

Cold Rolling Mill Rolls

Forged Steel Work Roll



Description

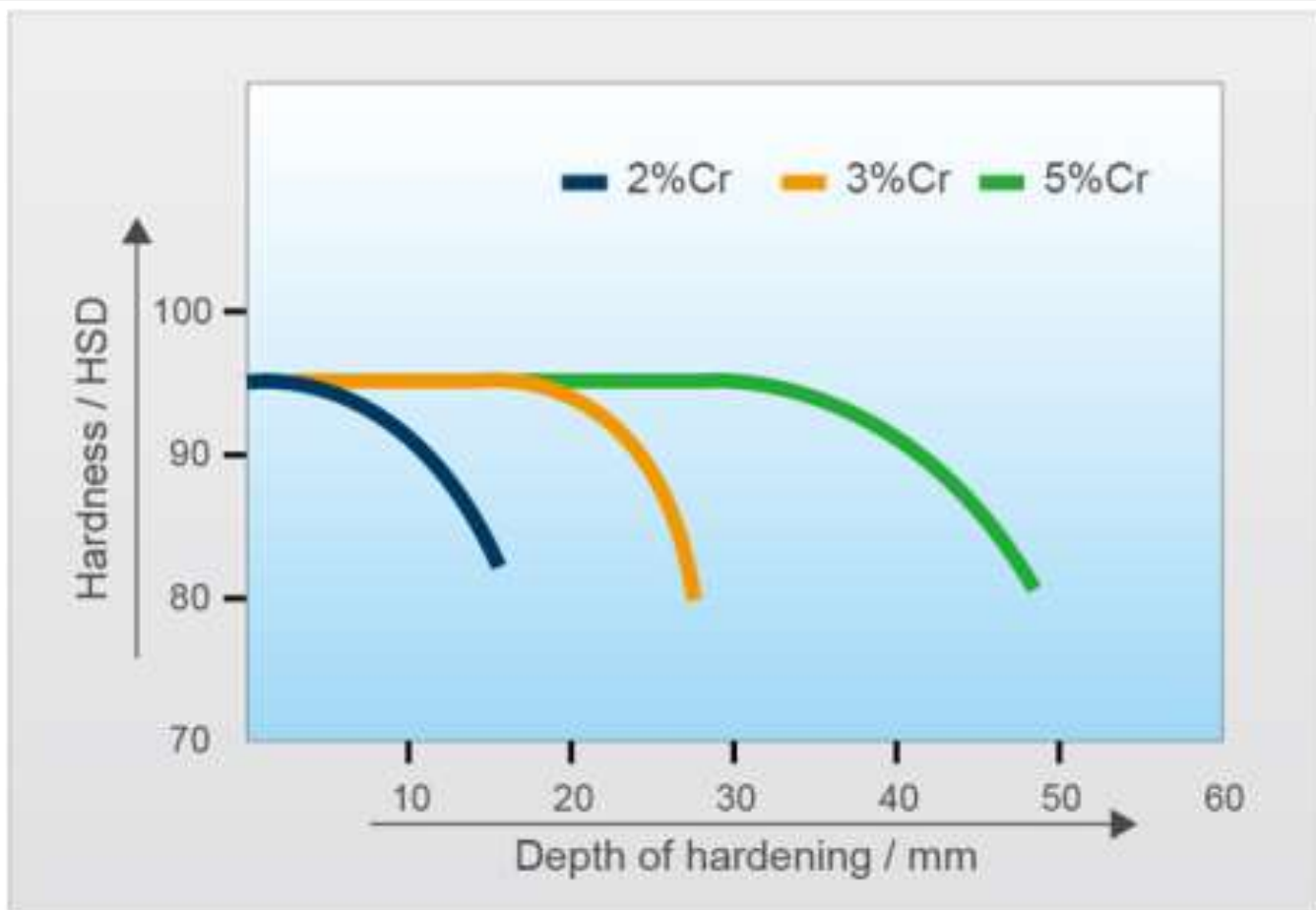
Forged Steel Work Roll

Forged steel work roll performs as a tool to transform materials under normal room temperature, therefore, it is the most wear and tear spare parts during the rolling process. With 2%Cr, 3%Cr, 5%Cr material series, we have greatly improved our products both in terms of quality and diversification.

In order to reduce the rolling mill rolls consumption, extend the roll campaign, we hire the best technical and quality team to control the quality, with the most advanced facilities.

Table.1 Physical Performances

Symbol	Hardness	Hardness Uniformity	Depth of hardness	Size
9Cr2Mo	85-102 HSD	3HSD	8~15mm	∅ 200-600mm
MC3	85-102HSD	3HSD	15-30mm	∅ 200-1000mm
MC5	85-102HSD	3HSD	20-40mm	∅ 300-1000mm

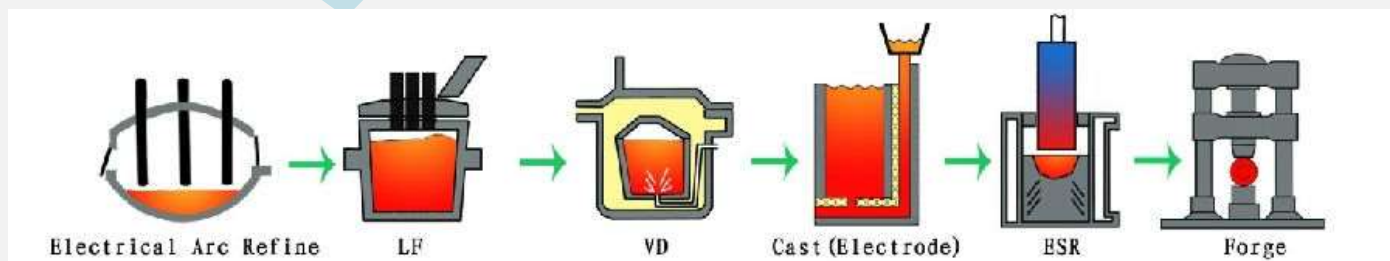


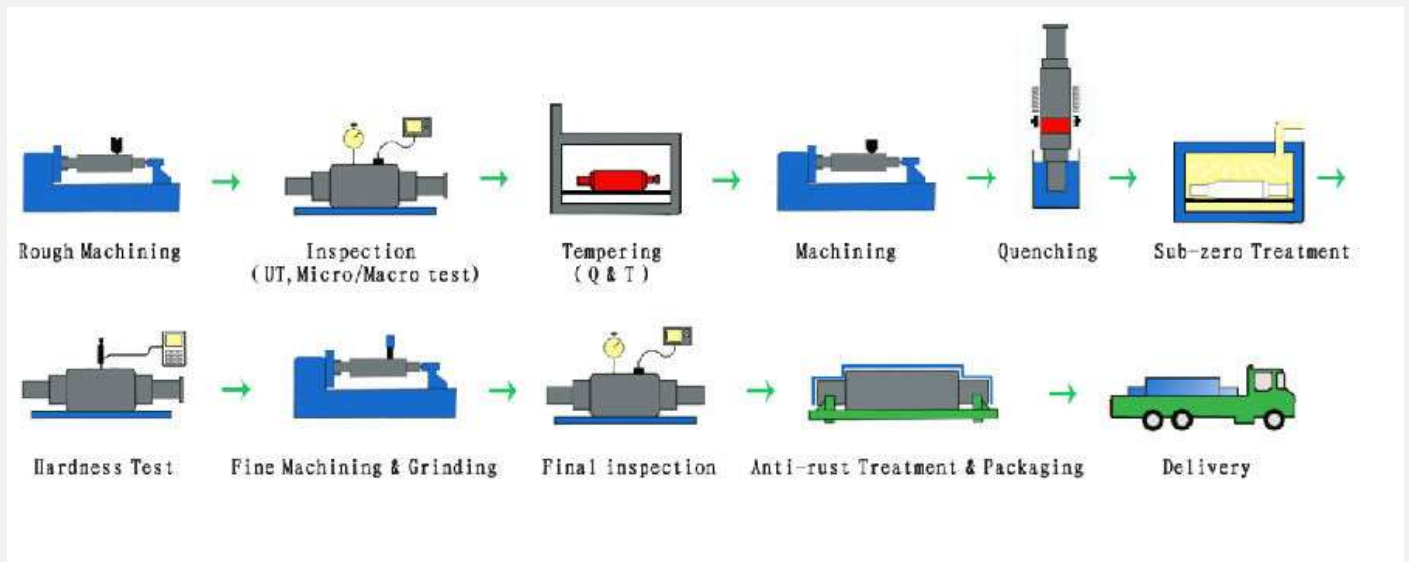
Pic.1 Hardness Curve of Work Roll

Table.2 Roll Applications

Symbol	Type of material	Application for cold mills
9Cr2Mo	2% Cr	Work rolls for general 4 HI mill
MC3	3% Cr	Work rolls and intermediate rolls for reverse cold mills.
MC5	5% Cr	Work rolls for tandem mill and skin pass mil

Forged Roll Production Process





Forged materials produced by the most famous special steel company are in line with our production requirements. We keep our continuous innovation and improvement of our products to keep us competitive. Our outstanding operational technology, advanced on site management and rigid quality control at each production step, ensure our quality assurance to our customers.

Main Equipment

- 90 ton DC Electrical Arc Furnace
- 40 ton Ladle Furnace
- 40 ton Vacuum Degas Furnace
- 26.5 ton Electro-slag Furnace
- 16MN Forging Machine



Forging Machine



Landle Furnace



VOD

- CNC Lathe Machine
- CNC Milling Machine
- CNC Grinding Machine
- Double Frequency Quenching Machine
- Industrial Frequency Quenching Machine
- Large Tempering Furnace



CNC Lathe Machine



Waldrich Grinding Machine



Conventional Heat Treatment of Back-up Roll



Surface Induction



CNC Milling Machine

Cold Rolling Mill Intermediate Roll



Description

Cold rolling mill intermediate Roll

Cold rolling mill intermediate roll applies to high precision 6-Hi (as well as a few 8-Hi) mill, named from working location between work roll and back-up roll, mainly used to control the shape of strip. Material specification of 2%Cr, 3%Cr, 5%Cr, Semi-High Speed Steel are available.

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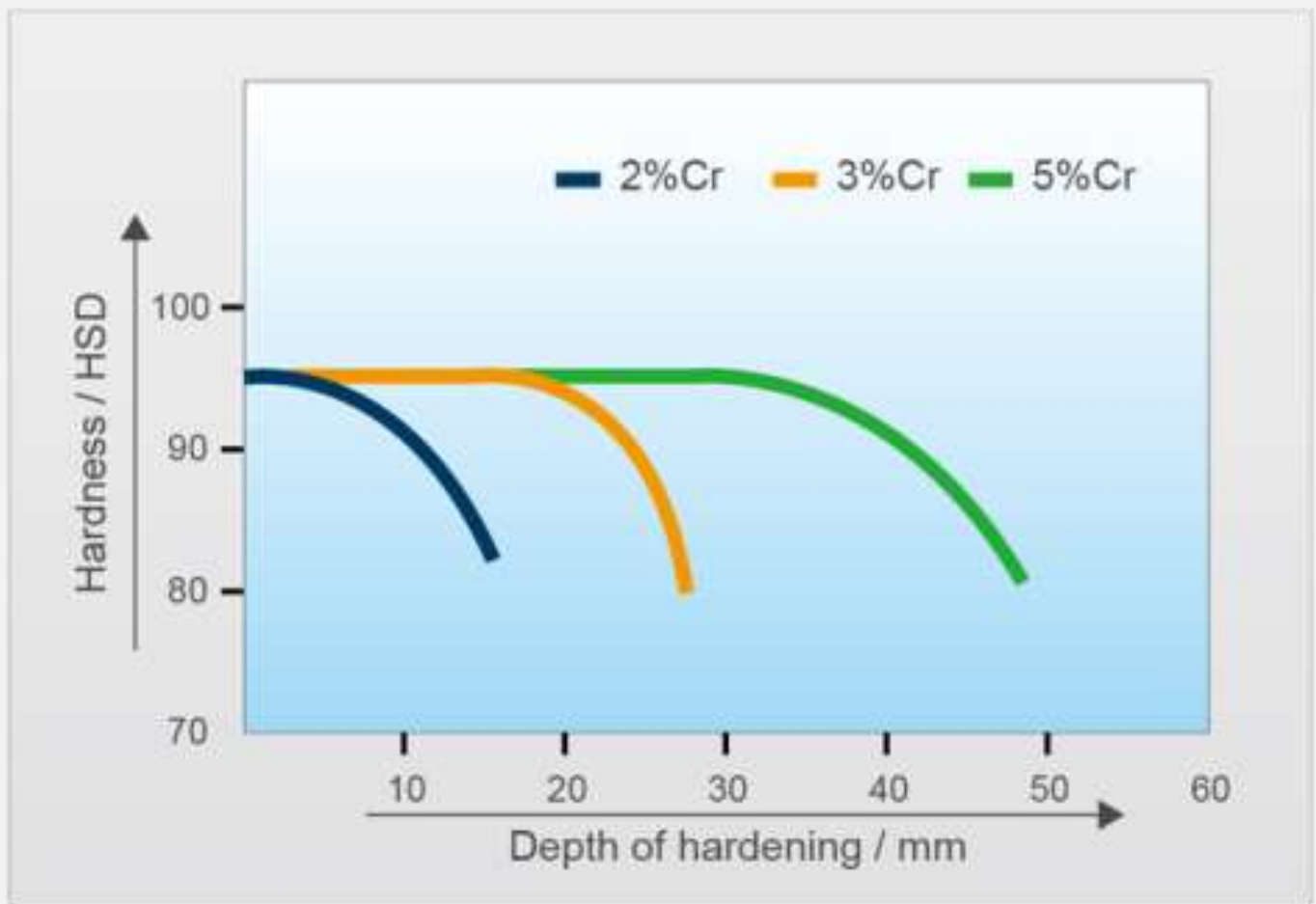


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Forged Steel Back-up Roll



Description

Forged steel back-up roll

Forged steel back-up roll is mainly used in 4-Hi mill and 6-Hi mill. The diameter of roll barrel is 350~1800mm. The material of back-up roll includes 60CrMo, 9Cr2Mo, 86CrMoV7, 70Cr3Mo, 5Cr5NiMoV etc.

Name	Type of material	Hardness	Depth of hardness	Hardness deviation
Back-up roll	2%Cr,3%Cr,4%Cr,5%Cr	60~80HSD	20~100mm	2-3HSD

Hardness Curve

