ROLL MATERIAL DATA SHEET

Indefinite Chill Double Poured

GRADE

ICDP

01 FIELD OF APPLICATION

Mill Type	Position
Hot Strip Mill	Late Finishing Stands Work Roll
Narrow Strip Mill	Late Finishing Stands Work Roll
Steckel Mill	Work Roll
Plate Mill	Work Roll

02 MECHANICAL PROPERTIES

HARDNESS RANGE	TENSILE STRENGTH	BENDING STRENGTH	YOUNG'S MODULUS
70-80 ShC	> **400** MPa	> **700** MPa	approx. **170,000** MPa

The microstructure of standard indefinite chill roll consists of M_3C type eutectic carbides and free graphite in a tempered martensitic/bainitic matrix. This alloy is characterized by good wear resistance and very good resistance towards mill accidents.

The amount of free graphite in the rolls can be adjusted to specific mill requirements by variation of the inoculation. Therefore, it is possible to customize roll properties for each mill.

PRODUCT HIGHLIGHTS

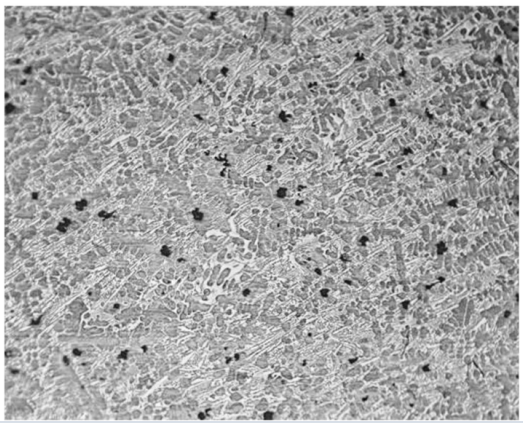
- Good wear resistance
- Good Fire Cracking Resistance
- Insensitive to rolling mill accidents



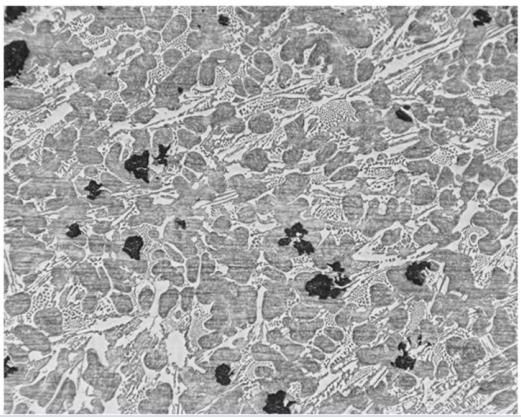
03 CHEMICAL COMPOSITION

wt. %	C	Mn	Si	P	S	Ni	Cr	Mo	Nb + V + W
Min	2.80	0.50	0.50	0	0	3.00	1.00	0.30	0
Max	3.50	1.30	1.50	0.10	0.050	5.00	2.00	3.00	0.50

04 MICROSTRUCTURE



■ *40 X – etched (Nital)*



■ *100 X – etched (Nital)*

05 HARDNESS PENETRATION CURVE (SHELL – INTERFACE – CORE)

