# The revolution in blasting technology



# TWISTER750®

# The entry into the world of of automatic blasting systems

- without compressed air
- fully automatic
- intuitive operation
- energy efficient
- resource saving
- reproducible results



PERFECTLY BLASTED SURFACES

## Welcome to the age of of smart surface treatment

With BMF blasting systems, you enter a new dimension of precision and efficiency. With our innovative technologies, we will not only improve the quality and quantity of your production process, we will revolutionise it. Discover our customised solutions that are specifically designed to increase your productivity and raise the quality of your end products to an unprecedented level.



Processing takes place without compressed air according to the centrifugal wheel principle, in which the workpieces rotate on a satellite holder around a centrally arranged, **speed-controlled centrifugal wheel** ①.

The workpiece kinematics of the **workpiece car riers** (3) result from a superposition of swivelling and rotating movements, which ensures that the **workpieces** (2) can be machined on all sides in just one clamping operation.

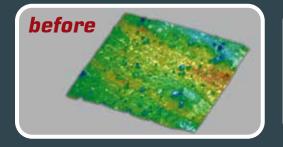
This allows both geometrically simple and highly complex components to be blasted **homogene**-

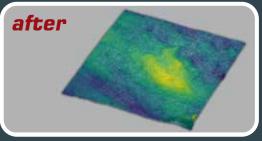
ously and reproducibly, resulting in a uniform surface quality. Blasting shadows, which are common when blasting by hand, are now a thing of the past.

In addition, the **targeted adjustment of the blasting parameters** enables precise control of the blasting process - optionally supported by artificial intelligence (AI).

Our systems are therefore ideally suited to the high demands of **series production**, as they guarantee **consistent quality and efficiency**.

## Blasting result in detail





Images taken with the **BMF CONSIGNO SSC** confocal microscope with special software for blasted surfaces at 20x magnification.

# TWISTER750<sup>®</sup> – very specific



#### **Basic concept**

- automatic blast cabinet with speed-controlled blast wheel
- compact dimensions (width/depth/height: 760/890/1830 mm)
- automatic extraction system including pre-separator

#### Workpiece handling

- positioning on up to 8 workpiece carriers with max. 10 workp. holders
- rotating and swivelling workpiece carriers, allowing workpieces to be processed on all sides
- possible workpiece size: 1 140 mm diameter

#### Operation

- simple, intuitive and without prior knowledge
- touch panel for quick input of blasting parameters such as blasting time and blast wheel speed
- blasting process possible in 2 steps
- SMART SURFACE CONTROL technology

#### Special features

 suitable for production in accordance with the Medical Device Regulation (MDR)

### Wide range of applications

Diverse and flexible application possibilities, e.g. in the following sectors:

- medical technology
- luxury goods, jewellery
- watch manufacture
- post-process for 3D-printed parts

## SMART SURFACE CONTR 😫 🖺

The pioneering SMART SURFACE CONTROL technology makes it possible to precisely programme both the optical and physical properties of surfaces. This means that the entire production process can be optimised to achieve the desired surface quality.

An **AI-supported analysis** of previously blasted reference workpieces helps to determine the ideal blasting parameters depending on the material to be processed. In this way, **high-quality and reproducible blasting results are continuously achieved**.

## Therefore a TWISTER750



**Quality:** results without beam shadows, with consistently high quality and exact reproducibility.



**Quantity:** increased productivity thanks to the ability to process up to 80 workpieces simultaneously.



Sustainability: economical use of consumables, less wear and tear with higher parts throughput  $\rightarrow$  significantly lower environmental impact.



**Economy/efficiency:** No need for compressed air and low labour costs thanks to the fully automatic blasting process make the TWISTER750 a cost-efficient solution for your production (energy savings of up to 90 %).

## Service and maintenance



We offer you suitable service and support concepts as well as training on the operation and maintenance of a blasting system. Software updates and error analyses can be carried out via remote maintenance access.

We offer **3D** printing technology to match the TWISTER<sub>750</sub>. This allows you to 3D print spare and wear parts yourself based on data from **DIGITALSOURCE (spare parts catalogue in a** cloud).

This enables you to significantly **reduce both the procurement times and the costs for spare parts** - a significant contribution to realising high availability of your system and thus extremely low downtimes.

## **Further information**

Feel free to contact us if you would like to know more about our systems or have any questions.

But we can also advise you individually.

In our **in-house test lab**, we are able to carry out **blasting tests on your components** and thus jointly define the optimum blasting parameters.



#### **BMF** GmbH

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Kofinanziert von der Europäischen Union

> Stevermittel auf der Grundlage des vom Sächsischen Landtag beichlossenen Hauskaltes.