

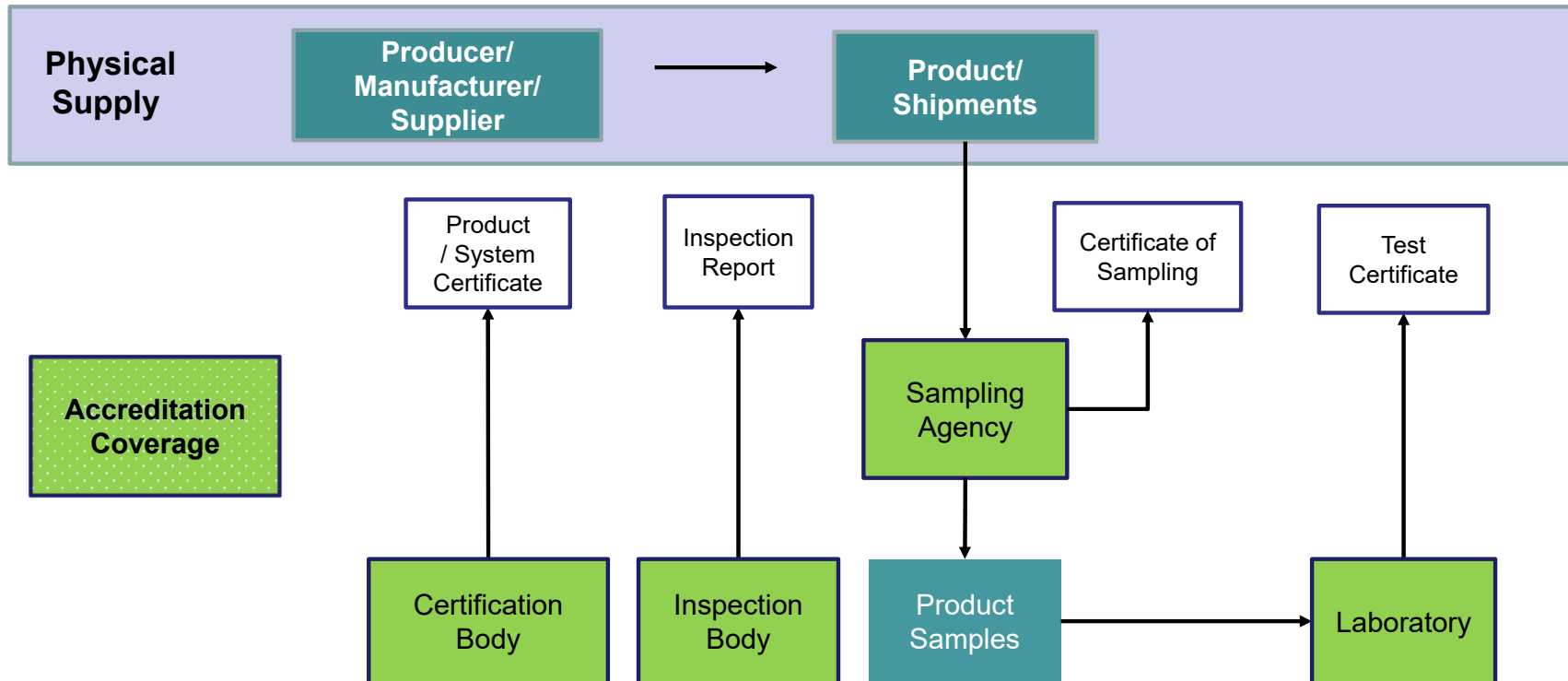


# **Foundations for future digital product conformity systems – it's not all about technology**

**WTO TBT Thematic Session on Digital Solutions for Conformity Assessment Procedures  
8 March 2022**

Presenter Brett Hyland

Stakeholder Engagement Manager - National Association of Testing Authorities (NATA)  
Australia



## Key product conformity assessment processes








ACRS CERT NO. 31102  
QST AS/NZS 4671-500N  
**Deformed Bar 24x15000mm**  
UNIT ID: **1613802680** COUNT **54**  
HEAT: **1600231688** INDIC. MASS **3.002t**  
GTIN: 99316266014168  
Item: 98081

  
  
(01)99316266014168(2)11613802680








Page 1 of 3  
GDTI: 93162660001480057629  
Certificate No.: 80057629  
Transmission Date: 09/07/2021  
Delivery No. 80057629

Customer: PL1813  
IBCS - SUNSHINE  
528 BALLARAT ROAD  
SUNSHINE VIC 3020  
Ship To:  
IBCS - SUNSHINE  
528 BALLARAT ROAD  
SUNSHINE VIC 3020

Supplier: The Aust Steel Co Ops P/L  
A.B.N: 89069426955



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with ISO/IEC 17025 - Testing.  
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Accreditation no.	Name	Authorized Signatories
Chemistry Lab:1726	InfraBuild Steel Laverton	S. Ciuciulete
Mechanical Lab:1843	InfraBuild Steel Laverton	S. Ciuciulete

**SPEC. & PROD. DETAILS COVERED BY THIS TEST CERTIFICATE FOR SALES ORDER: 40470**

Item No.	Heat No.	Steel Making	Customer Order	Material Description and Specification
000100	1600231688	EAF	5566261	500N (G3T A3/NZS 4671-500N) 15.00M GTIN: 99316266014168 24MM DEFORMED BAR Cast EAF - "Electric Arc -Billet Cast", BOB - "Basic Oxygen -Billet Cast" BOS - "Basic Oxygen -Slab Cast"

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

ItemNo	HeatNo	NATA Lab	L/P	C	P	Mn	Si	S	Ni	Cr	Mo	Cu	Al	B	Nb	Ti	V	CF1
000100	1600231688	1726	L	0.18	0.011	0.79	0.15	0.025	0.07	0.09	0.02	0.29	0.002	0.0001	0.001	0.001	<0.001	0.37

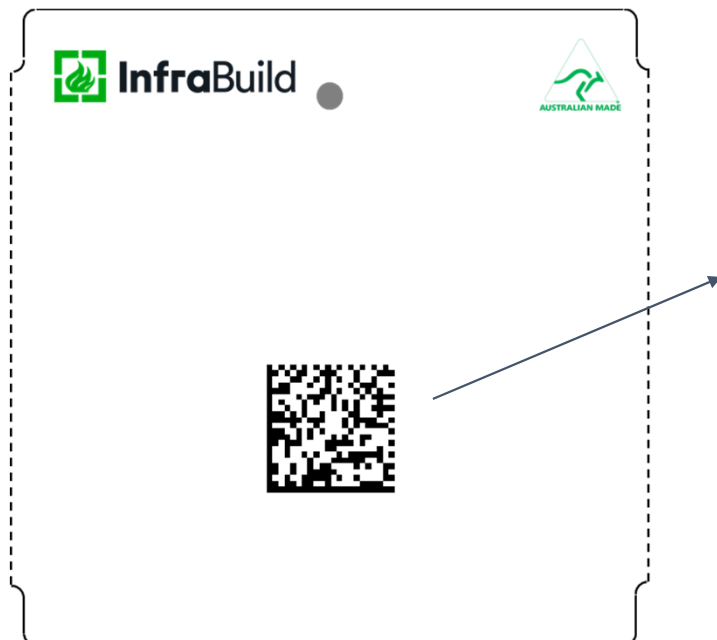
CF1=C + MN/6 + (CR + MO + V)/5 + (NI + CU)/15

**MECHANICAL TESTING**  
**Tensile AS/NZS 4671**

ItemNo	HeatNo	NATA Lab	Cal	YS MPa	UTS MPa	EL	AGT %											
000100	1600231688	1843	B	520	637	U	10.8											

Yield Strength - determined in accordance with requirements of nominated product standard  
TEST CATEGORY (Cat) B=Batch  
GAUGE LENGTH (Lo) U = The gauge length used in the determination of uniform elongation (Agf) in accordance with the relevant standard.



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AI Code	AI Type	Data	Comments
01	Global Trade Item Number (GTIN)	99316266014168	This is the InfraBuild Steel issued GTIN for 24mm Deformed Reinforcing Bar manufactured to AS/NZS 4671 in Quench & Self-Tempered 500N grade, produced in 15m lengths and supplied in ~3t bundles.
21	Serial Number	1613802680	The serial number indicates the individual production identity of the bundle or coil - combined with the GTIN it gives the globally unique identity of the individual bundle or coil
10	Batch Number	1600231688	This is the identity of the cast, or heat, of steel that was manufactured in the steelmaking process & from which the finished product has been rolled.
30	Count of Items	54	This the count of units within the bundle, in this case the count is 54 individual bars.
3100	Net weight, kilograms	3002	This is the indicative mass of the bundle measured in kilograms, the second "0" in the AI (3100) string indicates that there is no decimal point ==> 3002kg = 3.002t

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**ISO/IEC 15459-6**





**TEST CERTIFICATE**

Page 1 of 3  
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Mechanical Lab:1843	InfraBuild Steel Laverton	S. Ciuculete

**SPEC. & PROD. DETAILS COVERED BY THIS TEST CERTIFICATE FOR SALES ORDER: 40470**

Item No.	Heat No.	Steel Making	Customer Order	Material Description and Specification
000100	1600231688	EMF	55662611	500N (GST AS/NZS 4671-500N) 15.00M GTIN: 99316266014168 24MM DEFORMED BAR

Cast EMF - "Electric Arc -Billet Cast", BOB - "Basic Oxygen -Billet Cast" BOS - "Basic Oxygen -Slab Cast"

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

ItemNo	HeatNo	NATA Lab	L/P	C	P	Mn	Si	S	Ni	Cr	Mo	Cu	Al	B	Nb	Ti	V	CF1
000100	1600231688	1726	L	0.19	0.011	0.79	0.15	0.025	0.07	0.09	0.02	0.29	0.002	0.0001	0.001	0.001	<0.001	0.37

CF1=C + MN/6 + (CR + MO + V)/5 + (NI + CU)/15

**MECHANICAL TESTING**  
Tensile AS/NZS 4671

ItemNo	HeatNo	NATA Lab	Cat	YS MPa	UTS MPa	SL	AGT %
000100	1600231688	1843	B	529	637	U	10.6

Yield Strength - determined in accordance with requirements of nominated product standard  
TEST CATEGORY (Cat) B=Batch  
GAUGE LENGTH (Lo) U = The gauge length used in the determination of uniform elongation (Agt) in accordance with the relevant standard.

AI Code	AI Type	Data	Comments
01	Global Document Type Identifier (GDTI)	Document Type: 9316266000014  Document Serial Number: 80057629	This is the InfraBuild Steel issued GDTI to identify uniquely the Test Certificate for Delivery 80057629 of 24mm Deformed Reinforcing Bar manufactured to AS/NZS 4671 in Quench & Self-Tempered 500N grade, produced in 15m lengths and supplied in ~3t bundles.  Comprises the Document Type (Test Certificate) and the Serial Number

ISO/IEC 15418

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