



<b>Product Test Certificate</b>	<b>15068</b>	<b>11/08/2015</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	15211M10007	15215M10005	100	100	3	Any	AS1163	C350 L0	Bengang Steel	MTL/17219		Bengang Ste	BO,CC
2	15215M10006	15215M10011	100	100	2.5	Any	AS1163	C350 L0	Bengang Steel	MTL/17219		Bengang Ste	BO,CC
3	15215M10012	15215M10024	100	100	2	Any	AS1163	C350 L0	Bengang Steel	MTL/17219		Bengang Ste	BO,CC
4	15215M10025	15215M10040	100	100	2	Any	AS1163	C350 L0	YPE	MTL/17219		YPE	BO,CC
5	15215M10041	15215M10044	100	100	3	Any	AS1163	C350 L0	YPE	MTL/17219		YPE	BO,CC
6	15215M10045	15215M10047	100	100	3	Any	AS1163	C350 L0	Bengang Steel	MTL/17219		Bengang Ste	BO,CC

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	1532039	17.0	1.4	75.0	1.0	0.6					2.9					31	5	T2969-3397	A	420	494	33				
2	1532040	15.0	1.0	70.0	1.0	0.8					2.8					28	4	T2969-3398	A	369	456	36				
3	1476680A	16.0	1.0	57.0	3.0	0.5					2.3					27	6	T2969-3399	A	355	454	41				
4	5G03458B	13.0	64.0	1.7	1.0	1.0					3.2					14	161	T2969-3400	A	430	506	33				
5	5G02898B	15.0	1.3	97.0	1.0	0.8					3.6					32	4	T2969-3401	A	453	540	25				
6	1532039	17.0	1.4	75.0	1.0	0.6					2.9					31	5	T2969-3402	A	422	507	35				

**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 BSL " 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".

