

For Cold rolled stainless steel the old BS1449 standard has been replaced by two EN Standards:

EN10088-2 Replaces BS1449-Part 2: 1983

EN10059 - Covers Heat Resisting Grades

EN10259 & Now ISO 9445: Tolerances for COLD Rolled material

## MATERIAL CERTIFICATION

Where multi-certification is required, a combination of EN10088-2, EN10029 or 10051 will appear together with the appropriate ASTM Standards.

## THICKNESS TOLERANCES - EN10259

| Thickness (mm) | Tols (+/- mm) for given width in mm | Tols (+/- mm) for given width in mm | Tols (+/- mm) for given width in mm |
|----------------|-------------------------------------|-------------------------------------|-------------------------------------|
|                | 1000                                | 1250                                | 1500                                |
| Under 0.30     | 0.03                                | -                                   | -                                   |
| 0.30 to 0.49   | 0.04                                | 0.04                                | -                                   |
| 0.50 to 0.59   | 0.045                               | 0.05                                | -                                   |
| 0.6 to 0.79    | 0.05                                | 0.05                                | -                                   |
| 0.8 to 0.99    | 0.055                               | 0.06                                | 0.06                                |
| 1.0 to 1.19    | 0.06                                | 0.07                                | 0.07                                |
| 1.2 to 1.49    | 0.07                                | 0.08                                | 0.08                                |
| 1.5 to 1.99    | 0.08                                | 0.09                                | 0.10                                |
| 2.0 to 2.49    | 0.09                                | 0.10                                | 0.11                                |
| 2.5 to 2.99    | 0.11                                | 0.12                                | 0.12                                |
| 3.0 to 3.99    | 0.13                                | 0.14                                | 0.14                                |

## FLATNESS TOLERANCES

| Nominal Length (L) (mm) | Normal Tolerance (mm) |
|-------------------------|-----------------------|
| Up to 3000              | 10                    |
| Over 3000               | 12                    |

## LENGTH TOLERANCES

| Nominal Length (L) (mm) | Normal Tolerance (mm) |
|-------------------------|-----------------------|
| Up to 2000              | +5 / -0               |
| Over 2000               | +0.0025 x L / -0      |

## WIDTH TOLERANCES

| Thickness (mm) | All Plus Tols (mm) for Given Width in (mm) | All Plus Tols (mm) for Given Width in (mm) |
|----------------|--------------------------------------------|--------------------------------------------|
|                | 1000                                       | 1250 & 1500                                |
| Under 1.5      | +1.5                                       | +2.0                                       |
| 1.5 to 2.49    | +2.0                                       | +2.5                                       |
| 2.5 to 3.49    | +3.0                                       | +3.0                                       |
| 3.5 and Over   | +4.0                                       | +4.0                                       |

## FINISHES ACCORDING TO BS EN 10088-2 / 10028-7

| BS EN Finish       | Old BS Finish | Description                                      |
|--------------------|---------------|--------------------------------------------------|
| <b>Hot Rolled</b>  |               |                                                  |
| 1C                 | 0             | Hot rolled, heat treated, not descaled           |
| 1E                 | 1             | Hot rolled, heat treated, mechanically descaled  |
| 1D                 | 1             | Hot Rolled, heat treated, pickled                |
| 1U                 | -             | Hot rolled, not heat treated, not descaled       |
| <b>Cold Rolled</b> |               |                                                  |
| 2C                 | -             | Cold rolled, heat treated, not descaled          |
| 2E                 | -             | Cold rolled, heat treated, mechanically descaled |
| 2D                 | 2D            | Cold Rolled, heat treated, pickled               |
| 2B                 | 2B            | Cold Rolled, heat treated, pickled, skin passed  |
| 2R                 | 2A / (BA)     | Cold Rolled bright annealed                      |
| 2Q                 | -             | Cold Rolled, hardened & tempered, scale free     |

## FINISHES ACCORDING TO BS EN 10088-2 / 10028-7

\*NOTE: Special finishes indicate hot rolled (1) and cold rolled (2) sheets, e.g.: Ground polished hot rolled sheets + 1G / Ground polished cold rolled sheets = 2G

For more information on stainless steel finishes please refer to the AALco technical datasheet on this subject.

| BS EN Finish | Old BS Finish | Special Finishes - Description                                           | Typical Grit | Typical Ra |
|--------------|---------------|--------------------------------------------------------------------------|--------------|------------|
| 1G or 2G     | -             | Ground Grit                                                              | 120          | 2.5 to 2.0 |
| 1J or 2J     | 3B            | Brushed - Unidirectional                                                 | 180          | 1.2 to 1.0 |
| 1J or 2J     | 4             | Dull Polished - Unidirectional                                           | 240          | 0.6        |
| 1K or 2K     | 5             | Satin Polished - Unidirectional                                          | 320          | 0.5 Max    |
| 1P or 2P     | 7             | Bright Polished - Non-Directional with a high degree of image clarity    | 600          | 0.1        |
| 1P or 2P     | 8             | Mirror Finish - Non-Directional with a very high degree of image clarity | 800          | 0.05       |
| 1M or 2M     | -             | Patterned                                                                |              |            |
| 2L           | -             | Coloured                                                                 |              |            |
| 2W           | -             | Corrugated                                                               |              |            |
| 1S or 2S     | -             | Surface Coated (Metallic coatings such as tin, lead or aluminium)        |              |            |

## CONTACT

|                 |                                                                                                        |
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## REVISION HISTORY

|                          |              |
|--------------------------|--------------|
| <b>Datasheet Updated</b> | 18 July 2019 |
|--------------------------|--------------|

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