

The range of the dielectric synthetic fluids





Together, at service of **EDM** process.

# DIE SINKING EDM



The range of the dielectric synthetic fluids for Die Sinking EDM consists of six viscosity grades containing special additives aimed at facilitating the formation of the ionization channel.

# **EDMfluid®** series S

The advantages offered by this range compared to the traditional dielectric fluids are the following:

- Opportunity to choose the optimal viscosity grade.
- Very narrow distillation ranges.
- High chemical and physical stability.
- Very reduced tendency to evaporate.
- Colourless.
- Odorless.
- Irrelevant presence of light aromatic hydrocarbons (\$ 0.0001% in volume).
- Very low content of heavy aromatic hydrocarbons (§ 0.001 % in volume).
- Uniform surface finishing.
- Reduced finishing times.
- Decrease in electrode wear.
- Optimal operational performance for long working periods.
- Very low aggressive action human skin.
- It can be easily filtered even after prolonged working times.
- · Very low tendency to foaming phenomena.





PRODUCT	VISCOSITY AT 20°C cSt	FLASH POINT (ASTM D 93) °C	DISTILLATION RANGE (°C)	SCOPE OF APPLICATION
€DMfluid® 80-S	1.83	≥ 80	6	Superfinishing r <sub>a</sub> < 0.8 µm
€DMfluid® 95-S	2.36	≥ 95	6	Finishing r <sub>a</sub> 0.8 ÷ 1.6 µm
€DMfluid® 108 MP-S	3.00	≥ 108	6	Multifunctional, aerospace industry, gas turbines, automotive etc $r_a$ 1.0 $\div$ 3.2 $\mu m$
€DMfluid® 110 MP-S	3.30	≥ 110	30	For dies intended for die-casting with $r_{a}$ 2.0 $\div$ 4.0 $\mu m$
€DMfluid® 113-S	4.10	<u>2</u> 112	50	To manufacture dies for extrusion and hot forming in the presence of medium, heavy-duty rough-machining and to generate narrow blind deep cavities r <sub>a</sub> 3.2 ÷ 5.0 µm. Amperage ≥ 60 Amper
€DMfluid® 115-S	5.10	≥122	45	To manufacture dies with high surface roughness and heavy-duty rough-machining operations with Amperage \$80 Amper, r <sub>a</sub> 3.2 ÷ 5.0 µm

It is in our origins, it's within us. We maintain a firm commitment to this technology, which has enabled us to be leaders and a reference in our sector in the past, now and in the future.

## **ONA. AT GLANCE**

#### **\ 300 MACHINES PER YEAR**

Our annual production capacity is 300 die-sinking and wire EDM machines, both standard and modular.

#### **15,000 MACHINES INSTALLED №**

During the over 65 years we have been operating in the sector, we have installed more than 15,000 machines all around the world.

#### MADE IN EUROPE SEAL

Machines certified according to ISO9001 and ISO14001, within the framework of the EU legislation on Safety and Electromagnetic Compatibility.

**\ LEADERS IN THE PRODUCTION OF SPECIAL MACHINES** We are the leading manufacturer worldwide of special machines and large modular machines.

### ONA AROUND THE WORLD

#### **\ A GLOBAL AND FLEXIBLE TEAM**

150 people work in ONA, distributed throughout the 6 different countries where we have our subsidiaries: Spain. Italy, France, Portugal, USA, and China.

#### **\ ABOUT OUR CUSTOMERS**

We have our own and external network of sales people and technical staff who operate in more than 40 countries.

#### 60

Countries use ONA machines.

#### **WE EXPORT 85% OF OUR PRODUCTION**

The ONA spirit of expansion has been a constant since our inception: we began to work in foreign markets in 1962 and in 1990 we opened our first subsidiary outside Spain.

### A FIRM COMMITTED TO R&D

\ 20% OF OUR TEAM WORKS IN R&D&i

We have our own R&D&i department. **♦ FOCUSED ON THE DEVELOPMENT OF OUR OWN** 

# **TECHNOLOGY**

We develop CNCs, generators, expert systems, micromechanics and ecological filters that are unique in the market.

# WE COLLABORATE WITH LEADING RESEARCH CENTRES

ILT-Frauhofer and WZL-Aachen in Germany, and Tekniker. Tecnalia, Ideko, Ikerlan, CFAA and ETSII Bilbao in Spain.











## STEELFLUID S.r.l.

Corso Torino 2/10 - 16129 Genoa, Italy Tel. +39 010 54 06 91 - Tel. +39 010 57 09 618 Fax +39 010 54 51 087

steelfluid@steelfluid.it | www.steelfluid.it

# **ONA ELECTROEROSION S.A.**

Eguskitza, 1 - 48200 Durango, Spain Tel. +34 946200800

www.onaedm.com