

*NB: The OD & ID sizes listed under the Euro Norm, are guaranteed dimensions after machining with external chucking on the material, with a minimum clean-up length of 200mm or 3 times the OD, whichever is shorter. All sizes listed are available in Carbon steel 20MnV6, except for the sizes listed “•”. These and other sizes and grades are available ex-Mill and/or ex-stock overseas. Some sizes are also available in 4140 hardened & tempered high tensile steel and 316L free machining stainless steel. Weights are approximate only.

EN HOLLOW BAR 20MNV6 - (PRODUCED TO “EURO NORM” EN10294-1 SPECIFICATION)

O.D. mm	I.D. mm	W.T. mm	Approx Weight Kg/m	O.D. mm	I.D. mm	W.T. mm	Approx Weight Kg/m	O.D. mm	I.D. mm	W.T. mm	Approx Weight Kg/m	O.D. mm	I.D. mm	W.T. mm	Approx Weight Kg/m			
30	20	5	4.3	90	60	15	31.5	120	65	27.5	68.7	155	-120	17.5	69.3			
	15	7.5	5.3		55	17.5	35		-60	30	72.4		-115	20	76.6			
												-110	22.5	83.7				
35	25	5	5.1					125	-110	7.5	29.3							
	20	7.5	6.4	45	22.5	40.9	-105		10	34.7	-100	27.5	96.6					
												-95	30	102.7				
40	30	5	5.9	95	-80	7.5	20.7					-90	32.5	108.3				
	25	7.5	7.5		75	10	25.3	-95	15	47.3	-85	35	113.6					
	20	10	8.8		70	12.5	29.3	-85	20	58.5	-80	37.5	118.6					
												-75	40	123.1				
45	35	5	6.7					80	22.5	63.7								
	30	7.5	8.7					75	25	68.4								
	-25	10	9.8					70	27.5	72.8								
												-70	42.5	129.3				
												-65	45	133.2				
												-60	32.5	80.6				
50	40	5	7.6					-55	35	84.1	160	-145	7.5	39.3				
	35	7.5	9.9									-140	10	46.8				
				100	85	7.5	21.8					135	12.5	55.2				
					80	10	27.1	130	-115	7.5	31	-130	15	63.7				
													125	17.5	71.6			
55								75	12.5	31.5								
								70	15	36	-105	12.5	43.5	-120	20	79.3		
								65	17.5	40.2	100	15	49.9	115	22.5	86.7		
								60	20	44	95	17.5	56	-110	25	93.6		
												105	27.5	100.5				
												-100	30	106.7				
60	-50	5	9.3					50	25	50.7								
	45	7.5	12.2					45	27.5	53.2	80	25	72.3	95	32.5	112.7		
	40	10	14.9									75	27.5	77	-90	35	118.4	
				105	-90	7.5	23.7					-70	30	81.4	85	37.5	123.6	
					85	10	28.2					65	32.5	85.5	-80	40	128.5	
					80	12.5	33.3					-60	35	89.2	-75	42.5	133.2	
												55	37.5	93.8	-70	45	137.4	
65	-55	5	10.3					75	15	38.2								
	50	7.5	13.7					70	17.5	42.7								
	45	10	16.7					65	20	46.8	140	-125	7.5	33.6	170	-155	7.5	42.5
	40	12.5	19.3					60	22.5	50.7		-120	10	39.9		-150	10	51.4

65	35	15	21.4	105	55	25	54.1	140	115	12.5	47.3	170	145	12.5	60.8
					50	27.5	58.1	cont.	110	15	54.4	cont.	140	15	68.5
70	-60	5	11						105	17.5	61.2		135	17.5	77.2
	55	7.5	14.6	110	-95	7.5	24.9		-100	20	67.5		-130	20	85.5
	50	10	17.9		90	10	29.7		-95	22.5	71.6		125	22.5	93.5
	45	12.5	20.9		85	12.5	35.1		90	25	79.3		120	25	101.2
	-40	15	23.5		80	15	40.3		85	27.5	84.8		115	27.5	108.4
						-75	17.5	45.2		80	30	89.6		110	30
75	-65	5	11.8		70	20	49.6		75	32.5	94.4		105	32.5	122.1
	60	7.5	15.8		-65	22.5	53.8		-70	35	98.7		-100	35	128.4
	55	10	19.4		-60	25	57.7		-65	37.5	104.3		-95	37.5	134.5
	50	12.5	22.8		-55	27.5	61.1						-90	40	140
	45	15	25.7					150	-135	7.5	37		-85	42.5	145.2
	-40	17.5	27.4	115	-100	7.5	26.2		-130	10	43.5		80	45	150.2
					-95	10	31.2		125	12.5	51.7				
80	-65	7.5	16.8		90	12.5	37		-120	15	59.3	175	-160	7.5	45.2
	60	10	20.8		85	15	42.5		115	17.5	66.36		-155	10	54.3
	55	12.5	24		80	17.5	47.6		110	20	76.7		-150	12.5	64.6
	50	15	27.3		75	20	52.5		-105	22.5	80.4		-145	15	72.3
	45	17.5	30.1		-70	22.5	56.9		100	25	86.8		-140	17.5	81.5
	40	20	32.6		65	25	61		95	27.5	92.9		-135	20	90.1
					-60	27.5	64.9		-90	30	98.5		-130	22.5	98.3
85	70	7.5	18.1		-55	30	68.3		-85	32.5	103.8		-125	25	106.4
	65	10	22.4						-80	35	108.9		-120	27.5	113.9
	60	12.5	25.8	120	105	7.5	27.5		-75	37.5	113.5		-115	30	121.1
	55	15	29.4		-100	10	32.7		-70	40	117.7		-110	32.5	128.2
	50	17.5	32.5		95	12.5	38.9		-65	42.5	121.8		-105	35	134.7
	45	20	35.3		90	15	44.7						-100	37.5	140.9
					-85	17.5	50.1	155	-140	7.5	38		-95	40	146.9
90	75	7.5	19		80	20	55.3		-135	10	45.2		-90	42.5	152.4
	70	10	23.6		75	22.5	60.1		-130	12.5	53.5		-85	45	157.6
	65	12.5	27.5		70	25	64.5		-125	15	61.6				

EN HOLLOW BAR 20MNV6 - (PRODUCED TO "EURO NORM" EN10294-1 SPECIFICATION)

O.D. mm	I.D. mm	W.T. mm	Approx Weight Kg/m	O.D. mm	I.D. mm	W.T. mm	Approx Weight Kg/m	
180	-165	7.5	45.1	200	125	37.5	167.5	
	-160	10	54.6		120	40	175.1	
	-155	12.5	64.5		115	42.5	182.1	
	150	15	72.9		-110	45	189.0	
	145	17.5	82.1		-105	47.5	195.4	
	140	20	91.1		-100	50	202.5	
	-135	22.5	99.8					
	130	25	108	210	-190	10	74.1	
	-125	27.5	116		-185	12.5	85.3	
	-120	30	123.7		-180	15	97.4	
	115	32.5	131		-175	17.5	109.2	
	-110	35	138		170	20	120.2	
	105	37.5	144.5		-165	22.5	131.2	
	-100	40	150.9		160	25	141.8	
	-95	42.5	156.7		155	27.5	152.1	
	90	45	162.2		150	30	161.6	
	85	47.5	165.4		-145	32.5	171.1	
					140	35	180.2	
185	-170	7.5	46.6		220	-135	37.5	188.9
	-165	10	56.5	130		40	197.2	
	-160	12.5	67	-125		42.5	204.8	
	-155	15	75.5					
	-150	17.5	85.2	180		20	122.7	
	-145	20	94.6	170		25	145.4	
	-140	22.5	103.4	-160	30	166.9		
	-135	25	112.1	155	32.5	177.0		
	-130	27.5	120.4	150	35	186.5		
	-125	30	128.2	-145	37.5	195.9		
	-120	32.5	135.9	-140	40	204.9		
	-115	35	143.2	135	42.5	213.5		
	-110	37.5	150	130	45	221.8		
	-105	40	156.6					
	-100	42.5	162.8	125	47.5	229.7		
	-95	45	168.6					

190	-175	7.5	48.3	230	190	20	135.7
	-170	10	57.9		180	25	160.1
	165	12.5	68.8		-170	30	182.5
	160	15	77.8		160	35	203.9
	-155	17.5	87.4		-155	37.5	213.9
	150	20	97.1		-150	40	223.6
	-145	22.5	106.6		145	42.5	232.6
	-140	25	115.5		-140	45	241.5
	135	27.5	123.9		-135	47.5	250.1
	-130	30	132.1		-130	50	258.2
	-125	32.5	140.2		125	52.5	265.7
	120	35	147.7				
200	-185	7.5	52.1	250	-240	5	57.9
	-180	10	64		-235	7.5	73.9
	-175	12.5	75		-230	10	89.5
	-170	15	84.2		-225	12.5	104.2
	165	17.5	95		-220	15	119.1
	-160	20	105.2		-215	17.5	133.6
	-155	22.5	115.2		-210	20	147.7
	150	25	124.8		-205	22.5	160.9
200	146	27.5	133.9	200	25	174.2	
	-140	30	142.7	-195	27.5	187.2	
	-135	32.5	151.5	190	30	199.8	
	-130	35	159.6	-180	35	218.9	
					170	40	241.0
					160	45	262.0
					-155	47.5	271.9
					150	50	281.4
					-145	52.6	290.3
					140	55	299.1

TYPICAL CHEMICAL COMPOSITION

C%	Si%	Mn%	V%	S%	P%
0.19	0.30	1.50	0.12	0.03	0.03

TYPICAL MECHANICAL PROPERTIES

Tensile Strength	Yield Strength	Elongation
635 MPa	420 MPa	18%