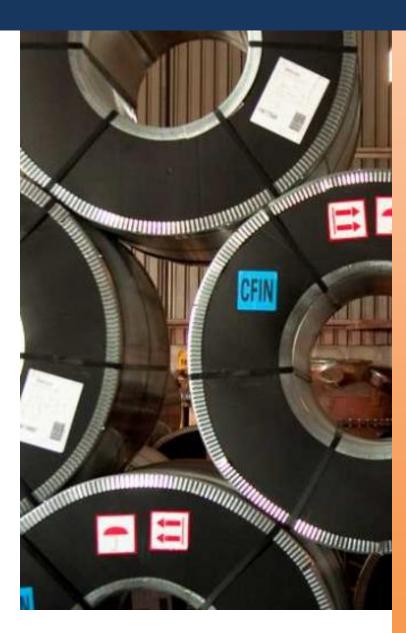
COLD ROLLED ANNEALED & TEMPERED PRODUCTS (CRC STEELS)

Date updated: 26 April 2019





COLD ROLLED STEELS – COLD ROLLED ANNEALED & TEMPERED

Cold rolled annealed and tempered steel (CRC) is produced by cold rolling pickled material to a specified thickness. The material is then annealed in hydrogen atmosphere to produce uniform fine grained steel. The material is then temper rolled to provide a consistent surface finish and surface roughness suitable for applications that require moderate bending and roll forming. Rust preventative oil is applied on the surface as standard to prevent corrosion (rust).

1. Product Data

Material: Mild Steel Grades SAE 1006 & 1008, EN10025 S355JR

Annealing: Batch anneal (Ebner Hicon 100% H²)

Maximum coil weight: 25.0 MT

Specific Coil Weight: 18 kg/mm

Maximum Coil OD: 1880 mm

Coil ID: 508 mm (610mm available by request)

Surface finish: EN Normal (0.6 – 1.9 Ra, 24 – 75 micro inches)

EN Semi bright ($\leq 0.9 \text{ Ra}$, $\leq 35 \text{ micro inches}$)

ASTM Normal (1.016 – 1.65 Ra, 40 – 65 micro inches)

Oiling (per side): Minimum 2g/m² to maximum 3g/m²,

Oil type: Rust preventative oil

2. CRC Qualities available

2.1. Commercial Qualities

- ASTM A1008 CS Type B, CS Type B, CS Type C
- EN10130 DC01
- ISO 3574 CR1
- JIS G3141 SPCC

2.2. Drawing Qualities

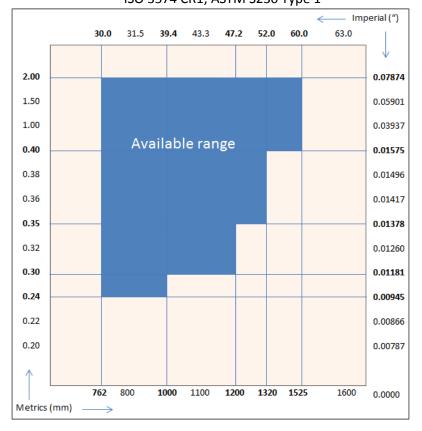
- ASTM DS Type A , DS Type B
- EN10130 DC03
- ISO 3574 CR2
- JIS G3141 SPCD
- 2.3. Deep-drawing Qualities (this is a non-standard product, may be available on enquiry)
 - EN10130 DC04
- 2.4. Structural Qualities
 - ASTM A1008 Grade 33 [230] Type 1
 - ASTM A1008 Grade 40 [S275] Type 1

- 3. Product dimensional and shape tolerances
- **3.1.** ASTM designated dimensional and shape tolerances are supplied according to the ASTM A568 specification standard.
- **3.2.** EN designated dimensional and shape tolerances are supplied according to the EN 10131 specification standard.
- **3.3.** ISO designated dimensional and shape tolerances are supplied according to the ISO 16162 specification standard.
- **3.4.** JIS designated dimensional and shape tolerances are supplied according to the JIS G3141 specification standard.
- 4. Mechanical properties
- **4.1.** The Customer should refer to respective material quality specification standards for the applicable mechanical property limits, taking into account the relevant footnotes.
- **4.2.** DSP may provide the customer with typical mechanical properties achievable, for the respective equivalent, grades on request.
- **4.3.** A tensile test per coil is performed to determine the mechanical properties of each coil.
- 5. Test Certificates/reports
- **5.1.** Test certificate accompanies each final product produced and may be supplied to the Customer on enquiry; as prescribed by EN 10204:2004 Type 3.1 specification standard.
- **5.2.** Information available on the test certificates / reports:
- Customer order detail
- Material quality
- Material identification number
- Dimensional characteristics
- Chemical composition
- Mechanical properties results
- Net mass (Mt)

6. Applicable product ranges (based on nominal order gauge)

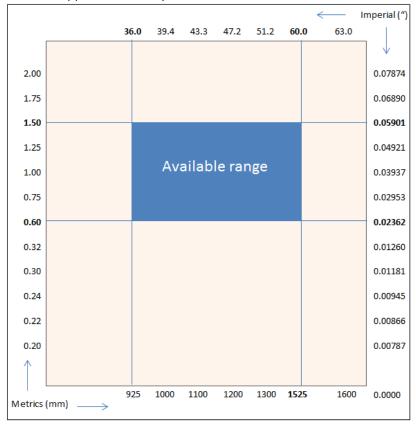
6.1. Commercial Quality

Applicable Quality standards: ASTM A1008 CS (Type A, B, & C); JIS G3141 SPCC; EN10130 DC01; ISO 3574 CR1; ASTM S230 Type 1



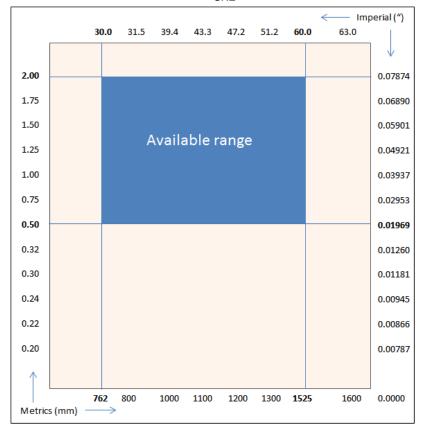
6.2. Structural Quality

Applicable Quality standards: ASTM HSLAS340 CLASS 2



6.3. Drawing Quality

Applicable Quality standards: ASTM DS (Type A & B); EN10130 DC03; JIS G3141 SPCD; ISO3574 CR2



7. General notes

Material may be supplied as "not oiled" on request. However, if the material is ordered and produced as not oiled; DSP cannot be held liable for corrosion related claims.