

TEST CERTIFICATE

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 Certificate No.: W136267
 Transmission Date: 16/07/20



Customer: STEEL AND TUBE NEW ZEALAND LTD
 PRIVATE BAG 30543
 LOWER HUTT
 NEW ZEALAND

Supplier: OneSteel Manufacturing Pty Limited
 Whyalia, SA - 5600, Australia
 A.B.N. 42 004 651 325
 Sales Order No: Z0646
 Printed on: 16/07/2020

Accredited for compliance with ISO/IEC 17025 -
 Testing. This document shall not be reproduced except
 in full.



Sampling undertaken by Liberty Primary Steel 20348
 Approved Signatory - M. Bublich
 Chemical results as identified are from Bureau
 Veritas Minerals Pty Ltd, Whyalia 0626
 Approved Signatory - K. Barsby
 Mechanical results as identified are from
 Bureau Veritas Minerals Pty Ltd, Whyalia 0626
 Approved Signatory - I. Harrison

STEELMAKING: Basic Oxygen - Slab Cast
 SPECIFICATION: AS/NZS3679.1-300PLUS
 PRODUCT: 150X150X12ANG

ITEMS COVERED BY THIS TEST CERTIFICATE

Item No	Heat / Unit No	Customer Order	Length
0369	591886	PO00172618	9.000
0369	591958	PO00172618	9.000
0369	591999	PO00172618	9.000
0370	594078	PO00172618	12.000
0370	595890	PO00172618	12.000

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	Sn	Al
0369	591886	0626	L	.170	.014	1.44	.230	.015	.001	.024	.001	.006	.001	.004
0369	591958	0626	L	.198	.006	1.24	.190	.008	.001	.020	.001	.004	.001	.002
0369	591999	0626	L	.165	.014	1.46	.190	.022	.002	.028	.010	.005	.001	.002
0370	594078	0626	L	.176	.015	1.48	.200	.013	.004	.028	.002	.003	.003	.003
0370	595890	0626	L	.170	.015	1.47	.190	.014	.004	.033	.001	.009	.003	.004
Item No	Heat / Unit No	NATA Lab	L/P	Nb	Ti	B	V	N	Ca	Zr	CF1			
0369	591886	0626	L	.001	.001	.0005	.003	.0056	.0007	.001	.42			
0369	591958	0626	L	.001	.002	.0004	.003	.0060	.0007	.001	.41			
0369	591999	0626	L	.001	.002	.0004	.004	.0062	.0007	.001	.42			
0370	594078	0626	L	.001	.001	.0005	.002	.0072	.0001	.001	.43			
0370	595890	0626	L	.001	.001	.0004	.002	.0044	.0001	.001	.42			

CF1=C+Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15


MECHANICAL TESTING

Tensile

Item No	Heat No	Tested Unit	NATA Lab	Test Report	ReH MPa	Rm MPa	ELONGN %
0369	591886	0626	59118	325	480	34	
0369	591958	0626	59118	345	520	34	
0369	591999	0626	59118	335	480	35	
0369	591999	0626	59118	340	490	35	
0370	594078	0626	59354	345	510	31	
0370	594078	0626	59354	355	530	33	
0370	595890	0626	59590	345	490	36	
0370	595890	0626	59590	345	490	35	

Yield Strength - determined in accordance with requirements of nominated product standard

Customer:	STEEL AND TUBE NEW ZEALAND LTD PRIVATE BAG 30543 LOWER HUTT NEW ZEALAND	Supplier:	OneSteel Manufacturing Pty Limited Whyalla, SA - 5600, Australia A.B.N. 42 004 651 325 Sales Order No: 20646 Printed on: 28/10/2020
Ship To:			

		Accredited for compliance with ISO/IEC 17025 - Testing. This document shall not be reproduced except in full.	
Sampling undertaken by Liberty Primary Steel 20348		Approved Signatory - M. Bublich	
Chemical results as identified are from Bureau		Approved Signatory - K. Barsby	
Veritas Minerals Pty Ltd, Whyalla 0626		Approved Signatory - L. Harrison	
Mechanical results as identified are from Bureau		Approved Signatory - L. Harrison	
Veritas Minerals Pty Ltd, Whyalla 0626		Approved Signatory - L. Harrison	
Bureau Veritas Minerals Pty Ltd, Whyalla 0626		Approved Signatory - L. Harrison	

STEELMAKING: Basic Oxygen - Slab Cast
SPECIFICATION: AS/NZS3679.1-300PLUS
PRODUCT: 150X150X12ANG

ITEMS COVERED BY THIS TEST CERTIFICATE

Item	Heat	Customer	Length	Unit Identifies
0724	595888	PO00183694	9.000	33337470
0873	595940	PO00188558	9.000	
0874	595887	PO00188558	12.000	
0874	595888	PO00188558	12.000	
0874	595889	PO00188558	12.000	

CHEMICAL ANALYSIS

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

Item	Heat / Unit No	NATA Lab	L/P	C	P	Mn	Si	S	NI	Cr	Mo	Cu	Sn	Al
0724	595888	0626	L	.168	.016	1.45	.200	.014	.004	.030	.001	.008	.003	.004
0873	595940	0626	L	.164	.014	1.45	.200	.007	.002	.027	.001	.004	.002	.002
0874	595887	0626	L	.168	.014	1.44	.190	.012	.003	.023	.001	.005	.001	.001
0874	595888	0626	L	.168	.016	1.45	.200	.014	.004	.030	.001	.008	.003	.004
0874	595889	0626	L	.172	.016	1.45	.200	.014	.004	.032	.001	.008	.003	.003
Item	Heat / Unit No	NATA Lab	L/P	Nb	Ti	B	V	N	Ca	Zr	CF1			
0724	595888	0626	L	.001	.001	.0005	.002	.0074	.0001	.001	.42			
0873	595940	0626	L	.001	.002	.0006	.002	.0065	.0001	.001	.41			
0874	595887	0626	L	.001	.001	.0005	.002	.0064	.0001	.001	.41			
0874	595888	0626	L	.001	.001	.0005	.002	.0074	.0001	.001	.42			
0874	595889	0626	L	.001	.002	.0005	.002	.0056	.0001	.001	.42			

CF1=C+Mn/6 + (Cr+Mo+V)/5 + (Ni+Cu)/15

MECHANICAL TESTING

Tensile

Item	Heat	Tested Unit	NATA Lab	Test Report	ReH MPa	Rm MPa	ELONGN %
0724	595888	0626	0626	59590	335	490	34
0724	595888	0626	0626	59590	345	500	30
0873	595940	0626	0626	59590	350	500	33
0873	595940	0626	0626	59590	350	500	34
0874	595887	0626	0626	59595	350	500	37
0874	595888	0626	0626	59590	335	490	34
0874	595888	0626	0626	59590	345	500	30
0874	595889	0626	0626	59590	340	490	32
0874	595889	0626	0626	59590	340	490	36

Yield Strength - determined in accordance with requirements of nominated product standard

DITH AUSTRALIA PTY LTD

Customer 需要家

需要家管理番号 : 4503004990

： MITSUI & CO., LTD.

Shipper

注文者照合番号 : JC8Y -JN00278
Ref. No. of Shipper :

品名 Commodity	数量 Quantity	单位 Unit	单价 Unit Price	总值 Total Value	备注 Remarks
HOT ROLLED STEEL ANGLES					

WITH EQUAL LEGS
AS/NZS 3679.1-300:2016

Specification

検査証明書
INSPECTION CERTIFICATE
JFE 条鋼株式会社
JFE Bars & Shapes Corporation

本社 社：〒105-0004 東京都港区新橋五丁目11番3号
11-3, Shindashi 5-chome, Minato-Ku, Tokyo 105-0004 Japan

証明書番号 : HEX-3251-01
Certificate No.

日付

証明書番号 : HEX-3251-01
Certificate No.

Date : 2019-12-06

船舶×海上事故
Ship's No. or
Construction No.

Project Name _____

契約番号 : SOXF708
Contract No.

JFE 条鋼 株式会社
JFE Bars & Shapes Corporation

[illegible]

上記製品は検査の結果指定の規格に合格していることを証明いたします。

JAB ACCREDITATION NO. OF
JFE TECHNO-RESEARCH CORP.,
KEIHIN DIVISION.
[RTL03320]

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE TO THE APPLICABLE SPECIFICATION WAS MADE BY ELECTRIC ARC FURNACE PROCESS AT JFE BARSS & SHAPES CORP, HIMEJI WORKS AND TESTED AT JFE TECHNO-RESEARCH CORPORATION, KEIHIN DIVISION WHICH HAS BEEN AUTHORIZED BY JAB AS AN ACCREDITED 3RD PARTY TESTING LABORATORY BASED ON INTERNATIONAL STANDARD ISO 17025.

YUUKI NAKASHIMA, MANAGER OF
QA SEC, HIMEJI WORKS
ISO9001:2015 CertNo:0111
Certified by JICQA LTD.

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WORKS: 1260, Hoso, Shikamaku Himeji City, Hyogo Pref. 672-8064 Japan

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