,63	54,30	98,44	75,21
1,25	35,89	31,89	38,87	31,89	38,87		27,56	24,45	30,97	28,51	84,72	67,42	117,95	88,99
1,50	43,31	38,48	46,90	38,48	46,90		33,25	29,51	37,37	34,40	102,22	81,36	142,32	107,38

Reststützmomente [8)]

t_N	$l_{a,B}$ = 60 mm			$l_{a,B}$ = 160 mm		
	min L	max L	max $M_{R,Rk}$	min L	max L	max $M_{R,Rk}$
mm	m	m	kNm/m	m	m	kNm/m
0,75	5,43	6,15	3,48	4,12	4,87	4,59
0,88	6,65	7,35	3,77	4,07	4,83	6,27
1,00	7,77	8,45	4,04	4,03	4,79	7,82
1,13	6,78	7,48	5,87	3,95	4,71	9,72
1,25	5,87	6,58	7,56	3,87	4,63	11,47
1,50	5,87	6,58	9,13	3,87	4,63	13,84

Reststützmomente $M_{R,Rk}$

$M_{R,Rk} = 0$ für $L \leq \min L$

$$M_{R,Rk} = \frac{L - \min L}{\max L - \min L} \cdot \max M_{R,Rk}$$

$M_{R,Rk} = \max M_{R,k}$ für $L \geq \max L$

Charakteristische Tragfähigkeitswerte für abhebende Flächenbelastung [1) 2)]

Nenn-blech-dicke	Feldmo-ment	Verbindung in jedem anliegenden Gurt						Verbindung in jedem 2. anliegenden Gurt					
		Endauf-lagerkraft	M/V- Interaktion					Endauf-lagerkraft	M/V- Interaktion				
t_N	$M_{c,Rk,F}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$
mm	kNm/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m
0,75	12,78	34,04	-	15,24	-	-	34,04	17,02	-	7,62	-	-	17,02
0,88	16,24	54,87	-	19,08	-	-	54,87	27,44	-	9,54	-	-	27,44
1,00	19,96	79,95	-	22,76	-	-	79,95	39,98	-	11,38	-	-	39,98
1,13	23,52	114,07	-	26,85	-	-	114,07	57,04	-	13,42	-	-	57,04
1,25	26,34	152,86	-	30,58	-	-	152,86	76,43	-	15,29	-	-	76,43
1,50	31,76	227,93	-	38,31	-	-	227,93	113,97	-	19,16	-	-	113,97

Fußnoten siehe Beiblatt 1/2

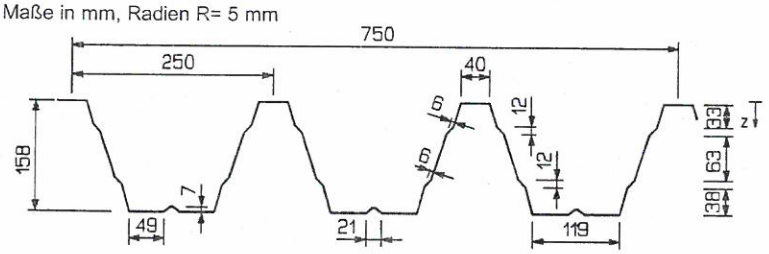
Stand: 31. Januar 2014

Stahl- Trapezprofil **JID 158.250.750**

Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Profiltafel in **Negativlage**

Maße in mm, Radien R= 5 mm



Anlage 3.3 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Maßgebende Querschnittswerte

Nenn-blech-dicke a)	Eigenlast	Biegung 11)		Normalkraftbeanspruchung						Grenzstützweiten 13)	
				nicht reduzierter Querschnitt			wirksamer Querschnitt 12)			Einfeld-träger	Mehrfeld-träger
t_N	g	I^+_{eff}	I^-_{eff}	A_g	i_g	z_g	A_{eff}	i_{eff}	z_{eff}	L_{gr}	L_{gr}
mm	kN/m²	cm⁴/m		cm²/m	cm		cm²/m	cm		m	
0,75	0,120	438,0	446,0	13,95	5,65	9,22	5,83	6,45	8,74		
0,88	0,141	527,6	527,6	16,50	5,65	9,22	7,85	6,41	8,78		
1,00	0,160	602,8	597,6	18,86	5,65	9,22	9,90	6,36	8,81		
1,13	0,181	684,2	684,2	21,41	5,65	9,22	12,21	6,31	8,87		
1,25	0,200	759,3	759,3	23,76	5,65	9,22	14,34	6,26	8,94		
1,50	0,240	915,6	915,6	28,67	5,65	9,22	19,08	6,14	9,07		

Schubfeldwerte

t_N	Grenzzustand der Gebrauchstauglichkeit 17)					Grenzzustand der Tragfähigkeit 18)						
										Lasteinleitung		
	$T_{b,Ck}$	K_1 14) 15)	K_2 14) 15)	K^*_1 15)	K^*_2 15)	$T_{Rk,g}$ 16)	L_R 16)	$T_{Rk,l}$	K_3 19)	$T_{t,Rk}$ 22)	$F_{t,Rk}$ 21) für a ≥ 130 mm	280 mm
mm	kN/m	10^{-4}·m/kN	10^{-4}·m²/kN	10^{-4}·1/kN	10^{-4}·m²/kN	kN/m	m	kN/m	-	kN/m	kN	kN
Normalbefestigung: Verbindung in jedem Untergurt												
0,75	1,53	0,340	93,18	4,667	1,750	13,47	8,00	15,56	0,351	3,74	23,08	23,08
0,88	2,33	0,288	61,20	4,667	1,750	17,33	8,00	25,77	0,382	4,81	27,30	27,30
1,00	3,25	0,252	43,83	4,667	1,750	21,16	8,00	38,46	0,408	5,87	31,20	31,20
1,13	4,46	0,222	31,91	4,667	1,750	25,60	8,00	56,30	0,435	7,11	35,43	35,43
1,25	5,80	0,200	24,58	4,667	1,750	29,94	8,00	77,02	0,458	8,31	39,33	39,33
1,50	9,27	0,165	15,37	4,667	1,750	39,66	8,00	116,8	0,503	11,02	47,46	47,46
Sonderbefestigung: Verbindung mit 2 Schrauben oder verstärkter Unterlegscheibe in jedem Untergurt 20)												
0,75	8,85	0,340	2,858	4,667	0,875	13,47	8,00	15,56	1,490	16,10	23,08	23,08
0,88	13,47	0,288	1,877	4,667	0,875	17,33	8,00	25,77	1,490	20,71	27,30	27,30
1,00	18,81	0,252	1,344	4,667	0,875	21,16	8,00	38,46	1,490	25,31	31,20	31,20
1,13	25,83	0,222	0,979	4,667	0,875	25,60	8,00	56,30	1,490	30,62	35,43	35,43
1,25	33,54	0,200	0,754	4,667	0,875	29,94	8,00	77,02	1,490	35,81	39,33	39,33
1,50	53,64	0,165	0,471	4,667	0,875	39,66	8,00	116,8	1,490	47,47	47,46	47,46

a) Blechdicke: Minustoleranz nach DIN EN 10143:2006, Tabelle 2 „Eingeschränkte Grenzabmaße (S)".

Weitere Fußnoten siehe Beiblatt 1/2 bzw. 2/2

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Stahl- Trapezprofil **JID 158.250.750**

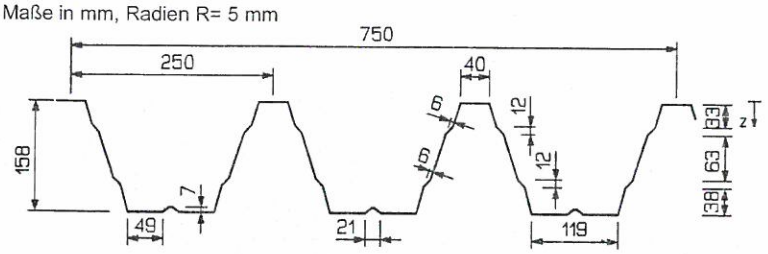
Querschnitts- und Bemessungswerte nach DIN EN 1993-1-3

Anlage 3.4 zum Prüfbescheid
ALS TYPENENTWURF
in baustatischer Hinsicht geprüft.
Prüfbescheid Nr. T14-018
Landesdirektion Sachsen
Landesstelle für Bautechnik
Leipzig, den 07.02.2014
Leiter: Bearbeiter:

FREISTAAT SACHSEN LANDESDIREKTION SACHSEN

Profiltafel in **Negativlage**

Maße in mm, Radien R= 5 mm



Nennstreckgrenze des Stahlkernes $f_{y,k}$ = 320 N/mm²

Charakteristische Tragfähigkeitswerte für andrückende Flächenbelastung [3)]

Nennblechdicke	Feldmoment	Endauflagerkraft [6)]		Querkraft	Elastisch aufnehmbare Schnittgrößen an Zwischenauflagern [1) 2) 4) 5) 7)] Lineare Interaktion											
					Stützmomente						Zwischenauflagerkräfte					
		l_{a1} = 10 mm	l_{a2} = 40 mm		$l_{a,B}$ = 10 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm		$l_{a,B}$ = 10 mm		$l_{a,B}$ = 60 mm		$l_{a,B}$ = 160 mm	
t_N	$M_{c,Rk,F}$	$R_{w,Rk,A}$		$V_{w,Rk}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$
mm	kNm/m	kN/m		kN/m	kNm/m						kN/m					
0,75	12,78	5,85	8,87	n.m.	19,05	15,24	19,05	15,24	19,05	15,24	14,63	11,71	25,56	20,45	37,24	29,79
0,88	16,24	8,29	12,38		23,85	19,08	23,85	19,08	23,85	19,08	20,71	16,57	35,54	28,44	51,41	41,13
1,00	19,96	10,98	16,22		28,46	22,76	28,46	22,76	28,46	22,76	27,44	21,96	46,43	37,14	66,73	53,39
1,13	23,52	14,43	21,09		33,56	26,85	33,56	26,85	33,56	26,85	36,07	28,86	60,20	48,16	86,01	68,81
1,25	26,34	18,17	26,31		38,22	30,58	38,22	30,58	38,22	30,58	45,41	36,33	74,93	59,95	106,51	85,21
1,50	31,76	27,90	39,77		47,89	38,31	47,89	38,31	47,89	38,31	69,75	55,80	112,76	90,21	158,76	127,01

Reststützmomente [8)]

t_N	$l_{a,B}$ = 10 mm			$l_{a,B}$ = 60 mm			$l_{a,B}$ = 160 mm			Reststützmomente $M_{R,Rk}$
	min L	max L	max $M_{R,Rk}$	min L	max L	max $M_{R,Rk}$	min L	max L	max $M_{R,Rk}$	
mm	m	m	kNm/m	m	m	kNm/m	m	m	kNm/m	
										$M_{R,Rk} = 0$ für $L \leq \min L$
										$M_{R,Rk} = \frac{L - \min L}{\max L - \min L} \cdot \max M_{R,Rk}$
										$M_{R,Rk} = \max M_{R,k}$ für $L \geq \max L$

Charakteristische Tragfähigkeitswerte für abhebende Flächenbelastung [1) 2)]

Nennblechdicke	Feldmoment	Verbindung in jedem anliegenden Gurt						Verbindung in jedem 2. anliegenden Gurt					
		Endauflagerkraft	M/V- Interaktion					Endauflagerkraft	M/V- Interaktion				
t_N	$M_{c,Rk,F}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$	$R_{w,Rk,A}$	$M^0_{Rk,B}$	$M_{c,Rk,B}$	$R^0_{Rk,B}$	$R_{w,Rk,B}$	$V_{w,Rk}$
mm	kNm/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m	kN/m	kNm/m	kNm/m	kN/m	kN/m	kN/m
0,75	15,24	34,04	-	12,78	-	-	34,04	17,02	-	6,39	-	-	17,02
0,88	19,08	54,87	-	16,24	-	-	54,87	27,44	-	8,12	-	-	27,44
1,00	22,76	79,95	-	19,96	-	-	79,95	39,98	-	9,98	-	-	39,98
1,13	26,85	114,07	-	23,52	-	-	114,07	57,04	-	11,76	-	-	57,04
1,25	30,58	152,86	-	26,34	-	-	152,86	76,43	-	13,17	-	-	76,43
1,50	38,31	227,93	-	31,76	-	-	227,93	113,97	-	15,88	-	-	113,97

Fußnoten siehe Beiblatt 1/2

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