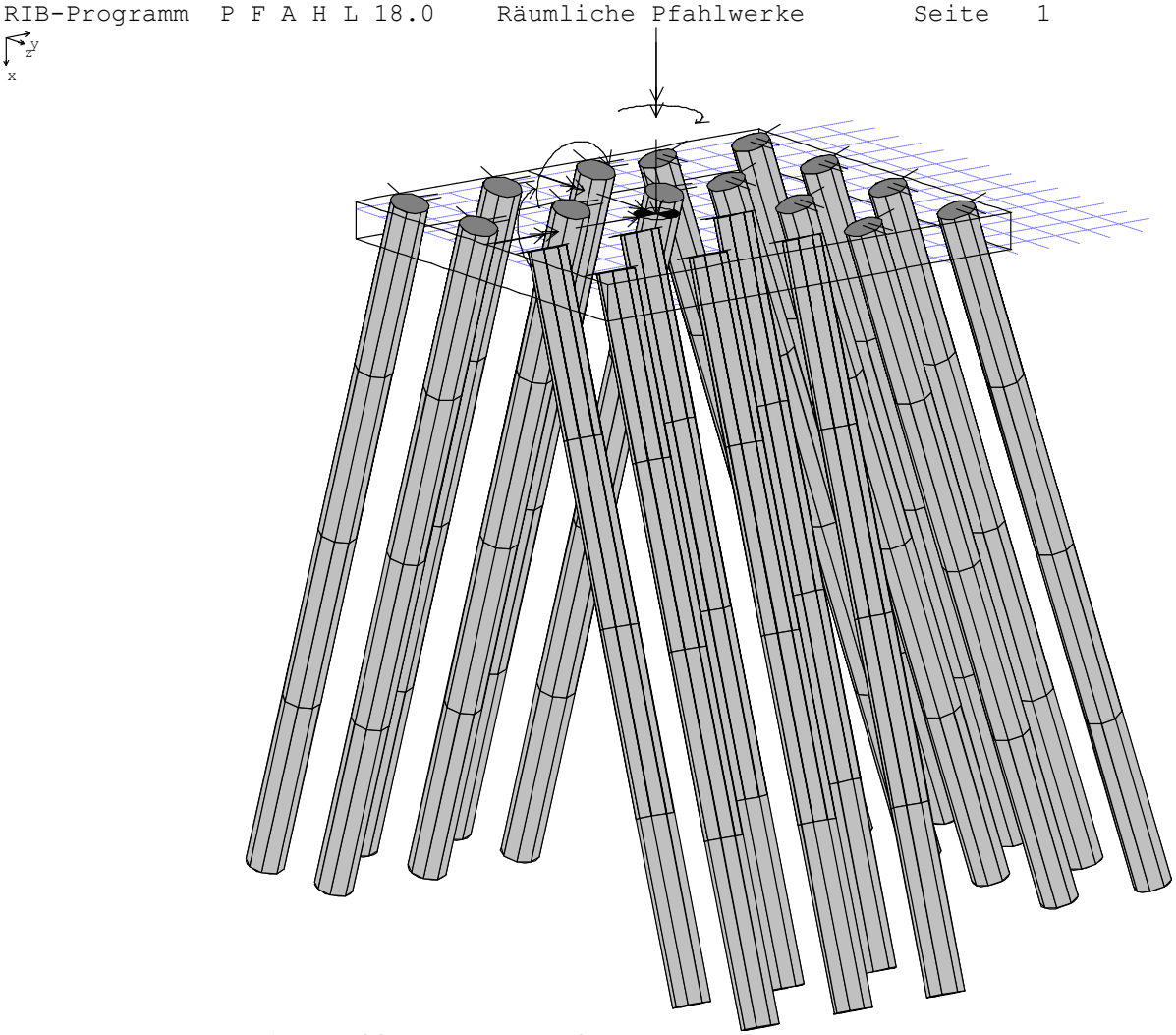

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Eingabedatei: __PFAHL_.PFA
Datum/Date: 26.10.2018

P R O T O K O L L der E I N G A B E
==========

Berechnung der charakteristischen Grössen
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1. System

Brauchbarkeitsuntersuchung wurde durchgeführt
****

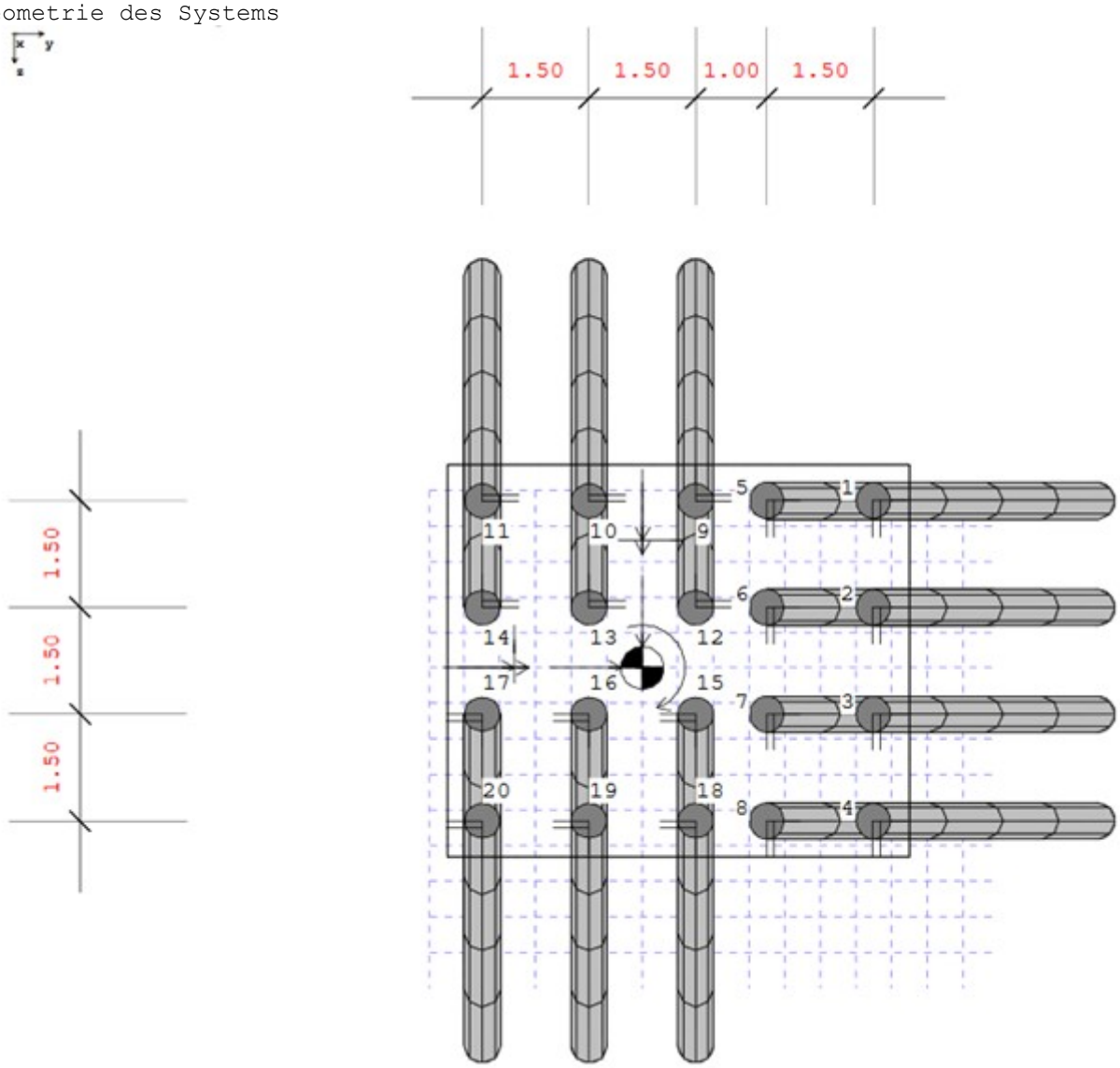
Dimensionen:

Länge,Abstand,Koordinaten	(m)
Winkel	(Altgrad)
Trägheitsmomente	(m**4)
Flächen	(m**2)
Bettungsgrösse quer zum Pfahl	(MN/m**2)
Bettungsgrösse am Fuss	(MN/m**3)
Kräfte	(kN)
Momente	(kN*m)
Verschiebungen	(m)
Verdrehungen	(-)
Bodenpressung	(MN/m)

Lagerungsart:

Art	Kopf	Fuss
0	I	-------I
1	0	-------I
2	0	-------0
3	I	-------0
4	I	-------
5	0	-------

Geometrie des Systems



Pfahl	l (m)	x (m)	y (m)	z (m)	Alpha (Grd)	Omega (Grd)
1	10.000	0.000	3.250	-2.350	18.430	0.000
2	10.000	0.000	3.250	-0.850	18.430	0.000
3	10.000	0.000	3.250	0.650	18.430	0.000
4	10.000	0.000	3.250	2.150	18.430	0.000
5	10.000	0.000	1.750	-2.350	18.430	0.000
6	10.000	0.000	1.750	-0.850	18.430	0.000
7	10.000	0.000	1.750	0.650	18.430	0.000
8	10.000	0.000	1.750	2.150	18.430	0.000
9	10.000	0.000	0.750	-2.350	18.430	270.000
10	10.000	0.000	-0.750	-2.350	18.430	270.000
11	10.000	0.000	-2.250	-2.350	18.430	270.000
12	10.000	0.000	0.750	-0.850	18.430	270.000
13	10.000	0.000	-0.750	-0.850	18.430	270.000
14	10.000	0.000	-2.250	-0.850	18.430	270.000
15	10.000	0.000	0.750	0.650	18.430	90.000

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Pfahl	l (m)	x (m)	y (m)	z (m)	Alpha (Grd)	Omega (Grd)
16	10.000	0.000	-0.750	0.650	18.430	90.000
17	10.000	0.000	-2.250	0.650	18.430	90.000
18	10.000	0.000	0.750	2.150	18.430	90.000
19	10.000	0.000	-0.750	2.150	18.430	90.000
20	10.000	0.000	-2.250	2.150	18.430	90.000

E = 26700.0 MN/m2, G = 11125.0 MN/m2

Querschnittswerte

Pfahl	I1 (m4)	I2 (m4)	IT (m4)	A (m2)
1- 20	0.00332	0.00332	0.00000	0.20200

System Beschreibung

Pfahl	Lagerung Art	Querbelastung y1	z1	Bettungsverlauf y1	z1	Fuss (MN/m3)
1- 20	3	0	0	1	1	starr

Bettungsverlauf

BettungNr.	Abschnitt	Ordinate (MN/m2)	Abstand (m)
1	1	5.0000	10.000

Lastfälle

LfNr	Rx(kN)	Ry(kN)	Rz(kN)	Mx(kNm)	My(kNm)	Mz(kNm)
1	10530.0	2200.0	-1690.0	-250.0	-3830.0	-5930.0
2	12160.0	2200.0	-1690.0	-250.0	-3830.0	-7150.0

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

E R G E B N I S S E
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Gesamtformänderung am Bezugspunkt

LfNr	vx(m)	vy(m)	vz(m)	dx(1)	dy(1)	dz(1)
1	0.00090	0.00193	-0.00198	-0.00015	0.00004	0.00010
2	0.00111	0.00141	-0.00201	-0.00013	0.00005	0.00007

Lastfall: 1

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
1	0.0	-57.0	37.5	-35.2	-22.1	67.0	43.5	-507.4	0.0
	0.1	-25.6	25.5	-16.5	-15.3	30.5	29.7		
	0.2	-5.4	15.2	-4.4	-9.3	7.0	17.8		
	0.3	5.7	7.5	2.5	-4.7	6.2	8.8		
	0.4	10.4	2.4	5.6	-1.7	11.8	2.9		
	0.5	11.1	-0.6	6.3	0.2	12.7	0.6		
	0.6	9.7	-2.0	5.6	1.1	11.2	2.3		
	0.7	7.3	-2.5	4.3	1.4	8.5	2.9		
	0.8	4.8	-2.5	2.8	1.5	5.6	2.9		
	0.9	2.3	-2.4	1.4	1.4	2.7	2.8		
	1.0	-0.0	-2.3	-0.0	1.4	0.0	2.7		
2	0.0	-57.0	37.5	-39.1	-24.8	69.1	45.0	-575.9	0.0
	0.1	-25.6	25.5	-18.2	-17.1	31.4	30.7		
	0.2	-5.4	15.2	-4.6	-10.3	7.1	18.4		
	0.3	5.7	7.5	3.0	-5.2	6.4	9.1		
	0.4	10.4	2.4	6.4	-1.8	12.2	3.0		
	0.5	11.1	-0.6	7.1	0.2	13.2	0.7		
	0.6	9.7	-2.0	6.3	1.2	11.5	2.4		
	0.7	7.3	-2.5	4.8	1.6	8.8	3.0		
	0.8	4.8	-2.5	3.2	1.7	5.7	3.0		
	0.9	2.3	-2.4	1.6	1.6	2.8	2.9		
	1.0	-0.0	-2.3	-0.0	1.5	0.0	2.8		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
3	0.0	-57.0	37.5	-43.1	-27.5	71.5	46.5	-644.3	0.0
	0.1	-25.6	25.5	-19.9	-18.9	32.4	31.7		
	0.2	-5.4	15.2	-4.9	-11.4	7.3	19.0		
	0.3	5.7	7.5	3.5	-5.7	6.7	9.4		
	0.4	10.4	2.4	7.2	-1.9	12.6	3.1		
	0.5	11.1	-0.6	7.9	0.3	13.6	0.7		
	0.6	9.7	-2.0	7.0	1.4	11.9	2.5		
	0.7	7.3	-2.5	5.4	1.8	9.1	3.1		
	0.8	4.8	-2.5	3.5	1.8	5.9	3.1		
	0.9	2.3	-2.4	1.7	1.8	2.9	3.0		
	1.0	-0.0	-2.3	0.0	1.7	0.0	2.9		
4	0.0	-57.0	37.5	-47.0	-30.2	73.9	48.2	-712.8	0.0
	0.1	-25.6	25.5	-21.6	-20.7	33.5	32.8		
	0.2	-5.4	15.2	-5.2	-12.5	7.5	19.6		
	0.3	5.7	7.5	4.0	-6.2	6.9	9.7		
	0.4	10.4	2.4	8.0	-2.1	13.1	3.1		
	0.5	11.1	-0.6	8.8	0.4	14.1	0.7		
	0.6	9.7	-2.0	7.7	1.6	12.4	2.6		
	0.7	7.3	-2.5	5.9	2.0	9.4	3.2		
	0.8	4.8	-2.5	3.9	2.0	6.2	3.2		
	0.9	2.3	-2.4	1.9	1.9	3.0	3.1		
	1.0	-0.0	-2.3	0.0	1.9	0.0	3.0		
5	0.0	-52.4	34.4	-34.1	-21.4	62.5	40.5	-587.3	0.0
	0.1	-23.6	23.4	-16.1	-14.8	28.6	27.7		
	0.2	-5.1	13.9	-4.3	-9.0	6.7	16.6		
	0.3	5.1	6.9	2.4	-4.6	5.6	8.3		
	0.4	9.4	2.2	5.4	-1.6	10.9	2.7		
	0.5	10.1	-0.5	6.1	0.1	11.8	0.6		
	0.6	8.8	-1.9	5.4	1.0	10.4	2.1		
	0.7	6.7	-2.3	4.2	1.4	7.9	2.7		
	0.8	4.4	-2.3	2.7	1.4	5.2	2.7		
	0.9	2.1	-2.2	1.3	1.4	2.5	2.6		
	1.0	-0.0	-2.1	-0.0	1.3	0.0	2.5		

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
6	0.0	-52.4	34.4	-38.1	-24.1	64.8	42.0	-655.8	0.0
	0.1	-23.6	23.4	-17.8	-16.6	29.6	28.7		
	0.2	-5.1	13.9	-4.6	-10.1	6.9	17.2		
	0.3	5.1	6.9	2.9	-5.1	5.8	8.6		
	0.4	9.4	2.2	6.2	-1.8	11.3	2.8		
	0.5	10.1	-0.5	6.9	0.2	12.2	0.6		
	0.6	8.8	-1.9	6.1	1.2	10.7	2.2		
	0.7	6.7	-2.3	4.7	1.6	8.2	2.8		
	0.8	4.4	-2.3	3.1	1.6	5.4	2.8		
	0.9	2.1	-2.2	1.5	1.5	2.6	2.7		
	1.0	-0.0	-2.1	-0.0	1.5	0.0	2.6		
7	0.0	-52.4	34.4	-42.0	-26.8	67.2	43.6	-724.2	0.0
	0.1	-23.6	23.4	-19.5	-18.4	30.6	29.8		
	0.2	-5.1	13.9	-4.8	-11.1	7.0	17.8		
	0.3	5.1	6.9	3.4	-5.6	6.1	8.9		
	0.4	9.4	2.2	7.0	-1.9	11.8	2.9		
	0.5	10.1	-0.5	7.7	0.3	12.7	0.6		
	0.6	8.8	-1.9	6.8	1.4	11.2	2.3		
	0.7	6.7	-2.3	5.2	1.8	8.5	2.9		
	0.8	4.4	-2.3	3.4	1.8	5.6	2.9		
	0.9	2.1	-2.2	1.7	1.7	2.7	2.8		
	1.0	-0.0	-2.1	0.0	1.7	0.0	2.7		
8	0.0	-52.4	34.4	-46.0	-29.5	69.7	45.3	-792.7	0.0
	0.1	-23.6	23.4	-21.1	-20.2	31.7	30.9		
	0.2	-5.1	13.9	-5.1	-12.2	7.2	18.5		
	0.3	5.1	6.9	3.9	-6.1	6.4	9.2		
	0.4	9.4	2.2	7.8	-2.0	12.3	3.0		
	0.5	10.1	-0.5	8.5	0.3	13.3	0.6		
	0.6	8.8	-1.9	7.5	1.5	11.6	2.4		
	0.7	6.7	-2.3	5.8	1.9	8.8	3.0		
	0.8	4.4	-2.3	3.8	2.0	5.8	3.0		
	0.9	2.1	-2.2	1.9	1.9	2.8	2.9		
	1.0	-0.0	-2.1	-0.0	1.8	0.0	2.8		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
9	0.0	36.8	-24.3	-39.6	-26.4	54.1	35.9	-725.9	0.0
	0.1	16.5	-16.5	-17.5	-17.9	24.1	24.3		
	0.2	3.5	-9.8	-3.4	-10.6	4.9	14.4		
	0.3	-3.7	-4.8	4.3	-5.1	5.6	7.1		
	0.4	-6.7	-1.5	7.5	-1.6	10.1	2.2		
	0.5	-7.2	0.4	7.9	0.5	10.7	0.6		
	0.6	-6.3	1.3	6.8	1.5	9.3	2.0		
	0.7	-4.7	1.6	5.2	1.8	7.0	2.4		
	0.8	-3.1	1.6	3.4	1.8	4.6	2.4		
	0.9	-1.5	1.5	1.6	1.7	2.2	2.3		
	1.0	-0.0	1.5	-0.0	1.6	0.0	2.2		
10	0.0	36.8	-24.3	-34.2	-22.7	50.3	33.3	-768.7	0.0
	0.1	16.5	-16.5	-15.2	-15.4	22.4	22.6		
	0.2	3.5	-9.8	-3.1	-9.1	4.6	13.4		
	0.3	-3.7	-4.8	3.6	-4.5	5.1	6.6		
	0.4	-6.7	-1.5	6.4	-1.4	9.3	2.0		
	0.5	-7.2	0.4	6.8	0.4	9.9	0.6		
	0.6	-6.3	1.3	5.9	1.3	8.6	1.8		
	0.7	-4.7	1.6	4.4	1.5	6.5	2.2		
	0.8	-3.1	1.6	2.9	1.5	4.2	2.2		
	0.9	-1.5	1.5	1.4	1.4	2.1	2.1		
	1.0	-0.0	1.5	0.0	1.4	0.0	2.0		
11	0.0	36.8	-24.3	-28.8	-19.0	46.8	30.8	-811.4	0.0
	0.1	16.5	-16.5	-12.9	-12.9	20.9	20.9		
	0.2	3.5	-9.8	-2.7	-7.7	4.4	12.5		
	0.3	-3.7	-4.8	2.9	-3.8	4.7	6.1		
	0.4	-6.7	-1.5	5.3	-1.2	8.6	1.9		
	0.5	-7.2	0.4	5.6	0.3	9.1	0.5		
	0.6	-6.3	1.3	4.9	1.0	7.9	1.7		
	0.7	-4.7	1.6	3.7	1.3	6.0	2.1		
	0.8	-3.1	1.6	2.4	1.3	3.9	2.1		
	0.9	-1.5	1.5	1.2	1.2	1.9	2.0		
	1.0	-0.0	1.5	0.0	1.2	0.0	1.9		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
12	0.0	41.4	-27.5	-39.2	-26.2	57.0	37.9	-757.2	0.0
	0.1	18.5	-18.6	-17.3	-17.7	25.3	25.7		
	0.2	3.8	-11.0	-3.4	-10.5	5.1	15.2		
	0.3	-4.3	-5.4	4.2	-5.1	6.0	7.4		
	0.4	-7.7	-1.7	7.4	-1.5	10.7	2.3		
	0.5	-8.2	0.5	7.8	0.5	11.3	0.7		
	0.6	-7.1	1.5	6.8	1.5	9.8	2.1		
	0.7	-5.4	1.9	5.1	1.8	7.4	2.6		
	0.8	-3.5	1.8	3.3	1.8	4.8	2.5		
	0.9	-1.7	1.7	1.6	1.7	2.4	2.4		
	1.0	0.0	1.7	-0.0	1.6	0.0	2.3		
13	0.0	41.4	-27.5	-33.8	-22.4	53.5	35.5	-800.0	0.0
	0.1	18.5	-18.6	-15.0	-15.2	23.8	24.0		
	0.2	3.8	-11.0	-3.0	-9.0	4.9	14.3		
	0.3	-4.3	-5.4	3.5	-4.4	5.5	7.0		
	0.4	-7.7	-1.7	6.3	-1.4	9.9	2.2		
	0.5	-8.2	0.5	6.7	0.4	10.5	0.6		
	0.6	-7.1	1.5	5.8	1.2	9.2	2.0		
	0.7	-5.4	1.9	4.4	1.5	6.9	2.4		
	0.8	-3.5	1.8	2.9	1.5	4.5	2.4		
	0.9	-1.7	1.7	1.4	1.4	2.2	2.2		
	1.0	0.0	1.7	0.0	1.4	0.0	2.2		
14	0.0	41.4	-27.5	-28.4	-18.7	50.2	33.2	-842.8	0.0
	0.1	18.5	-18.6	-12.7	-12.7	22.4	22.5		
	0.2	3.8	-11.0	-2.7	-7.6	4.6	13.4		
	0.3	-4.3	-5.4	2.8	-3.7	5.1	6.6		
	0.4	-7.7	-1.7	5.2	-1.2	9.3	2.0		
	0.5	-8.2	0.5	5.5	0.3	9.9	0.6		
	0.6	-7.1	1.5	4.8	1.0	8.6	1.8		
	0.7	-5.4	1.9	3.7	1.3	6.5	2.2		
	0.8	-3.5	1.8	2.4	1.3	4.2	2.2		
	0.9	-1.7	1.7	1.2	1.2	2.1	2.1		
	1.0	0.0	1.7	-0.0	1.2	0.0	2.0		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
15	0.0	-51.6	32.6	50.0	33.6	71.9	46.8	-74.6	0.0
	0.1	-24.2	22.5	22.0	22.7	32.6	31.9		
	0.2	-6.2	13.6	4.1	13.4	7.5	19.1		
	0.3	3.9	6.9	-5.6	6.5	6.8	9.5		
	0.4	8.4	2.4	-9.6	1.9	12.7	3.1		
	0.5	9.3	-0.3	-10.1	-0.7	13.7	0.7		
	0.6	8.3	-1.6	-8.7	-1.9	12.0	2.5		
	0.7	6.3	-2.1	-6.6	-2.3	9.1	3.1		
	0.8	4.2	-2.2	-4.3	-2.3	6.0	3.1		
	0.9	2.1	-2.1	-2.1	-2.1	2.9	3.0		
	1.0	0.0	-2.0	0.0	-2.1	0.0	2.9		
16	0.0	-51.6	32.6	46.7	31.4	69.6	45.2	-191.6	0.0
	0.1	-24.2	22.5	20.5	21.1	31.7	30.9		
	0.2	-6.2	13.6	3.9	12.5	7.4	18.5		
	0.3	3.9	6.9	-5.2	6.1	6.5	9.2		
	0.4	8.4	2.4	-8.9	1.8	12.2	3.0		
	0.5	9.3	-0.3	-9.4	-0.6	13.2	0.7		
	0.6	8.3	-1.6	-8.1	-1.8	11.6	2.4		
	0.7	6.3	-2.1	-6.1	-2.1	8.8	3.0		
	0.8	4.2	-2.2	-4.0	-2.1	5.8	3.0		
	0.9	2.1	-2.1	-1.9	-2.0	2.8	2.9		
	1.0	0.0	-2.0	0.0	-1.9	0.0	2.8		
17	0.0	-51.6	32.6	43.4	29.1	67.5	43.7	-308.6	0.0
	0.1	-24.2	22.5	19.1	19.6	30.8	29.8		
	0.2	-6.2	13.6	3.7	11.6	7.3	17.9		
	0.3	3.9	6.9	-4.8	5.6	6.1	8.9		
	0.4	8.4	2.4	-8.3	1.7	11.8	2.9		
	0.5	9.3	-0.3	-8.7	-0.6	12.7	0.6		
	0.6	8.3	-1.6	-7.5	-1.6	11.2	2.3		
	0.7	6.3	-2.1	-5.7	-2.0	8.5	2.9		
	0.8	4.2	-2.2	-3.7	-2.0	5.6	2.9		
	0.9	2.1	-2.1	-1.8	-1.8	2.7	2.8		
	1.0	0.0	-2.0	0.0	-1.8	0.0	2.7		

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
18	0.0	-56.2	35.7	50.4	33.9	75.5	49.3	-106.0	0.0
	0.1	-26.1	24.6	22.1	22.9	34.2	33.6		
	0.2	-6.6	14.9	4.1	13.5	7.8	20.1		
	0.3	4.4	7.5	-5.6	6.5	7.2	10.0		
	0.4	9.3	2.6	-9.7	1.9	13.4	3.2		
	0.5	10.3	-0.4	-10.2	-0.7	14.5	0.8		
	0.6	9.1	-1.8	-8.8	-1.9	12.6	2.6		
	0.7	7.0	-2.3	-6.6	-2.3	9.6	3.3		
	0.8	4.6	-2.4	-4.3	-2.3	6.3	3.3		
	0.9	2.2	-2.3	-2.1	-2.1	3.1	3.1		
	1.0	-0.0	-2.2	0.0	-2.1	0.0	3.0		
19	0.0	-56.2	35.7	47.1	31.6	73.4	47.7	-223.0	0.0
	0.1	-26.1	24.6	20.7	21.3	33.3	32.6		
	0.2	-6.6	14.9	3.9	12.6	7.6	19.5		
	0.3	4.4	7.5	-5.2	6.1	6.9	9.7		
	0.4	9.3	2.6	-9.0	1.8	13.0	3.2		
	0.5	10.3	-0.4	-9.5	-0.6	14.0	0.7		
	0.6	9.1	-1.8	-8.2	-1.8	12.2	2.5		
	0.7	7.0	-2.3	-6.2	-2.2	9.3	3.2		
	0.8	4.6	-2.4	-4.0	-2.1	6.1	3.2		
	0.9	2.2	-2.3	-2.0	-2.0	3.0	3.0		
	1.0	-0.0	-2.2	0.0	-1.9	0.0	3.0		
20	0.0	-56.2	35.7	43.8	29.4	71.3	46.2	-340.0	0.0
	0.1	-26.1	24.6	19.3	19.8	32.5	31.6		
	0.2	-6.6	14.9	3.7	11.7	7.5	18.9		
	0.3	4.4	7.5	-4.8	5.7	6.5	9.4		
	0.4	9.3	2.6	-8.3	1.7	12.5	3.1		
	0.5	10.3	-0.4	-8.8	-0.6	13.5	0.7		
	0.6	9.1	-1.8	-7.6	-1.7	11.8	2.4		
	0.7	7.0	-2.3	-5.7	-2.0	9.0	3.1		
	0.8	4.6	-2.4	-3.7	-2.0	5.9	3.1		
	0.9	2.2	-2.3	-1.8	-1.9	2.9	2.9		
	1.0	-0.0	-2.2	0.0	-1.8	0.0	2.9		

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Lastfall: 2

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
1	0.0	-57.1	37.5	-20.7	-12.9	60.8	39.7	-582.8	0.0
	0.1	-25.7	25.5	-9.8	-9.0	27.5	27.0		
	0.2	-5.6	15.2	-2.7	-5.5	6.2	16.2		
	0.3	5.6	7.5	1.4	-2.8	5.7	8.0		
	0.4	10.3	2.4	3.2	-1.0	10.8	2.6		
	0.5	11.1	-0.6	3.6	0.1	11.6	0.6		
	0.6	9.6	-2.0	3.3	0.6	10.2	2.1		
	0.7	7.3	-2.5	2.5	0.8	7.7	2.6		
	0.8	4.8	-2.5	1.7	0.9	5.1	2.7		
	0.9	2.3	-2.4	0.8	0.8	2.5	2.5		
	1.0	0.0	-2.3	0.0	0.8	0.0	2.5		
2	0.0	-57.1	37.5	-24.3	-15.3	62.1	40.5	-656.1	0.0
	0.1	-25.7	25.5	-11.3	-10.6	28.1	27.6		
	0.2	-5.6	15.2	-2.9	-6.4	6.3	16.5		
	0.3	5.6	7.5	1.8	-3.3	5.9	8.2		
	0.4	10.3	2.4	4.0	-1.1	11.0	2.6		
	0.5	11.1	-0.6	4.4	0.1	11.9	0.6		
	0.6	9.6	-2.0	3.9	0.8	10.4	2.2		
	0.7	7.3	-2.5	3.0	1.0	7.9	2.7		
	0.8	4.8	-2.5	2.0	1.0	5.2	2.7		
	0.9	2.3	-2.4	1.0	1.0	2.5	2.6		
	1.0	0.0	-2.3	-0.0	1.0	0.0	2.5		
3	0.0	-57.1	37.5	-27.8	-17.8	63.5	41.5	-729.4	0.0
	0.1	-25.7	25.5	-12.8	-12.2	28.7	28.3		
	0.2	-5.6	15.2	-3.1	-7.4	6.4	16.9		
	0.3	5.6	7.5	2.3	-3.7	6.0	8.4		
	0.4	10.3	2.4	4.7	-1.3	11.3	2.7		
	0.5	11.1	-0.6	5.1	0.2	12.2	0.6		
	0.6	9.6	-2.0	4.5	0.9	10.7	2.2		
	0.7	7.3	-2.5	3.5	1.2	8.1	2.8		
	0.8	4.8	-2.5	2.3	1.2	5.3	2.8		
	0.9	2.3	-2.4	1.1	1.1	2.6	2.6		
	1.0	0.0	-2.3	0.0	1.1	0.0	2.6		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
4	0.0	-57.1	37.5	-31.3	-20.2	65.2	42.6	-802.7	0.0
	0.1	-25.7	25.5	-14.4	-13.8	29.5	29.0		
	0.2	-5.6	15.2	-3.4	-8.3	6.5	17.3		
	0.3	5.6	7.5	2.7	-4.2	6.2	8.6		
	0.4	10.3	2.4	5.4	-1.4	11.6	2.8		
	0.5	11.1	-0.6	5.9	0.3	12.5	0.6		
	0.6	9.6	-2.0	5.2	1.1	10.9	2.3		
	0.7	7.3	-2.5	3.9	1.3	8.3	2.8		
	0.8	4.8	-2.5	2.6	1.4	5.4	2.9		
	0.9	2.3	-2.4	1.3	1.3	2.7	2.7		
	1.0	0.0	-2.3	0.0	1.3	0.0	2.6		
5	0.0	-52.9	34.6	-20.1	-12.4	56.6	36.7	-633.9	0.0
	0.1	-23.9	23.5	-9.5	-8.6	25.7	25.1		
	0.2	-5.3	14.1	-2.6	-5.3	5.9	15.0		
	0.3	5.0	7.0	1.3	-2.7	5.2	7.5		
	0.4	9.4	2.2	3.1	-1.0	9.9	2.4		
	0.5	10.2	-0.5	3.5	0.1	10.7	0.5		
	0.6	8.9	-1.9	3.1	0.6	9.4	1.9		
	0.7	6.7	-2.3	2.4	0.8	7.2	2.4		
	0.8	4.4	-2.3	1.6	0.8	4.7	2.5		
	0.9	2.2	-2.2	0.8	0.8	2.3	2.3		
	1.0	0.0	-2.1	-0.0	0.8	0.0	2.3		
6	0.0	-52.9	34.6	-23.6	-14.9	57.9	37.6	-707.1	0.0
	0.1	-23.9	23.5	-11.0	-10.3	26.3	25.7		
	0.2	-5.3	14.1	-2.9	-6.2	6.0	15.4		
	0.3	5.0	7.0	1.8	-3.2	5.3	7.6		
	0.4	9.4	2.2	3.8	-1.1	10.2	2.5		
	0.5	10.2	-0.5	4.2	0.1	11.0	0.5		
	0.6	8.9	-1.9	3.8	0.7	9.6	2.0		
	0.7	6.7	-2.3	2.9	1.0	7.3	2.5		
	0.8	4.4	-2.3	1.9	1.0	4.8	2.5		
	0.9	2.2	-2.2	0.9	1.0	2.4	2.4		
	1.0	0.0	-2.1	0.0	0.9	0.0	2.3		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
7	0.0	-52.9	34.6	-27.1	-17.3	59.4	38.7	-780.4	0.0
	0.1	-23.9	23.5	-12.6	-11.9	27.0	26.4		
	0.2	-5.3	14.1	-3.1	-7.2	6.1	15.8		
	0.3	5.0	7.0	2.2	-3.6	5.5	7.8		
	0.4	9.4	2.2	4.5	-1.2	10.5	2.6		
	0.5	10.2	-0.5	5.0	0.2	11.3	0.5		
	0.6	8.9	-1.9	4.4	0.9	9.9	2.1		
	0.7	6.7	-2.3	3.4	1.1	7.5	2.6		
	0.8	4.4	-2.3	2.2	1.2	4.9	2.6		
	0.9	2.2	-2.2	1.1	1.1	2.4	2.5		
	1.0	0.0	-2.1	0.0	1.1	0.0	2.4		
8	0.0	-52.9	34.6	-30.7	-19.8	61.1	39.8	-853.7	0.0
	0.1	-23.9	23.5	-14.1	-13.5	27.7	27.1		
	0.2	-5.3	14.1	-3.3	-8.1	6.2	16.2		
	0.3	5.0	7.0	2.7	-4.1	5.7	8.1		
	0.4	9.4	2.2	5.3	-1.4	10.8	2.6		
	0.5	10.2	-0.5	5.7	0.2	11.7	0.6		
	0.6	8.9	-1.9	5.0	1.0	10.2	2.1		
	0.7	6.7	-2.3	3.9	1.3	7.8	2.6		
	0.8	4.4	-2.3	2.5	1.3	5.1	2.7		
	0.9	2.2	-2.2	1.2	1.3	2.5	2.5		
	1.0	0.0	-2.1	0.0	1.2	0.0	2.5		
9	0.0	24.3	-16.3	-39.0	-25.8	46.0	30.6	-841.4	0.0
	0.1	10.7	-11.0	-17.4	-17.5	20.4	20.7		
	0.2	2.0	-6.5	-3.6	-10.4	4.1	12.3		
	0.3	-2.7	-3.1	4.0	-5.1	4.8	6.0		
	0.4	-4.7	-0.9	7.2	-1.6	8.6	1.8		
	0.5	-4.9	0.3	7.7	0.4	9.1	0.6		
	0.6	-4.2	0.9	6.7	1.4	7.9	1.7		
	0.7	-3.2	1.1	5.0	1.7	6.0	2.1		
	0.8	-2.1	1.1	3.3	1.7	3.9	2.1		
	0.9	-1.0	1.0	1.6	1.6	1.9	1.9		
	1.0	-0.0	1.0	-0.0	1.6	0.0	1.9		

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Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
10	0.0	24.3	-16.3	-34.3	-22.6	42.0	27.9	-858.0	0.0
	0.1	10.7	-11.0	-15.4	-15.3	18.7	18.9		
	0.2	2.0	-6.5	-3.3	-9.1	3.8	11.2		
	0.3	-2.7	-3.1	3.4	-4.5	4.4	5.5		
	0.4	-4.7	-0.9	6.2	-1.4	7.8	1.7		
	0.5	-4.9	0.3	6.7	0.4	8.3	0.5		
	0.6	-4.2	0.9	5.8	1.2	7.2	1.5		
	0.7	-3.2	1.1	4.4	1.5	5.4	1.9		
	0.8	-2.1	1.1	2.9	1.5	3.6	1.9		
	0.9	-1.0	1.0	1.4	1.4	1.7	1.8		
	1.0	-0.0	1.0	0.0	1.4	0.0	1.7		
11	0.0	24.3	-16.3	-29.6	-19.4	38.3	25.3	-874.6	0.0
	0.1	10.7	-11.0	-13.4	-13.2	17.1	17.2		
	0.2	2.0	-6.5	-3.0	-7.9	3.6	10.2		
	0.3	-2.7	-3.1	2.8	-3.9	3.9	5.0		
	0.4	-4.7	-0.9	5.3	-1.3	7.0	1.6		
	0.5	-4.9	0.3	5.7	0.3	7.5	0.4		
	0.6	-4.2	0.9	5.0	1.0	6.5	1.4		
	0.7	-3.2	1.1	3.8	1.3	4.9	1.7		
	0.8	-2.1	1.1	2.5	1.3	3.2	1.7		
	0.9	-1.0	1.0	1.2	1.2	1.6	1.6		
	1.0	-0.0	1.0	0.0	1.2	0.0	1.6		
12	0.0	28.5	-19.3	-38.5	-25.5	47.9	31.9	-880.2	0.0
	0.1	12.5	-13.0	-17.2	-17.3	21.2	21.6		
	0.2	2.3	-7.6	-3.5	-10.3	4.2	12.8		
	0.3	-3.2	-3.7	3.9	-5.0	5.1	6.2		
	0.4	-5.5	-1.1	7.1	-1.6	9.0	1.9		
	0.5	-5.8	0.4	7.6	0.4	9.5	0.6		
	0.6	-5.0	1.1	6.6	1.4	8.3	1.8		
	0.7	-3.8	1.3	5.0	1.7	6.2	2.2		
	0.8	-2.4	1.3	3.3	1.7	4.1	2.1		
	0.9	-1.2	1.2	1.6	1.6	2.0	2.0		
	1.0	0.0	1.2	-0.0	1.6	0.0	2.0		

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
13	0.0	28.5	-19.3	-33.8	-22.3	44.3	29.4	-896.8	0.0
	0.1	12.5	-13.0	-15.2	-15.1	19.7	19.9		
	0.2	2.3	-7.6	-3.2	-9.0	4.0	11.8		
	0.3	-3.2	-3.7	3.3	-4.4	4.7	5.8		
	0.4	-5.5	-1.1	6.1	-1.4	8.3	1.8		
	0.5	-5.8	0.4	6.6	0.4	8.8	0.5		
	0.6	-5.0	1.1	5.7	1.2	7.6	1.6		
	0.7	-3.8	1.3	4.3	1.5	5.7	2.0		
	0.8	-2.4	1.3	2.8	1.5	3.7	2.0		
	0.9	-1.2	1.2	1.4	1.4	1.8	1.9		
	1.0	0.0	1.2	-0.0	1.4	0.0	1.8		
14	0.0	28.5	-19.3	-29.1	-19.0	40.8	27.1	-913.4	0.0
	0.1	12.5	-13.0	-13.2	-12.9	18.1	18.3		
	0.2	2.3	-7.6	-2.9	-7.7	3.7	10.9		
	0.3	-3.2	-3.7	2.8	-3.8	4.3	5.3		
	0.4	-5.5	-1.1	5.2	-1.2	7.6	1.6		
	0.5	-5.8	0.4	5.6	0.3	8.0	0.5		
	0.6	-5.0	1.1	4.9	1.0	7.0	1.5		
	0.7	-3.8	1.3	3.7	1.3	5.3	1.8		
	0.8	-2.4	1.3	2.4	1.3	3.4	1.8		
	0.9	-1.2	1.2	1.2	1.2	1.7	1.7		
	1.0	0.0	1.2	-0.0	1.2	0.0	1.7		
15	0.0	-38.0	24.0	52.6	35.2	64.9	42.6	-200.0	0.0
	0.1	-17.8	16.6	23.2	23.8	29.2	29.0		
	0.2	-4.6	10.0	4.5	14.0	6.4	17.3		
	0.3	2.9	5.1	-5.7	6.8	6.4	8.5		
	0.4	6.2	1.8	-10.0	2.1	11.7	2.7		
	0.5	6.8	-0.2	-10.5	-0.7	12.6	0.7		
	0.6	6.1	-1.2	-9.1	-2.0	11.0	2.3		
	0.7	4.7	-1.6	-6.9	-2.4	8.3	2.9		
	0.8	3.1	-1.6	-4.5	-2.4	5.4	2.9		
	0.9	1.5	-1.5	-2.2	-2.2	2.7	2.7		
	1.0	0.0	-1.5	0.0	-2.2	0.0	2.6		

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
16	0.0	-38.0	24.0	49.2	32.9	62.2	40.7	-285.4	0.0
	0.1	-17.8	16.6	21.8	22.2	28.1	27.7		
	0.2	-4.6	10.0	4.3	13.1	6.3	16.5		
	0.3	2.9	5.1	-5.3	6.4	6.0	8.2		
	0.4	6.2	1.8	-9.3	1.9	11.2	2.6		
	0.5	6.8	-0.2	-9.8	-0.6	12.0	0.7		
	0.6	6.1	-1.2	-8.5	-1.8	10.5	2.2		
	0.7	4.7	-1.6	-6.4	-2.2	7.9	2.7		
	0.8	3.1	-1.6	-4.2	-2.2	5.2	2.7		
	0.9	1.5	-1.5	-2.0	-2.1	2.5	2.6		
	1.0	0.0	-1.5	-0.0	-2.0	0.0	2.5		
17	0.0	-38.0	24.0	45.9	30.6	59.6	38.8	-370.9	0.0
	0.1	-17.8	16.6	20.3	20.7	27.0	26.5		
	0.2	-4.6	10.0	4.0	12.2	6.1	15.8		
	0.3	2.9	5.1	-4.9	6.0	5.7	7.9		
	0.4	6.2	1.8	-8.6	1.8	10.6	2.5		
	0.5	6.8	-0.2	-9.1	-0.6	11.4	0.6		
	0.6	6.1	-1.2	-7.9	-1.7	10.0	2.1		
	0.7	4.7	-1.6	-6.0	-2.1	7.6	2.6		
	0.8	3.1	-1.6	-3.9	-2.1	5.0	2.6		
	0.9	1.5	-1.5	-1.9	-1.9	2.4	2.5		
	1.0	0.0	-1.5	0.0	-1.9	0.0	2.4		
18	0.0	-42.3	26.9	53.1	35.6	67.9	44.6	-238.8	0.0
	0.1	-19.6	18.5	23.4	24.0	30.5	30.3		
	0.2	-4.9	11.2	4.5	14.2	6.6	18.1		
	0.3	3.4	5.6	-5.8	6.9	6.7	8.9		
	0.4	7.0	1.9	-10.1	2.1	12.3	2.8		
	0.5	7.7	-0.3	-10.6	-0.7	13.2	0.7		
	0.6	6.9	-1.4	-9.2	-2.0	11.5	2.4		
	0.7	5.2	-1.8	-6.9	-2.4	8.7	3.0		
	0.8	3.5	-1.8	-4.5	-2.4	5.7	3.0		
	0.9	1.7	-1.7	-2.2	-2.2	2.8	2.8		
	1.0	0.0	-1.7	0.0	-2.2	0.0	2.8		

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Charakteristische Schnittkräfte

Pfa	x/l	M1 (kNm)	Q2 (kN)	M2 (kNm)	Q1 (kN)	Mres (kNm)	Qres (kN)	N (kN)	MT (kNm)
19	0.0	-42.3	26.9	49.7	33.2	65.3	42.8	-324.3	0.0
	0.1	-19.6	18.5	22.0	22.4	29.4	29.1		
	0.2	-4.9	11.2	4.3	13.3	6.5	17.4		
	0.3	3.4	5.6	-5.4	6.5	6.4	8.6		
	0.4	7.0	1.9	-9.4	2.0	11.7	2.7		
	0.5	7.7	-0.3	-9.9	-0.6	12.6	0.7		
	0.6	6.9	-1.4	-8.6	-1.9	11.0	2.3		
	0.7	5.2	-1.8	-6.5	-2.3	8.3	2.9		
	0.8	3.5	-1.8	-4.2	-2.2	5.5	2.9		
	0.9	1.7	-1.7	-2.1	-2.1	2.7	2.7		
	1.0	0.0	-1.7	0.0	-2.0	0.0	2.6		
20	0.0	-42.3	26.9	46.4	30.9	62.7	41.0	-409.8	0.0
	0.1	-19.6	18.5	20.5	20.9	28.4	27.9		
	0.2	-4.9	11.2	4.1	12.4	6.3	16.7		
	0.3	3.4	5.6	-4.9	6.0	6.0	8.3		
	0.4	7.0	1.9	-8.7	1.8	11.2	2.7		
	0.5	7.7	-0.3	-9.2	-0.6	12.0	0.6		
	0.6	6.9	-1.4	-8.0	-1.7	10.5	2.2		
	0.7	5.2	-1.8	-6.0	-2.1	8.0	2.7		
	0.8	3.5	-1.8	-3.9	-2.1	5.2	2.7		
	0.9	1.7	-1.7	-1.9	-2.0	2.6	2.6		
	1.0	0.0	-1.7	0.0	-1.9	0.0	2.5		

HANDBUCHBEISPIEL 1 MIT 20 PFAEHLEN EC2

Resultierende Bodenpressungen in 10-telspunkten je Pfahl(kN/m)

Lf	Pf	L*0/10	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	10/10
1	1	14.1	13.2	10.5	7.4	4.6	2.5	1.0	0.2	0.1	0.1	0.0
1	2	14.5	13.6	10.9	7.6	4.8	2.6	1.1	0.2	0.1	0.1	0.0
1	3	15.1	14.1	11.2	7.9	4.9	2.6	1.1	0.2	0.1	0.1	0.0
1	4	15.6	14.6	11.6	8.2	5.1	2.7	1.1	0.2	0.1	0.2	0.0
1	5	13.0	12.2	9.8	6.9	4.3	2.3	1.0	0.2	0.1	0.1	0.0
1	6	13.5	12.7	10.1	7.1	4.5	2.4	1.0	0.2	0.1	0.1	0.0
1	7	14.0	13.2	10.5	7.4	4.6	2.5	1.0	0.2	0.1	0.1	0.0
1	8	14.6	13.7	10.9	7.7	4.8	2.6	1.1	0.2	0.1	0.1	0.0
1	9	11.9	11.0	8.7	6.1	3.8	2.0	0.8	0.1	0.1	0.1	0.0
1	10	10.9	10.2	8.0	5.6	3.5	1.8	0.8	0.1	0.1	0.1	0.0
1	11	10.1	9.4	7.5	5.2	3.2	1.7	0.7	0.1	0.1	0.1	0.0
1	12	12.6	11.6	9.2	6.4	4.0	2.1	0.8	0.2	0.1	0.1	0.0
1	13	11.7	10.8	8.6	6.0	3.7	2.0	0.8	0.1	0.1	0.1	0.0
1	14	10.9	10.1	8.0	5.6	3.5	1.8	0.8	0.1	0.1	0.1	0.0
1	15	15.2	14.2	11.3	8.0	5.0	2.7	1.1	0.2	0.1	0.1	0.0
1	16	14.6	13.7	10.9	7.7	4.8	2.6	1.1	0.2	0.1	0.1	0.0
1	17	14.0	13.2	10.5	7.4	4.6	2.5	1.1	0.2	0.1	0.1	0.0
1	18	16.0	14.9	11.9	8.4	5.2	2.8	1.2	0.3	0.1	0.2	0.0
1	19	15.4	14.4	11.5	8.1	5.1	2.7	1.1	0.3	0.1	0.1	0.0
1	20	14.9	14.0	11.2	7.9	4.9	2.6	1.1	0.2	0.1	0.1	0.0
2	1	12.8	12.0	9.6	6.7	4.2	2.2	0.9	0.2	0.1	0.1	0.0
2	2	13.1	12.3	9.8	6.9	4.3	2.3	1.0	0.2	0.1	0.1	0.0
2	3	13.5	12.6	10.0	7.0	4.4	2.3	1.0	0.2	0.1	0.1	0.0
2	4	13.8	12.9	10.3	7.2	4.5	2.4	1.0	0.2	0.1	0.1	0.0
2	5	11.8	11.1	8.9	6.2	3.9	2.1	0.9	0.2	0.1	0.1	0.0
2	6	12.1	11.4	9.1	6.4	4.0	2.1	0.9	0.2	0.1	0.1	0.0
2	7	12.5	11.7	9.3	6.6	4.1	2.2	0.9	0.2	0.1	0.1	0.0
2	8	12.9	12.0	9.6	6.8	4.2	2.3	0.9	0.2	0.1	0.1	0.0
2	9	10.1	9.3	7.4	5.2	3.2	1.7	0.7	0.1	0.1	0.1	0.0
2	10	9.2	8.5	6.7	4.7	2.9	1.5	0.6	0.1	0.1	0.1	0.0
2	11	8.3	7.7	6.1	4.3	2.7	1.4	0.6	0.1	0.1	0.1	0.0
2	12	10.6	9.8	7.7	5.4	3.3	1.8	0.7	0.1	0.1	0.1	0.0
2	13	9.7	9.0	7.1	5.0	3.1	1.6	0.7	0.1	0.1	0.1	0.0
2	14	8.9	8.3	6.5	4.6	2.8	1.5	0.6	0.1	0.1	0.1	0.0
2	15	13.9	13.0	10.3	7.2	4.5	2.4	1.0	0.2	0.1	0.1	0.0
2	16	13.2	12.4	9.8	6.9	4.3	2.3	1.0	0.2	0.1	0.1	0.0
2	17	12.6	11.8	9.4	6.6	4.1	2.2	0.9	0.2	0.1	0.1	0.0
2	18	14.6	13.6	10.8	7.6	4.7	2.5	1.0	0.2	0.1	0.1	0.0
2	19	13.9	13.0	10.3	7.3	4.5	2.4	1.0	0.2	0.1	0.1	0.0
2	20	13.3	12.4	9.9	7.0	4.3	2.3	1.0	0.2	0.1	0.1	0.0

End of program Pfahl
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