# Hardfacing Welding Wire & Rod **TOOL 45 SG**

#### **Standards**

# Chemical Composition of Welding Wire % (Typical)

DIN 8555	: MSG 3-GZ-50-ST		
	: WSG 3-GZ-50-ST		

С	Si	Mn	Cr	Ti	Mo
0.30	0.50	0.70	5.00	0.70	3.60

#### **Mechanical Properties**

Hardness (as welded) (HRC)
45 - 48

#### **Typical Base Material Grades**

1.2367-1.2365-1.274-1.2344-1.2343-1.2083

#### **Features and Applications**

- Generally are used in build-up for hot work tool steels
- Application areas forging dies, gravures, hot cutting tools, de-burring tools, punches, aluminum casting moulds, repair of 1.2344 hot work tool steels
- Used in steel casting and mold applications with 45-48 HRC strength of hardfacing welds
- Weld metal has wear and impact resistance at high temperatures
- 400°C pre-heat must be done before welding
- It has wear and impact resistance at high temperatures
- Shielding gas: MAG: Ar+CO<sub>2</sub>

TIG: Ar

# **Resistance Type and Level**

Friction	High Temp.	Corrosive	Machining
Impact	Thermo Shock	Crack Resistance	

### **Welding Electrode**

GeKaTec THERMO DUR

# **Current Type**

MAG D.C.(+) / TIG D.C. (-)

# **Operating Data**

Product Diameter x L		•	Package Weight (Kg)	
Code	(mm) / (inch)		MAG	TIG
6031100143	1.00	0.040"	BS 300 15 Kg	Carton Box 5 Kg
6031100329	1.20	0.047"		
6031100330	1.6 x 1000	1/16 x 39"		
6031100331	2.0 x 1000	5/64 x 39"		
6031100332	2.4 x 1000	3/32 x 39"		

**Approvals: SEPRO**