

# **GEMET ST6**

## **IDENTIFICATION**

Gemet ST6, ECoCr-A

## **CLASSIFICATION**

AWS/SFA 5.13: ECoCr -A

## **DESCRIPTION**

Rutile -coated welding electrode on cobalt base, core wire alloyed. Gemet ST6 has excellent welding properties and a homogeneous, finely rippled seam weld metal.

# WELD METAL ANALYSIS (RANGE) %

C	Cr	W	Co
1.1 max	27.5 max	4.5 max	balance

# **MECHANICAL PROPERTIES (RANGE)**

Hardness of Pure Weld Metal	Hardness at 600°C
37 - 42 HRC	Approx. 33 HRC

## TYPICAL APPLICATIONS

GEMET ST6 is used for high - grade hard -facing on parts subjected to a combination of erosion, corrosion, cavitations, impact, pressure, abrasion and high temperatures up to  $900^{\circ}$ C, such as tight surfaces on fittings, valve seats and cones for combustion engines, gliding surfaces metal-metal, highly stressed hot working tools without thermal shock, milling mixers and drilling tools. Excellent gliding characteristic, easy polishability, good toughness, nonmagnetic, machining by grinding or with tungsten carbide cutting tools.

## **WELDING INSTRUCTIONS:**

- Clean welding area
- Preheating temperature 450 600°C
- Very slow cooling.
- Hold electrode vertically and with a short arc and lowest possible amperage.
- Re-dry electrodes that have become damp for 2 h / 300°C

## **PACKING PARAMETERS**

Size (mm)	Length (mm)	Current Condition AC / DC (+) Amps	Packing / Packet (kg)	Packing / Box (kg)
3.15 / 3.20	350	70 - 110	2	$2 \times 5 = 10$
4	350	90 - 130	2	2 x 5 = 10
5	350	110 - 150	2	$2 \times 5 = 10$