## GRADE: **Superten Alloy Cast Steel**



#### **DESCRIPTION**

Superten is a high carbon, high alloy steel which is given a special multi-stage heat treatment in order to develop the combination of hardness, toughness and wear resistance required for any particular application.

The structure produced consists of well broken up and dispersed carbides in a matrix of bainite and pearlite. The high hardenability means that Superten rolls show no significant reduction in hardness with depth, even in larger diameter rolls.

The high carbide content and tough, hard matrix make Superten rolls particularly suitable for section rolling.

Abrasive wear is significantly reduced and surface finish remains very good for the duration of each mounting.

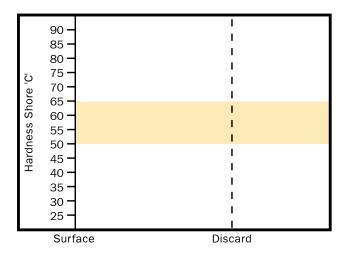
Experience in many mills has shown that Superten rolls give substantially higher outputs than conventional rolls.

They also have excellent resistance to thermal fatigue and thus are very suitable as roughing rolls for strip and plate.

APPLICATIONS						
Product	Type of Mill	Position				
Medium Section	2 and 3 High	Intermediary and Finishing				
Heavy Section	2 and 3 High	Finishing				
Plate and Strip	2 and 4 High	Roughing				
Beam	Universal	Horizontal				
Med & Small Section	Cogging					

# TYPICAL MECH. PROPERTIES Property N/mm2 Tensile Strength 600 Bending Strength 850

### **DEPTH OF HARDNESS**



### **MICROSTRUCTURE X500**



AIM CHEMISTRY (WT%)									
Code	Leeb E	Shore C	С	Si	Mn	Ni	Cr	Мо	
ST15G	590/620	50/55	1.0/2.0	0.3/0.8	1.0/2.0	1.0/2.0	1.0/2.0	0.3/0.8	

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