Circular Hollow Sections

Revision: 20/08/2015

Data Sheet

GENERAL DESCRIPTION

New Zealand Steel manufactures a range of general purpose, reticulation and structural, cold formed electric resistance welded circular hollow sections. These products are manufactured to meet international specifications and are supplied in a range of sizes, and surface and end finishes. Pipes are suitable for welding, screwing and bending.

APPLICATIONS

Reticulation, agricultural, architectural, general engineering, mechanical handling and structural uses such as:

- Building services pipe work
- Cowsheds and yards
- Fencing
- Scaffolding
- Agricultural implements
- Frames and stock crates
- Sign gantries
- Service bridges
- Railings
- Columns
- Trusses

STANDARDS

- AS 1074:1989
- AS/NZS 1163:2009 Grade C250 / C350
- AS/NZS 4792:2006 Galvanising

PACKING

Despatched material will be packed appropriately providing protection against weather and transit damage.

Mechanical Properties			
	AS1074	AS/NZS1163 C250	AS/NZS1163 C350
Min Yield Strength (MPa)	195	250	350
Min Tensile Strength (MPa)	320	320	430
Min Elongation (%)	20	18 – 22	16 – 20

Available Dimensions		
Thickness	2.0mm – 5.4mm	
Nominal Diameter (bore)	15mm – 100mm	
Outside Diameter	21.3mm – 114.3mm	

Surface Finish	
Black (Mill Finish)	
Galvanised HDG 300	
Red Primed	

Available Lengths			
Coating	ND Range	Length Range	Standard Length
Black	15mm – 50mm	4.1m – 8.0m	6.5m
DIACK	65mm – 100mm	4.5m - 9.0m	6.5m
Galvanised	15mm – 50mm	4.1m – 6.5m	6.5m
Galvariiseu	65mm – 100mm	4.8m - 6.5m	6.5m

End Finishes	
Plain End (Mill Cut)	
Screwed One or Both Ends	
Screwed and Socketed	
Swaged	

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AS1074 and AS/NZS1163 C250(L0) SPECIFICATION		
SIZE ND (MM)	DESCRIPTION	THICKNESS (mm)
15	Light	2.0
15	Medium	2.6
20	Light	2.3
20	Medium	2.6
20	Heavy	3.2
25	Light	2.6
25	Medium	3.2
25	Heavy	4.0
32	Light	2.6
32	Medium	3.2
32	Heavy	4.0
40	Light	2.9
40	Medium	3.2
40	Heavy	4.0
50	Light	2.9
50	Medium	3.6
50	Heavy	4.5
65	Light	3.2
65	Medium	3.6
65	Heavy	4.5
80	Light	3.2
80	Medium	4.0
80	Heavy	5.0
100	Light	3.6
100	Medium	4.5
100	Heavy	5.4

AS/NZS1163 C250(L0) SPECIFICATION		
SIZE ND (MM)	DESCRIPTION	THICKNESS (mm)
20	Extra Light	2.0
25	Extra Light	2.0
32	Extra Light	2.0
40	Extra Light	2.3
50	Extra Light	2.3
65	Extra Light	2.3
80	Extra Light	2.6
100	Extra Light	3.2

AS/NZS C350(L0) SPECIFICATION		
SIZE ND (mm)	DESCRIPTION	THICKNESS (mm)
20	Extra Light	2.0
20	Light	2.3
25	Extra Light	2.0
25	Light	2.6
32	Extra Light	2.0
32	Light	2.6
40	Extra Light	2.3
40	Light	2.9
50	Light	2.9
65	Light	3.2

MANUFACTURING TOLERANCES			
Outside Dimension			
AS1074	Per Standard Tables 2.1, 2.2 and 2.3		
AS/NZS1163	±1% (min ±0.5mm, max ±10mm)		
	Thickness		
AS1074	-8%,+unlimited (Light)		
	-10%,+unlimited (Medium and Heavy)		
AS/NZS1163	±10%		
	Straightness		
AS1074	0.20% of Total Length		
AS/NZS1163	0.20% of Total Length		
Length			
AS1074	±0.08m		
AS/NZS1163	-0.0mm, +15mm		

THICKNESS IDENTIFICATION	
Extra Light	Green
Light	Yellow
Medium	Blue
Heavy	Red

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