

# Lastifil 20 C

## Solid welding wire - MAG welding of non alloy steel

### CLASSIFICATION

EN ISO 14341-A : G 42 4 M21 3Si1

AWS A5.18 : ER 70S-6

### GENERAL DESCRIPTION

Copper coated 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: S185, S235 - S355 (EN 10025).

Boiler plate: P235GH, P265GH, P295GH (EN 10028-2).

Pipe steel: P235T1 - P355N (EN 10217-1); P235T2 - P355N (EN 10217-3); StE290.7TM - StE480.7TM (EN 10208-2).

API steel: X42 - X70.

Fine grain steel: StE355 - StE460 (EN 10028-3).

Hull steel grade A, B, D, E, AH32 - EH36.

Cast steel GS38, GS45.

BS 4360 grades 40, 43 and 50.

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

<b>C :</b> 0.06 - 0.14	<b>Mn :</b> 1.30 - 1.60	<b>Si :</b> 0.70 - 1.00	<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)
≥ 420 MPa	500 - 640 MPa	≥ 20%	≥ 47 J (-30°C)

### GENERAL INFORMATION

**Welding positions** All

**Shielding gas** Ar/CO<sub>2</sub>, M21 (EN ISO 14175) or 100% CO<sub>2</sub>

**Packing** 15 kg spool (in a cardboard box)

**Polarity** DC+

**Diameter (mm)** 0.6 0.8 1.0 1.2 1.6

#### Tips & tricks

Gas flow in short arc, 8 to 10 litre/min (17-21 cu.ft./hr) and in spray arc, 12 to 17 litre/min (25-36 cu.ft./hr).  
When welding outdoors protect the welding area against wind and increase the gas flow.  
You will obtain the highest mechanical strength in short arc (lower burn off of alloying elements).

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.