

Classifications

DIN 8555

MF 10-GF-65-GT

Characteristics

Chromium-Niobium-Molybdenum alloy with addition of Tungsten and Vanadium designed to resist high stress grinding abrasion with low impact and solid erosion at service temperatures up to 650 °C. The deposits will readily show stress relief cracks.

Microstructure: Austenitic matrix with complex carbides of different types
Chromium rich hexagonal primary carbides,
M7C3 eutectic carbides and nodular Niobium carbides.

Oxy-acetylene cutting Cannot be flame cut

Machinability Grinding only

Deposit thickness 8 to 10 mm in 2 or 3 layers

Field of use

Wear plates, sinter finger crushers, exhaust fan blades in pellet plants, perlite crushers, bucket teeth and lips on bucketwheel excavators in phosphate mines, boiler fan blades in the sugar cane industry, burden area in blast furnace bells, wear plates in blast furnace bell-less top charging systems.

Typical analysis in %

| C | Mn | Si | Cr | Mo | Nb | W | V | Fe |
|-----|-----|-----|------|-----|-----|-----|-----|---------|
| 5.5 | 0.2 | 0.5 | 21.2 | 6.2 | 6.1 | 1.8 | 1.0 | balance |

Typical mechanical properties

Hardness as welded: 63 HRC

Recommended welding parameters

| Wire diameter [mm] | Amperage [A] | Voltage [V] | Stick-Out [mm] |
|--------------------|--------------|-------------|----------------|
| 2.8* | 300 – 350 | 26 – 30 | 35 – 40 |

*available on request