

Cast Steel Roll Specifications

GRADE: SG Pearlitic Chill

Union Electric Åkers
Forged and Cast Rolls



DESCRIPTION

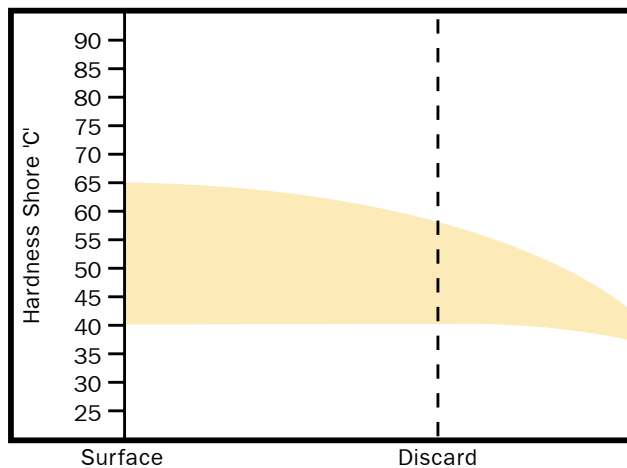
SG Pearlitic Chill rolls are basically an indefinite chill type of roll deriving good wear resistance from a combination of free carbide and hard matrix. However, the graphite is changed from flake to nodular in form. The internal notch effect of nodular graphite is relatively small and therefore SG rolls have a much higher strength and allow the use of an iron roll in applications which would represent too high a duty for a flake graphite quality.

Their indefinite chill characteristics give the rolls good hardness penetration so that they are suitable for small to medium sections and billets although they can also give good results when rolling flat products.

APPLICATIONS

Product	Type of Mill	Position
Plate	2 High	Finishing
Plate	3 High	All Positions
Plate	4 High	Roughing and Finishing
Wide Strip	2 and 4 High	Roughing
Billet	2 and 3 High	Finishing
Billet	Continuous	Intermediate and Finishing
Beams	Universal	Vertical and Edgers
Medium Sections	2 and 3 High	Intermediate and Finishing

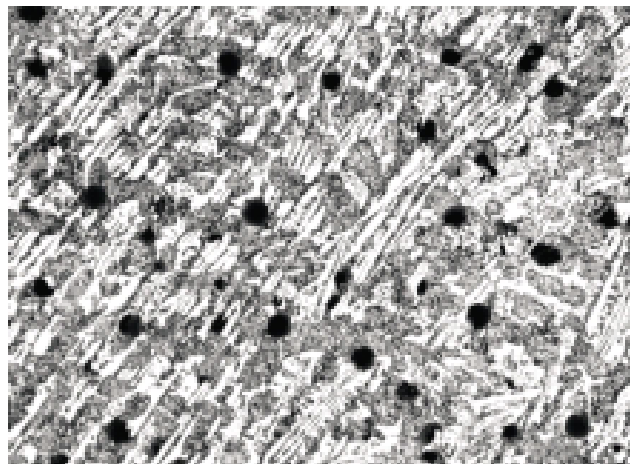
DEPTH OF HARDNESS



TYPICAL MECH. PROPERTIES

Property	N/mm ²
Tensile Strength	400
Bending Strength	785

MICROSTRUCTURE X100



AIM CHEMISTRY (WT%)

Code	Leeb E	Shore C	C	Si	Mn	Ni	Cr	Mo
SG34A	530/575	40/48	2.8/3.4	1.5/2.5	0.5/0.9	1.2/1.9	0.1/0.5	0.5max
SG34G	620/650	55/60	3.2/3.5	1.0/1.6	0.5/0.9	2.0/4.0	0.1/0.5	0.2/1.0
SG34M	620/675	58/64	3.2/3.5	1.0/1.6	0.5/0.9	1.5/3.5	0.4/0.8	0.2/1.0