



INNOVATIVE PRODUCTION PROCESSES:

FIRE POLISHING

MAXIMUM ENERGY EFFICIENCY AND HIGHEST SURFACE QUALITY

WALTEC.DE

FOR ROUND ARTICLES AND ARTICLES WITH HANDLE: HORIZONTAL FIRE POLISHING

WALTEC's horizontal fire polishing machine is designed for a wide range of articles: From high-speed tumblers to high-quality glassware with handles. In the case of handle production, the spindles are fixed in the first part of the machine and the tracking burner polishes the parting line of the split moulds.

The body and the other parting lines are processed during the rotation of the spindles in the second part of the fire polisher. This procedure guarantees the highest surface quality.

Horizontal polishing machines can be equipped with productive options, e.g. article cooling.



-Servo-driven main-chain

No rotation in tracking slide 1. Servo-driven article rotation only in tracking slide 2.

> TRACKING SLIDE 1 Article with handle

No article rotation

TRACKING SLIDE 2 Servo-driven article rotation

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FOR ROUND, SQUARE, RECTANGULAR AND OVAL ARTICLES: **VERTICAL FIRE POLISHING**

As illustrated in the figure, this fire polishing machine with two individually driven slides is predestined for polishing washing machine windows, casserole dishes, food containers and other non-round products.

All movements like the main chain, the slide movement and the spindle rotation are servo driven and freely adjustable. The 90° turning is implemented by a strong mechanical cam.

MODE 1

Servo-driven article rotation in tracking slide 1 and slide 2.

TRACKING SLIDE 1 Servo-driven article rotation ONT

TRACKING SLIDE 2 Servo-driven article rotation





BEYOND CUSTOMER EXPECTATIONS: IMPROVED QUALITY AND ENERGY SAVINGS

A traditional fire polishing process is based on merging gases such as natural gas, methane or propane with compressed air and firing this mix up to the right ignition temperature. This process



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Air contains around 21% oxygen and nearly 79% nitrogen temperature. This process carries a high level of energy waste: Nitrogen out of compressed air needs to be heated up!

Another important energy-relevant issue is the continuous flow of articles, passing through a tunnel of permanently operated burners on

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both sides. Flames are thus not only directed to the article surfaces but they also burn a large amount of precious energy for spaces between the glass articles. This leads to an unnecessary and expensive loss of energy.

Expensive waste of energy: Fixed installed rows of burners with continuous energy consumption (targeting the space between articles)

WALTEC's servo powered fire polishing lines with innovative tracking burner technology drive energy savings, improve product quality and support multi-product functionality.

WALTEC replaced compressed air with oxygen – saving about 30% of combustion gases. The innovative burner tracking system decreases the gas consumption by another 50%.

WALTEC's state of the art servo-powered fire polishers with gas and oxygen as well as the tracking burner technology feature comprehensive energy savings up to 80%.

Servo drive technology fully synchronizes the article transport and spindle rotation with the tracking burners and guarantees high precision energyefficient polishing and the best possible surface quality.

> **Save up to 50% energy** by synchronously accompanying articles during transport: Efficiency-optimized tracking burners from WALTEC

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IMPROVE YOUR PROCESS -WALTEC.DE/FIREPOLISHING

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FOR THE GLASS INDUSTRY -DRIVEN BY INNOVATION



WALTEC MASCHINEN GMBH **KRONACHER STR. 2A** GERMANY 96352 WILHELMSTHAL

INFO@WALTEC.DE

+49 9260 99010

WALTEC.DE

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