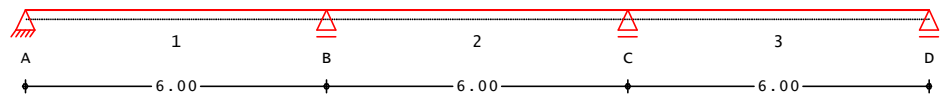


**Pos. B351 Stahlbetonbalken nach DIN 1045-1**
System Mehrfeldträger

M 1:150



Abmessungen

Feld	l [m]	x [m]	b [cm]	h [cm]	I [cm <sup>4</sup> ]
1	6.00		30.0	59.0	513447
2	6.00		30.0	59.0	513447
3	6.00		30.0	59.0	513447

Auflager

Aufl.	t [cm]	Art
A	24.0	Beton
B	24.0	Beton
C	24.0	Beton
D	24.0	Beton

Einwirkungen

Ständig	ständige Einwirkung
NutzC1	Versammlungsraum Nutzlast, Kategorie C ±
NutzC2	Versammlungsraum Nutzlast, Kategorie C fw
EW_eigen	# Eigengewicht des Systems ständige Einwirkung

# Die Einwirkung wurde automatisch generiert.

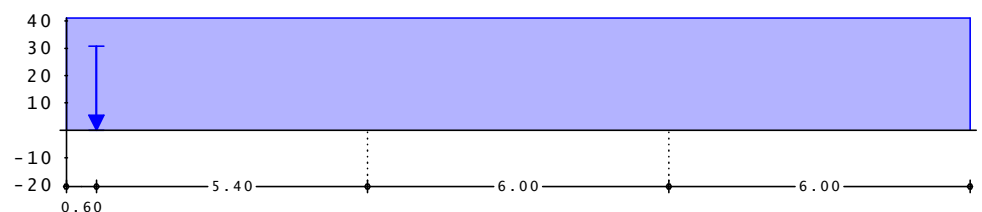
Erläuterungen

 feldweise (fw)  
 Die Lasten der Einwirkung werden als feldweise wirkend aufgeteilt.

Belastung

Einw. Ständig

M 1:150



Gleichlasten

Nr.	Feld	q [kN/m]
1	1-3	41.00

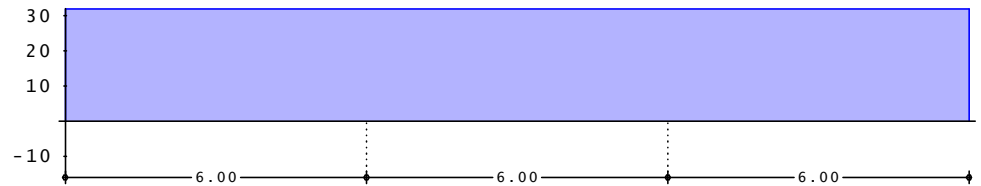
Einzellasten

Nr.	Feld	a [m]	F [kN]
1	1	0.60	91.00

Einw. NutzC1

Versammlungsraum

M 1:150



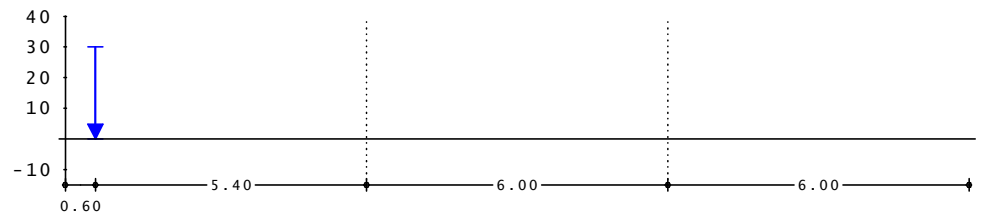
Gleichlasten

Nr.	Feld	q [kN/m]
1	1-3	32.00

Einw. NutzC2

Versammlungsraum

M 1:150



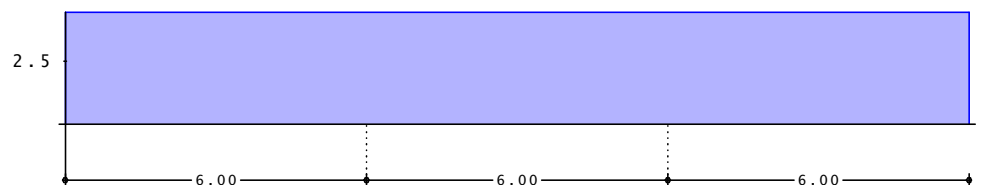
Einzellasten

Nr.	Feld	a [m]	F [kN]
1	1	0.60	30.00

Einw. EW\_eigen

Eigengewicht des Systems

M 1:150



Eigengewicht

Feld	g [kN/m]
1	4.425
2	4.425
3	4.425

Schnittgrößen

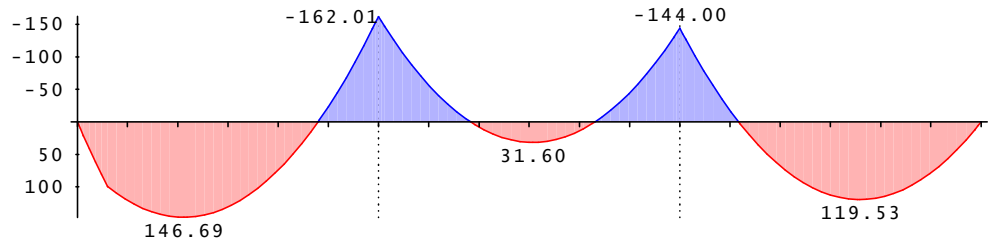
nach der linearen Elastizitätstheorie

Einw. Ständig

 charakteristisches Moment  $M_k$ 

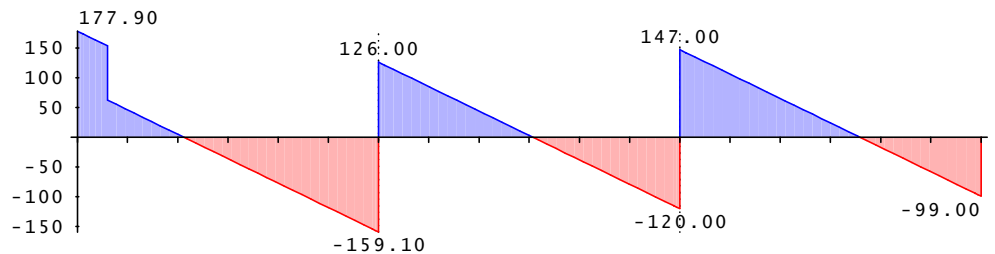
[kNm]

M 1:150


 charakteristische Querkraft  $V_k$ 

[kN]

M 1:150



Feld	x [m]	max $M_k$ [kNm]	min $M_k$ [kNm]	max $V_k$ [kN]	min $V_k$ [kN]	
1	0.00	0.00	0.00	177.90	177.90	
	0.12	a	21.05	21.05	172.98	172.98
	0.68	d	104.29	104.29	58.85	58.85
	2.12	*	146.69	146.69	0.00	0.00
	5.32	d	-62.88	-62.88	-131.06	-131.06
	5.88	a	-143.22	-143.22	-154.18	-154.18
	6.00		-162.01	-162.01	-159.10	-159.10
2	0.00	-162.01	-162.01	126.00	126.00	
	0.12	a	-147.19	-147.19	121.08	121.08
	0.68	d	-85.50	-85.50	97.96	97.96
	3.07	*	31.60	31.60	-0.00	-0.00
	5.32	d	-71.59	-71.59	-91.95	-91.95
	5.88	a	-129.89	-129.89	-115.08	-115.08
	6.00		-144.00	-144.00	-120.00	-120.00
3	0.00	-144.00	-144.00	147.00	147.00	
	0.12	a	-126.65	-126.65	142.08	142.08
	0.68	d	-53.12	-53.12	118.96	118.96
	3.59	*	119.53	119.53	-0.00	-0.00
	5.32	d	58.05	58.05	-70.96	-70.96
	5.88	a	11.58	11.58	-94.08	-94.08
	6.00		0.00	0.00	-99.00	-99.00

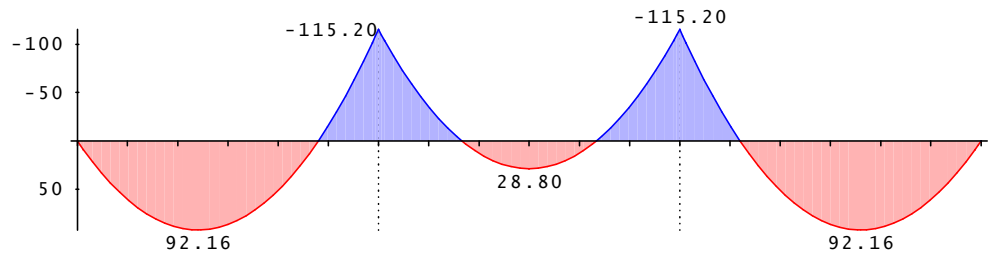
Einw. NutzC1

Versammlungsraum

M 1:150

 charakteristisches Moment  $M_k$ 

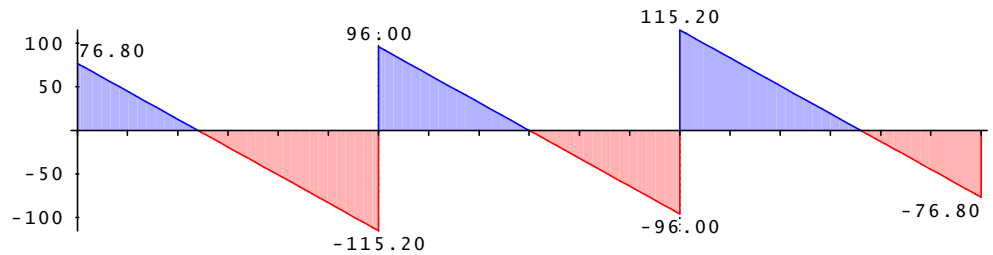
[kNm]



M 1:150

 charakteristische Querkraft  $V_k$ 

[kN]



Feld	x [m]	max $M_k$ [kNm]	min $M_k$ [kNm]	max $V_k$ [kN]	min $V_k$ [kN]	
1	0.00	0.00	0.00	76.80	76.80	
	0.12	a	8.99	8.99	72.96	72.96
	0.68	d	44.99	44.99	54.91	54.91
	2.40	*	92.16	92.16	-0.00	-0.00
	5.32	d	-43.95	-43.95	-93.31	-93.31
	5.88	a	-101.61	-101.61	-111.36	-111.36
	6.00		-115.20	-115.20	-115.20	-115.20
2	0.00	-115.20	-115.20	96.00	96.00	
	0.12	a	-103.91	-103.91	92.16	92.16
	0.68	d	-57.08	-57.08	74.11	74.11
	3.00	*	28.80	28.80	0.00	0.00
	5.32	d	-57.08	-57.08	-74.11	-74.11
	5.88	a	-103.91	-103.91	-92.16	-92.16
	6.00		-115.20	-115.20	-96.00	-96.00
3	0.00	-115.20	-115.20	115.20	115.20	
	0.12	a	-101.61	-101.61	111.36	111.36
	0.68	d	-43.95	-43.95	93.31	93.31
	3.60	*	92.16	92.16	0.00	0.00
	5.32	d	44.99	44.99	-54.91	-54.91
	5.88	a	8.99	8.99	-72.96	-72.96
	6.00		0.00	0.00	-76.80	-76.80

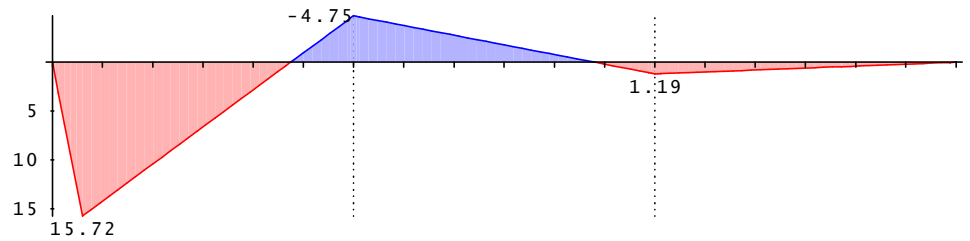
Einw. NutzC2

Versammlungsraum

M 1:150

 charakteristisches Moment  $M_k$ 

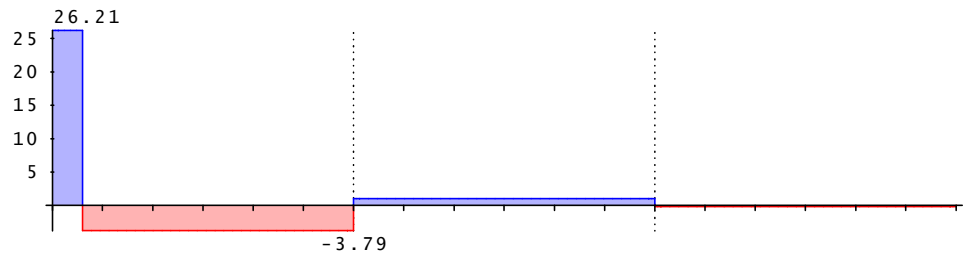
[kNm]



M 1:150

 charakteristische Querkraft  $V_k$ 

[kN]



Feld	x [m]		max $M_k$ [kNm]	min $M_k$ [kNm]	max $V_k$ [kN]	min $V_k$ [kN]
1	0.00		0.00	0.00	26.21	26.21
	0.12	a	3.14	3.14	26.21	26.21
	0.60	*	15.72	15.72	26.21	-3.79
	0.68	d	15.41	15.41	-3.79	-3.79
	5.32	d	-2.16	-2.16	-3.79	-3.79
	5.88	a	-4.30	-4.30	-3.79	-3.79
6.00			-4.75	-4.75	-3.79	-3.79
2	0.00		-4.75	-4.75	0.99	0.99
	0.12	a	-4.63	-4.63	0.99	0.99
	0.68	d	-4.07	-4.07	0.99	0.99
	5.32	d	0.51	0.51	0.99	0.99
	5.88	a	1.07	1.07	0.99	0.99
	6.00		1.19	1.19	0.99	0.99
3	0.00		1.19	1.19	-0.20	-0.20
	0.12	a	1.16	1.16	-0.20	-0.20
	0.68	d	1.05	1.05	-0.20	-0.20
	5.32	d	0.14	0.14	-0.20	-0.20
	5.88	a	0.02	0.02	-0.20	-0.20
	6.00		0.00	0.00	-0.20	-0.20

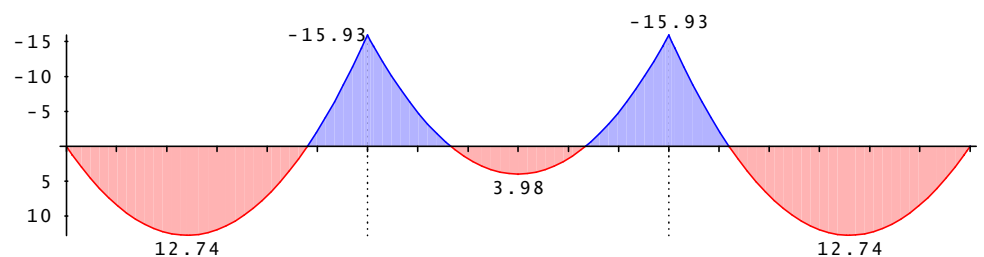
Einw. EW\_eigen

Eigengewicht des Systems

M 1:150

 charakteristisches Moment  $M_k$ 

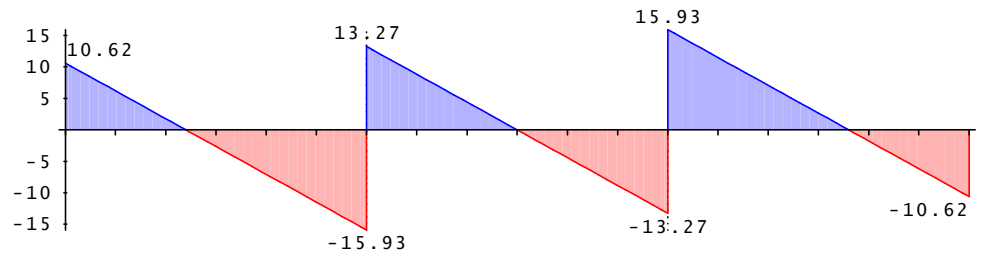
[kNm]



M 1:150

 charakteristische Querkraft  $V_k$ 

[kN]



Feld	x [m]		max Mk [kNm]	min Mk [kNm]	max V <sub>k</sub> [kN]	min V <sub>k</sub> [kN]
1	0.00		0.00	0.00	10.62	10.62
	0.12	a	1.24	1.24	10.09	10.09
	0.68	d	6.22	6.22	7.59	7.59
	2.40	*	12.74	12.74	0.00	0.00
	5.32	d	-6.08	-6.08	-12.90	-12.90
	5.88	a	-14.05	-14.05	-15.40	-15.40
	6.00		-15.93	-15.93	-15.93	-15.93
2	0.00		-15.93	-15.93	13.27	13.27
	0.12	a	-14.37	-14.37	12.74	12.74
	0.68	d	-7.89	-7.89	10.25	10.25
	3.00	*	3.98	3.98	0.00	0.00
	5.32	d	-7.89	-7.89	-10.25	-10.25
	5.88	a	-14.37	-14.37	-12.74	-12.74
	6.00		-15.93	-15.93	-13.27	-13.27
3	0.00		-15.93	-15.93	15.93	15.93
	0.12	a	-14.05	-14.05	15.40	15.40
	0.68	d	-6.08	-6.08	12.90	12.90
	3.60	*	12.74	12.74	0.00	0.00
	5.32	d	6.22	6.22	-7.59	-7.59
	5.88	a	1.24	1.24	-10.09	-10.09
	6.00		0.00	0.00	-10.62	-10.62

charakteristische Auflagerkräfte

Einwirkung	Aufl.	max [kN]	min [kN]
Ständig	A	177.90	177.90
	B	285.11	285.11
	C	267.00	267.00
	D	99.00	99.00
NutzC1	A	76.80	76.80
	B	211.20	211.20
	C	211.20	211.20
	D	76.80	76.80
NutzC2	A	26.21	0.00
	B	4.78	0.00
	C	0.00	-1.19
	D	0.20	0.00
EW_eigen	A	10.62	10.62
	B	29.20	29.20
	C	29.20	29.20
	D	10.62	10.62

**Kombinationen**

gemäß DIN 1045-1 und DIN 1055-100

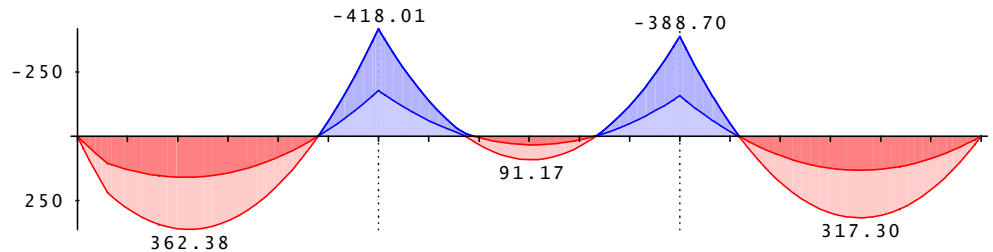
 Grundkombination  $E_d$   
 DIN 1055-100, (14)

$E_k$	$\Sigma (\gamma * \psi * E_W \text{ (Felder: 1, \dots, n)})$		
1	1.00*Ständig	+1.00*EW_eigen	
2	1.35*Ständig	+1.50*NutzC1	+1.05*NutzC2 (1)
	+1.35*EW_eigen		
3	1.35*Ständig	+1.50*NutzC1	+1.35*EW_eigen
4	1.00*Ständig	+1.50*NutzC2	+1.00*EW_eigen (1)
5	1.00*Ständig	+1.50*NutzC1	+1.35*EW_eigen
6	1.35*Ständig	+1.50*NutzC2	+1.00*EW_eigen (1)
7	1.35*Ständig	+1.05*NutzC1	+1.50*NutzC2 (1)
	+1.35*EW_eigen		

 Grundkombination  
 M 1:150

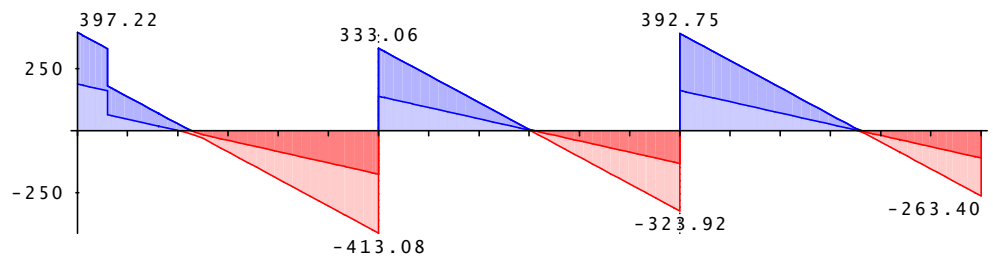
 Moment  $M_{Ed}$ 

[kNm]


 Grundkombination  
 M 1:150

 Querkraft  $V_{Ed}$ 

[kN]



Grundkombination

x [m]	max $M_{Ed}$ [kNm]	$E_k$	min $M_{Ed}$ [kNm]	$E_k$	max $V_{Ed}$ [kN]	$E_k$	min $V_{Ed}$ [kN]	$E_k$
Feld 1, L = 6.00 m								
0.00	0.00	1	0.00	1	397.22	2	188.52	1
0.12a	46.88	2	22.30	1	384.10	2	183.07	1
0.68d	233.16	2	110.68	1	172.07	3	60.76	4
2.22*	362.38	2	159.15	1	5.45	5	-10.55	6
4.79	1.18	3	0.00	4	-120.19	1	-281.10	2
4.80	0.00	5	-0.71	6	-120.41	1	-281.61	2
5.32d	-68.85	1	-161.04	2	-143.96	1	-338.30	2
5.88a	-157.27	1	-369.23	2	-169.58	1	-399.96	2
6.00	-177.94	1	-418.01	2	-175.03	1	-413.08	2
Feld 2, L = 6.00 m								
0.00	-177.94	1	-418.01	2	333.06	2	139.28	1
0.12a	-161.56	1	-378.83	2	319.95	2	133.83	1
0.68d	-93.30	1	-215.77	2	258.29	2	108.21	1
1.73	0.00	5	-11.19	6	143.64	2	60.57	1

x [m]	max MEd [kNm]	Ek	min MEd [kNm]	Ek	max VEd [kN]	Ek	min VEd [kN]	Ek
1.89	19.61	3	0.00	4	126.12	2	53.29	1
3.04*	91.17	3	32.94	4	3.64	7	-0.83	1
4.30	3.34	3	0.00	4	-54.78	4	-138.58	3
4.33	0.00	5	-1.71	6	-55.95	4	-141.40	3
5.32d	-78.63	4	-192.72	3	-100.72	4	-249.14	3
5.88a	-142.66	4	-350.62	3	-126.34	4	-310.80	3
6.00	-158.14	4	-388.70	3	-131.79	4	-323.92	3

Feld 3, L = 6.00 m

0.00	-158.14	4	-388.70	3	392.75	3	162.63	4
0.12a	-138.96	4	-342.36	3	379.64	3	157.18	4
0.68d	-57.53	4	-145.63	3	317.98	3	131.56	4
1.16	0.00	4	-6.53	3	265.89	3	109.92	4
1.19	3.51	6	0.00	5	262.95	3	108.70	4
3.59*	317.30	2	132.27	1	2.79	1	-3.01	2
5.32d	154.59	2	64.35	1	-78.55	1	-188.62	2
5.88a	30.82	2	12.83	1	-104.17	1	-250.28	2
6.00	0.00	1	0.00	1	-109.62	1	-263.40	2

Auflagerkräfte

Kombination	Aufl.	max [kN]	min [kN]
Grundkombination	A	397.22	188.52
	B	746.14	314.31
	C	716.67	294.42
	D	263.40	109.62

Bemessung

 gemäß DIN 1045-1 (07.01), 7.3.2(2), 8.2(5),  
 10.3.2(1), 10.3.2(2),  
 13.2.2(3)

Material

 Beton **C 20/25**

 Betonstahl u/o/b: **Bst 500SB/Bst 500SB/Bst 500SA**

 Elastizitätsmodul  $E_{cm} = 24900 \text{ N/mm}^2$ 

Betondeckung

 Expositionsklasse oben/unten/seitlich **XC1/XC1/XC1**

Feld	$c_{min,o}$ [mm]	$\Delta c_o$ [mm]	$d'o$ [cm]	$c_{min,u}$ [mm]	$\Delta c_u$ [mm]	$d'u$ [cm]	$c_{min,s}$ [mm]	$\Delta c_s$ [mm]
1	10	10	4.5	10	10	4.4	10	10
2	10	10	4.5	10	10	3.8	10	10
3	10	10	4.4	10	10	4.0	10	10

 Mindestmomente  
 DIN 1045-1, 8.2(5)

Kombinat.	Aufl.	min Ml [kNm]	max Ml [kNm]	min Mr [kNm]	max Mr [kNm]
Grundkomb.	B	-336.89	0.00	-196.47	0.00
	C	-196.47	0.00	-307.11	0.00

Momentenumlagerung:

 Stütze B : Verhältnis  $x_d/d \geq 0.45$ .  
 Stütze C : Verhältnis  $x_d/d \geq 0.45$ .

Biegebemessung

x [m]	MEd,o MED,u [kNm]	Ek	x/do x/du [-]	zo zu [cm]	Aso Asu [cm <sup>2</sup> ]	Aso,k Asu,k [cm <sup>2</sup> ]	erf.Aso [cm <sup>2</sup> ]	erf.Asu [cm <sup>2</sup> ]
Feld 1, l = 6.00 m								
0.00	0.00	1	-	-	-	3.83 <sub>e</sub>	3.83	
	0.00	1	0.001	54.6	0.00	11.50 <sub>q</sub>		11.50
0.12 <sub>a</sub>	22.30	1	-	-	-	3.83 <sub>e</sub>	3.83	
	46.88	2	0.072	53.1	1.93	11.50 <sub>q</sub>		11.50
2.22*	159.15	1	-	-	-	-	-	
	362.38	2	0.583	41.4	20.13	5.03 <sub>f</sub>		20.13
5.88 <sub>a</sub>	-369.23	2	0.603	40.8	20.81	1.56 <sub>M</sub>	20.81	
	-157.27	1	-	-	-	5.03 <sub>f</sub>		5.03
6.00	-374.03	2	0.615	40.5	21.22	1.56 <sub>M</sub>	21.22	
	-177.94	1	-	-	-	-		-

Feld 2, l = 6.00 m								
0.00	-374.03	2	0.615	40.5	21.22	1.56 <sub>M</sub>	21.22	
	-177.94	1	0.000	19.3	0.00	-		0.00
0.12 <sub>a</sub>	-378.83	2	0.617	40.5	21.47	1.56 <sub>M</sub>	21.47	
	-161.56	1	0.000	17.0	0.19	0.95 <sub>f</sub>		0.95
3.04*	32.94	4	-	-	-	-	-	
	91.17	3	0.116	52.6	3.80	1.54 <sub>M</sub>		3.80
5.88 <sub>a</sub>	-350.62	3	0.559	41.8	19.26	1.56 <sub>M</sub>	19.26	
	-142.66	4	-	-	-	0.95 <sub>f</sub>		0.95
6.00	-346.49	3	0.550	42.0	18.94	1.56 <sub>M</sub>	18.94	
	-158.14	4	-	-	-	-		-

Feld 3, l = 6.00 m								
0.00	-346.49	3	0.546	42.2	18.85	1.56 <sub>M</sub>	18.85	
	-158.14	4	-	-	-	-		-
0.12 <sub>a</sub>	-342.36	3	0.537	42.4	18.53	1.56 <sub>M</sub>	18.53	
	-138.96	4	-	-	-	4.12 <sub>f</sub>		4.12
3.59*	132.27	1	-	-	-	-	-	
	317.30	2	0.475	44.1	16.47	4.12 <sub>f</sub>		16.47
5.88 <sub>a</sub>	12.83	1	-	-	-	3.32 <sub>e</sub>	3.32	
	30.82	2	0.055	53.9	1.25	6.97 <sub>q</sub>		6.97
6.00	0.00	1	-	-	-	3.32 <sub>e</sub>	3.32	
	0.00	1	0.001	55.0	0.00	6.97 <sub>q</sub>		6.97

Querkräftbemessung	x [m]	VEd [kN]	Ek θ [°]	VRd,max [kN]	VEd,red [kN]	VRd,ct [kN]	erfasw [cm <sup>2</sup> /m]
Feld 1, l = 6.00 m							
	0.00	397.2	2 21	410.3	174.0		-
	0.12 <sub>a</sub>	384.1	2 21	410.3	174.0		3.12
	0.67 <sub>v</sub>	174.0	3 21	410.3	174.0	70.4	3.12
	1.28	106.9	3 18	371.9	106.9	74.8	10.65 <sub>U</sub>
	2.22	13.9	6 18	371.9	10.5	77.7	10.65 <sub>U</sub>
	5.34 <sub>v</sub>	340.4	2 31	546.0	340.4	51.8	9.71
	5.88 <sub>a</sub>	400.0	2 31	546.0	340.4		10.65 <sub>U</sub>
	6.00	413.1	2 31	546.0	340.4		-
Feld 2, l = 6.00 m							
	0.00	333.1	2 28	511.6	260.4		-
	0.12 <sub>a</sub>	319.9	2 28	511.6	260.4		10.65 <sub>U</sub>
	0.66 <sub>v</sub>	260.4	2 28	511.6	260.4	65.3	6.55
	3.04	7.6	7 18	376.4	3.6	52.1	2.10 <sub>M</sub>
	5.34 <sub>v</sub>	251.2	3 27	505.5	251.2	59.3	6.19
	5.88 <sub>a</sub>	310.8	3 27	505.5	251.2		10.65 <sub>U</sub>
	6.00	323.9	3 27	505.5	251.2		-
Feld 3, l = 6.00 m							

x [m]	VEd [kN]	Ek θ [°]	VRd,max [kN]	VEd,red [kN]	VRd,ct [kN]	erfasw [cm <sup>2</sup> /m]
0.00	392.8	3 30	540.7	319.9		-
0.12 <sub>a</sub>	379.6	3 30	540.7	319.9		10.64 <sub>u</sub>
0.67 <sub>v</sub>	319.9	3 30	540.7	319.9	51.9	8.87
3.59	9.7	4 18	374.9	3.0	75.1	10.65 <sub>u</sub>
5.33 <sub>v</sub>	190.1	2 22	441.3	190.1	59.6	3.69
5.88 <sub>a</sub>	250.3	2 22	441.3	190.1		3.69
6.00	263.4	2 22	441.3	190.1		-

### Bewehrungswahl

#### untere Längsbewehrung

Feld	Anz.	ds [mm]	As [cm <sup>2</sup> ]	a [m]	l [m]	l <sub>b,l</sub> [m]	l <sub>b,r</sub> [m]	La ge
1	2	∅ 20	6.28	-0.36	12.36	0.48 <sub>h</sub>	0.12	1
	3	∅ 20	9.42	-0.36	5.51	0.48 <sub>h</sub>	0.40	1
	1	∅ 20	3.14	-0.38	5.20	0.83 <sub>h</sub>	0.83	1
3	2	∅ 12	2.26	0.42	3.60	0.53	0.53	2
	2	∅ 20	6.28	0.00	6.37	0.12	0.49 <sub>h</sub>	1
	1	∅ 20	3.14	0.55	5.82	0.66	0.49 <sub>h</sub>	1
	2	∅ 20	6.28	0.84	5.51	0.60	0.60 <sub>h</sub>	1
	1	∅ 20	3.14	1.58	4.02	0.83	0.83	1

#### obere Längsbewehrung

Aufl.	Anz.	ds [mm]	As [cm <sup>2</sup> ]	a [m]	l [m]	l <sub>b,l</sub> [m]	l <sub>b,r</sub> [m]	La ge
A	2	∅ 16	4.02	-0.22	2.18	0.34 <sub>mh</sub>	0.34 <sub>m</sub>	1
B	2	∅ 20	6.28	-2.08	5.13	0.43 <sub>m</sub>	0.43 <sub>m</sub>	1
	2	∅ 20	6.28	-1.87	4.09	0.71 <sub>m</sub>	0.71 <sub>m</sub>	1
	2	∅ 20	6.28	-1.64	3.46	0.81 <sub>m</sub>	0.81 <sub>m</sub>	1
	2	∅ 14	3.08	-1.40	2.97	0.57 <sub>m</sub>	0.57 <sub>m</sub>	2
C	2	∅ 20	6.28	-2.86	4.93	0.43 <sub>m</sub>	0.43 <sub>m</sub>	1
	1	∅ 20	3.14	-2.36	4.43	0.95 <sub>m</sub>	0.94 <sub>m</sub>	1
	1	∅ 20	3.14	-2.20	4.20	1.06 <sub>m</sub>	1.06 <sub>m</sub>	1
	2	∅ 20	6.28	-1.77	3.39	0.84 <sub>m</sub>	0.84 <sub>m</sub>	1
D	2	∅ 12	2.26	-1.43	2.72	0.51 <sub>m</sub>	0.51 <sub>m</sub>	2
	3	∅ 12	3.39	-1.88	2.01	0.26 <sub>m</sub>	0.26 <sub>mh</sub>	1

(Längen inkl. Verankerungslängen, ohne Stöße)

**Längsbewehrung**  
**M 1:170**
**AS**
**[cm<sup>2</sup>]**
oben

Lage 2:

2ø14

2ø12

Lage 1:

2ø20

2ø20

2ø20

1ø20

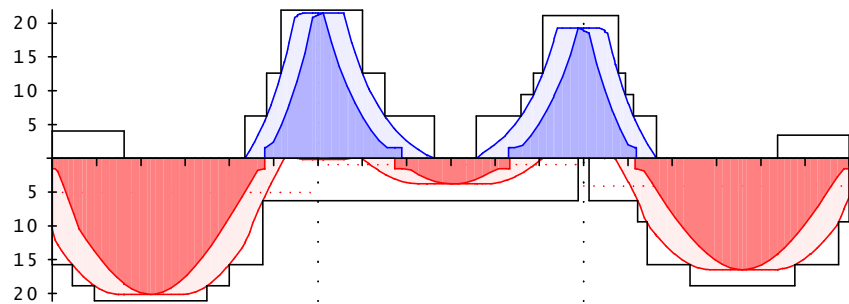
2ø20

1ø20

2ø16

2ø20

3ø12


unten

Lage 1:

2ø20

2ø20

3ø20

1ø20

1ø20

2ø20

Lage 2:

2ø12

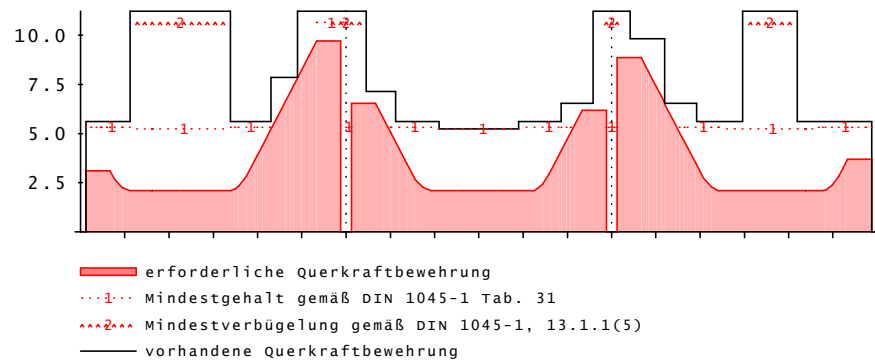
1ø20

▬ erf. Längsbewehrung / Zugkraftdeckungslinie  
▬ verl. Feldbewehrung gemäß DIN 1045-1, 13.2.2(6)  
▬ vorhandene Längsbewehrung

**Querkraftbewehrung**  
**(Bügel)**

Feld	xa [m]	xe [m]	ds [mm]	s [cm]	Schn. [-]	asw [cm <sup>2</sup> /m]
1	0.12	1.12	ø10	28.0	2	5.61
	1.12	3.39	ø10	14.0	2	11.22
	3.39	4.31	ø10	28.0	2	5.61
	4.31	4.91	ø10	20.0	2	7.85
	4.91	6.00	ø10	14.0	2	11.22
2	0.00	0.45	ø10	14.0	2	11.22
	0.45	1.11	ø10	22.0	2	7.14
	1.11	2.10	ø10	28.0	2	5.61
	2.10	3.90	ø10	30.0	2	5.24
	3.90	4.86	ø10	28.0	2	5.61
	4.86	5.58	ø10	24.0	2	6.54
	5.58	6.00	ø10	14.0	2	11.22
3	0.00	0.42	ø10	14.0	2	11.22
	0.42	1.20	ø10	16.0	2	9.82
	1.20	1.92	ø10	24.0	2	6.54
	1.92	2.96	ø10	28.0	2	5.61
	2.96	4.19	ø10	14.0	2	11.22
	4.19	5.88	ø10	28.0	2	5.61

**Querkraftbewehrung ASw**  
**M 1:170**

 [cm<sup>2</sup>/m]

**Tabellensymbole**

- \* - maximales Feldmoment
- a - Auflagerrand
- d - Abstand d vom Auflagerrand
- v - bemessungsrelevante Querkraft
- e - Endauflagereinspannung (DIN 1045-1, 13.2.1(1))
- f - verl. Feldbew. DIN 1045-1, 13.2.2(6), 13.3.2(1)
- h - gesonderte Verankerungsform erforderlich
- q - aus VEd im Endauflager (DIN 1045-1, 13.2.2(7))
- m - mäßige Verbundbedingungen
- M - Mindestbewehrung (DIN 1045-1, 13.1.1, 13.2.3)
- U - Bügelbewehrung infolge DIN 1045-1, 13.1.1(5)