

Product Test Certificate	13092	4/09/2013
	Number	Date

Line	Pack NoNo included		RHS/SHS/CHS Nominal Size (mm)				Specification	Grade	Steel Supplier	Testing Authority/ NATA (ILAC) Accreditation No			Steelmaking process
	From	To	d /do	b	t	L				Tensile	Impact	Chemical	
1	13239M10018	13239M10024	40	40	1.6	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219	MTL/17219	BSL/632	BO,CC +note 9
2	13239M10025	13239M10040	40	40	1.6	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219	MTL/17219	BSL/632	BO,CC +note 9
3	13239M10041	13239M10048	40	40	1.6	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219	MTL/17219	BSL/632	BO,CC +note 9
4	13239M10049	13239M10065	40	40	2	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219	MTL/17219	BSL/632	BO,CC +note 9
5	13240M10005	13240M10020	40	40	4	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219	MTL/17219	BSL/632	BO,CC +note 9
6	13240M10011	13240M10026	40	40	2.5	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219	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	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	7363289	14.4	1.9	72.0	0.9	1.0	1.1	2.0	0.3	2.6	3.6	0.2	0.1	0.3	27	6	T 2394-1563	A	447	504	30				
2	7359349	16.3	1.9	73.0	0.5	1.2	1.0	2.0	0.2	2.2	3.1	0.2	0.1	0.3	29	5	T 2394-1567	A	448	506	25				
3	7363289	14.4	1.9	72.0	0.9	1.0	1.1	2.0	0.3	2.6	3.6	0.2	0.1	0.3	27	6	T 2394-1563	A	447	504	30				
4	6362249	14.9	1.6	75.0	0.6	1.0	1.1	1.3	0.2	1.5	3.0	0.2	0.1	0.3	28	5	T 2394-1569	A	445	515	26				
5	7354849	14.7	1.4	98.0	0.6	1.1	1.8	2.4	0.5	2.2	3.1	0.2	1.3	0.3	32	4	T 2395-1572	A	535	591	15				
6	7353209	14.8	2.0	76.0	0.7	0.8	1.4	1.9	0.4	2.5	2.9	0.2	0.1	0.3	28	6	T 2395-1573	A	483	537	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 Cl 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".

