

1) Definition

Product name : GeKa SG3
Product group : Gas Shielded Arc Welding Wire
Welding method : ISO 4063 GMAW - 135
Shielding Gas : EN ISO 14175 – M20, M21, M24, M26, C1

2) Standards / Classifications

EN ISO 14341-A : G4Si 1 (G 46 4 M21/C1 4Si1)
AWS A5.18 : ER70S-6

3) Chemical Analysis of Welding Wire (%)

	C	Mn	Si	P	S	Cu	Cr	Ni	Mo	V	Al	Ti+Zr
EN 14341-A	0,06 0,14	1,60 1,90	0,80 1,20	- 0,025	- 0,025	- 0,35	- 0,15	- 0,15	- 0,15	- 0,03	- 0,02	- 0,15
GeKa Typical	0,07 0,09	1,65 1,80	0,85 1,10	- 0,020	0,010 0,020	- 0,10	- 0,10	- 0,10	- 0,10	- 0,02	- 0,01	- 0,12

4) Mechanical Properties of Weld Metal

	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation- Lo=5do- (%)	Impact Strength (-40 oC) (J)
EN 14341-A	460 -	530 680	20 -	47 -
GeKa Typical	460 -	540 680	22 -	47 -

5) Diameter, Weight and Tolerances

Diameter (mm)	Diameter Tolerance ¹⁾ (mm)	Weight (Kg)		
0,80	-0,04/+0	1/5/15/20/50/250/400	Spool Type ²⁾	Plastic / Wire basket
1,00	-0,04/+0		Spool Colour	Black (Plastic) Copper coated (Wire)
1,20	-0,04/+0			
1.60	-0.04/+0			

^{1,2)} Tolerances are according to EN ISO 544

Weight (Kg)	Spool Type					
	D100	D200	BS300	D320	Eco Pack	Big Pack
1	X					
5		X				
15			X	X		
20			X	X		
50					X	
250						X
400						X

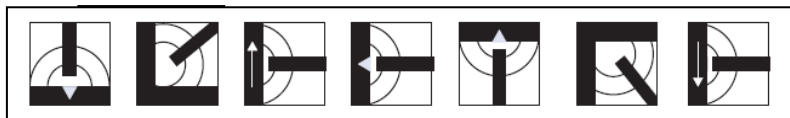
6) Typical Base Material Grades

E295,E360,S235J2G3-S355J2G3, P235T1-P355T1, P235T2,P355T2, L210NB-L415NB, L290MB-L415MB, P235G1TH, P255G1TH, P235GH-P355GH, S235JRS1-S235J4S, S315G1S-S355G3S, S255N-S420N, P255NH-P420NH, GE200-GE260

7) Features and Applications

- Used for the same welding purposes as SG2
- Its strength is increased by Si-Mn
- Low spatter although used under CO2 atmosphere
- Excellent wire feeding capability
- Shielding gases: MAG; Ar+CO2 mix gases, TIG; %100 Ar gas can be used

8) Welding Positions & Current Type & Operating Data



Thickness of Material : <30 mm
Preheat / Interpass Temp. : <150 °C
Tempering Temperature : N/A

Mechanization : Manual, mechanical and robotic
Operating Temperature : From - 30 °C to + 350 °C

9) Welding Parameters

Diameter (mm)	Welding current (A)	Welding voltage (V)	Wire feed speed (m/min)
0,8	70-190	16-26	7-20
1,0	80-220	16-27	6-17
1,2	90-340	17-30	4-13