

Product Test Certificate	14032	8/04/2014
	Number	Date

Line	Pack NoNo included		RHS/SHS/CHS Nominal Size (mm)				Specification	Grade	Steel Supplier	Testing Authority/ NATA (ILAC) No			Steelmaking process
	From	To	d /do	b	t	L				Tensile	Impact	Chemical	
1	14062M10003	14062M10042	60.3		3.6	Any	AS/NZS 1163	C250 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
2	14063M10011	14063M10018	100	100	2	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
3	14063M10019	14063M10022	100	100	3	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
4	14063M10023	14070M10058	100	100	3	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
5	14063M10045	14063M10048	100	100	4	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
6	14063M10049	14063M10058	100	100	5	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9

Line	STEEL CHEMICAL ANALYSES (%) -As supplied by Steelmaker ("L")																	MECHANICAL TEST RESULTS (Orientation-"L")								
	HEAT No	C	P	Mn	Si	S	Ni	Cr	Mo	Cu	Al	Ti	Nb	V	B	CE	SiE	Testing Report No- Sample ID	Condition	Tensile test			Impact test at 0°C			
		x100																		YS	TS	E	1	2	3	Ave
1	7382059	5.9	1.2	20.0	0.6	1.2	1.7	2.8	0.4	3.0	2.9	0.2	0.1	0.3	0.0	10	4	T2528-2136	A	383	399	33				
2	6382538	14.8	1.2	74.0	0.6	1.5	1.3	1.5	0.3	2.5	3.1	0.2	0.1	0.4	0.0	28	4	T2528-2138	A	401	459	36				
3	6367299	16.2	1.1	74.0	1.0	1.1	1.2	2.3	0.3	2.3	2.8	0.2	0.1	0.3	0.0	30	4	T2528-2139	A	379	458	33				
4	7383689	14.8	1.2	75.0	0.7	1.0	3.3	3.1	0.4	4.0	4.4	0.2	0.1	0.3	0.0	28	4	T2528-2140	A	467	531	29				
5	7378339	15.1	1.3	100.0	0.8	1.2	1.2	1.8	0.4	2.9	3.6	0.2	1.6	0.3	0.0	33	4	T2528-2141	A	455	554	25				
6	7383949	14.8	1.6	99.0	1.3	0.9	3.1	2.9	0.4	3.8	3.5	0.2	1.6	0.3	0.0	32	5	T2531-2142	A	439	544	27				

Notes: **1)** CE=C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15; **2)** SiE=Si+2.5P; **3)** Gauge Length for E= 5.65vSo; **4)** Impact test piece thickness is 5 mm; **5)** For t less than 6 mm L0 properties derived as per CI 10.6.2.2 of AS/NZS 1163; **6)** Data in the table refers to the samples representative for each line; **7)** BSL=BlueScope Steel; YPE=Yien Phui Enterprise CO., LTD; BO,SC= Basic Oxygen,Continuous (Slab) Casting; ALS=Australian Laboratory Services Industrial; **8)** The production date in the format yyddd constitutes the first 5 digits of the pack number and is printed on each length; **9)** Information provided by the steel supplier " STEEL FEED: IN ACCORDANCE WITH CLAUSES 6 AND 10.6.2.2 OF AS/NZS 1163:2009 THESE COILS WERE PRODUCED FROM ALUMINIUM FULLY KILLED, FINE GRAINED STEEL AND ALUMINIUM HAS BEEN USED AS THE GRAIN REFINING ELEMENT".

Packs covered by this certificate

Line	Heat	Pack numbers
1	7382059	14062M10003 14062M10004 14062M10005 14062M10006 14062M10007 14062M10008 14062M10009 14062M10010 14062M10011 14062M10012 14062M10013 14062M10014 14062M10015
	7382059	14062M10016 14062M10017 14062M10018 14062M10019 14062M10020 14062M10021 14062M10022 14062M10023 14062M10024 14062M10025 14062M10026 14062M10027 14062M10028
	7382059	14062M10029 14062M10030 14062M10031 14062M10032 14062M10033 14062M10034 14062M10035 14062M10036 14062M10037 14062M10038 14062M10039 14062M10040 14062M10041
	7382059	14062M10042
2	6382538	14063M10011 14063M10012 14063M10013 14063M10014 14063M10015 14063M10016 14063M10017 14063M10018
3	6367299	14063M10019 14063M10020 14063M10021 14063M10022
4	7383689	14063M10023 14063M10024 14063M10025 14063M10026 14063M10027 14063M10028 14063M10029 14063M10030 14063M10031 14063M10032 14063M10033 14063M10036 14063M10037
	7383689	14063M10038 14063M10039 14063M10040 14063M10041 14063M10042 14063M10043 14063M10044 14070M10058
5	7378339	14063M10045 14063M10046 14063M10047 14063M10048
6	7383949	14063M10049 14063M10050 14063M10051 14063M10052 14063M10053 14063M10054 14063M10055 14063M10056 14063M10057 14063M10058

Independent Tube Mills confirms that products listed above were manufactured, tested, and supplied in full compliance with the specifications quoted in this certificate

Authorized signatory: ***R.Fisher***