

Seamless hot rolled hollow bars

Heléns have a wide assortment of hollow bars for machining with excellent machineability. The hollow bars are manufactured in accordance with EN 10294, with guaranteed clean turned sizes.

HOLLOW BARS

Tubes are manufactured acc to EN 10294-1, in grade E470 or equivalent. Guaranteed clean turned size after machining with external chucking, applies to lengths up to 3 x OD but maximum 200 mm. Tubes are stamped with heat number and delivered in random lengths or fix cut lengths. Certificate in acc to EN 10204/3.1 can be supplied on request. Please note that delivery dimensions may vary slightly depending on the supplier, this is due to the manufacturing process.

PRODUCT INFORMATION

CLEAN TURNED SIZES			DELIVERED SIZE			
OD	ID	WALL	OD	ID	WALL	KG/M
30	15	7.5	31.8	12.2	9.8	5.32
30	20	5	31.8	17.6	7.1	4.33
35	20	7.5	36.5	17.1	9.7	6.41
35	25	5	36.5	22.5	7.0	5.09
40	20	10	41.3	17.3	12.0	8.67
40	25	7.5	41.3	22.1	9.6	7.51
40	30	5	41.3	27.5	6.9	5.85
45	25	10	46.3	21.9	12.2	10.26
45	30	7.5	46.3	27.1	9.6	8.69
45	35	5	46.3	32.5	6.9	6.70
50	25	12.5	51.3	22.8	14.2	13.00
50	30	10	51.3	26.7	12.3	11.83
50	35	7.5	51.3	32.1	9.6	9.87
50	40	5	51.3	37.5	6.9	7.51
55	30	12.5	57.1	26.1	15.5	15.90
55	35	10	57.1	31.7	12.7	13.91
55	40	7.5	57.1	37.1	10.0	11.62
55	45	5	57.1	42.5	7.3	8.95
60	35	12.5	61.3	31.1	15.1	17.20
60	40	10	61.3	36.7	12.3	14.86
60	45	7.5	61.3	42.1	9.6	12.24
65	35	15	66.5	30.9	17.8	21.38

CLEAN TURNED SIZES			DELIVERED SIZE			
OD	ID	WALL	OD	ID	WALL	KG/M
65	40	12.5	66.5	36.3	15.1	19.14
65	45	10	66.5	41.7	12.4	16.54
65	50	7.5	66.5	47.1	9.7	13.59
70	35	17.5	71.3	30.3	20.5	25.68
70	40	15	71.3	35.7	17.8	23.48
70	45	12.5	71.3	41.1	15.1	20.93
70	50	10	71.3	46.7	12.3	17.90
70	55	7.5	71.3	52.1	9.6	14.61
75	40	17.5	76.3	35.3	20.5	28.21
75	45	15	76.3	40.7	17.8	25.68
75	50	12.5	76.3	46.1	15.1	22.79
75	55	10	76.3	51.7	12.3	19.40
75	60	7.5	76.3	57.1	9.6	15.79
75	65	5	76.3	62.5	6.9	11.73
80	40	20	81.5	36.9	22.3	32.56
80	45	17.5	81.5	42.3	19.6	29.92
80	50	15	81.5	47.1	17.2	27.27
80	55	12.5	81.5	52.5	14.5	23.96
80	60	10	81.5	57.7	11.9	20.42
80	65	7.5	81.5	62.9	9.6	17.02
85	45	20	86.5	41.9	22.3	35.31
85	50	17.5	86.5	47.3	19.6	32.34

CLEAN TURNED SIZES			DELIVERED SIZE			
OD	ID	WALL	OD	ID	WALL	KG/M
85	55	15	86.5	52.1	17.2	29.39
85	60	12.5	86.5	57.5	14.5	25.75
85	70	7.5	86.5	67.7	9.4	17.79
90	50	20	91.5	46.9	22.3	38.05
90	55	17.5	91.5	51.9	19.8	35.01
90	60	15	91.5	57.1	17.2	31.51
90	65	12.5	91.5	62.5	14.5	27.53
90	70	10	91.5	67.7	11.9	23.36
90	75	7.5	91.5	72.7	9.4	19.03
95	50	22.5	96.5	46.7	24.9	43.97
95	55	20	96.5	51.9	22.3	40.80
95	60	17.5	96.5	57.3	19.6	37.17
95	65	15	96.5	62.1	17.2	33.64
95	70	12.5	96.5	67.5	14.5	29.32
95	75	10	96.5	72.7	11.9	24.83
95	80	7.5	96.5	77.7	9.4	20.10
100	50	25	101.6	46.4	27.6	50.37
100	55	22.5	101.6	51.8	24.9	47.10
100	60	20	101.6	57.0	22.3	43.61
100	65	17.5	101.6	62.2	19.7	39.79
100	70	15	101.6	67.2	17.2	35.79
100	75	12.5	101.6	72.6	14.5	31.14
100	80	10	101.6	77.8	11.9	26.32
100	85	7.5	101.6	82.8	9.4	21.32
105	55	25	106.6	51.4	27.6	53.77
105	60	22.5	106.6	56.8	24.9	50.17
105	65	20	106.6	62.0	22.3	46.36
105	70	17.5	106.6	67.2	19.7	42.22
105	75	15	106.6	72.2	17.2	37.91
105	80	12.5	106.6	77.6	14.5	32.93
105	85	10	106.6	82.8	11.9	27.75
110	60	25	111.6	56.4	27.6	57.17
110	65	22.5	111.6	61.8	24.9	53.31
110	70	20	111.6	67.0	22.3	49.11
110	75	17.5	111.6	72.2	19.7	44.62
110	80	15	111.6	77.2	17.2	40.04
110	90	10	111.6	87.8	11.9	29.26
110	95	7.5	111.6	92.8	9.4	23.70
115	65	25	116.6	61.4	27.6	60.58
115	70	22.5	116.6	66.8	24.9	56.38
115	75	20	116.6	72.0	22.3	51.86
115	80	17.5	116.6	76.8	19.9	47.45
115	85	15	116.6	82.2	17.2	42.16
115	90	12.5	116.6	87.4	14.6	36.72
120	70	25	121.7	66.5	27.6	64.05
120	75	22.5	121.7	71.7	25.0	59.62
120	80	20	121.7	77.1	22.3	54.66
120	90	15	121.7	87.1	17.3	44.54
125	70	27.5	126.7	66.3	30.2	71.87

CLEAN TURNED SIZES			DELIVERED SIZE			
OD	ID	WALL	OD	ID	WALL	KG/M
125	75	25	126.7	71.5	27.6	67.45
125	80	22.5	126.7	76.7	25.0	62.70
125	85	20	126.7	82.1	22.3	57.47
125	90	17.5	126.7	87.3	19.7	51.98
125	95	15	126.7	92.1	17.3	46.56
125	100	12.5	126.7	97.5	14.6	40.36
125	105	10	126.7	102.9	11.9	33.78
130	75	27.5	131.7	71.1	30.3	75.77
130	80	25	131.7	76.5	27.6	70.85
130	85	22.5	131.7	81.7	25.0	65.78
130	90	20	131.7	86.9	22.4	60.31
130	100	15	131.7	97.1	17.3	48.81
130	110	10	131.7	107.7	12.0	35.42
140	75	32.5	141.8	70.6	35.6	93.23
140	80	30	141.8	76.0	32.9	88.35
140	85	27.5	141.8	81.2	30.3	83.31
140	90	25	141.8	86.4	27.7	77.85
140	95	22.5	141.8	91.8	25.0	72.04
140	105	17.5	141.8	102.2	19.8	59.57
140	110	15	141.8	107.2	17.3	53.13
140	115	12.5	141.8	112.4	14.7	46.07
150	85	32.5	151.8	80.6	35.6	102.01
150	95	27.5	151.8	91.2	30.3	90.79
150	100	25	151.8	96.4	27.7	84.77
150	110	20	151.8	107.0	22.4	71.48
150	125	12.5	151.8	122.4	14.7	49.70
160	75	42.5	162.3	66.5	47.9	135.14
160	85	37.5	161.9	80.1	40.9	122.04
160	95	32.5	161.9	90.7	35.6	110.88
160	100	30	161.9	101.9	30.0	104.90
160	105	27.5	161.9	101.3	30.3	98.33
160	115	22.5	161.9	111.7	25.1	84.68
160	125	17.5	161.9	122.3	19.8	69.38
160	135	12.5	161.9	132.5	14.7	53.36
170	95	37.5	171.9	90.1	40.9	132.11
170	105	32.5	171.9	100.7	35.6	119.66
170	115	27.5	171.9	111.1	30.4	105.99
170	120	25	171.9	116.5	27.7	98.61
170	125	22.5	171.9	121.7	25.1	90.86
170	135	17.5	171.9	132.3	19.8	74.27
170	140	15	171.9	137.1	17.4	66.29
180	100	40	181.9	94.9	43.5	148.52
180	120	30	181.9	115.9	33.0	121.17
180	130	25	181.9	126.5	27.7	105.33
180	140	20	181.9	136.9	22.5	88.44
180	145	17.5	181.9	142.3	19.8	79.15
180	150	15	181.9	147.1	17.4	70.58
190	100	45	192.4	94.2	49.1	173.51
190	105	42.5	192.4	99.6	46.4	167.06

CLEAN TURNED SIZES			DELIVERED SIZE			
OD	ID	WALL	OD	ID	WALL	KG/M
190	115	37.5	192.4	110.0	41.2	153.62
190	120	35	192.4	115.4	38.5	146.11
190	125	32.5	192.4	120.6	35.9	138.59
190	135	27.5	192.4	131.2	30.6	122.09
190	150	20	192.4	146.8	22.8	95.36
190	160	15	192.4	157.0	17.7	76.25
190	165	12.5	192.4	162.4	15.0	65.62
200	100	50	202.5	90.3	56.1	202.53
200	120	40	202.5	114.9	43.8	171.41
200	125	37.5	202.5	120.1	41.2	163.88
200	140	30	202.5	135.9	33.3	139.00
200	145	27.5	202.5	141.1	30.7	130.01
200	150	25	202.5	146.3	28.1	120.85
200	160	20	202.5	156.9	22.8	101.00
200	165	17.5	202.5	162.1	20.2	90.81
210	130	40	214.1	134.1	40.0	197.19
210	135	37.5	214.1	123.3	45.4	188.79
210	140	35	214.1	144.1	35.0	180.16
210	150	30	214.1	140.1	37.0	161.59
210	160	25	214.1	151.1	31.5	141.84

CLEAN TURNED SIZES			DELIVERED SIZE			
OD	ID	WALL	OD	ID	WALL	KG/M
210	170	20	214.1	162.3	25.9	120.20
210	180	15	214.1	173.3	20.4	97.34
220	125	47.5	222.7	111.1	55.8	229.66
220	130	45	222.7	116.7	53.0	221.80
220	150	35	222.7	139.1	41.8	186.47
220	170	25	222.7	161.3	30.7	145.36
220	180	20	222.7	172.3	25.2	122.73
230	125	52.5	234.9	109.9	62.5	265.71
230	145	42.5	234.9	132.1	51.4	232.59
230	155	37.5	234.9	143.1	45.9	213.78
220	145	37.5	222.7	133.5	44.6	195.86
230	160	35	234.9	148.7	43.1	203.85
230	180	25	234.9	170.9	32.0	160.11
230	190	20	234.9	182.1	26.4	135.74
250	140	55	252.9	124.3	64.3	299.05
250	150	50	252.9	135.3	58.8	281.45
250	160	45	252.9	146.5	53.2	261.99
250	180	35	252.9	168.7	42.1	218.75
250	190	30	252.9	179.9	36.5	194.78
250	200	25	252.9	190.9	31.0	169.63

HOLLOW BARS IN GRADE E470

YIELD STRENGTH MPa (WALL IN MM)	
≤ 16	470
> 16 ≤ 25	460
> 25 ≤ 40	430
> 40 ≤ 50	430
> 50 ≤ 65	400

Extension A₅ % min. 17% longitudinally

TENSILE STRENGTH MPa (WALL IN MM)	
≤ 16	650
> 16 ≤ 25	620
> 25 ≤ 40	600
< 40 ≤ 50	550
> 50 ≤ 65	520

Extension A₅ % min. 17% longitudinally

CHEMICAL COMPOSITION

C%	Si%	Mn%	P%	S%	Al %	N%	V%
0.16-0.22	0.10-0.50	1.30-1.70	≤0.030	0.015-0.050	min 0.010	≤0.020	0.08-0.15

TOLERANCE OF DELIVERY SIZE SPECIFIED BY THE MANUFACTURER

OD	OD TOLERANCE
≤ 75 mm	± 0,5 mm
> 75 mm ≤ 180 mm	± 0,75%
> 180 mm	± 1%

OD	WALL	WALL TOLERANCE
≤ 180 mm	≤ 15 mm	± 12,5% eller ± 0,4 mm
	> 15 mm	± 10%
> 180 mm	≤ 30 mm	± 12,5%
	≤ 30 mm	± 10%