

# \ ONA ELECTRO-EROSION

Pioneers in the development of EDM (Electric Discharge Machining) technologies, **ONA** is the world's oldest EDM machine manufacturer, the European Union's first and one of the world's most important manufacturers.

We work with the experience and conviction that technological knowledge guarantees the best solution. Thus, since 1952, our team of experts, with the talent and know-how required, has been available to provide tailored solutions that adapt to your needs.

**14,000**

machines installed worldwide.

**90%**

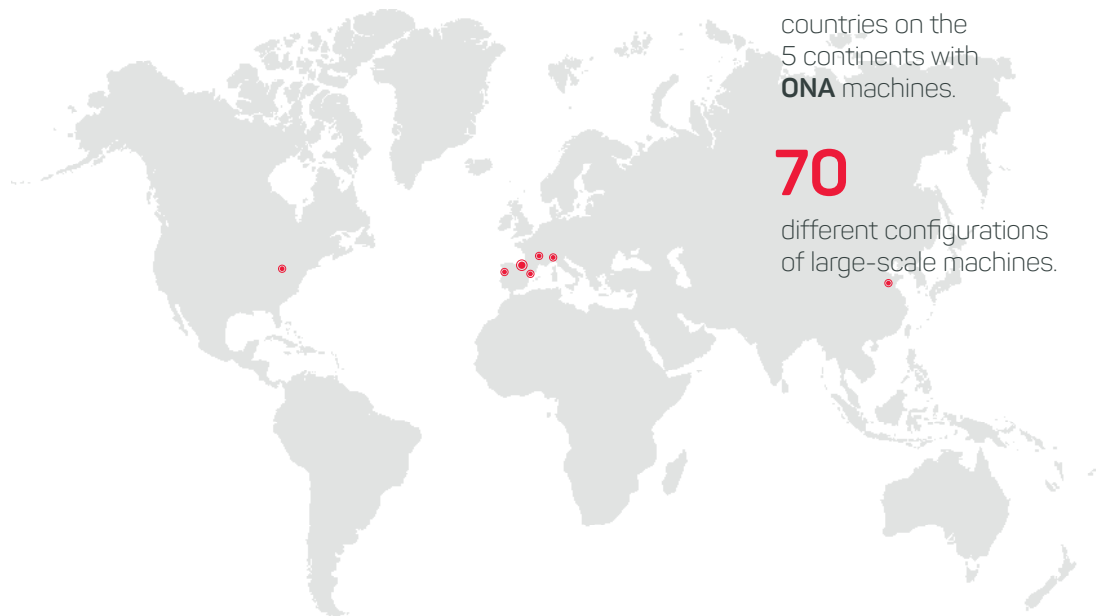
of our production are exports.

**60**

countries on the 5 continents with **ONA** machines.

**70**

different configurations of large-scale machines.



## \ GUARANTEED ROBUSTNESS, PRECISION AND RELIABILITY

The new generation of **ONA** machines has the traditional robustness and reliability that has defined the brand since 1952:

- Made in Europe quality.
- Symmetrical structural design.
- Certified precision: ISO 11090 in die sinking machines and ISO 14137 in wire machines.
- Direct position measurement on the X, Y, U, V axes.

## \ MEET OUR EXPERTS

Our best service and technical advice for our customers' success.

The Technology and Processes Service (TPS) at **ONA**, provided by our best experts in electro-erosion, aims to guarantee a perfect integration of our products in the specific environment of each customer. The guarantee that our customers will always get the best performance from their **ONA** machine.

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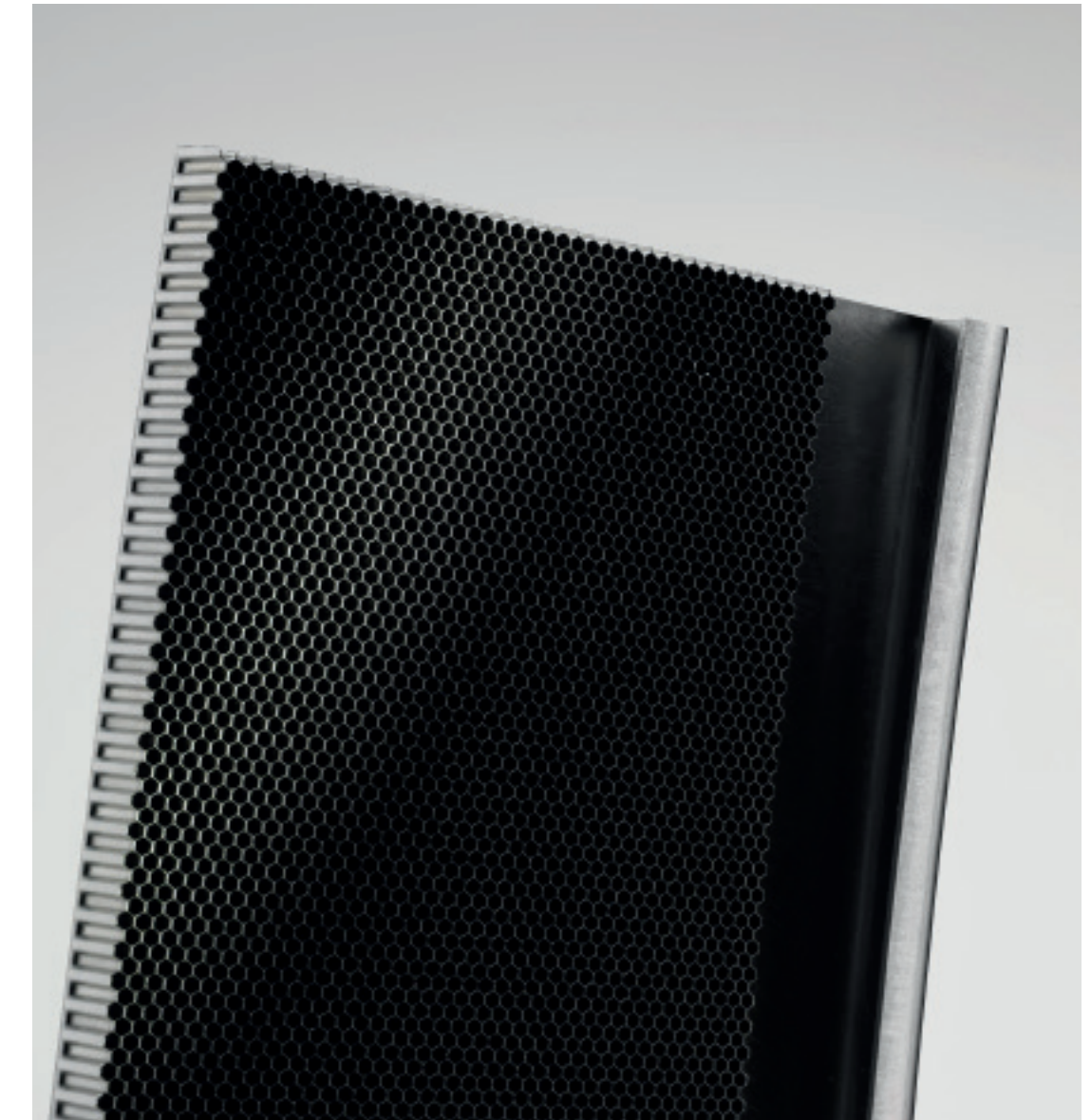
\ [www.onaedmusa.com](http://www.onaedmusa.com)

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LOOK NO FURTHER,  
THE FUTURE IN EDM  
IS HERE  
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## COVER PICTURE >>

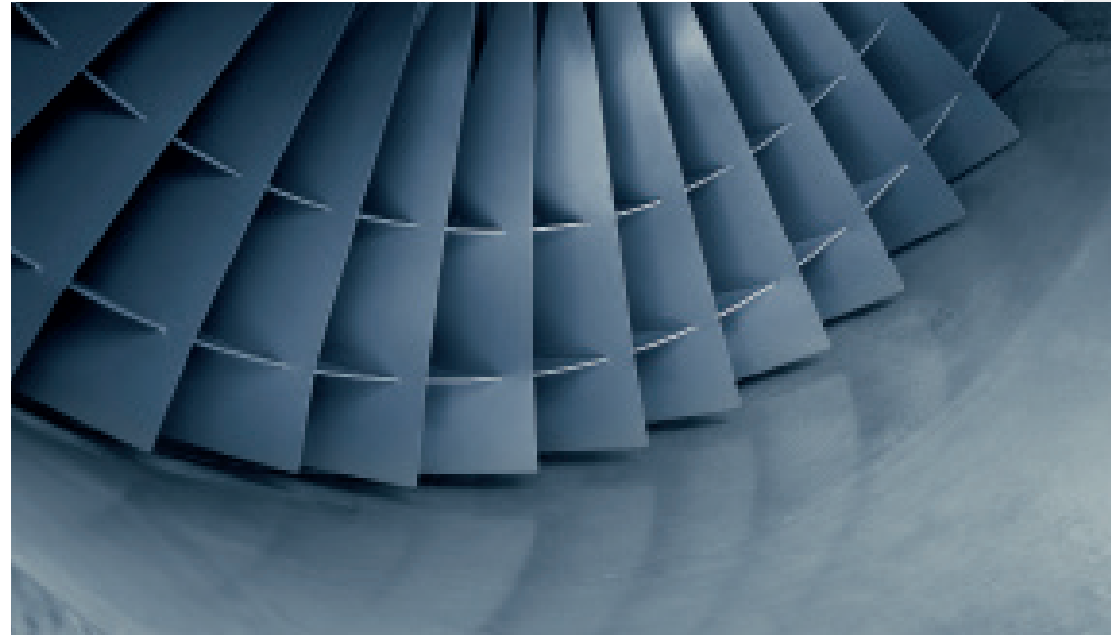
Erosion of the honeycomb lining structure on the component of a low pressure turbine of an aircraft engine.

**ONA** WE ARE EDM



\ **ONA QX**  
STANDARD

# \ WE ARE EDM



We are EDM. It is in our origins, it's within us.

It is the commitment we made when we started out and which we have stood by after more than 60 years of experience.

The cornerstone of our work that gives meaning to everything we do: electro-erosion. We maintain a firm commitment to this technology. This has enabled us to be, and continue to be, the leaders of our industry, in the past, present, and in the future.

**WE ARE EDM.**

## \ WE ARE EXPERTS

We are specialists in EDM, focused on the research and development of electro-erosion technologies.

## \ WE ARE PROUD

More than 60 years of experience, 14,000 machines installed, a team of highly qualified professionals, with extensive knowledge and a promising future.

## \ WE ARE YOUR SOLUTION

We adapt our knowledge and resources to find the best solution for our customers.

## \ WE ARE CONFIDENT

We offer the highest level of productivity, quality, and results, as we are confident in our Technology.

## QX DIE-SINKING EDM MACHINE \ ONA QX STANDARD

NEW DIGITAL GENERATOR FOR GREATER EFFICIENCY

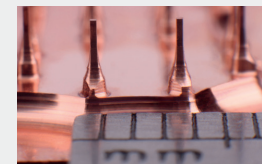
The **ONA QX STANDARD** family of machines incorporates a new digital generator for greater efficiency which brings a great improvement in productivity, while significantly reducing the wear of the electrodes.

Compared to conventional machines, the improvement in productivity of the **ONA QX** machines is up to 30% in roughing processes and up to 50% in finishing processes. At the same time the wear of the electrodes is reduced by more than 80%.

### TECHNOLOGICAL ADVANTAGES:



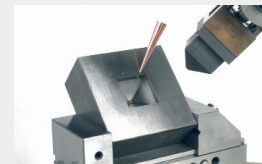
The generator of the QX machines allows an improvement in the performance of the machine in fine finishing processes which makes it possible to achieve a final minimum roughness in the order of 0.08 µm Ra.



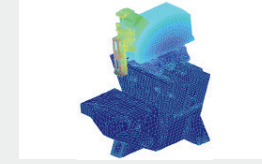
New possibilities in the finishing of microcomponents, enabling the production of corners with minimum internal radii of only 5 microns.



Totally automated ecological filter, maximum productivity and cost savings.



Powerful CNC that can control up to 8 axes simultaneously and is capable of working in 3D without limitations.



Design optimised by means of finite elements (FEM).



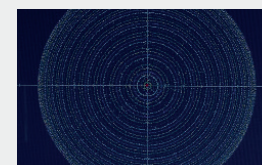
Guaranteed long-lasting precision. Direct measurement of positioning using linear scales in ten-thousandths.



Easy integration of robots, workpiece changers and electrodes.



Rotating electrode changer for 20 or 40 electrodes.



Jump Orbit System (JOS). The new JOS System reduces the execution time for orbital erosion jobs. The system defines which areas of the orbit have already been completed and only erodes in areas where this is necessary.

## ONA QX3 / QX4 UNBEATABLE MACHINING EFFICIENCY



## ONA QX6 GREAT AUTONOMY AND VERSATILITY



### ONA QX3 / QX4

Travel of X axis	15.7 / 236 in
Travel of Y axis	11.8 / 15.7 in
Travel of the electrode holder	11.8 / 15.7 in
Maximum distance between head and table	18.5 / 236 in
Internal dimensions of the tank (Length x Width x Height)	35.8 x 24 x 13.8 in 42.1 x 30.3 x 17.7 in
Worktable	23.6 x 19.7 / 31.5 x 23.6 in
Admissible weight on the table	1650 / 3300 lbs
Type of work tank	Rise and fall tank
Maximum weight of the electrode	220 / 440 lbs
Minimum roughness	0.08 µm Ra
Intensity of the generator	100 A

### ONA QX6

Travel of X axis	39.4 in
Travel of Y axis	23.6 in
Travel of the electrode holder	19.7 in
Maximum distance between head and table	29.9 in
Internal dimensions of the tank (Length x Width x Height)	66.9 x 39.4 x 23.6 in
Worktable	47.2 x 31.5 in
Admissible weight on the table	8800 lbs
Type of work tank	Drop door
Maximum weight of the electrode	440 lbs
Minimum roughness	0.08 µm Ra
Intensity of the generator	100 / 200 A