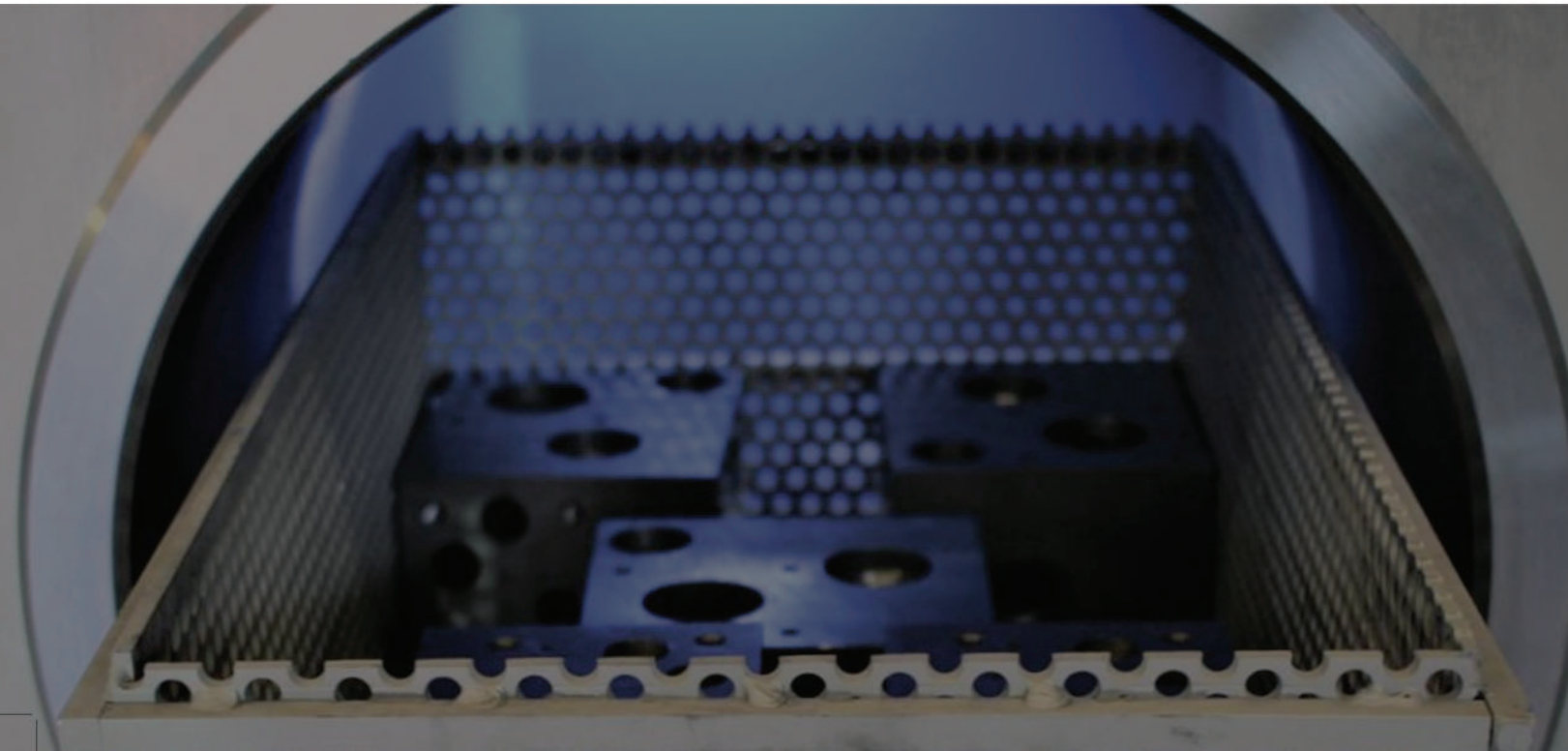


XP F 450 Thermal deburring Machine with lomg chamber able to treat any type of oxidizable material especially for parts with large size.	XP XL 9100 Thermal deburring machine for large blocks of aluminum, steel and cast iron, it works at an operating pressure of 2 to 16 bar. With internal diameter of 410 mm	XP L 245 Thermal deburring machine with long chamber to treat light alloys, Especially suitable for large alluminium blocks.
Operating pressures (bar) from 2 to 20 Chamber length (mm) from 350 to 500 Chamber Diameter (mm) da 260 a 300	Operating pressures (bar) from 2 to 16 Chamber length (mm) from 500 to 600 Chamber Diameter (mm) 410	Operating pressures (bar) from 2 to 10 Chamber length (mm) from 350 to 500 Chamber Diameter (mm) 260
MATERIAL aluminium copper zamak steel cast iron brass	MATERIAL aluminium copper zamak steel cast iron brass	MATERIAL aluminium copper zamak brass



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THE ONLY TEM WITH HORIZONTAL DEBURRING CHAMBER



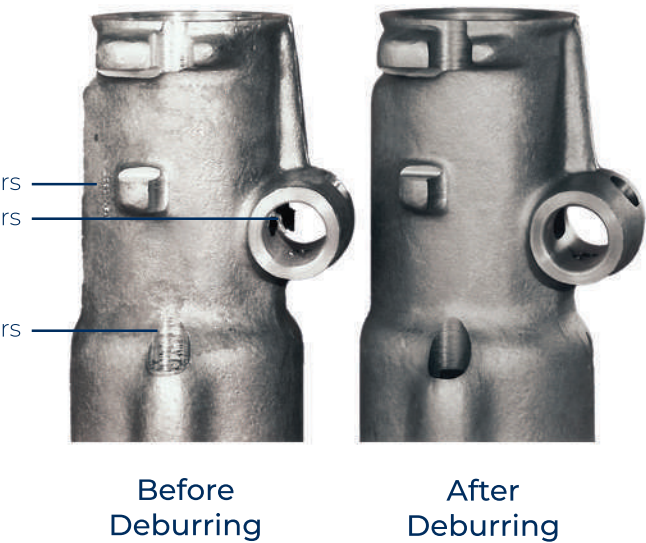
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ABOUT SGM®

SGM s.r.l. is a leading company in the production of machines for thermal deburring and has more than thirty years of experience (born in 1979 with the name of STM sas). SGM® now offers an integrated machine system for the entire cycle of pre-treatment, thermal deburring, final deoxidation and protection, with results that are highly competitive, with full respect for the environment. In this way SGM® is able to respond to the increasingly demanding requirements of the well-established third party sector as well as of the companies with bigger production volumes, which require the machines themselves.

THE THERMAL DEBURRING PROCESS

The thermal deburring is a system aimed at the elimination of burrs on the components made of oxidable materials and that come from specific processes (mechanical, die-casting, etc). The process uses, according to a chemicalphysical principle, the heat generated from the ignition of a suitable combustible mixture. The obtained energy uses the oxygen, contained in the original mixture, to remove burrs, waste and unwanted material present on the edges, within the cavities and surfaces more or less hidden of the treated details.



TREATED MATERIALS

Burrs thickness up to 0,1 mm

- Aluminium
- Copper and its alloys
- Zamak and its alloys

Burrs thickness up to 0,3 mm

- Steel
- Cast iron
- Ferrous parts



DEOXIDATION

Thermal deburring superficially oxidizes the treated parts. To restore their surfaces to their original appearance, a deoxidation treatment is sufficient. SGM® has developed, over the years, a deoxidation process without the use of acids and easily adoptable by any industrial activity. Today SGM® uses:

- **Aqueous and environment friendly products**, that do not require rinsing;
- **Industrial washing machines** equipped with an ultrasonic and vacuum system.

The process meets the needs of preparation and especially deoxidation of ferrous, cast iron and aluminium parts subjected to thermal deburring.

THE HORIZONTAL REVOLUTION

The experience has enabled us to produce innovation by designing the first and only TEM with horizontal deburring chamber. Compact, economical and technological, New-Tem is not only a machine but a revolutionary system for the industry.

1.



MORE CARE IN THE TREATMENT

With New-Tem SGM®, the flame front is tangent to and distant from the basket, ensuring it does not directly impact the parts.

2.



WIDER RANGE OF TREATABLE PRODUCTS

The tangentiality of the flame front enables us to work with much more delicate parts.

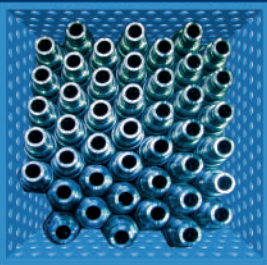
3.



UNIFORMITY OF RESULT

The baskets are completely and uniformly immersed in the oxygen-rich atmosphere, ensuring the removal of all metal burrs, regardless of their location.

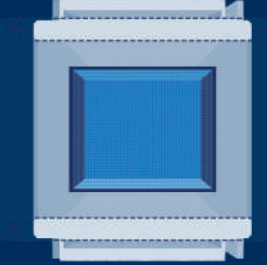
4.



HANDINESS

The rectangular shape of the deburring baskets facilitates easier insertion and significantly reduces the manual time required for positioning the workpieces.

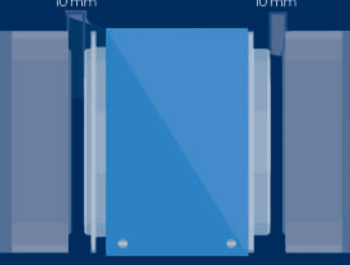
5.



CHAMBERS INTERCHANGEABILITY = FLEXIBILITY

The deburring chambers are easily interchangeable in different lengths, enabling smooth production adjustments.

6.



SIMPLIFICATION

Chamber closing cylinder stroke minimized to just 20 mm.

RANGE OF NEW-TEM PRODUCTS



Thermal deburring machines offer a versatile solution to specialized requirements. The New-Tem machine range guides customers toward three distinct options, with the possibility of developing customized models to meet specific needs.



WM800

Industrial Washing machine ideal to carry out the post-treatment de-oxidation process of thermal deburring, in compliance with environmental regulations, it fully satisfies the needs of preparation and especially deoxidation of ferrous, cast iron and aluminium parts subjected to thermal deburring with a simple and fast cycle.

Process for iron alloys

