

HOT ROLLED PICKLE AND OILED (HRPO) PRODUCTS

Date updated: 02 December 2016



HOT ROLLED STEELS – PICKLED [TEMPERED] AND OILED

Hot Rolled Pickled and oiled product is steel that has been descaled, removing the iron oxide scale layer using hydrochloric acid. The material may also be supplied in tempered condition (skin-passed using temper rolls with specific surface roughness) to improve the shape flatness and to apply surface roughness on the strip to suit end-user requirements. Finally, the product is then oiled using rust preventative oil to help retard corrosion during storage, for a reasonable time period.

1. Product Data

Gauge range	1.2mm – 3.0mm
Width range	925mm – 1525mm
Coil weight range:	16 - 25.0 mt
Specific Coil Weight:	18 kg/mm
Maximum Coil OD:	1880 mm
Coil ID:	508 mm (610mm available by request)
Surface finish (If tempered):	Matte (0.6 – 1.9 Ra, 24 – 75 micro inches)
Oiling:	Minimum 1g/m ² to maximum 3g/m ² ,
Oil types:	Rust preventative oil

2. HRC Qualities available

SAE J403 1006, SAE J403 1008 [no mechanical property values will be supplied]

EN 10111 DD11, EN 10111 DD12, EN 10111 DD13

3. Product dimensional tolerances and surface characteristics

3.1. Thickness tolerance (mm)

Nominal thickness t	Tolerances for a nominal width (w)	
	w ≤ 1200	1200 < w ≤ 1500
t ≤ 2.00	±0.13	±0.14
2.00 < t ≤ 2.50	±0.14	±0.16
2.50 < t ≤ 3.00	±0.15	±0.17

3.2. Width tolerance

Order width w	Tolerances (mm)			
	Mill edges		Trimmed edges	
	Lower	Upper	Lower	Upper
w ≤ 1200	0	+20	0	+3
1200 < t ≤ 1525	0	+20	0	+5

3.3. Surface characteristics

3.3.1. Worn work roll scale, roll marks, small scratches, kinks from payoff reels and slight discoloration are permitted.

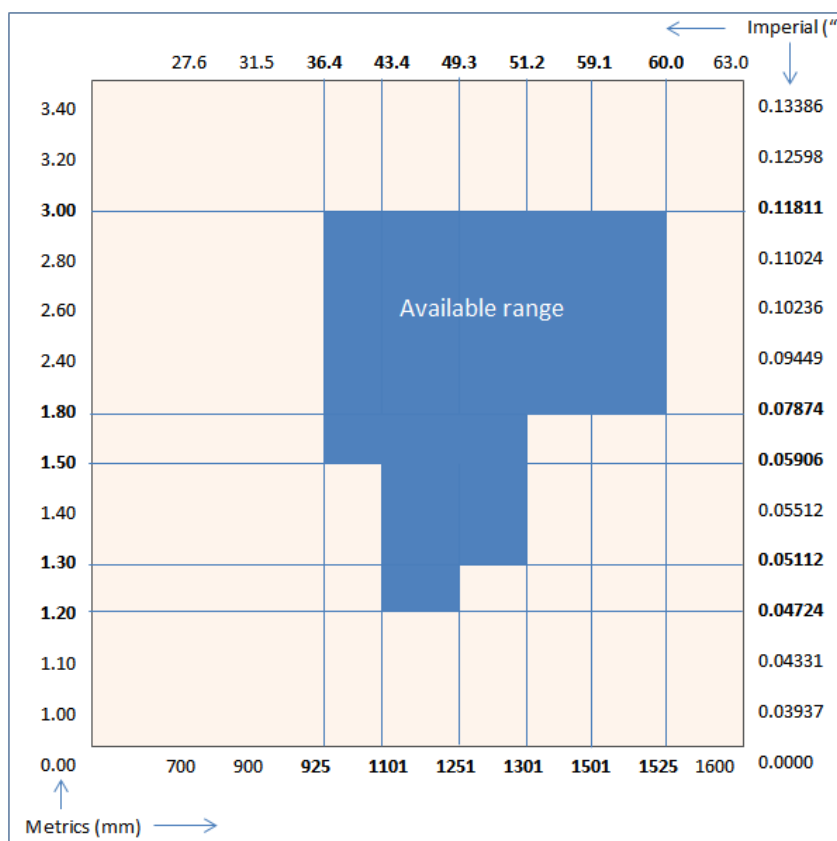
3.3.2. The product is intended for non-surface critical end-use.

4. Mechanical properties

Steel grade	Steel number	0.2% offset Yield strength, MPa (N/mm ²) ¹	UTS, MPa (N/mm ²), min	Elongation % min			Validity (months)
				<2.0mm	2.0mm ≤ e <3.0mm	≤3.0mm	
DD11	1.0332	170 - 340	440	23	24	28	6
DD12	1.0398	170 - 320	420	25	26	30	
DD13	1.0335	170 - 310	100	28	29	33	

1. For product thickness <2mm, 0.2% offset Yield strength values increase by 20MPa.

5. Applicable product dimension range (based on normal order gauge)



6. General Notes

6.1. Gauges ≤1.80 mm is not recommended for shape/flatness critical applications.

6.2. When ordering non-standard widths or gauges below 2.0mm the absorption of stepdown gauges requested by the HRC supplier are to be discussed on a case by case basis with Marketing.