

# TUBES

## St52.3 Hydraulic Tube

Typical Analysis (Ave. values %)	C	Si	Mn	P	S
	≤0.2	≤0.55	≤1.6	≤0.035	≤0.035
NEAREST STANDARD	SAE	DIN	AFNOR	SIS	
	1518	1.0570	20 M5	2172	

DESCRIPTION	Low carbon steel grade, excellent weldable, the most widely used steel grade used for cylinder tubes. Normally supplied stressed relieved and annealed to either Din 2391-C for seamless tubes or Din 2393-C for welded tubes. Supplied either stressed relieved and annealed or normalised.
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MECHANICAL PROPERTIES	Ruling section	Yield Strength MPa	Tensile Strength MPa	Elong. %
	<16 mm wall	≥355	490-630	22
	16-40 mm wall	≥345	490-630	22

TUBE FINISH	Un-honed	As the name states the tube has been drawn but no surface finish process has taken place. The tube is usually 0.015" or .38mm under bore size and there is no measurable surface finish
	Skived & Roller Burnished	This tube has a different surface finishing process and is quicker and cheaper to manufacture than honing. Metal is cut away and then rolled smooth. This process gives a clean finish with a surface finish of 0.8 <i>umRa</i> .
	S.S.I.D	<b>Super Smooth Inside Diameter</b> this process is more like un-honed except the tube passes through a further rolling process. This creates a more concentric cylinder bore to the outside diameter. Surface finish is .8 <i>umRa</i> .

Unhoned					
SIZE RANGE	76.2x63.5	88.9x76.2	101.6x88.9	146.1x127	152.4x127
	177.8x152.4	203.2x177.8			

Sizes normally stocked in Australia. Some branches may not hold the entire range.  
Other sizes available on request.

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Skived and Roller Burnished					
<b>SIZE RANGE</b>	47.6x38.1	82x70	101.6x88.9	139.7x127	170x140
	50.8x38.1	82.6x63.5	108x88.9	146.1x127	171.5x152.4
	57.2x44.5	82.6x69.9	114.3x101.6	150x125	182.4x165.1
	60x50	88.9x76.2	120x100	152.4x127	190x160
	60.3x50.8	95x80	120.7x101.6	125.4x139.7	203.2x177.8
	63.5x50.8	95.2x76.2	127x101.6	165.1x152.4	228.6x203.2
	69.9x57.2	95.3x82.6	127x114.3	168.2x152.4	254x228.6
	76.2x63.5				

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S.S.I.D					
<b>SIZE RANGE</b>	47.6x38.1	50.8x38.1	63.5x50.8	73x63.5	

Sizes normally stocked in Australia. Some branches may not hold the entire range.  
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Every care has been taken in listing this information, particularly specifications. Bohler Uddeholm Australia Pty Ltd will not accept responsibility for any loss or other damage caused to any person or Company as a result of the use of information contained herein

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