

GM ST12

IDENTIFICATION

GM ST-12, ER CCoCr-B

CLASSIFICATION

AWS/SFA 5.21: ER CCOCR-B

DESCRIPTION

GM ST12 content of complex carbides in an alloy matrix. They are resistant to wear & corrosion to retain these properties at high temperature. These wear resistance in mainly due to inherent characteristic of hard carbide phase.

CHEMICAL ANALYSIS (RANGE) %

C	Si	Cr	Ni	Mn	Mo	Fe	Co	W
1.2 - 2.0	2.0 max	25.0-32.0	3.0 max	2.0 max	1.0 max	5.0 max	Bal.	07-Oct

TYPICAL APPLICATIONS

- Cutting tools to withstand abrasion
- It used for control plates in beverage industry, pump vanes, heavy bushes & for hardfacing engine valves.

WELD METAL PROPERTIES

- **Hardness** : 45 - 50 HRC

GENERAL CHARACTERISTICS

- **Machinability** : Good
- **Deposit thickness** : Depends upon application and procedure used.
- **Shielding gas** : Pure argon or argon 98% + oxygen 2%

WELDING PARAMETERS

Diameter (mm)	Current intensity (A)	Voltage (V)	Stick-out (mm)	Gas flow (l/mm)	Weight / Spool (kg)
1.2	110 - 180	20 -31	20 max	Dec-15	12.5 / 15.0
1.6	150 - 250	20 - 31	20 max	Dec-15	12.5 / 15.0
2.40 / 2.50	300 - 400	24 - 31	20 max	15 -20	12.5 / 15.0