



**Bisalloy Steels Pty Ltd** 

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Applications	<ul> <li>BISPLATE<sup>®</sup> 70 – a low carbon, low alloy, high strenght structural steel exhibiting excellent cold formability and low temperature fracture toughness. BISPLATE<sup>®</sup> 70 can be welded with minimal preheat and has excellent low temperature fracture toughness. The combination of BISPLATE<sup>®</sup> 70's mechanical properties and ease of fabrications offers economical advantages in many structural applications such as:</li> <li>Transport Equipment (trays/low loaders/outriggers)</li> <li>Storage Tanks (water/oil/gas)</li> <li>High Rise Buildings (columns/transfer beams)</li> <li>Lifting Equipment (mobile/overhead cranes)</li> <li>Mining Equipment (dump trucks trays/structural applications)</li> <li>Longwall Mining Supports</li> </ul>													
	Thickness (mm)		С	Р	Mn	Si	S	Cr	Мо	В	CE(IIW)*	CET⁺		
	5<16	Maximum	0.18	0.025	1.5	0.25	0.008	0.25	0.25	0.002	0.40	0.29		
Chemical Composition	≥16-80	Maximum	0.20	0.025	1.5	0.25	0.008	0.30	0.25	0.002	0.50	0.35		
	>80-100	Maximum	0.18	0.025	1.5	0.25	0.008	1.20	0.25	0.002	0.58	0.34		
	*Typical Average													
		0.2% P	roof Stre	ess	Tens	ile	Elongati	on in 5(	0mm G.L					
Tensile Properties	Specification	specification 600 MDa (min)*		*	Strength									
	Typical	670 MPa			760 MDo		20% (IIIIII)"							
	*Dependent on Plate Thickness				700 10		2070							
	Diete Thiele	F		N.			Diete	Thisland		From	ang ( 1)			
	(mm)		(min)		Test Temp (°C)		(mm)		(min)		Test Temp (	(°C)		
Chorny Impost	5		By Agmt		-20									
	0		40		-20		5-100		40		-40			
Properties	6-9.5		40		-2	0		5-100		4	1()	-40		
Properties (Longitudinal)	6-9.5 9.5-<12		40 60		-2 -2	0		5-100		2	40	-40		
Properties (Longitudinal)	6-9.5 9.5-<12 12-100		40 60 75		-2 -2 -2	0 0 0	*10 x	5-100 10mm sam	ple	2	10	-40		
Hardness	6-9.5 9.5-<12 12-100 Typical 230 H	В	40 60 75		-2 -2 -2	0 0 0	*10 x	5-100 10mm sam	ple	2	40	-40		
Hardness Testing	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N	B • is manufacto IATA approve	40 60 75 ured in a d.	ccordan	-2 -2 -2 ce with AS	0 0 0 5/NZS 35	*10 x	5-100 10mm sam 600.	ple	2	40	-40		
Charpy Impact Properties (Longitudinal) Hardness Testing Reference Specifications	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N Welding accord	B is manufactu IATA approve rding to AS/N	40 60 75 ured in a d. ZS 1554	ccordan parts 4	-2 -2 -2 ce with AS and 5, WT	0 0 ;/NZS 35 IA Techn	*10 x 97 Grade ( ical Note 1	5-100 <sup>10mm sam</sup> 600. 5	ple	2	40	-40		
Charpy Impact Properties (Longitudinal)HardnessTestingReference SpecificationsEquivalent Specifications	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N Welding accor BISPLATE 70 <sup>®</sup> i • ASTM A533 A • ISO 4950-3 G	B is manufacto IATA approve rding to AS/N s equivalent to . Class 3 irade E550 & Ei	40 60 75 ured in a d. ZS 1554 :	ccordan parts 4 • ISO	-2 -2 ce with AS and 5, WT 9328-4 Gr	0 0 5/NZS 35 IA Techn rade P55	*10 x 97 Grade ( ical Note 1 50TQ & P62	5-100 <sup>10mm sam</sup> 600. 5 20TQ	ple		40	-40		
Charpy Impact Properties (Longitudinal) Hardness Testing Reference Specifications Equivalent Specifications	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N Welding accor BISPLATE 70 <sup>®</sup> i • ASTM A533 A • ISO 4950-3 G In accordance	B is manufactu IATA approve rding to AS/N s equivalent to Class 3 irade E550 & E with AS/NZS	40 60 75 urred in a d. ZS 1554 : 620 3 1365.	ccordan parts 4 • ISO	-2 -2 ce with AS and 5, WT 9328-4 Gr	0 0 5/NZS 35 IA Techn rade P55	*10 x 97 Grade ( ical Note 1	5-100 <sup>10mm sam</sup> 600. 5 20TQ	ple		40	-40		
Charpy Impact Properties (Longitudinal)HardnessTestingReference SpecificationsEquivalent SpecificationsManufacturing Tolerances	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N Welding accor BISPLATE 70 <sup>®</sup> i • ASTM A533 A • ISO 4950-3 G In accordance Tighter tolerar	B is manufactu IATA approve rding to AS/N s equivalent to Class 3 irade E550 & E with AS/NZS nces may be	40 60 75 ured in a d. ZS 1554 : 620 \$ 1365. available	ccordan parts 4 • ISO e on nego	-2 -2 -2 ce with AS and 5, WT 9328-4 Gr 9328-4 Gr	0 0 5/NZS 35 IA Techn rade P55	*10 x 97 Grade ( ical Note 1	5-100 <sup>10mm sam</sup> 600. 5 20TQ	ple		40	-40		
Charpy Impact Properties (Longitudinal)HardnessTestingReference SpecificationsEquivalent SpecificationsManufacturing TolerancesSurface Finish	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N Welding accor BISPLATE 70 <sup>®</sup> i • ASTM A533 A • ISO 4950-3 G In accordance Tighter toleran Shotblasted	B is manufactu IATA approve rding to AS/NI s equivalent to Class 3 irade E550 & E with AS/NZS nces may be	40 60 75 ured in a d. ZS 1554 : 620 3 1365. available	ccordan parts 4 • ISO e on nego	-2 -2 -2 ce with AS and 5, WT 9328-4 Gr 9328-4 Gr	0 0 5/NZS 35 IA Techn rade P55	*10 x 97 Grade ( ical Note 1 50TQ & P62	5-100 <sup>10mm sam</sup> 600. 5 20TQ	ple		40	-40		
Charpy Impact Properties (Longitudinal)HardnessHardnessTestingReference SpecificationsEquivalent SpecificationsSpecificationsManufacturing TolerancesSurface FinishPlate Colour Code	6-9.5 9.5-<12 12-100 Typical 230 H BISPLATE 70 <sup>®</sup> All testing is N Welding accor BISPLATE 70 <sup>®</sup> i • ASTM A533 A • ISO 4950-3 G In accordance Tighter toleran Shotblasted Lime Green	B is manufacto IATA approve rding to AS/N s equivalent to Class 3 irade E550 & E with AS/NZS nces may be	40 60 75 ured in a d. ZS 1554 : 620 3 1365. available	ccordan parts 4 • ISO e on nego	-2 -2 -2 ce with AS and 5, WT 9328-4 Gr otiation.	0 0 5/NZS 35 IA Techn rade P55	*10 x 97 Grade ( ical Note 1	5-100 <sup>10mm sam</sup> 600. 5 20TQ	ple		40	-40		

Contact Bisalloy direct or visit www.bisalloy.com.au.

PLEASE NOTE: Every care has been taken to ensure the accuracy of information contained in this manual which supersedes earlier publications, however Bisalloy Steels shall not be liable for any loss or damage whatsoever caused from the application of such information. Typical values are provided for reference information only and no guarantee is given that a specific plate will provide these properties. Information is subject to change without notice. December 2012