

## **Adamite Rolls**

The adamite rolls include monobloc, duplex rolls and sleeves. Owing to the alloy elements such as Mo, Cr, Ni etc. that have been added at higher carbon scope and having applied to them special heat treatment, the rolls are given an optimum combination of wear-ability, toughness and fire crack resistance. And there is almost no hardness drop in the working layer of adamite rolls.

**化学成分** Chemical composition(%)

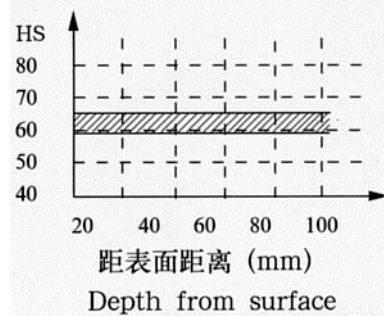
代号 Symbol	C	Si	Mn	Cr	Ni	Mo
AD-1	1.20-1.60	0.30-1.00	0.60-1.40	0.50-1.20	0.20-1.20	0.20-0.80
AD-2	1.45-1.85	0.30-1.00	0.60-1.40	0.80-2.00	0.20-1.20	0.20-0.80
AD-3	1.75-2.15	0.30-1.00	0.70-1.30	1.80-2.50	1.00-1.50	0.20-0.80
AD-4	1.75-2.15	0.30-1.00	0.70-1.30	0.80-2.00	1.80-2.50	0.20-0.80
AD-5	1.90-2.30	0.30-1.00	0.70-1.30	0.50-1.20	0.20-1.20	0.20-0.80
辊环芯部 rings core	> 1.50	> 1.20	--	--	--	--

**物理性能** Physical Properties:

代号 Symbol	辊身硬度 Barrel Hardness HS	抗拉强度 Tensile strength MPa	延伸率 Elongation %	冲击韧性 Impact Value × 10 <sup>4</sup> J/m <sup>2</sup>
AD-1	35-50	> 500	> 1.0	> 4
AD-2	40-55	> 450	> 1.0	> 4
AD-3	50-65	> 350	> 0.5	> 5
AD-4	50-65	> 350	> 0.5	> 5
AD-5	45-55	> 350	> 0.5	> 5

**硬度分布曲线示例:**

Example of typical hardness profile:



**金相组织** Microstructure:

辊身工作层金相组织为:

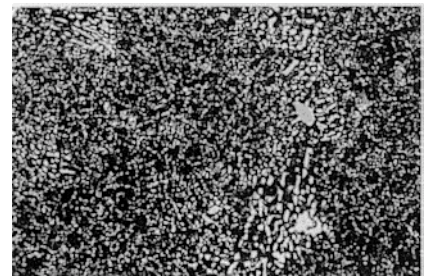
珠光体 + 碳化物

细珠光体 + 少量贝氏体 + 碳化物

The microstructure of working layer is:

pearlite + carbide

fine pearlite + a little of bainite + carbide

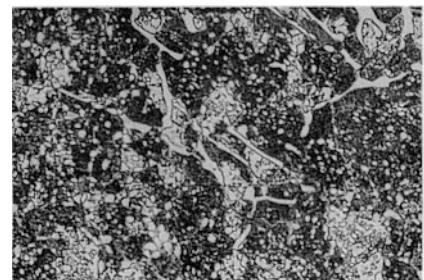


基体 Matrix 500X  
珠光体 + 碳化物  
pearlite+carbide

**用途** Application:

带钢热连轧机粗轧、精轧前段、立辊; 型钢、轨梁轧机、棒材轧机的粗轧、中轧、预精轧机架; 万能轧机、悬臂轧机辊环、辊套。

Rolls for roughing, early finishing and vertical stands of hot strip mills, rolls for roughing, intermediate and pre-finishing stands of section, beam and bar mills, rings and sleeves for vertical and horizontal stands of universal and hang arm mills.



基体 Matrix 500X  
细珠光体 + 少量贝氏体 + 碳化物  
fine pearlite+a little of bainite+carbide

**承制范围** The capacity of making:

轧辊类别 Type of rolls	辊身直径 (mm) Diameter of barrel	辊身长度 (mm) Length of barrel	单重 (t) Weight
半钢轧辊 Adamite rolls	Φ 1500(max.)	3000(max.)	60(max.)
半钢辊环 Adamite rings	Φ 1400(max.)	700(max.)	7 (max.)