

MATERIAL GRADES OF STATICALLY CAST ROLLS



- Chemical composition material V180 mod:

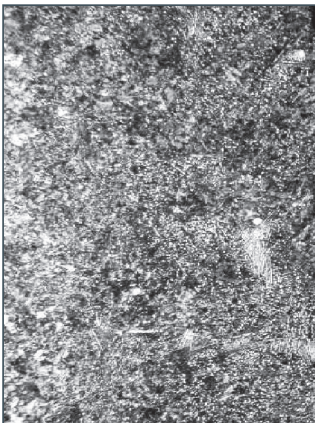
Chemical composition [%]									Barrel Hardness [HSc]
C	Mn	Si	Pmax	Smax	Ni	Cr	Mo	Ti	
1,7-1,9	0,7-1,2	0,5-0,9	0,025	0,025	1,0-1,2	1,2-1,4	0,5-0,7	0,05-0,1	47-55

- Mechanical properties of barrel material (min.):

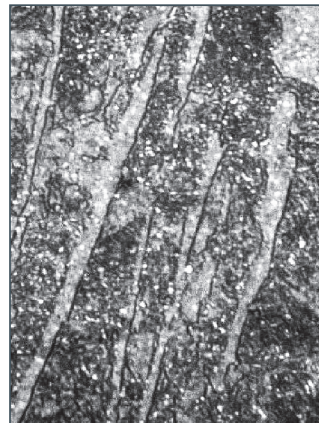
TENSILE STRENGTH [MPa]	550-750
BENDING STRENGTH [MPa]	700-950

- Microstructure:

100x



500x



- Characteristic microstructure:

Perlitic matrix with finely distributed carbides and free graphite. Advanced amount cementite in structure is proportional higher carbon content.

- Applications:
roughing rolls, billet rolls

Hardness penetration of the rolls, material V180

