

## ACB – Poutrelles alvéolaires à ouvertures sinusoidales «ANGELINA™»

Dimensions: Les dimensions des poutrelles cellulaires sont modulables.  
Exécution des soudures suivant dimensionnement.  
Etat de surface: conforme à EN 10163-3: 2004, classe C, sous-classe 1

## ACB – Castellated beams with sinusoidal openings "ANGELINA™"

Dimensions: The dimensions of the castellated beams are variable.  
Execution of the welds according to design.  
Surface condition: according to EN 10163-3: 2004, class C, subclass 1

## ACB – Lochstegträger mit sinusförmigen Öffnungen „ANGELINA™“

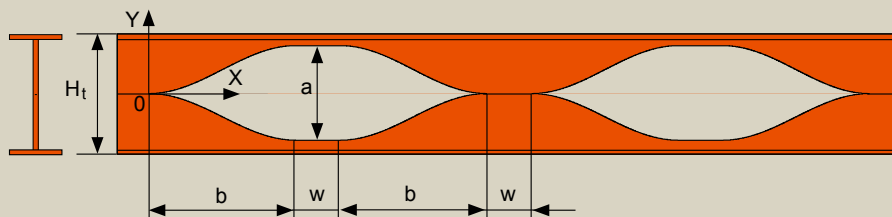
Abmessungen: Die Abmessungen der Lochstegträger sind variabel.  
Schweißnahtausführung nach Berechnung.  
Oberflächenbeschaffenheit: Gemäß EN 10163-3: 2004, Klasse C, Untergruppe 1

Profil de base Base profile Basisprofil	IPE					
	poutre de plancher / Floor beam / Deckenträger					
	$y = \left(0,5 \cdot \frac{a}{2}\right) \cdot \sin \left[\pi \cdot \left(\frac{x}{b} + \frac{3}{2}\right)\right] + \frac{a}{4}$					
G	H <sub>t</sub>	a	b	w	A <sub>L</sub>	
kg/m	mm	mm	mm	mm	m <sup>2</sup> /m	

IPE A 200	18,4	316,0	238,0	429,5	250	0,764
IPE 200	22,4	319,0	238,0	433,6	250	0,768
IPE O 200	25,1	321,0	238,0	436,3	250	0,779
IPE A 220	22,2	354,6	275,2	482,0	250	0,843
IPE 220	26,2	357,6	275,2	486,1	250	0,848
IPE O 220	29,4	359,6	275,2	488,8	250	0,858
IPE A 240	26,2	387,4	300,8	526,6	250	0,918
IPE 240	30,7	390,4	300,8	530,6	250	0,922
IPE O 240	34,3	392,4	300,8	533,4	250	0,932
IPE A 270	30,7	446,6	359,2	607,0	250	1,037
IPE 270	36,1	449,6	359,2	611,1	250	1,041
IPE O 270	42,3	453,6	359,2	616,5	250	1,051
IPE A 300	36,5	505,6	417,2	687,2	250	1,156
IPE 300	42,2	508,6	417,2	691,3	250	1,160
IPE O 300	49,3	512,6	417,2	696,7	250	1,174
IPE A 330	43,0	558,0	462,0	758,4	250	1,250
IPE 330	49,1	561,0	462,0	762,5	250	1,254
IPE O 330	57,0	565,0	462,0	768,0	250	1,268
IPE A 360	50,2	616,2	517,2	837,6	250	1,351
IPE 360	57,1	618,6	517,2	840,8	250	1,353
IPE O 360	66,0	622,6	517,2	846,3	250	1,367

Profil de base Base profile Basisprofil	IPE					
	poutre de plancher / Floor beam / Deckenträger					
	$y = \left(0,5 \cdot \frac{a}{2}\right) \cdot \sin \left[\pi \cdot \left(\frac{x}{b} + \frac{3}{2}\right)\right] + \frac{a}{4}$					
G	H <sub>t</sub>	a	b	w	A <sub>L</sub>	
kg/m	mm	mm	mm	mm	m <sup>2</sup> /m	

IPE A 400	57,4	688,0	582,0	935,1	250	1,464
IPE 400	66,3	691,0	582,0	939,2	250	1,467
IPE O 400	75,7	695,0	582,0	944,7	250	1,481
IPE A 450	67,2	785,8	677,6	1068,1	250	1,603
IPE 450	77,6	788,8	677,6	1072,2	250	1,605
IPE O 450	92,4	794,8	677,6	1080,3	250	1,622
IPE A 500	79,4	883,0	772,0	1200,2	250	1,741
IPE 500	90,7	886,0	772,0	1204,3	250	1,744
IPE O 500	107,0	892,0	772,0	1212,4	250	1,760
IPE A 550	92,1	974,6	855,2	1324,7	250	1,875
IPE 550	90,7	886,0	772,0	1204,3	250	1,744
IPE O 550	123,0	983,6	855,2	1336,9	250	1,893
IPE A 600	108,0	1071,0	948,0	1455,7	250	2,013
IPE 600	122,0	1074,0	948,0	1459,8	250	2,015
IPE O 600	154,0	1084,0	948,0	1473,4	250	2,045
IPE 750 x 147	147,0	1398,0	1290,0	1900,2	250	2,510
IPE 750 x 173	173,0	1406,8	1289,6	1912,2	250	2,534
IPE 750 x 196	196,0	1415,2	1290,4	1923,6	250	2,552



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Profil de base Base profile Basisprofil	HE					
	poutre de plancher / Floor beam / Deckenträger					
	$y = \left(0,5 \cdot \frac{a}{2}\right) \cdot \sin \left[\pi \cdot \left(\frac{x}{b} + \frac{3}{2}\right)\right] + \frac{a}{4}$					
G	H <sub>t</sub>	a	b	w	A <sub>L</sub>	
kg/m	mm	mm	mm	mm	m <sup>2</sup> /m	

HE 260 AA	54,1	381,0	274,0	517,9	250	1,474
HE 260 A	68,2	387,0	274,0	526,0	250	1,484
HE 260 B	93,0	397,0	274,0	539,6	250	1,499
HE 260 M	172,0	427,0	274,0	580,4	250	1,575
HE 280 AA	61,2	420,0	312,0	570,9	250	1,593
HE 280 A	76,4	426,0	312,0	579,0	250	1,603
HE 280 B	103,0	436,0	312,0	592,6	250	1,618
HE 280 M	189,0	466,0	312,0	633,4	250	1,694
HE 300 AA	69,8	451,0	336,0	613,0	250	1,705
HE 300 A	88,3	458,0	336,0	622,5	250	1,717
HE 300 B	117,0	468,0	336,0	636,1	250	1,732
HE 300 M	238,0	508,0	336,0	690,5	250	1,832
HE 320 AA	74,2	486,0	370,0	660,6	250	1,740
HE 320 A	97,6	495,0	370,0	672,8	250	1,756
HE 320 B	127,0	505,0	370,0	686,4	250	1,771
HE 320 M	245,0	544,0	370,0	739,4	250	1,866
HE 340 AA	78,9	523,0	406,0	710,9	250	1,777
HE 340 A	105,0	533,0	406,0	724,5	250	1,795
HE 340 B	134,0	543,0	406,0	738,1	250	1,810
HE 340 M	248,0	580,0	406,0	788,3	250	1,902
HE 360 AA	83,7	560,0	442,0	761,2	250	1,814
HE 360 A	112,0	571,0	442,0	776,1	250	1,834
HE 360 B	142,0	581,0	442,0	789,7	250	1,849
HE 360 M	250,0	616,0	442,0	837,3	250	1,934
HE 400 AA	92,4	636,0	516,0	864,5	250	1,891
HE 400 A	125,0	648,0	516,0	880,8	250	1,912
HE 400 B	155,0	658,0	516,0	894,4	250	1,927
HE 400 M	256,0	690,0	516,0	937,9	250	2,004
HE 450 AA	99,7	729,0	608,0	990,9	250	1,984
HE 450 A	140,0	744,0	608,0	1011,3	250	2,011
HE 450 B	171,0	754,0	608,0	1024,9	250	2,026
HE 450 M	263,0	782,0	608,0	1062,9	250	2,096

Profil de base Base profile Basisprofil	HE					
	poutre de plancher / Floor beam / Deckenträger					
	$y = \left(0,5 \cdot \frac{a}{2}\right) \cdot \sin \left[\pi \cdot \left(\frac{x}{b} + \frac{3}{2}\right)\right] + \frac{a}{4}$					
G	H <sub>t</sub>	a	b	w	A <sub>L</sub>	
kg/m	mm	mm	mm	mm	m <sup>2</sup> /m	

HE 500 AA	107,0	822,0	700,0	1117,3	250	2,077
HE 500 A	155,0	840,0	700,0	1141,7	250	2,110
HE 500 B	187,0	850,0	700,0	1155,3	250	2,125
HE 500 M	270,0	874,0	700,0	1188,0	250	2,184
HE 550 AA	120,0	920,0	796,0	1250,5	250	2,175
HE 550 A	166,0	938,0	796,0	1275,0	250	2,209
HE 550 B	199,0	948,0	796,0	1288,5	250	2,224
HE 550 M	278,0	970,0	796,0	1318,4	250	2,280
HE 600 AA	129,0	1017,0	892,0	1382,3	250	2,272
HE 600 A	178,0	1036,0	892,0	1408,2	250	2,308
HE 600 B	212,0	1046,0	892,0	1421,7	250	2,323
HE 600 M	285,0	1066,0	892,0	1448,9	250	2,372
HE 600 x 337	337,0	1078,0	892,0	1465,2	250	2,407
HE 600 x 399	399,0	1094,0	892,0	1487,0	250	2,450
HE 650 AA	138,0	1114,0	988,0	1514,2	250	2,369
HE 650 A	190,0	1134,0	988,0	1541,4	250	2,407
HE 650 B	225,0	1144,0	988,0	1555,0	250	2,422
HE 650 M	293,0	1162,0	988,0	1579,4	250	2,468
HE 650 x 343	343,0	1174,0	988,0	1595,7	250	2,500
HE 650 x 407	407,0	1190,0	988,0	1617,5	250	2,543
HE 700 AA	150,0	1212,0	1084,0	1647,4	250	2,468
HE 700 A	204,0	1232,0	1084,0	1674,6	250	2,505
HE 700 B	241,0	1242,0	1084,0	1688,2	250	2,520
HE 700 M	301,0	1258,0	1084,0	1709,9	250	2,560
HE 700 x 352	352,0	1270,0	1084,0	1726,2	250	2,592
HE 700 x 418	418,0	1286,0	1084,0	1748,0	250	2,635
HE 800 AA	172,0	1404,0	1268,0	1908,3	250	2,660
HE 800 A	224,0	1424,0	1268,0	1935,5	250	2,698
HE 800 B	262,0	1434,0	1268,0	1949,1	250	2,713
HE 800 M	317,0	1448,0	1268,0	1968,2	250	2,746
HE 800 x 373	373,0	1460,0	1268,0	1984,5	250	2,782
HE 800 x 444	444,0	1476,0	1268,0	2006,2	250	2,824

## ACB – Poutrelles alvéolaires à ouvertures sinusoidales «ANGELINA™» (suite)

Dimensions: Les dimensions des poutrelles cellulaires sont modulables.  
Exécution des soudures suivant dimensionnement.  
Etat de surface: conforme à EN 10163-3: 2004, classe C, sous-classe 1

## ACB – Castellated beams with sinusoidal openings "ANGELINA™" (continued)

Dimensions: The dimensions of the castellated beams are variable.  
Execution of the welds according to design.  
Surface condition: according to EN 10163-3: 2004, class C, subclass 1

## ACB – Lochstegträger mit sinusförmigen Öffnungen „ANGELINA™“ (Fortsetzung)

Abmessungen: Die Abmessungen der Lochstegträger sind variabel.  
Schweißnahtausführung nach Berechnung.  
Oberflächenbeschaffenheit: Gemäß EN 10163-3: 2004, Klasse C, Untergruppe 1

Profil de base Base profile Basisprofil	HE					
	poutre de plancher / Floor beam / Deckenträger					
	$y = \left( 0,5 \cdot \frac{a}{2} \right) \cdot \sin \left[ \pi \cdot \left( \frac{x}{b} + \frac{3}{2} \right) \right] + \frac{a}{4}$					
G	H <sub>t</sub>	a	b	w	A <sub>L</sub>	
kg/m	mm	mm	mm	mm	m <sup>2</sup> /m	

HE 900 AA	198,0	1600,0	1460,0	2174,8	250	2,858
HE 900 A	252,0	1620,0	1460,0	2201,9	250	2,896
HE 900 B	291,0	1630,0	1460,0	2215,5	250	2,911
HE 900 M	333,0	1640,0	1460,0	2229,1	250	2,934
HE 900 x 391	391,0	1652,0	1460,0	2245,4	250	2,970
HE 900 x 466	466,0	1668,0	1460,0	2267,2	250	3,012
HE 1000 AA	222,0	1798,0	1656,0	2443,9	250	3,056
HE 1000 A	272,0	1818,0	1656,0	2471,1	250	3,095
HE 1000 B	314,0	1828,0	1656,0	2484,7	250	3,110
HE 1000 M	349,0	1836,0	1656,0	2495,5	250	3,130
HE 1000 x 393	393,0	1844,2	1656,4	2506,7	250	3,140
HE 1000 x 409	393,0	1844,2	1656,4	2506,7	250	3,140
HE 1000 x 488	437,0	1854,0	1656,0	2520,0	250	3,170
HE 1000 x 579	494,0	1864,0	1656,0	2533,6	250	3,190

Profil de base Base profile Basisprofil	HL					
	poutre de plancher / Floor beam / Deckenträger					
	$y = \left( 0,5 \cdot \frac{a}{2} \right) \cdot \sin \left[ \pi \cdot \left( \frac{x}{b} + \frac{3}{2} \right) \right] + \frac{a}{4}$					
G	H <sub>t</sub>	a	b	w	A <sub>L</sub>	
kg/m	mm	mm	mm	mm	m <sup>2</sup> /m	

HL 920 x 345	345,0	1712,0	1570,0	2327,0	250	3,450
HL 920 x 368	368,0	1715,4	1568,8	2331,6	250	3,460
HL 920 x 390	390,0	1720,8	1569,6	2339,0	250	3,480
HL 920 x 420	420,0	1728,2	1570,4	2349,0	250	3,500
HL 920 x 449	449,0	1732,6	1569,2	2355,0	250	3,510
HL 920 x 491	491,0	1742,0	1570,0	2367,8	250	3,520
HL 920 x 537	537,0	1749,8	1569,6	2378,4	250	3,540
HL 920 x 588	588,0	1762,2	1572,4	2395,2	250	3,570
HL 920 x 656	656,0	1772,0	1570,0	2408,5	250	3,600
HL 920 x 725	725,0	1783,8	1569,6	2424,6	250	3,630
HL 920 x 787	787,0	1796,2	1570,4	2441,4	250	3,660
HL 920 x 970	970,0	1828,2	1570,4	2484,9	250	3,740
HL 1000 AA	296,0	1810,0	1656,0	2460,2	250	3,479
HL 1000 A	321,0	1818,0	1656,0	2471,1	250	3,495
HL 1000 B	371,0	1828,0	1656,0	2484,7	250	3,510
HL 1000 M	412,0	1836,0	1656,0	2495,5	250	3,530
HL 1000 x 443	443,0	1840,2	1656,4	2501,2	250	3,530
HL 1000 x 483	483,0	1848,0	1656,0	2511,8	250	3,550
HL 1000 x 539	539,0	1857,8	1655,6	2525,2	250	3,580
HL 1000 x 554	554,0	1860,0	1656,0	2528,2	250	3,590
HL 1000 x 591	591,0	1868,2	1656,4	2539,3	250	3,600
HL 1000 x 642	642,0	1876,0	1656,0	2549,9	250	3,620
HL 1000 x 748	748,0	1896,0	1656,0	2577,1	250	3,670
HL 1000 x 883	883,0	1920,0	1656,0	2609,7	250	3,740
HL 1100 A	343,0	2038,0	1896,0	2770,1	250	3,710
HL 1100 B	390,0	2048,0	1896,0	2783,7	250	3,726
HL 1100 M	433,0	2056,0	1896,0	2794,6	250	3,746
HL 1100 R	499,0	2066,0	1896,0	2808,2	250	3,770
HL 1100 R	499,0	2066,0	1896,0	2808,2	250	3,770