# SK TOOL ALLOY Co-G

gas shielded metal cored wire

## Classifications

DIN 8555

MF 23-GF-200-CKZ

## Characteristics

NiCrMo alloy with addition of Cobalt designed for hardsurfacing of parts subject to oxidation, corrosion and mechanical stresses at high temperature (1.100 °C). For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode.

| | |
|---|---|
| Microstructure: | Solution of the austenitic type |
| Machinability: | Good with metallic carbide tipped tools |
| Oxy-acetylene cutting: | Cannot be flame cut |
| Deposit thickness: | Depends upon application and procedure used |
| Shielding gas: | Argon 98% + Oxygen 2% or Argon 82% + $CO_2$ 18% |

## Field of use

Punches for extrusion of steel pipes, hot working tools.

## Typical analysis in %

| C | Mn | Si | Cr | Ni | Mo | Co | W | Fe |
|---|---|---|---|---|---|---|---|---|
| 0,03 | 1,3 | 0,7 | 16,0 | balance | 16,0 | 2,5 | 4,0 | 3,0 |

## Typical mechanical properties

Hardness as welded: 220 HB

## Recommended welding parameters

| Wire diameter [mm] | Amperage [A] | Voltage [V] | Stick-Out [mm] | Gas-Rate [L/min] |
|---|---|---|---|---|
| 1,6 | 150-250 | 20-31 | 20 max. | 15-18 |
| 2,4 | 200-450 | 20-31 | 20 max. | 18-20 |