

<b>Product Test Certificate</b>	<b>14063</b>	<b>6/05/2014</b>
	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	14098M10022	14098M10033	100	100	3	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
2													
3													
4													
5													
6													

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				
																				MPa			%				Joules			
1	7388089	15.3	1.9	74.0	1.3	1.5	1.7	2.4	0.5	2.6	4.8	0.2	0.1	0.3	0.0	29	6	T2545-2243	A	466	548	24								

**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	7388089	14098M10022 14098M10023 14098M10024 14098M10025 14098M10026 14098M10027 14098M10028 14098M10029 14098M10030 14098M10031 14098M10032 14098M10033

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***