#### PRODUCT SPECIFICATION

# Lastifil 10020 TM



## Metal powder cored wire for high strength steels

#### **CLASSIFICATION**

EN ISO 18276-A: T 89 4 Mn2NiCrMo M M21 1 H5

AWS A5.28: E 120C-K4 H4

#### **GENERAL DESCRIPTION**

Lastifil 10020 TM is a closed and copper-plated metal cored wire for welding steels with high yield strength and tensile strength, such as S890QL, S960QL and S1100QL, HSLA, TMCP and QT steels.

The absence of slag allows for multi-layer welding without time-consuming slag snapping.

Excellent weldability, and beautiful weld appearance, practically spatter-free, with exceptional mechanical properties at low temperature (-40 °C).

Low hydrogen content (<5 ml / 100 g).

## **APPLICATIONS**

High strength steels for structures where the strength / weight ratio is very important.

Constructions subject to high stress, cranes, off-shore constructions, mobile constructions, ... S890Q, S960Q, S890QL, S960QL, S1100QL.

Fine-grained high strength steel where low heat input is necessary to maintain the original properties.

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

<b>C</b> : 0.07	<b>Mn:</b> 1.50	<b>Si:</b> 0.50	<b>P &amp; S :</b> < 0.015	<b>Cr:</b> 0.60
Ni: 2.60	<b>Mo:</b> 0.60			

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

Yield Strength	Tensile Strength	Elongation	Impact Strength
N/mm²	N/mm²	5d (%)	Charpy V notch (ISO-V)
≥ 890 MPa	980 - 1180 MPa	≥ 15%	≥ 47 J (-40°C)

#### **GENERAL INFORMATION**

Welding positions	All
Shielding gas	Ar/CO2, M21 (EN ISO 14175)
Packing	16 kg spool (in a cardboard box)
Polarity	DC+
Diameter (mm)	1.2

**Tips & tricks** Remove grease and impurities from the welding zone.

Respect pre-heating, interpass temperature and heat input depending on the base metal.

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.