

## Adamite rolls

### Chemical Analysis

| Grades  | C       | Si      | Mn      | P      | S     | Ni      | Cr      | Mo      |
|---------|---------|---------|---------|--------|-------|---------|---------|---------|
| AD140   | 1.3~1.5 | 0.3/0.6 | 0.7/1.4 | ≤0.035 | ≤0.03 | --      | 0.8/1.6 | 0.2/0.6 |
| AD140 I | 1.3~1.5 | 0.3/0.6 | 0.7/1.1 | ≤0.035 | ≤0.03 | 0.2/0.5 | 0.8/1.2 | 0.2/0.6 |
| AD160   | 1.5~1.7 | 0.3/0.6 | 0.7/1.1 | ≤0.035 | ≤0.03 | --      | 0.8/1.2 | 0.2/0.6 |
| AD160 I | 1.5~1.7 | 0.3/0.6 | 0.8/1.3 | ≤0.035 | ≤0.03 | ≥0.2    | 0.8/2.0 | 0.2/0.6 |
| AD180   | 1.7/1.9 | 0.3/0.8 | 0.6/1.1 | ≤0.035 | ≤0.03 | 0.5/2.0 | 0.8/1.5 | 0.2/0.6 |
| AD190   | 1.8/2.0 | 0.3/0.8 | 0.8/1.2 | ≤0.035 | ≤0.03 | 1.0/2.0 | 1.5/3.5 | 0.2/0.6 |
| AD200   | 1.9/2.1 | 0.3/0.8 | 0.8/1.2 | ≤0.035 | ≤0.03 | 0.6/2.5 | 0.6/2.0 | 0.3/0.8 |

### Physical Properties

| Designation of rolls | Barrel hardness (HSD) | Tensile strength (MPa) |
|----------------------|-----------------------|------------------------|
| AD140                | 38~48, 45~55          | >490                   |
| AD140 I              | 35~45, 40~50          | >490                   |
| AD160                | 40~50                 | >490                   |
| AD160 I              | 40~50, 50~60          | >490                   |
| AD180                | 45~55, 55~60          | >490                   |
| AD190                | 55~65                 | >490                   |
| AD200                | 50~60, 55~65          | >490                   |

### Microstructure

Microstructure of working layer in the barrel: pearlite + SG + carbide

### Application

For hot strip mill, two-high reversing stands of plate mill, Roughing mill, billet rolling mill, section mill, barmill and roughing stands of high-speed wire-rod mill