

Classifications

DIN 8555	ASME IIC SFA 5.21
MF 20-GF-300-CTZ	ERC CoCr-E

Characteristics

Cobalt base alloy providing excellent resistance to metal-to-metal wear, thermal shocks, oxidation in corrosive environments at high temperature. For reduced levels of dilution and an improved weldability, we recommend using a pulsed MIG welding mode.

Microstructure:	Cr and Mo carbides in an austenitic matrix
Machinability:	Good
Oxy-acetylene cutting:	Cannot be flame cut
Deposit thickness:	Depends upon application and procedure used
Shielding gas:	Argon 98% + Oxygen 2% or Argon 100%
Welding flux (for dia. 2,4):	Record SA

Field of use

Extrusion dies, hot working tools, turbine injectors, valve seats, ingot tong bits.

Typical analysis in %

C	Mn	Si	Cr	Ni	Mo	Co	Fe
0,27	1,0	1,2	28,0	2,4	5,0	balance	3,5

Typical mechanical properties

Hardness as welded: 32 HRC

Recommended welding parameters

Wire diameter [mm]	Amperage [A]	Voltage [V]	Stick-Out [mm]	Gas-Rate [L/min]
1,2	110-180	20-31	20 max.	12-15
1,6	150-250	20-31	20 max.	15-18
2,4	300-400	20-31	20 max.	18-20