

Teknox 

3D
WAVE
ADDITIVE DYEING SYSTEM



 **NORBLAST**



TECHNOLOGY

Specifically designed for the dyeing of 3D printed parts, the new 3DWAVE machine is the ideal solution to obtain exceptional results and maximise productivity. The innovative immersion dyeing system guarantees precision and even colour. 3DWAVE is the perfect ally for companies that work with 3D technology and need an efficient, reliable machine.



AVANTAGES

ALL-IN-ONE

pre-rinsing - dyeing - rinsing - hot drying

OPTIMAL DYEING OF COMPLEX SURFACES

thanks to the Rotowave system

LOW OPERATING COSTS

energy consumption, dyeing and disposal

HIGH PRODUCTIVITY

1 complete cycle in less than 60 minutes

WORKPIECE HOLDER

with lid for partial filling

EFFICIENCY... AND MORE

EASY TO USE

automatic process,
no intermediate handling

CUSTOMISABLE PROGRAMS

that can easily be created according to individual needs

TOWARDS INDUSTRY 5.0

3DWAVE analyses and stores
daily electricity consumption, thus allowing
for energy saving and optimisation



PROCESS

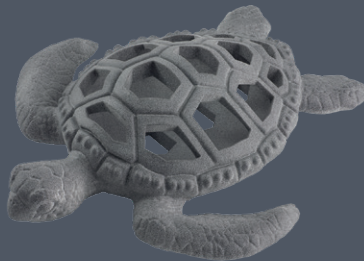
The pieces are inserted into a stainless steel basket. The basket is equipped with a locking system at different heights that keeps the pieces inside and ensures they are not damaged during rotation.

Thanks to the RotoWave technology, which uses a partial immersion and continuous exchange system, the liquid is constantly in movement, allowing it to enter even the deepest recesses, improving the capacity of the dye to adhere to the surfaces, avoiding stagnation and streaking. Thanks to the flexibility offered for the creation of customisable programs, the machine is able to operate automatically, with no intermediate handling.

- 1** **AUTOMATIC PRELIMINARY RINSE**
to remove any impurities on the surface
- 2** **DYEING OF PIECES USING ROTOWAVE TECHNOLOGY**
with slow rotation and partial immersion
- 3** **AUTOMATIC FINAL RINSE**
to remove any excess dye
- 4** **HOT AIR DRYING**
in a micro-filtered, temperature-controlled environment



AFTER PRINTING



AFTER BLASTING

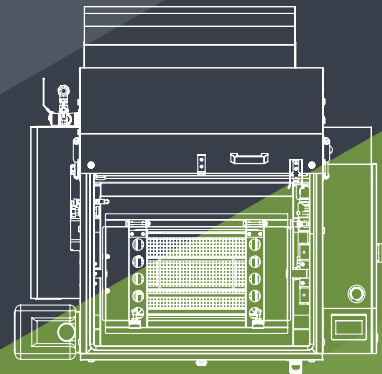
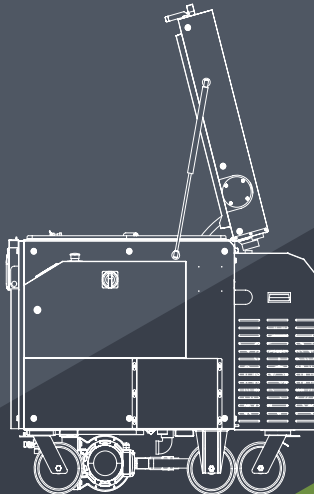
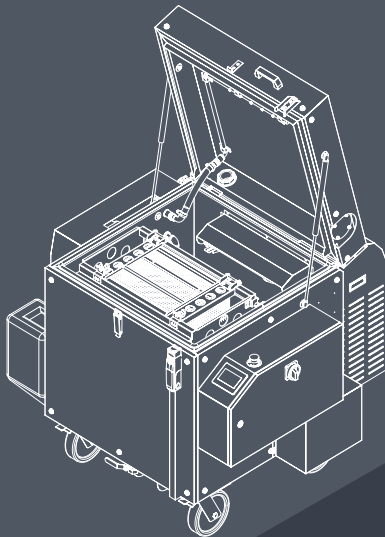


AFTER DYEING

TECHNICAL DATA

Dimensions of workpiece holder	450 x 300 x H 300 mm – mesh 12 x 12 mm
Production volume per cycle	Up to full build HP Jet Fusion 5200
Cycle time	30-60 minutes (based on the program phases activated)
Pre-rinse and post-rinse	Integrated into the treatment cycle
Heated air drying	Integrated into the treatment cycle
Liquid working temperature	60 °C – 80 °C
Liquid dye percentage	10% in water
Tank capacity	160 lt
External dimensions of machine	W 1300 x D 960 x H 1200
Weight	~ 260 kg

3D
WAVE



REQUIRED CONNECTIONS

Electricity supply	3 PH 400 V 50 HZ + N + PE, total power 7 kW
Water supply	Pressurised mains water; softened water recommended
Compressed air	Pressure 6 bar - Flow 20 Nmc/h

3D WAVE

The 3D WAVE project, patent pending 2023,
is the result of a collaboration between two
long-established Italian companies that have combined
their experience and expertise to offer an innovative
opportunity for additive manufacturing professionals.

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