

Hollow sections

Our hollow sections can be supplied cold formed from stock. Hot formed hollow sections can be delivered directly from the manufacturer or from one of our partners in Europe.

COLD FORMED HOLLOW

Cold formed hollow sections made in accordance with EN 10219 in quality S355J2H. Hollow sections are delivered in fabrication lengths of 6, 7,5, 10 or 12 m.

PRODUCT INFORMATION

ARTICLE NO.	OD	OD	WALL	KG/M	LENGTH
10321	25.00	25.00	3.00	1.89	6000
10338	30.00	30.00	3.00	2.36	6000
10356	35.00	35.00	3.00	2.83	6000
10378	40.00	20.00	3.00	2.36	6000
10379	40.00	30.00	3.00	2.83	6000
10380	40.00	40.00	3.00	3.30	6000
10388	40.00	40.00	4.00	4.20	6000
10389	40.00	40.00	4.00*	4.20	6000
10444	50.00	25.00	3.00	3.10	6100
10445	50.00	30.00	3.00	3.30	6000
10460	50.00	30.00	4.00	4.20	6000
10446	50.00	50.00	3.00	4.25	6000
10461	50.00	50.00	4.00	5.45	6000
10462	50.00	50.00	4.00	5.45	7500
10463	50.00	50.00	4.00*	5.45	6000
10487	50.00	50.00	5.00	6.56	6000
10488	50.00	50.00	5.00	6.56	7500
10504	60.00	30.00	3.00	3.77	6000
10542	60.00	30.00	4.00	4.88	6000
10505	60.00	40.00	3.00	4.25	6000
10543	60.00	40.00	4.00	5.45	6000
10545	60.00	40.00	4.00*	5.45	6000
10559	60.00	40.00	5.00	6.56	6000
10506	60.00	60.00	3.00	5.19	6000

ARTICLE NO.	OD	OD	WALL	KG/M	LENGTH
10544	60.00	60.00	4.00	6.71	6000
10560	60.00	60.00	5.00	8.13	6000
10561	60.00	60.00	5.00	8.13	10000
10571	70.00	40.00	3.00	4.75	6000
10583	70.00	40.00	4.00	6.14	6000
10572	70.00	50.00	3.00	5.19	6000
10584	70.00	50.00	4.00	6.71	6000
10604	70.00	50.00	5.00	8.13	6000
10573	70.00	70.00	3.00	6.13	6000
10574	70.00	70.00	3.00	6.13	12000
10585	70.00	70.00	4.00	7.97	12000
10605	70.00	70.00	5.00	9.70	7500
10606	70.00	70.00	5.00	9.70	12000
10629	80.00	40.00	3.00	5.19	6000
10642	80.00	40.00	4.00	6.71	6000
10647	80.00	40.00	5.00	8.13	6000
10630	80.00	50.00	3.00	5.69	6000
10643	80.00	50.00	4.00	7.34	6000
10648	80.00	50.00	5.00	8.91	6000
10631	80.00	60.00	3.00	6.13	6000
10644	80.00	60.00	4.00	7.97	6000
10649	80.00	60.00	5.00	9.70	6000
10632	80.00	80.00	3.00	7.07	12000
10645	80.00	80.00	4.00	9.22	12000

*Pickled strip

ARTICLE NO.	OD	OD	WALL	KG/M	LENGTH
20738	80.00	80.00	5.00	11.30	6000
10650	80.00	80.00	5.00	11.30	12000
10662	80.00	80.00	6.30	13.50	12000
10672	90.00	50.00	3.00	6.13	12000
10697	90.00	50.00	4.00	7.97	6000
10698	90.00	50.00	4.00	7.97	12000
10707	90.00	50.00	5.00	9.70	7500
10673	90.00	90.00	3.00	8.01	7500
10699	90.00	90.00	4.00	10.50	12000
10708	90.00	90.00	5.00	12.80	12000
10711	90.00	90.00	6.30	15.50	6000
10712	90.00	90.00	6.30	15.50	12000
10726	100.00	40.00	3.00	6.13	6000
10750	100.00	40.00	4.00	7.97	6000
10780	100.00	40.00	5.00	9.70	6000
10727	100.00	50.00	3.00	6.60	6000
10728	100.00	50.00	3.00	6.60	12000
10751	100.00	50.00	4.00	8.59	12000
10781	100.00	50.00	5.00	10.50	7500
10782	100.00	50.00	5.00	10.50	12000
10802	100.00	50.00	6.30	12.50	12000
10729	100.00	60.00	3.00	7.07	6000
10730	100.00	60.00	3.00	7.07	12000
10752	100.00	60.00	4.00	9.22	12000
10783	100.00	60.00	5.00	11.30	12000
10803	100.00	60.00	6.30	13.50	12000
10731	100.00	80.00	3.00	8.01	12000
10753	100.00	80.00	4.00	10.50	10000
10784	100.00	80.00	5.00	12.80	10000
10785	100.00	80.00	5.00	12.80	12000
10804	100.00	80.00	6.30	15.50	12000
10732	100.00	100.00	3.00	8.96	10000
10733	100.00	100.00	3.00	8.96	10000
10754	100.00	100.00	4.00	11.70	10000
10755	100.00	100.00	4.00	11.70	12000
10786	100.00	100.00	5.00	14.40	10000
10787	100.00	100.00	5.00	14.40	12000
10805	100.00	100.00	6.30	17.50	6000
10806	100.00	100.00	6.30	17.50	10000
10807	100.00	100.00	6.30	17.50	12000
10809	100.00	100.00	8.00	21.40	10000
10810	100.00	100.00	8.00	21.40	12000
10811	100.00	100.00	10.00	25.56	12000
10820	110.00	110.00	4.00	13.00	12000
10821	110.00	110.00	5.00	16.00	12000
10823	110.00	110.00	6.30	19.40	12000
10827	120.00	40.00	3.00	7.07	6000
10849	120.00	40.00	4.00	9.22	6000
10828	120.00	60.00	3.00	8.01	6000

ARTICLE NO.	OD	OD	WALL	KG/M	LENGTH
10850	120.00	60.00	4.00	10.50	12000
10856	120.00	60.00	5.00	12.80	10000
10857	120.00	60.00	5.00	12.80	12000
10915	120.00	60.00	6.30	15.50	10000
10916	120.00	60.00	6.30	15.50	12000
10829	120.00	80.00	3.00	8.96	12000
10851	120.00	80.00	4.00	11.70	12000
10858	120.00	80.00	5.00	14.40	10000
10859	120.00	80.00	5.00	14.40	12000
10917	120.00	80.00	6.30	17.50	10000
10918	120.00	80.00	6.30	17.50	12000
10924	120.00	80.00	8.00	21.40	12000
10852	120.00	120.00	4.00	14.30	12000
10860	120.00	120.00	5.00	17.60	10000
10861	120.00	120.00	5.00	17.60	12000
10919	120.00	120.00	6.30	21.40	10000
10920	120.00	120.00	6.30	21.40	12000
10925	120.00	120.00	8.00	26.40	12000
10926	120.00	120.00	10.00	31.80	12000
10932	140.00	70.00	4.00	12.40	12000
10936	140.00	70.00	5.00	15.20	12000
10944	140.00	70.00	6.30	18.50	12000
10933	140.00	80.00	4.00	13.00	12000
10937	140.00	80.00	5.00	16.00	12000
10945	140.00	80.00	6.30	19.40	12000
10938	140.00	140.00	5.00	20.70	12000
10946	140.00	140.00	6.30	25.40	12000
10947	140.00	140.00	8.00	31.40	12000
10948	140.00	140.00	10.00	38.10	12000
10954	150.00	50.00	5.00	14.40	12000
10955	150.00	75.00	5.00	16.37	12000
10949	150.00	100.00	4.00	14.90	12000
10956	150.00	100.00	5.00	18.30	10000
10957	150.00	100.00	5.00	18.30	12000
10970	150.00	100.00	6.30	22.40	12000
10973	150.00	100.00	8.00	27.70	12000
10976	150.00	100.00	10.00	33.40	12000
10958	150.00	150.00	5.00	22.30	12000
10971	150.00	150.00	6.30	27.40	12000
10974	150.00	150.00	8.00	34.00	12000
10977	150.00	150.00	10.00	41.30	12000
10981	160.00	80.00	4.00	14.30	12000
10982	160.00	80.00	5.00	17.60	12000
10985	160.00	80.00	6.30	21.40	12000
10987	160.00	80.00	8.00	26.40	12000
10992	160.00	80.00	10.00	31.84	12000
10986	160.00	160.00	6.30	29.30	12000
10988	160.00	160.00	8.00	36.50	12000
10993	160.00	160.00	10.00	44.40	12000

ARTICLE NO.	OD	OD	WALL	KG/M	LENGTH
10998	180.00	80.00	6.00	22.63	12000
11002	180.00	100.00	6.30	25.40	12000
11007	180.00	100.00	8.00	31.40	12000
11009	180.00	100.00	10.00	38.10	12000
11003	180.00	180.00	6.30	33.30	12000
11008	180.00	180.00	8.00	41.50	12000
11010	180.00	180.00	10.00	50.70	12000
11024	200.00	100.00	5.00	22.30	12000
11028	200.00	100.00	6.30	27.40	12000
11032	200.00	100.00	8.00	34.00	12000
11038	200.00	100.00	10.00	41.30	12000
11029	200.00	120.00	6.30	29.30	12000
11033	200.00	120.00	8.00	36.50	12000
11039	200.00	120.00	10.00	44.40	12000
11030	200.00	200.00	6.30	37.30	12000
11034	200.00	200.00	8.00	46.50	12000
11040	200.00	200.00	10.00	57.00	12000
11041	200.00	200.00	12.50	68.30	12000
11048	220.00	120.00	6.30	31.30	12000

ARTICLE NO.	OD	OD	WALL	KG/M	LENGTH
11049	220.00	120.00	8.00	39.00	12000
11050	220.00	120.00	1.00	47.50	12000
11057	250.00	150.00	6.30	37.30	10000
11056	250.00	150.00	6.30	37.30	12000
11059	250.00	150.00	8.00	46.50	12000
11064	250.00	150.00	10.00	57.00	12000
11067	250.00	150.00	12.50	68.30	12000
11058	250.00	250.00	6.30	47.10	12000
11060	250.00	250.00	8.00	59.10	12000
11065	250.00	250.00	10.00	72.70	12000
11068	250.00	250.00	12.50	88.00	12000
11071	260.00	140.00	6.30	37.30	12000
11072	260.00	140.00	10.00	57.00	12000
11077	300.00	200.00	6.30	47.10	12000
11078	300.00	200.00	8.00	59.10	12000
11079	300.00	200.00	10.00	72.70	12000
11081	300.00	200.00	12.50	88.00	12000
11080	300.00	300.00	10.00	88.40	12000
11084	400.00	200.00	10.00	88.40	12000

CHEMICAL COMPOSITION

STEEL GRADE	C%	Si%*	Mn%	P%	S%	Al TOT%	CEV T _{≤16} **
S355J2H	0.22	0.55	1.60	0.035	0.035	0.02	0.45

* Normal delivery value is approx 0.15 – 0.25%

** Normal delivery value is approx 0.40

STRENGTH

STEEL GRADE S355J2H		
Yield point ReH min	T ≤ 16	355 N/mm ²
Tensile strength Rm min	T < 3	510–680 N/mm ²
	3 ≤ T ≤ 16	490–630 N/mm ²
Extension A5 min.		20%
Impact strength at -20°C		min 27 Joule*

* We can supply impact strength min. 34 Joule at -40 °C on special request.

TOLERANCES

CHARACTERISTICS	TOLERANCES
Outer dimension (w, h) w, h < 100 100 < w, h < 200 w, h > 200	±1% with at least ±0,5 mm ±0,8% ±0,6%
Thickness (t)**	t ≤ 5 mm: ±10% t > 5 mm: ±0,50 mm
Concavity/convexity t (t1, t2) Fig 2*	max. 0.8% of side with at least 0.5 mm
Side right-angularity (v) Fig 3	90° ±1°
Outer edge radius (R) Fig 5	See below
Twisting (w) Fig 4	2 mm + 0.5 mm/m length
Straightness (f) Fig 1	0,15% of whole length
Weight (g)	±6% on individual length
Length tolerance:	Fabrication length: -0/+50 mm Fixed length: After agreement when ordering

* Tolerance of convexity and concavity is dependant on the tolerance of the outer dimensions.

** On special request, we can deliver tolerance of -5% + 10% with min ±0.2 mm and max ±0.5 mm.

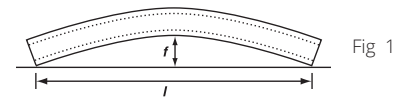


Fig 1

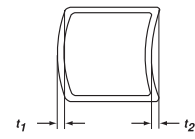


Fig 2

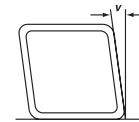


Fig 3

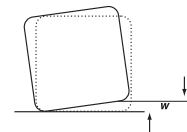


Fig 4

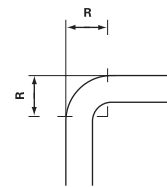


Fig 5

OUTER EDGE RADIUS

WALL THICKNESS	OUTER EDGE RADIUS
T ≤ 6	1,6T to 2,4T
6 < T ≤ 10	2,0T to 3,0T
10 < T	2,4T to 3,6T

HOT FORMED HOLLOW SECTIONS

Hot formed hollow sections made in accordance with EN 10210 in quality S355J2H. Delivery from mill.

CHEMICAL PROPERTIES

STEEL GRADE	C%	Si%*	Mn%	P%	S%	Al TOT%	CEV T≤16**
S355J2H	0.22	0.55	1.60	0.035	0.035	0.020	0.45

* Normal delivery value is approx 0.15 – 0.25%

** Normal delivery value is approx 0.40

STRENGTH

STEEL GRADE S355J2H		
Yield strength ReH min	T ≤ 16	355 N/mm ²
Tensile strength Rm min	T < 3	510–680 N/mm ²
	3 ≤ T ≤ 16	490–630 N/mm ²
Extension A5 min.		20%
Impact strength at -20°C		min 27 Joule*

* On special request, we can deliver impact strength min 34 joule at -40°C.

TOLERANCE

CHARACTERISTICS	TOLERANCE
Outer dimensions (w,h)	±1% with at least ±0,5 mm
Wall thickness (t)**	-10% (Seamless -12.5%)
Concavity/convexity (t ₁ , t ₂)* Fig 2	1%
Side right-angularity (v) Fig 3	90° ±1°
Outer edge radius (R) Fig 5	max 3 t
Twisting (w) Fig 4	2 mm + 0.5 mm/m length
Straightness (f) Fig 1	0.20% of whole length
Weight (g)	±6% on individual length (Seamless -6/+8%)
Length tolerance:	Fabrication length: -0/+300 mm Fixed length: After agreement when ordering

* Tolerance of convexity and concavity is dependant on the tolerance of the outer dimensions.

** The positive deviation is limited by the weight tolerance.

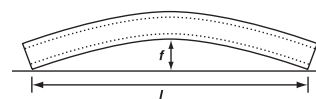


Fig 1

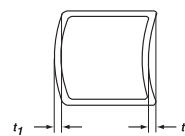


Fig 2

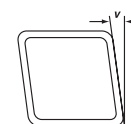


Fig 3

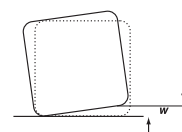


Fig 4

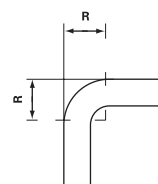


Fig 5