The network of **specialists**, for **AM professionals**

PostPROCESS & Surface Treaments for Polymers & composytes made in Additive Manufacturing

INTEGR AM

EN

I-AM Program

Polymers & composites

What does **IntegrAM** mean?
IntegrAM stands for "Integrated Solutions of Post Processing and Finishing Technologies for Additive Manufacturing".
The IntegrAM network is a partnership of specialists, manufacturers, developers of solutions, specifically dedicated to the Additive Manufacturing sector.
The IntegrAM network is evolving day by day and continuously adding new solutions to offer the best possible program of post processing and finishing technologies, but not only...
...Get in touch with our sales or technical contacts to learn about the latest updated opportunities.

Many of these solutions are designed by the **IntegrAM** team and produced in Italy by Rollwasch Italiana, a manufacturer with at least 75 years of experience. Other solutions, assistive devices and products offered are produced by specialists under the guidance of the IntegrAM Team, to fully meet the expectations of AM professionals according to international standards.

Techno Surface, holds important patents of proprietary and exclusive technologies for Additive Manufacturing, in addition to coordinating the IntegrAM business network;

Spengler follows the international distribution of the products in addition to having made important progress, thanks to its experience in Additive Manufacturing engineering. Spengler delivers high-quality 3D printing consultancy and training, custom hardware/software development services, and advanced post-process solutions to its customers.

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BS Basic Standard

The SURF-PRO finishing machine series is characterized by pre-assembled compositions on technological pallets or skids, easily positionable and with the prerogative of being PLUG & PLAY. Depending on the preferences of the end user, the type of environment in which the finishing machine is intended or more simply on the expected budget, all SURF-PRO machines can be supplied in the basic version or with an «AM» cabin. All basic machines have a 4.7" color touch screen HMI interface, but those with an «AM» cabin have an external HMI panel, ideal for managing recipes based on multiple types of «AM» processes, even 7" or 15".
The SURF-PRO BS - Basic Standard - line combines the vibratory finishing unit with a wastewater recovery tank, easily connectable to a collection point provided by the customer.

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MF Micro Fluid

The SURF-PRO finishing machine series is characterized by pre-assembled compositions on technological pallets or skids, easily positionable and with the prerogative of being PLUG & PLAY. Depending on the preferences of the end user, the type of environment in which the finishing machine is intended or more simply on the expected budget, all SURF-PRO machines can be supplied in the basic version or with an «AM» cabin. All basic machines have a 4.7" color touch screen HMI interface, but those with an «AM» cabin have an external HMI panel, ideal for managing recipes based on multiple types of «AM» processes, even 7" or 15". The SURF-PRO MF - MicroFLUID - line combines the vibratory finishing unit with a customized dosing station based on the types of "multi-tasking" processes typical of MicroFLUID technology.
The configuration levels are multiple and can be identified thanks to preliminary tests in our test laboratories.

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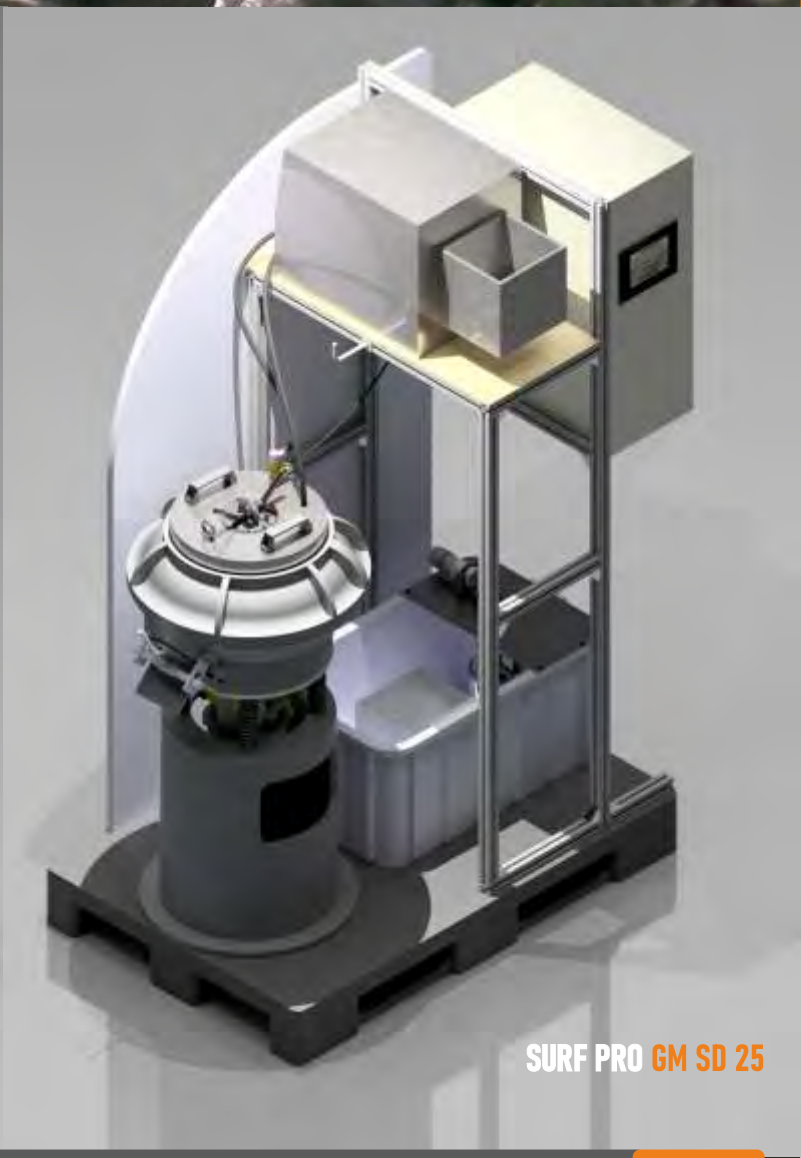
SURF PRO



SURF PRO GM SD 25

DYEING

STEAM

The SURF-PRO finishing machine series is characterized by pre-assembled compositions on technological pallets or skids, easily positionable and with the prerogative of being PLUG & PLAY. Depending on the preferences of the end user, the type of environment in which the finishing machine is intended or more simply on the expected budget, all SURF-PRO machines can be supplied in the basic version or with an «AM» cabin. All basic machines have a 4.7" color touch screen HMI interface, but those with an «AM» cabin have an external HMI panel, ideal for managing recipes based on multiple types of «AM» processes, even 7" or 15".
The SURF-PRO GM-SD or QS-SD line combines the vibratory finishing unit with a steam boiler and specific accessories for Steam Dyeing processes.

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Extra-Black AM

Intense-CMY AM

All SurfPRO GM-SD or QS-SD systems offered by IntegrAM are supplied with HMI and proprietary software that allows you to manage, with maximum operational flexibility, a certain number of heterogeneous recipes, rich in variables and nuances ideal for customizing each Steam Dyeing process ad hoc.

During the FAT (Factory Acceptance Test) phase, before the delivery of the machine, IntegrAM ensures that you can verify every nuance of the system purchased, enjoying a "training" carried out with your components and with the recipes and dosages developed for you.

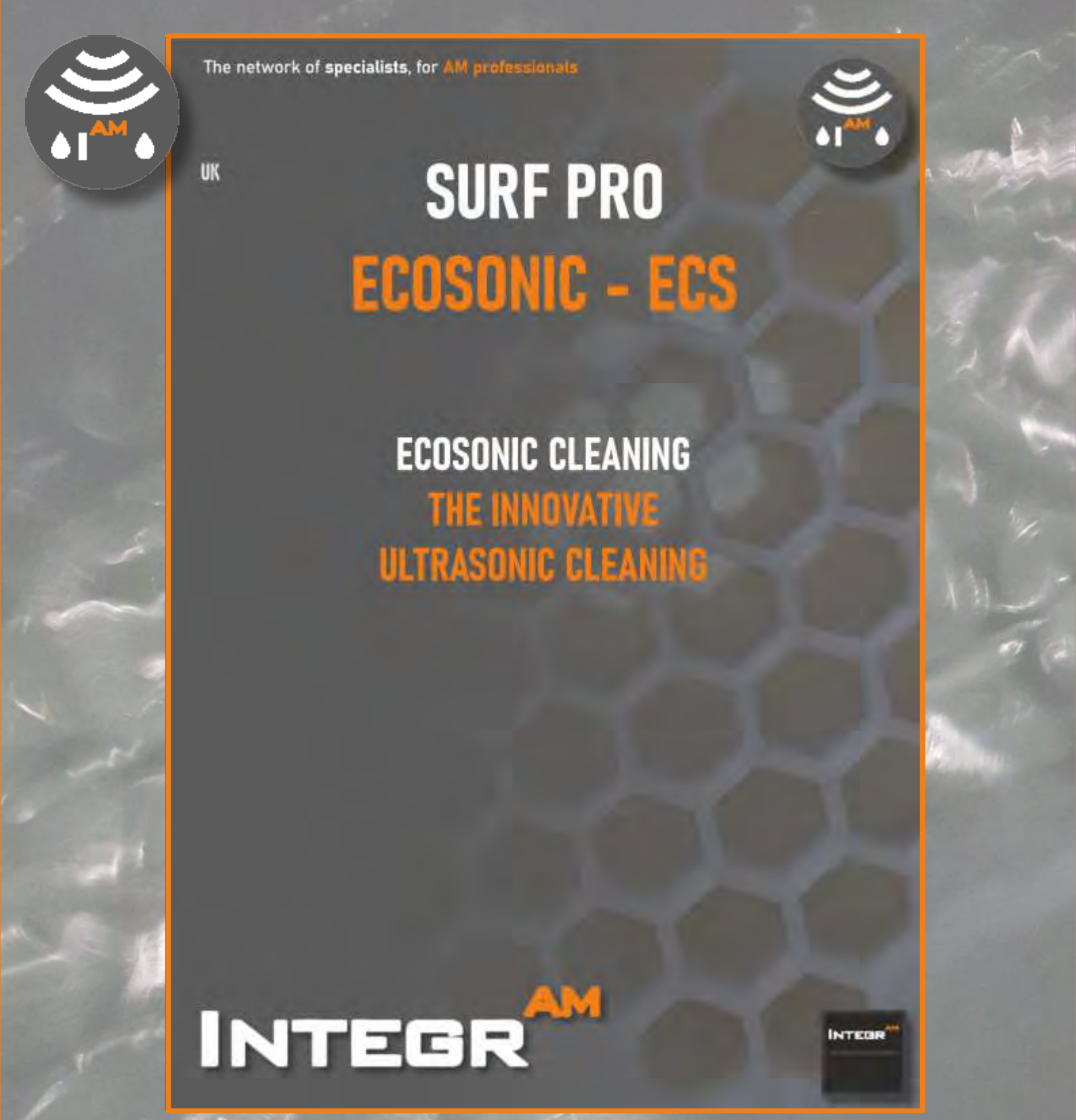
I-AM Labs & Show room

The IntegrAM network offers its customers the opportunity to evaluate the results of post-processes and various surface treatment technologies through its own testing laboratory and showroom.
In fact, we have installed a series of systems available both for testing and as training machines at the Rollwasch plant in Albiate (MB).
Among the machines available at our testing center and showroom: a DCK-ALL-IN-ONE, several VibroBLAST units of 25, 50 and 120 liters, a 60 liter Steam-DYEING machine, several Surf-PRO machines with capacities of 25, 50, 120 and more, a Surf-PRO-MF-25-50 unit for MicroFLUID processes.
Depending on the production campaigns and in combination with some international fairs, other machines may be available.

The VibroBLAST series of vibro-sandblasting systems represents a truly exclusive and revolutionary innovation in the world of surface treatment. Among the main advantages offered:
Automation of the finishing of batches of pieces in mass, even delicate ones, thanks to the elastic media «QF». By avoiding sandblasting the components one by one, but entire batches of tens or hundreds of pieces, the return on the initial investment occurs in a very short time
The VBA-DP technology allows the use of glass microspheres, ceramic microspheres, corundum-based grits, garnet, melamine granulates and many other typical sandblasting grits;
The surfaces prepared with VibroBLAST technology come out homogeneous, perfectly prepared, without evident residues of grits and ready for subsequent finishing, superfinishing or dyeing processes;

The SUPER VibroBLAST S-VBA-DP technology combines all the advantages of the standard VirboBLAST VBA-DP technology with specially designed tanks, equipped with an increased sandblasting shot evacuation system (up to three times) and a more powerful suction and filtration system (up to approximately 3 times).
This allows highly productive processes, cycles that can be set with recipes, therefore repeatability and high quality of results.
The VBA and S-VBA technology are protected by international patents, as are the QF elastic media and the VibroBLAST DCK Decaking systems;

Steam Dyeing technology (dry saturated steam dyeing) allows you to obtain the same results as with traditional dyeing, using 10 to 20 times fewer colors, thus generating a drastic reduction in costs and pollutants produced with each work cycle.
After years of research and development, the laboratory in charge of color formulations (DCL - Dyeing Color Lab), has developed a range of specific colors for additive manufacturing:
«EXTRA-BLACK-AM» for black and a series of «INTENSE-CMY-AM» shades based on at least 67 available color shades, ready to use.
The use of recipes ensures color repeatability while the adoption of special counter-tanks ensures «color change» in very rapid times.



EcoSONIC technology represents the highest level of evolution and innovation in the field of ultrasonic cleaning and accurate cleaning of 3D printed components.
A plant program that allows starting from small 25-liter machines, reaching larger capacity systems, therefore 60 up to 120 liters, can be combined with processes with only WASHING, RINSING and DRYING, or more complex and sophisticated processes that add an INITIAL PRE-WASH and, at the end, before drying, also a SANITIZATION cycle with dry saturated steam and hydrogen peroxide;
Finally, the chemistry makes use of the innovative range of washing and rinsing additives, summarized in the new Rollkemik ISO-PROPULSIVE program.

The ROTOPAINT coating technology is a step forward towards mass painting with solvent-based paints or water-based paints.

This technology combines the rotary dynamics of the tumbler with sophisticated systems equipped with sensors, dispensers and heating devices compatible with Industry 4.0 - generating automatic and repeatable painting cycles on 3D printed components of all types and materials.

Since 2024, the ROTOPAINT system range has finally been automated with servosystems capable of loading and unloading pieces in total automation.

Microfluid* technology enables vibrofinishing processes such as deburring, smoothing, surface roughness reduction to very low levels. These processes benefit from three main elements:
> QF* plastic media with usage costs and consumption rates among the lowest in the world; as an alternative to other types of “vector” media such as ROLLMEDIA EB porcelain or similar.
> Microfluid* chemical compounds formulated mainly in GEL, which reduce water consumption up to 20-30 times compared to traditional abrasive media.
> Multitasking recipes can be programmed in the PLC through the HMI color touch screen (the first recipe is usually provided by Rollwasch, based on the first test report).
* (Patented)

The Shot Peening process is a form of bombardment of a surface with spheroids that determines a series of imprints called "dimples" capable of generating taut surfaces with relative compressions.

This type of application is ideal for reinforcing structures such as metal beams, bridge components or pylons for the electrification of railway lines, and all those components in which the increase in surface roughness has no negative effects. The process that IntegrAM has identified with the acronym VSP is, as we will see, capable of reaching similar levels of tension and compression, without however generating such high surface roughness and, in many applications, dangerous for the use for which the components are intended.

LubroCOAT technology (lubrication of elastomers and polymers with dry saturated steam) allows to obtain the same results as those obtained with steam dyeing, using specific lubricants instead of colors.

The use of recipes ensures the repeatability of FUNCTIONAL SURFACES while the adoption of special counter-tanks ensures the "additive change" in very rapid times.

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This brochure is for guidance only. Its content can change depending on the development of the product.

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IntegrAM

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