



Product Test Certificate

161427

2/11/2016

Certificate Number

Date

RHS/SHS/CHS
Nominal Size (mm)

| PackFrom | PackTo | d /do | b | t | L | Specification | Grade | Product Description |
|-------------|-------------|-------|------|-----|-----|---------------|--------|---------------------|
| 16300M10034 | 16300M10074 | 75.0 | 75.0 | 5.0 | Any | AS1163: 2016 | C350L0 | Painted 75x75x5.0 |

| Heat No. | Steel Supplier | Testing Authority/NATA (ILAC) No | | | Steel Chemical Analysis | | | | | | | | | | | | | | | | Mechanical Test Results (Orientation-"L") | | | | | | | | | | |
|----------|----------------|----------------------------------|--------|--------------|-------------------------|-------------------|----|-----|----|------|-----|----|-----|-----|-----|-----|------|-----|------|-------|---|------------|-----------------------------|-----------|--------------|-----|----|--------------------|--|--|--|
| | | | | | Analysis Type "L"/"P" | Testing Report 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 | | | |
| | | (% x 100) | | | | | | | | | | | | | | | | MPa | | | Joules | | | | | | | | | | |
| | | Tensile | Impact | Chemical | | | YS | TS | E | 1 | 2 | 3 | Avg | | | | | | | | | | | | | | | | | | |
| 7506619 | Australia-BSL | MTL/19968 | | BSL/632 | L | D13363 | 15 | 2 | 99 | <0.5 | 1 | 2 | 2.3 | 0.3 | 2.3 | 2.8 | <0.2 | 1.6 | <0.3 | <0.03 | 32 | 6 | T3359-7342 | A | 491 | 561 | 27 | | | | |
| 9S443 | Import | MTL/19968 | | L2734-130526 | L | MANUAL | 17 | 1 | 75 | 1 | 1 | 1 | 0 | 1 | 5.4 | 0.1 | 0.1 | 0.2 | 0 | 30 | 4 | T3359-7345 | A | 405 | 495 | 31 | | | | | |
| 9S447 | Import | MTL/19968 | | L2734-130513 | P | MANUAL | 17 | 1.5 | 77 | 1 | .4 | .1 | 1 | 0 | 0 | 4.2 | 0 | .1 | .03 | 0 | 31 | 5 | T3359-7343 | A | 420 | 529 | 29 | | | | |
| 9S454 | Import | MTL/19968 | | L2734-130526 | L | MANUAL | 17 | 1.3 | 77 | 1 | 0.4 | 1 | 0 | 0 | 1 | 3.6 | 0.1 | 0.2 | 0.1 | 0 | 31 | 4 | T3359-7344 | A | 420 | 505 | 30 | | | | |

- 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 CI 9.4.2.3 (b) of AS/NZS 1163;
 - 6) "L" = LADLE, "P" = PRODUCT
 - 7) ALS=Australian Laboratory Services Industrial; MTL = Mec Test Laboratories; SS=Spectrometer Services Pty Ltd; BSL=Bluescope Steel;
 - 8) The production date in the format yyddd constitutes the first 5 digits of the pack number and is printed on each length;
 - 9) THE STEEL IS MADE BY BASIC OXYGEN OR AN ELECTRIC ARC PROCESS AND IS FULLY KILLED, CONTINUOUSLY CAST AND FINE GRAINED. THE STRIP WAS HOT ROLLED AT THE HOT STRIP MILL.



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Packs covered by this certificate

| Heat | Pack Numbers |
|---------|---|
| 7506619 | 16300M10034 16300M10035 16300M10036 16300M10037 16300M10038 16300M10039 16300M10040 16300M10041 16300M10042 16300M10043 16300M10044 16300M10045 16300M10046 16300M10047 16300M10048 16300M10049 16300M10050 16300M10051 16300M10052 16300M10053 16300M10054 16300M10055 16300M10056 16300M10057 16300M10058 16300M10059 16300M10060 16300M10061 16300M10062 |
| 9S447 | 16300M10063 16300M10064 16300M10065 16300M10066 |
| 9S454 | 16300M10066 16300M10067 16300M10068 |
| 9S454 | 16300M10066 16300M10067 16300M10068 |
| 9S443 | 16300M10068 16300M10069 16300M10070 16300M10071 16300M10072 16300M10073 16300M10074 |
| 9S443 | 16300M10068 16300M10069 16300M10070 16300M10071 16300M10072 16300M10073 16300M10074 |

Australian Pipe and Tube confirms that products listed above were manufactured, tested, and supplied in full compliance with the specifications quoted in this certificate.

**Authorized signatory: L. DONALD
CEO**