

The Davy Roll Company Limited

Description

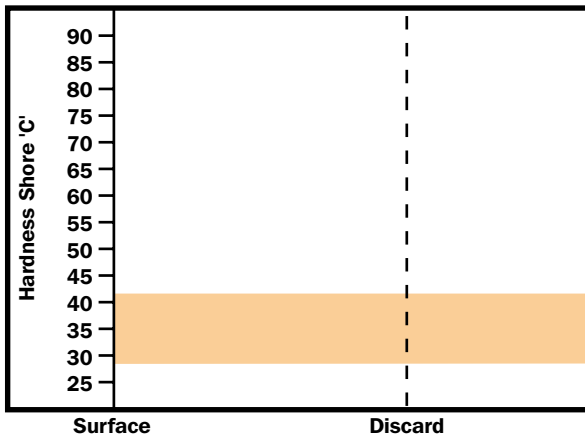
Carbon Cast Steel has a low alloy content and is annealed to produce a tough material which has low thermal sensitivity.

The structure changes from ferrite and pearlite in the low carbon grades to wholly pearlitic in the high carbon qualities. Hardness and wear resistance increase with carbon content.

The high toughness and thermal shock resistance make Carbon Cast Steel very suitable for heavy duty applications such as primary mills and the roughing of heavy sections.

The lower carbon grades have good weldability.

Typical Hardness Gradient



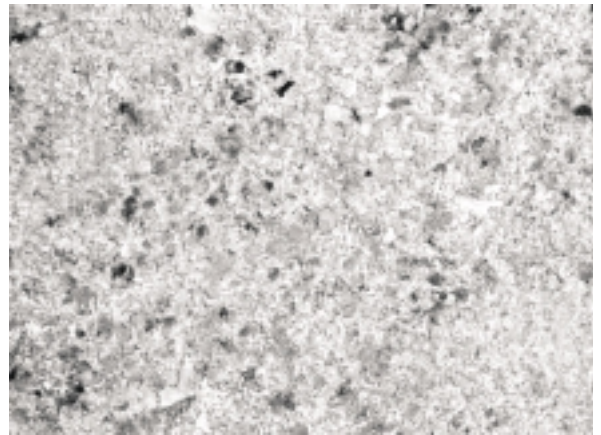
Applications

Product	Type of Mill	Position
Slabs	Universal and High Lift	Horizontal and Vertical
Blooms	2 and 3 High	All Positions
Heavy Sections and Rails	2 and 3 High	Roughing, Intermediate and Finishing

Typical Mechanical Properties

Property	N/mm ²
Tensile Strength	720
Bending Strength	980

Micrograph x100



Typical Analysis

Code	Leeb E	Shore C	C	Si	Mn	Ni	Cr	Mo
C1	455-490	28-34	0.4/0.5	0.3/0.8	0.5/1.0	0.5 max	0.5 max	0.25 max
C2	480-515	32-38	0.5/0.6	0.3/0.8	0.5/1.0	0.5 max	0.5 max	0.25 max
C3	490-525	34-40	0.6/0.7	0.3/0.8	0.5/1.0	0.5 max	0.5 max	0.25 max
C4	500-540	36-42	0.65/0.75	0.3/0.8	0.5/1.0	0.5 max	0.5 max	0.25 max

