PUBLIC RECORD

Australian Government
Anti-Dumping Commission

ANTI-CIRCUMVENTION INQUIRY

ZINC COATED (GALVANISED) STEEL EXPORTED FROM THE PEOPLE'S REPUBLIC OF CHINA, THE REPUBLIC OF KOREA AND TAIWAN

RECORD OF MEETING WITH BLUESCOPE STEEL LIMITED

Date: 27 May 2015

Location: BlueScope Steel Limited
Five Islands Road, Port Kembla

Attendees:

Anti-Dumping Commission	BlueScope Steel Limited
Andrea Stone Manager, Operations 2	Alan Gibbs Development Manager
Roman Maevsky Manager, Operations 2	Chad Uphill Senior Finance Analyst
	Miles Mihajlovic Finance Analyst
	Chris Kilmore Product Development Manager
	Paul Morgan Senior Metallurgist Engineer
	Andrew Micallef Metal Coated Product Owner
	John O'Connor Director John O'Connor and Associates

Background:

- Interim dumping duty and interim countervailing duty is applicable to exports of zinc coated (galvanised) steel of iron or non-alloy steel exported to Australia from the People's Republic of China (China), the Republic of Korea (Korea) and Taiwan.
- Following applications from BlueScope Steel Limited (BlueScope), the Anti-Dumping Commission (the Commission) has initiated two anti-circumvention inquiries into the slight modification of galvanised steel exported from China (investigation 298), and Korea and Taiwan (investigation 290).
- In its applications, BlueScope alleged that the anti-dumping measures have been circumvented by the slight modification of exported goods so as to not be the subject of the existing anti-dumping measures. This modification was identified as the addition of minute levels of alloying elements (specifically boron, but potentially other elements) to the product so that it becomes 'alloyed' galvanised steel.

- The anti-circumvention inquiry relating to galvanised steel exported from Korea and Taiwan (investigation 290) was initiated on 5 May 2015. The anti-circumvention inquiry relating to galvanised steel exported from China (investigation 298) was initiated on 1 June 2015.

Purpose of visit:

- The purpose of the visit was to gain a better understanding of:
    - the process involved in the slight modification of galvanised steel to circumvent anti-dumping measures;
    - alloys that may be used for this slight modification; and
    - the commercial activities that may surround this circumvention.
- The visit will assist in the preparation of importer and exporter questionnaires and provide guidance for the inquiry process.

Preliminary discussion:

- Commission staff discussed the key dates and processes of the inquiry, being the same as for an investigation, with the Statement of Essential Facts due 110 days from initiation and the report to the Parliamentary Secretary due after 155 days.
- The Commission explained that exporter questionnaires are in the process of being finalised and will be sent to BlueScope for their comment prior to being disseminated to relevant exporters. The same will apply to importer questionnaires.
- BlueScope highlighted that circumvention of steel products through slight modification is a practice that has been adopted by exporters exporting to other jurisdictions for several years and has been the subject of positive findings of circumvention by other jurisdictions. BlueScope queried whether the Commission's inquiry would reference these findings.

  The Commission confirmed that the inquiry will focus on a finding of fact as to whether there has been a circumvention activity, as defined in Australia's legislation, in relation to goods exported to Australia. While the Commission may refer to other jurisdictions' approach for guidance, its focus would be on the facts at hand in the Australian context.
- BlueScope highlighted that, since the Commission imposed anti-dumping measures in August 2013, an increase in the imports of galvanised steel under the applicable 'alloyed' tariff classification and statistical code have been observed (starting October 2013).

  BlueScope observed that imports ordered in or around July 2013 would likely have arrived in Australia by October 2013, further supporting this correlation between anti-dumping measures and a change in trade patterns.

  To support these assertions, BlueScope supplied a chart of import statistics of alloyed galvanised steel generated from data gathered from the Australian Bureau of Statistics. These charts show negligible trade of alloyed galvanised steel in the months preceding the imposition of the anti-dumping measures. In October 2013 it can be observed that imports of alloyed galvanised steel had commenced. The import statistics chart forms **Confidential Attachment 1**.

Tour of production facilities and alloying process:

- BlueScope provided a site tour to the Commission staff to view the manufacturing stage where alloys may be added to steel. The alloying process was discussed in detail.

  Details of BlueScope's manufacturing process for galvanised steel is at **Non Confidential Attachment 2**.
- A control room at the ladle treatment station was visited during the site tour where BlueScope staff conduct quality control of the composition of BlueScope's steel between the basic oxygen steelmaking (BOS) step and casting into slabs (see Non-Confidential Attachment 2) . In this control

room, through the use of a computer system, steel is tested and elements are added to match the chemical characteristics required. This system has the capability of detecting and adding amounts of >0.0002% of required elements (including boron) through simply keying into the computer the amount to be added.

- BlueScope explained that to make galvanised steel with enough boron in it to be classified as alloyed product (>0.0008%), it would need to add approximately 25kgs of the element into the specific steel batch (approx. 250 - 280 tonnes per batch).

- BlueScope explained that although it has an automated system, boron may also be added manually by physically putting bags of boron into a batch.

- BlueScope explained that no further changes need to be made to the manufacturing process (including the hot-rolling of coil or galvanising processes) to make alloyed galvanised steel that includes minute amounts of boron. No additional overheads, labour, or any other costs or processes are required apart from the automated (or manual) addition of boron to the liquid steel before casting into slabs.

Technical matters:

- BlueScope presented PowerPoint slides that outlined the list of "other alloys" and their concentration which would change non-alloyed steel into alloyed steel for the purposes of Schedule 3 of the Customs Tariff. This identified the following alloys that could be included and their quantities as:

    - 0.0008% or more of Boron
    - 0.3% or more of Aluminium
    - 0.30% or more of Chromium
    - 0.4% or more of Copper
    - 0.4% or more of Lead
    - 1.65% or more of Manganese
    - 0.08% or more of Molybdenum
    - 0.1% or more of other elements (except Sulfur, Phosphorus, Carbon and Nitrogen, taken separately)
    - And eight other alloying elements

  BlueScope advised that any galvanised steel not containing one or more of the above elements is known as non-alloy.

  This PowerPoint presentation, which also includes details of BlueScope's manufacturing process, and the rates of duty applicable to alloyed and non-alloyed galvanised steel (highlighting the commercial rationale for circumventing the measures), forms **Confidential Attachment 3**.

- The Commission asked BlueScope to identify from the list of possible alloys, elements other than boron that may be used to slightly modify galvanised steel. BlueScope advised that chromium could also be used in small amounts to modify the steel to be 'alloyed' galvanised steel. However, BlueScope explained that the addition of chromium can impact the hardness of the steel, and hence an equalising modification to carbon levels in the steel would be required.

  BlueScope also advised that molybdenum may be used to slightly modify galvanised steel, though it had not seen evidence of this.

- BlueScope submitted that boron is the most likely element added to circumvent the anti-dumping measures due to its low cost and the fact that, in small quantities as required by the tariff, it does not impact the steel in any way. However, BlueScope advised and demonstrated evidence of the addition of chromium to steel products, though not specifically in relation to galvanised steel.

- BlueScope calculated an approximate cost of boron of $USD0.40 per tonne of steel to achieve the >0.0008% of boron required for steel to be alloyed. This calculation was made on the basis of adding 25kgs of boron to a 280 metric tonne batch of steel.

  This was further supported by two invoices for boron purchases attached at **Confidential Attachment 4**.

- BlueScope submitted that because boron is simply added in the standard process of adjusting the chemical characteristics of the batch of steel, the manufacturing process and/or costs associated with it are not affected.

- BlueScope contended that the addition of enough boron, chromium or molybdenum to classify the product as alloyed is unlikely to be unintentional. BlueScope explained that these levels of alloys do not occur naturally in steel (though even smaller amounts may be present due to the inclusion of scrap with these elements in it in the steelmaking process).

- BlueScope advised that, in large quantities, boron could have a softening effect in specific types of low-carbon steel grades, but the minute amounts needed to allow it to be classified as 'alloyed' galvanised steel (at least 0.0008%) would have no impact on the steel's qualities.

- BlueScope explained that it would be impossible for the end user to know whether such a small amount of boron has been added to the galvanised steel without testing it or observing the mill certificate. The visual and physical characteristics of steel would not differ from such a small addition of boron or other elements.

- BlueScope submitted that the addition of boron does not impact the galvanising process, although other processes such as welding may be impacted through large additions of boron.

- BlueScope advised that the end use of the alloyed galvanised steel is not impacted by the minor addition of boron. The steel does not become unsuitable for any end use. Additions of other alloys in minor quantities would also not impact the end use. Only the addition of large quantities of boron, or any other alloy for that matter, would impact the end product.

Marketing and legitimate trade:

- BlueScope contended that it is likely to be importers who are driving the inclusion of boron in steel however there may also be some exporters driving this.

- BlueScope advised that galvanised steel (alloyed and non-alloyed) are marketed in the same way.

- BlueScope advised that there may be some specialised legitimate trade of alloyed galvanised steel, but this would be of highly specialised products with various alloys in them (not just boron of minute quantities), predominantly for use in the manufacture of automotive parts. BlueScope advised that the leading indicator between these legitimate goods and circumvention goods (with minute amounts of alloys) would be the price, with legitimate products being significantly more expensive.

  BlueScope provided a list of tariff concession orders that apply to galvanised steel and other steel products for goods destined for automotive use. These orders were applied for by Ford, Holden and Precision Components (automotive parts manufacturer). This list is attached at **Confidential Attachment 5**.

- BlueScope does not consider there would be any 'legitimate' trade of alloyed steel with minute amounts of boron (and potentially chromium or molybdenum) in it. The levels of these alloys are too small to make any impact on the steel and they would not occur without intentional addition.

Test Certificates

- BlueScope provided a guide to test certificates, attached at **Non Confidential Attachment 6**, which provided an easy guide to reading a test certificate including how additions of boron, and any other elements, could be identified.
- BlueScope also provided a sample of test certificates for various imported goods, attached at **Confidential Attachment 7**, and identified the differing methods used by various exporters to identify additions of 'other alloys' including boron.

NON CONFIDENTIAL ATTACHMENT 2

BLUESCOPE'S MANUFACTURING PROCESS – GALVANISED STEEL

We observed BlueScope's manufacturing process for galvanised steel to be as follows:

1) STEELMAKING AND SLAB CASTING

The main raw materials used in the production of steel are iron ore, coke (itself produced from coking coal) and fluxes (mainly limestone and dolomite).

The raw materials are fed into the top of a blast furnace in predetermined proportions and sequences. Air, which is heated to about 1200°C, is blown into the blast furnace; this causes the coke to burn, producing carbon monoxide which creates the required chemical reaction. The iron ore is reduced to molten iron by removing the oxygen. Molten iron and slag is periodically drained from the blast furnace and the molten iron is transported to the steelmaking area.

Molten iron is poured into the basic oxygen steelmaking (BOS) vessel, along with steel scrap. The BOS process creates liquid steel from molten iron, scrap steel and alloying materials.

The BOS vessel is charged and a lance that blows 99% pure oxygen onto the steel and iron causes the temperature to rise to about 1700°C. This melts the scrap, lowers the carbon content of the molten iron and helps remove unwanted elements.

The liquid steel is transferred to a separate vessel, where samples are tested and computer analyses of the steel are done to ensure the desired chemistry is achieved. The steel can be further refined at the ladle treatment station by adding alloying materials which give the steel special properties required by the customer. The liquid steel is cast into slabs of various dimensions in a continuous casting process.

2) HOT-ROLLING

The steel slabs are converted to hot rolled coil (HRC) on hot strip mills.

The cast slab is reheated in a furnace to obtain consistent temperature of around 1200°C. The heated slab is reduced in thickness by passing through a set of five or six rolling mill stands to produce HRC of the desired thickness and widths. The HRC is then transferred to the Springhill and Western Port coating mills.

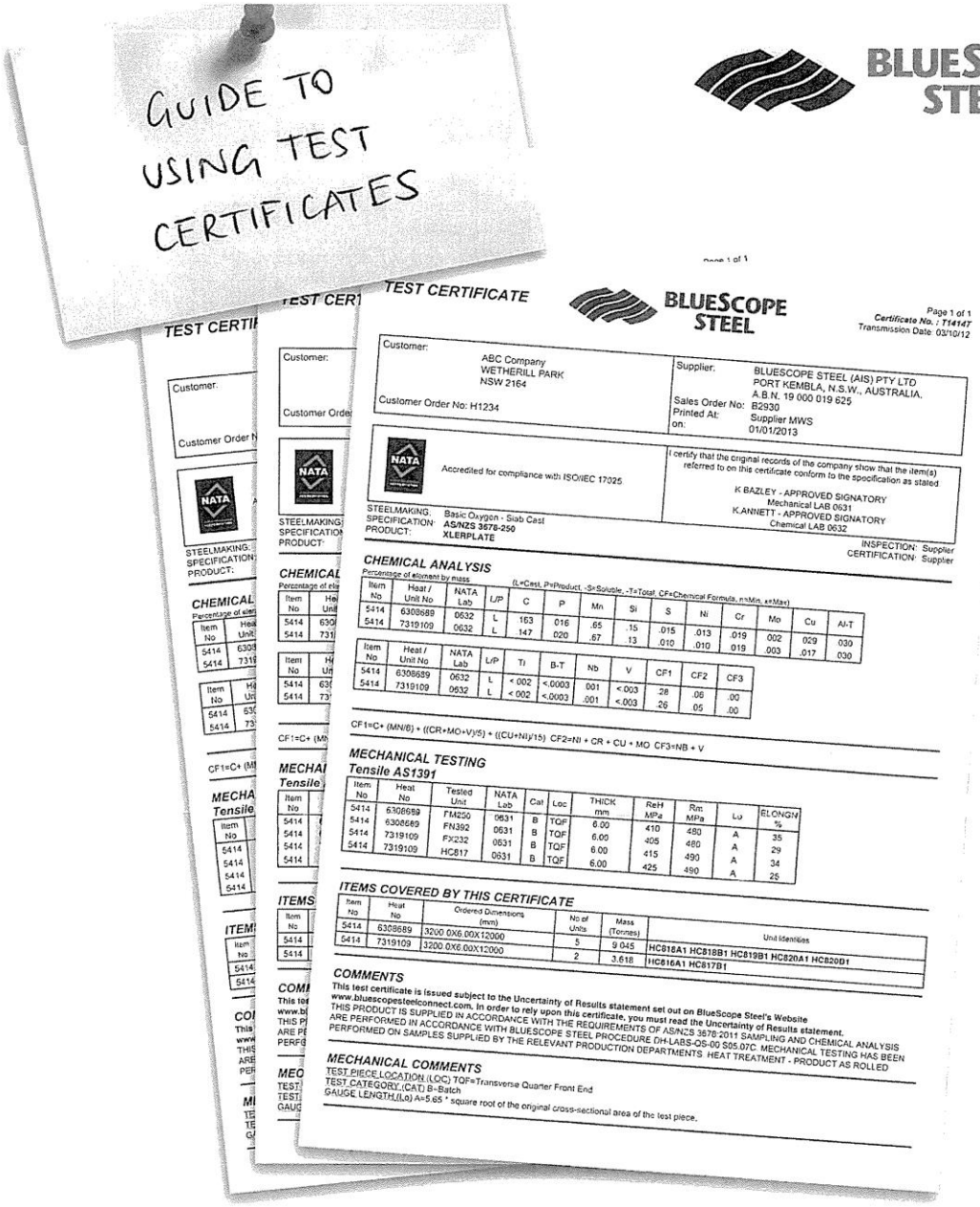
3) GALVANISING

The HRC is pickled to remove scale (iron oxide) formed during the hot rolling process. The HRC is unwound, side trimmed to the customers required width and passed through a bath of 70°C hydrochloric acid, washed, dried and recoiled.

The pickled HRC is cold rolled to reduce the steel thickness. The cold rolling process is conducted at room temperature. The cold rolling process involves passing the HRC through a number of rolling mill stands to progressively reduce the thickness without changing the width. For example, a 1,200 metre coil of 2.5 mm thickness could be reduced to 0.5 mm thickness and 6,000 metres long. During the process the grain structure is elongated, making the steel hard and springy. This intermediate steel product is known as a cold rolled fully hard (CRFH) product.

The cold rolled coil is cleaned to remove any oils from the cold rolling process and any traces of surface oxide and is then annealed in an inert atmosphere furnace. Where formability is the prime requirement, the coil is fully annealed. Where high strength and limited formability is required, the coil is partially annealed.

The clean and annealed coil then passes from the furnace through a molten metal bath of the required composition where the molten metal chemically bonds to the steel surface.



Test Certificates

BlueScope Steel is Australia's only manufacturer of flat steel and has a long history of supplying quality products that meet or exceed Australian Standards at its ISO:9001 accredited manufacturing facilities.

Compliance is a key issue in the Australian construction market, and test certificates allow you to check for compliance.

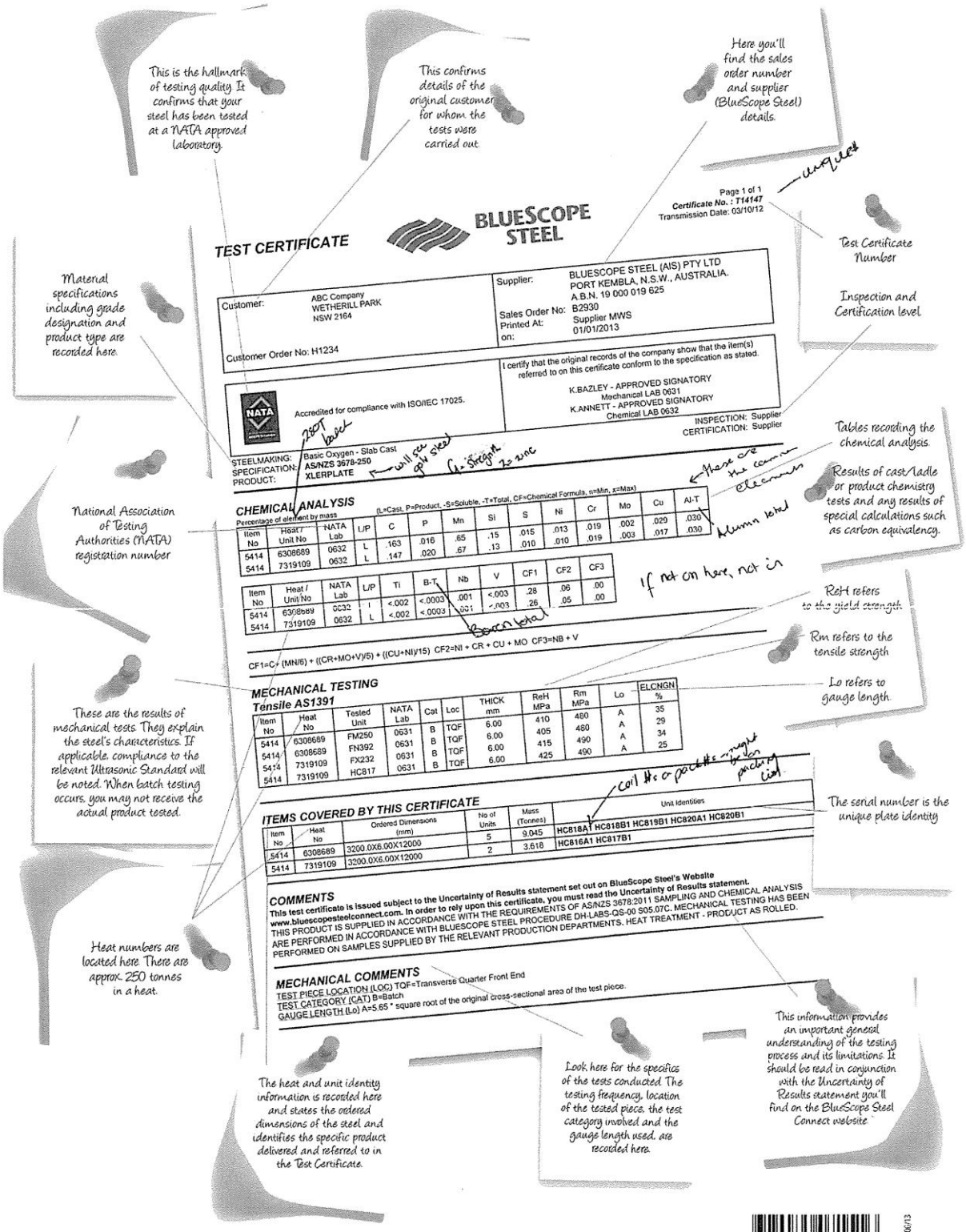
The test certificate is an important reference document that reports on all elements relating to the applicable Australian Standard. Compliance to the applicable Australian Standard is vital as it gives the specifier and purchaser confidence that the material obtained will perform as intended in the design and use phases of a project. In addition test certificates provide evidence of material identification and origin. Knowing the mill is BlueScope Steel will provide peace of mind that the product is compliant with the applicable Standard.

BlueScope Steel's products are tested via NATA (National Association of Testing Authorities) accredited agencies. NATA is a member of an internationally accepted system that recognizes the competence of testing and calibration laboratories that assures the quality of test data internationally.

NATA accredited test certificates are provided with each BlueScope Steel order and are kept on file. Certificates dating back to 1993 are available online for uncoated steel, and 1998 for coated steel.

When you specify BlueScope Steel you can be 100% confident it's 100% compliant with the applicable Australian Standard.

GUIDE TO USING TEST CERTIFICATES



9 320075 071516 BMI0737 06/13