

# Lastifil 20 CM

## Solid welding wire - MAG welding of mild steel

### CLASSIFICATION

EN ISO 14341-A : G 46 4 M21 4Si1

AWS A5.18 : ER 70S-6

### GENERAL DESCRIPTION

Welding wire for steel constructions with very high requirements for mechanical characteristics and weldability. The perfect spooling, the uniform copper coating, the low torsion in the wire, the small tolerances on the diameter and the high degree of purity, guarantee an optimal and constant welding quality. The mechanical characteristics are higher than those of most lime type electrodes.

### APPLICATIONS

For boiler work, machine building, ship building, sheet metal welding etc...  
 Structural steel: St37 - St52, S235 - S355, St52-3, St50-2, St60-2 (\*\*), P235 - P355  
 High strength fine-grained steel StE255 to StE420 and StE355, A242, A440, A441, A588.  
 Boilerplate HI, HIII, 17Mn4, 19Mn5, A414grA,B,C,D,E,F, A662grA,B.  
 Pipe steel St35.8, St45.8, St52.4, A53grA,B, A106grC, A714grI, II, III.  
 Hull steel A, B, D, E.  
 Cast steel GS-38, GS-45, GS-52, A27, A486gr70, A643grA, A732gr1A,2A,3A.  
 BS 4360 grades 40, 43 and 50.

### CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

<b>C</b> : 0.06 - 0.14	<b>Mn</b> : 1.60 - 1.90	<b>Si</b> : 0.80 - 1.20	<b>P</b> : < 0.025	<b>S</b> : < 0.025
<b>Cu</b> : < 0.35	<b>Fe</b> : Balance			

### MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 460 MPa	530 - 670 MPa	≥ 20%	≥ 47 J (-40°C)

### GENERAL INFORMATION

<b>Welding positions</b>	All	
<b>Shielding gas</b>	Ar/CO <sub>2</sub> , M21 (EN ISO 14175) or 100% CO <sub>2</sub>	
<b>Packing</b>	15 kg spool (in a cardboard box)	
<b>Polarity</b>	DC+	
<b>Diameter (mm)</b>	1.0	1.2

**Tips & tricks** Gas flow in short arc 8 to 10 liter/min (17-21 cu.ft./hr), in spray arc 12 to 17 liter/min (25-36 cu.ft./hr). When welding outdoors protect the welding area against wind and draught and increase the gas flow. The highest mechanical strength is obtained in short arc (Lower burn off of alloying elements.). Preheat steel 60 in function of the plate thickness.

*The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.*