



# Coventry Fasteners

Australia's Fastener Specialists

Welshpool  
290-296 Welshpool Rd,  
Welshpool,  
WA 6106  
Tel: (08) 9350 3600  
Fax: (08) 9458 3006

Kilburn  
60 Grand Junction Rd,  
Kilburn,  
SA 5084  
Tel: (08) 8300 8700  
Fax: (08) 8300 8777

Wetherill Park  
1/442 Victoria St,  
Wetherill Park,  
NSW 2164  
Tel: (02) 9616 6100  
Fax: (02) 9616 6150

Pinkenba  
Building 2, 660  
MacArthur Ave,  
Pinkenba,  
QLD 4008  
Tel: (07) 3291 8200  
Fax: (07) 3291 8250

Laverton  
72 William Angliss Dve,  
Laverton,  
VIC 3026  
Tel: (03) 9368 7906  
Fax: (03) 9368 7999

## TEST CERTIFICATE

Order No: 515656

Coating: HOT DIP GALVANISED

Certificate No: 20090801011

LOT NO.: 3113380018

### Product Details

Date of Issue: 2009-08-01

| Item | Heat No    | Description              | Coventry Fasteners Part No. | Spec/Grade   |
|------|------------|--------------------------|-----------------------------|--|
| 001  | D90090701  | AS1252 HDG BOLT: M20X140 | 20X140MHSA                  | AS1252-1983 (DIMENSIONAL) / AS1252-1996 (MECHANICAL) |
| 002  | 8C04087    | AS1252 HDG NUT: M20      | 20MHSN                      |  |
| 003  | 4109010932 | AS1252 HDG WASHER: M20   | 20MHSW                      |  |

#### Chemical Analysis

| Item | C%   | Si%  | Mn%  | P%    | S%    |
|------|------|------|------|-------|-------|
| 001  | 0.40 | 0.27 | 0.64 | 0.019 | 0.018 |
| 002  | 0.44 | 0.19 | 0.67 | 0.014 | 0.008 |
| 003  | 0.46 | 0.25 | 0.60 | 0.028 | 0.019 |

#### Required Chemical Analysis

| Item | C%   |      | Mn%   | P%    | S%    |
|------|------|------|-------|-------|-------|
|      | Min  | Max  | Min   | Max   | Max   |
| 001  | 0.25 | 0.55 | -     | 0.035 | 0.035 |
| 001  | 0.15 | 0.40 | 0.035 | 0.035 | 0.035 |

#### Mechanical Properties

| Item | Yield (MPa) | Tensile (MPa) | Wedge (MPa) | Elong% | Proof Load |
|------|-------------|---------------|-------------|--------|------------|
| 001  | 789         | 884           | 880         | 15.50  | 147        |
| 002  | -           | -             | -           | -      | 285.4      |
| 003  | -           | -             | -           | -      | N/A        |

#### Required Mechanical Properties

| Item | Yield (MPa) | Tensile (MPa) | Wedge (MPa) | Min Elong % |
|------|-------------|---------------|-------------|-------------|
| 001  | 660         | 830           | 830         | 12          |

#### Final Hardness

| Item | Scale | Min   | Max   |
|------|-------|-------|-------|
| 001  | HRC   | 27.00 | 31.00 |
| 002  | HRC   | 29.00 | 33.00 |
| 003  | HRC   | 39.00 | 41.50 |

#### Required Final Hardness

| Item | Scale | Min   | Max   |
|------|-------|-------|-------|
| 001  | HRC   | 23.00 | 34.00 |
| 002  | HRC   | 24.00 | 36.00 |
| 003  | HRC   | 35.00 | 45.00 |

- Marking: Grade & Trademark
- Decarburization & Head Soundness
- Visual/Dimensional Examination
- Coating Thickness
- Product verified by Independent Batch Testing in Australia (NATA Approved)

Coventry Fasteners certify that the information given is a true and accurate extract from the manufacturers Test Results. The product conforms to: AS1252-1983 (Dimensional) AS1252-1996 (Mechanical)

Approved:

*Byung Hwan Lee*  
IL WOO FASTENER CO.  
PRESIDENT

For & on behalf of **Coventry Fasteners**  
(A division of Coventry Group Ltd ABN 37 008 670 102)