


Customer: NEW ZEALAND STEEL LTD ATTN: MARKETING (MA05) PRIVATE BAG 92121 AUCKLAND New Zealand	Supplier: BLUESCOPE STEEL (AIS) PTY LTD PORT KEMBLA, N.S.W., AUSTRALIA. A.B.N. 19 000 019 625
Cust Order No: 116176	Sales Order No: Z9020 Printed At: Supplier MWS on: 03/09/2019

 Accredited for compliance with ISO/IEC 17025 - Testing.	I certify that the original records of the company show that the item(s) referred to on this certificate conform to the specification as stated. R.MATHIESSEN - BLUESCOPE STEEL APPROVED SIGNATORY Mechanical LAB 0631 M.GATRICK - BLUESCOPE STEEL APPROVED SIGNATORY Chemical LAB 0632
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STEELMAKING: Basic Oxygen - Slab Cast
SPECIFICATION: **AS/NZS 3678-350L15**
PRODUCT: **XLERPLATE**

INSPECTION: Supplier
CERTIFICATION: EN10204 3.1

CHEMICAL ANALYSIS

Percentage of element by mass (L=Cast, P=Product, -S=Soluble, -T=Total, CF=Chemical Formula, n=Min, x=Max)

Item No	Heat / Unit No	NATA Lab	L/P	C	P	Mn	Si	S	Ni	Cr	Mo	Cu	Al-T
0097	6666809	0632	L	.1	.023	1.21	.30	.999	.016	.036	.006	.038	.027
0098	6668837	0632	L	.16	.021	1.22	.30	.915	.917	.95	9	.4	.7

Item No	Heat / Unit No	NATA Lab	L/P	Ti	B-T	Nb	V	CF1	CF2	CF3
0097	6666809	0632	L	.015	.0004	.001	.9	.937	.100	.902
0098	6668837	0632	L	.017	.4	.001	<.3	.38	.11	.02

 $CF1 = C + (Mn/6) + ((Cr+Mo+V)/5) + ((Cu+Ni)/15)$
 $CF2 = Ni + Cr + Cu + Mo$
 $CF3 = Nb + Ti + V$

MECHANICAL TESTING

Tensile AS 1391

Item No	Heat No	Tested Unit	NATA Lab	Cat	Loc	THICK mm	ReH MPa	Rm MPa	Lo	ELONGN %
0097	6666809	KR003	0631	B	TQF	16.00	395	5	A	33
0098	6668837	KT471	0631	B	TQF	2500.00	4005	520	A	1

Charpy V-Notch AS 1544.2

Item No	Heat No	Tested Unit	NATA Lab	Cat	Loc	Wo mm	THICK mm	TEMP DEG C	ENERGY JOULES	ENERGY JOULES	ENERGY JOULES	AVG ENERGY JOULES
0097	6666809	KR003	0631	B	LQF	10	10	-15	150	140	152	1478
0098	6668837	KT471	0631	B	LQF	10	10	-15	95	92	96	94

ITEMS COVERED BY THIS CERTIFICATE

Item No	Heat No	Ordered Dimensions (mm)	No of Units	Mass (Tonnes)	Unit Identities
0097	6666809	2400.0X20.00X9000	2	6.782	KT463A1 KT463A2
0098	6668837	2400.0X25.00X9000	2	8.478	KT470A1 KT471A1

COMMENTS

This test certificate is issued subject to the Uncertainty of Results statement set out on BlueScope Steel's Website

www.bluescopesteelconnect.com. In order to rely upon this certificate, you must read the Uncertainty of Results statement.

THIS PRODUCT IS SUPPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF AS/NZS 3678:2016. SAMPLING AND CHEMICAL ANALYSIS ARE PERFORMED IN ACCORDANCE WITH BLUESCOPE STEEL PROCEDURE DH-LABS-QS-00 S05.07C. MECHANICAL TESTING HAS BEEN PERFORMED ON SAMPLES SUPPLIED BY THE RELEVANT PRODUCTION DEPARTMENTS. HEAT TREATMENT - PRODUCT AS ROLLED. Quality management system conforms to AS/NZS ISO 9001 as assessed by BSI (Certificate Number FS 594448).



MECHANICAL COMMENTS

TEST PIECE LOCATION (LOC) LQF=Longitudinal Quarter Front End TQF=Transverse Quarter Front End

TEST CATEGORY (CAT) B=Batch

GAUGE LENGTH (Lo) A=5.65 * square root of the original cross-sectional area of the test piece.

MEASUREMENT ABBR AVG=AVERAGE

