Graphite Cast Steel Rolls

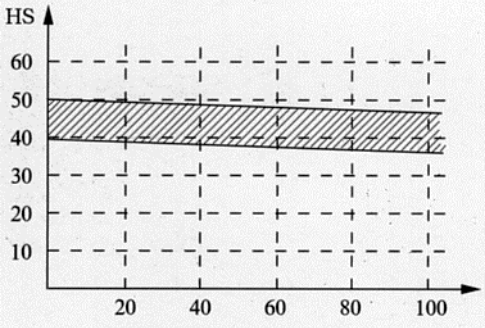
The characteristics of graphite cast steel rolls are similar to adamite rolls, but it makes a feature of presenting a small amount of graphite which increase the resistance to fire crack and scale adhesion, and are suitable for blooming or roughing operation.

化学成分 Chemical composition(%)

代 号 symbol	C	Si	Mn	Cr	Ni	Mo
GS-1	1.2-1.4	1.0-1.6	0.5-1.2	0.4-1.2	0.2-1.5	0.2-0.5
GS-2	1.4-1.6	1.0-1.6	0.5-1.2	0.4-1.2	0.2-1.5	0.2-0.5
GS-3	1.6-1.8	1.0-1.6	0.5-1.2	0.4-1.2	0.2-1.5	0.2-0.5
GS-4	1.8-2.0	1.0-1.6	0.5-1.2	0.6-1.6	0.2-1.5	0.2-0.5
GS-5	2.0-2.2	1.0-1.6	0.5-1.2	0.6-2.0	0.2-1.5	0.2-0.5
芯部 Core	3.0-3.6	1.5-2.5	0.4-1.0	<0.3	<1.0	0.2-0.5
	0.3-0.5	0.2-0.6	0.4-0.8	--	--	--

硬度分布曲线示例:

Example of typical hardness profile:



距表面距离 (mm)
Depth from surface

辊身硬度 Barrel Hardness(HS)

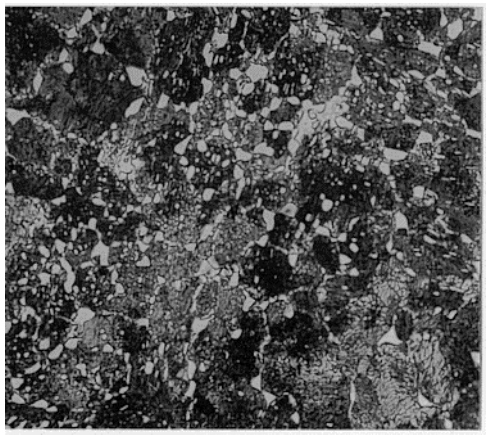
代号 Symbol	GS-1	GS-2	GS-3	GS-4	GS-5
HS	36-44	38-55	40-48	42-50	44-52

机械性能 Mechanical Properties:

抗拉强度 Tensile Strength	MPa	385-750
抗弯强度 Bending Strength	MPa	585-920

金相组织 Microstructure:

细珠光体+球状石墨+碳化物
Fine Pearlite+Nodular Graphite+Carbide



基体 Matrix 500X

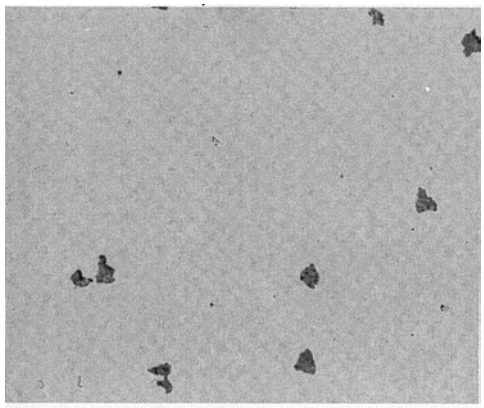
用途 Appication:

用于带钢热连轧机、中宽厚板二辊可逆轧机粗轧机架。

用于初轧机、钢坯连轧机及型钢和轨梁等轧机，尤为适用于深孔型的轧辊及带钢热连轧机粗轧机架。

These rolls are being used on roughing stands of hot strip mill and roughing stands of 2-Hi reversing plate mills.

These rolls are being used in blooming mills,billet mills,beam and shape steel mills,and especially for the rolls with deep grooves and roughing stands of hot strip mills.



石墨 Graphite 50X

承制范围 The capacity of making:

辊身直径(mm) Diameter of barrel	辊身长度(mm) Length of barrel	净重(t) Net weight
Φ 1350(max.)	3100(max.)	50(max.)