

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

INTEGR^{AM}

SurfPRO
MicroFLUID

INTEGR^{AM}

UK



Surf PRO MicroFLUID



The IntegrAM program was born from a network of specialists, for AM professionals:
<https://integram.eu/en/who-we-are/>

 **ATTENTION**
TURN-OFF THE POWER
BEFORE OPENING
THE DOOR

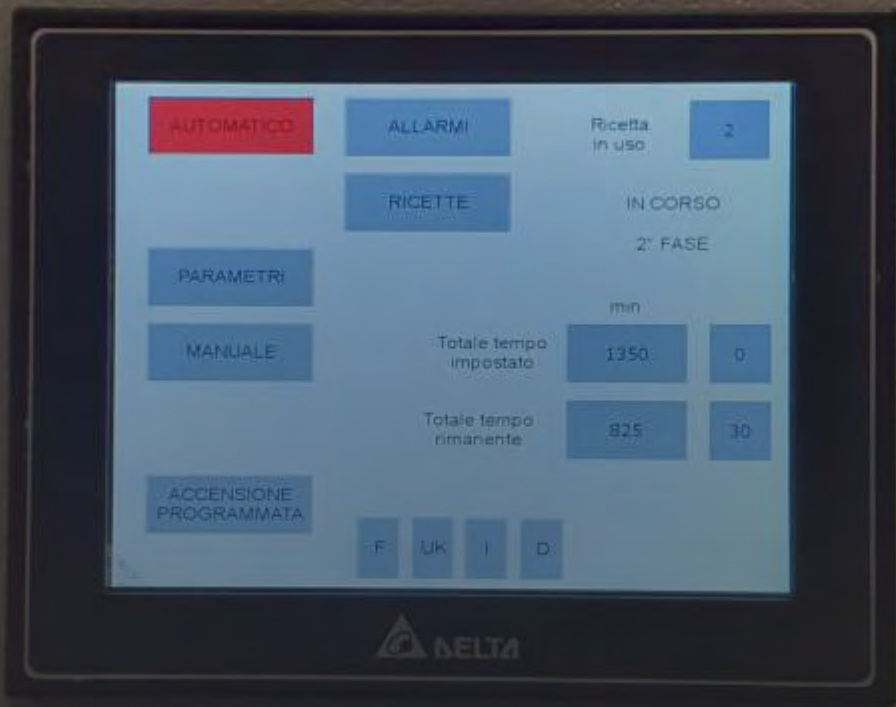
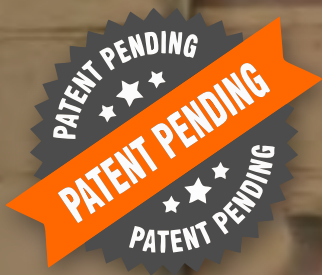
PATENT PENDING
★ ★ ★
PATENT PENDING
★ ★ ★
PATENT PENDING

Surf PRO MicroFLUID



Surf PRO MicroFLUID

PATENT PENDING
★ ★ ★
PATENT PENDING
★ ★ ★
PATENT PENDING



Surf PRO MicroFLUID



The **Microfluid*** technology allows vibratory finishing processes such as deburring, smoothing, surface roughness reduction to very low levels. These processes take advantage of three main elements:

- > **QF plastic Media*** with operating costs and consumption rates among the most reduced in the world; alternatively to other kinds of «vectorial» media such as ROLLMEDIA EB porcelain or similar;
- > **Microfluid chemical compounds*** formulated mainly in GEL, that reduce water consumption up to 20-30 times compared with traditional abrasive media;
- > **Multi tasking recipes** that can be programmed in the PLC towards the colour touch screen HMI (first recipe is generally provided by Rollwasch, based on the first test report).

* (patent pending - I)



SurfPRO MicroFLUID range of machines can be provided both in

> **Surf PRO SPR configuration**

The machines based on this design have just a single bottom filter to discharge the effluents - its valve is pneumatically activated to open or to close, according the process recipe.

This configuration is generally recommended for all capacities when the outlet filter is not smaller than #3 mm.

> **Surf PRO SP3 configuration**

The machines based on this design can have 1 or 2 or 3 bottom filters to discharge the effluents - their valves are pneumatically activated to open or to close, according the process recipe.

This configuration is generally recommended for all capacities except for the 25 liters, specially when the outlet filters are smaller or equal to #2 mm.

All machines **Surf PRO MicroFLUID** are designed with a technologic pallet that allows the machine to be considered «Plug & Play», saving time and money at the placement in its final destination.



The technique of MicroFLUID processes (patent pending - I) is simple and fully automated, from the first phase of the last of the cycle. It's enough to press START...

The objective of the fully automatic dosing station schedule is as follows:

1. Feed water drops , in the initial part of the process, by automatic opening of electrovalve related to flow meter A
2. Dose the abrasive compound in gel, series Abragel, in parallel to phase 1. through the pump 1MF.
3. Rinse with tap water* and cleaning compound, through the group composed of pump C (liquid compound) and solenoid valve related to flow meter B or, wherever required, just water without compound.
4. Dose the abrasive compound in gel, series Abragel, in parallel to phase 2. through the pump 2MF.
5. Rinse with tap water* and cleaning compound, through the group composed of pump C (liquid compound) and solenoid valve related to flow meter B or, wherever required, just water without compound.

*(tap water of good quality, alternatively to Demineralized water)

Surf PRO MicroFLUID

SPR (& SP3)

Sigla modello Model ID code	Copert. di serie Standard cover	Staz. dos. di serie Std. dosing station	H ₂ O risciacquo max. max H ₂ O for rinsing	Potenza Vibr. Power Vibr.
SPR-D-25-MF	PLASTO-LID-25	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,43 Kw.
SPR-D-50-MF	PLASTO-LID-50	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SPR-D-120-L-MF	PLASTO-LID-120	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SPR-D-120-MF	PLASTO-LID-120	Mix-Kem-"N"MF _ _ -D	80 lt./h.	1,10 Kw.
SP3-D-25-MF	PLASTO-LID-25	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,43 Kw.
SP3-D-60-MF	PLASTO-LID-60	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SP3-D-120-L-MF	PLASTO-LID-123	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SP3-D-120-MF	PLASTO-LID-123	Mix-Kem-"N"MF _ _ -D	80 lt./h.	1,10 Kw.
SP3-D2-25-MF	PLASTO-LID-25	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,43 Kw.
SP3-D2-60-MF	PLASTO-LID-60	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SP3-D2-120-L-MF	PLASTO-LID-123	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SP3-D2-120-MF	PLASTO-LID-123	Mix-Kem-"N"MF _ _ -D	80 lt./h.	1,10 Kw.
SP3-D3-25-MF	PLASTO-LID-25	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,43 Kw.
SP3-D3-60-MF	PLASTO-LID-60	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SP3-D3-120-L-MF	PLASTO-LID-123	Mix-Kem-"N"MF _ _ -D	80 lt./h.	0,52 Kw.
SP3-D3-120-MF	PLASTO-LID-123	Mix-Kem-"N"MF _ _ -D	80 lt./h.	1,10 Kw.

Quadro comandi touch Screen 4,7" incluso Control board touch screen 4,7" included



Surf PRO MicroFLUID

The Surf PRO series, for Microfluid processes, provides complete installations with a unique identification code.

For any additional modular accessory, these machines are compatible with a wide range of accessories Modultek highlighted in the Surf PRO general catalogue or presentation.

The Surf PRO MF series has to be completed with the suitable MIK-KEM type; and this let change the name of the machine that will be «name of the machine» + «name of the mixing device without MIX-KEM», here follows some example as follows:

Name of the machine SPR-D-60-MF - name of the MIX-KEM: MIX-KEM-1MF-08-80-D
Complete name of the Microfluid machine: SPR-D-60-1MF-08-80-D

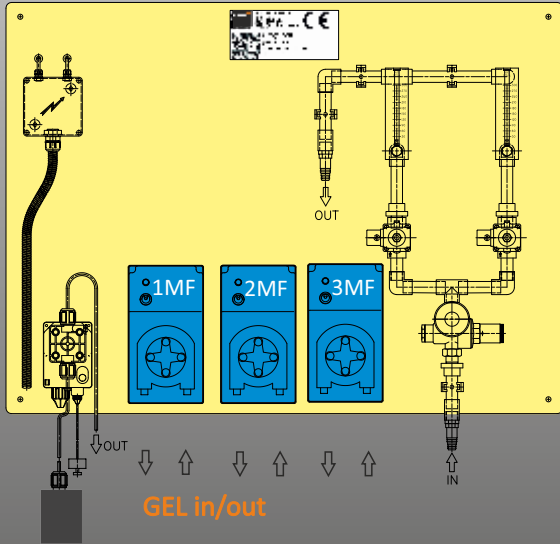
Name of the machine SP3-D-120-MF - name of the MIX-KEM: MIX-KEM-3MF-15-15L-15-150-D
Complete name of the Microfluid machine: SP3-D-120-MF-3MF-15-15L-15-150-D

A complete list of the available MIX-KEM accessory for the Surf PRO-Microfluid machines is available in the next page.

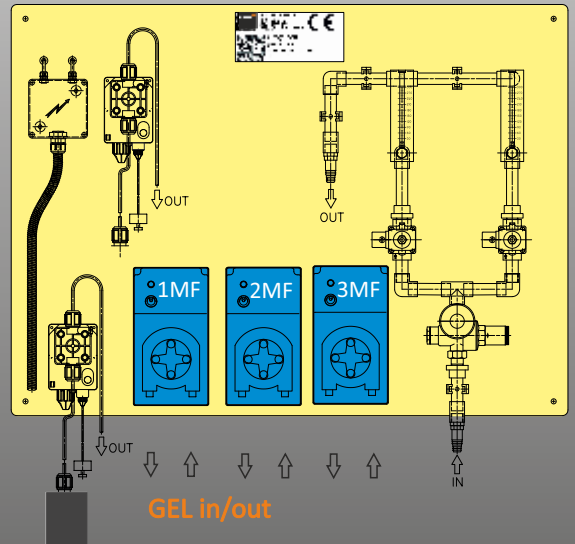
Surf PRO MicroFLUID

SPR (& SP3)

Mix-Kem-"N"MF__-__D



Mix-Kem-"N"MF__-__D



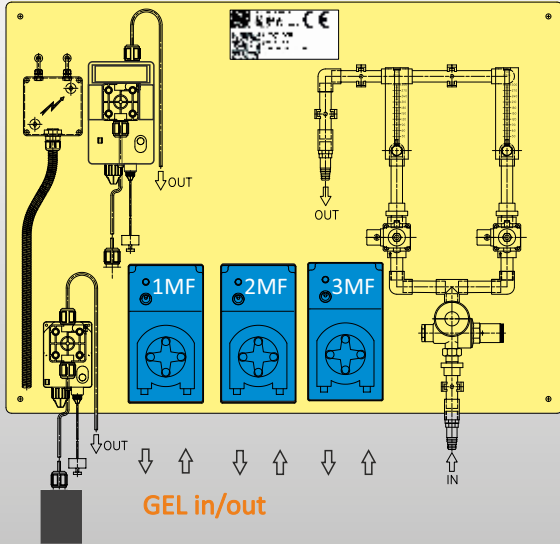
Stazione dosaggio Dosing station	Pompa 1 per liquidi* Pump 1 for liquids*	Pompa 2 per liquidi Pump 2 for liquids	Pompa 1 per gel* Pump 1 for gel*	Pompa 2 per gel* Pump 2 for gel*	Pompa 3 per gel* Pump 3 for gel*	Flussimetro 1** Flowmeter 1**	Flussimetro 2** Flowmeter 2**	Riduttore Press. Pressure Reducer
MIX-KEM-1MF-08-15-D	5 l/h	-	OK	-	-	8 l/h	15 l/h	OK
MIX-KEM-1MF-08-80-D	5 l/h	-	OK	-	-	8 l/h	80 l/h	OK
MIX-KEM-1MF-15-150-D	15 l/h	-	OK	-	-	15 l/h	150 l/h	OK
MIX-KEM-1MF-15-300-D	15 l/h	-	OK	-	-	15 l/h	300 l/h	OK
MIX-KEM-2MF-08-15-D	5 l/h	-	OK	OK	-	8 l/h	15 l/h	OK
MIX-KEM-2MF-08-80-D	5 l/h	-	OK	OK	-	8 l/h	80 l/h	OK
MIX-KEM-2MF-15-150-D	15 l/h	-	OK	OK	-	15 l/h	150 l/h	OK
MIX-KEM-2MF-15-300-D	15 l/h	-	OK	OK	-	15 l/h	300 l/h	OK
MIX-KEM-3MF-08-15-D	5 l/h	-	OK	OK	OK	8 l/h	15 l/h	OK
MIX-KEM-3MF-08-80-D	5 l/h	-	OK	OK	OK	8 l/h	80 l/h	OK
MIX-KEM-3MF-15-150-D	15 l/h	-	OK	OK	OK	15 l/h	150 l/h	OK
MIX-KEM-3MF-15-300-D	15 l/h	-	OK	OK	OK	15 l/h	300 l/h	OK

Stazione dosaggio Dosing station	Pompa 1 per liquidi* Pump 1 for liquids*	Pompa 2 per liquidi Pump 2 for liquids	Pompa 1 per gel* Pump 1 for gel*	Pompa 2 per gel* Pump 2 for gel*	Pompa 3 per gel* Pump 3 for gel*	Flussimetro 1** Flowmeter 1**	Flussimetro 2** Flowmeter 2**	Riduttore Press. Pressure Reducer
MIX-KEM-1MF-5-5L-08-15-D	5 l/h	5 l/h	OK	-	-	8 l/h	15 l/h	OK
MIX-KEM-1MF-5-5L-08-80-D	5 l/h	5 l/h	OK	-	-	8 l/h	80 l/h	OK
MIX-KEM-1MF-15-15L-15-150-D	15 l/h	15 l/h	OK	-	-	15 l/h	150 l/h	OK
MIX-KEM-1MF-15-15L-15-300-D	15 l/h	15 l/h	OK	-	-	15 l/h	300 l/h	OK
MIX-KEM-2MF-5-5L-08-15-D	5 l/h	5 l/h	OK	OK	-	8 l/h	15 l/h	OK
MIX-KEM-2MF-5-5L-08-80-D	5 l/h	5 l/h	OK	OK	-	8 l/h	80 l/h	OK
MIX-KEM-2MF-15-15L-15-150-D	15 l/h	15 l/h	OK	OK	-	15 l/h	150 l/h	OK
MIX-KEM-2MF-15-15L-15-300-D	15 l/h	15 l/h	OK	OK	-	15 l/h	300 l/h	OK
MIX-KEM-3MF-5-5L-08-15-D	5 l/h	5 l/h	OK	OK	OK	8 l/h	15 l/h	OK
MIX-KEM-3MF-5-5L-08-80-D	5 l/h	5 l/h	OK	OK	OK	8 l/h	80 l/h	OK
MIX-KEM-3MF-15-15L-15-150-D	15 l/h	15 l/h	OK	OK	OK	15 l/h	150 l/h	OK
MIX-KEM-3MF-15-15L-15-300-D	15 l/h	15 l/h	OK	OK	OK	15 l/h	300 l/h	OK

Surf PRO MicroFLUID

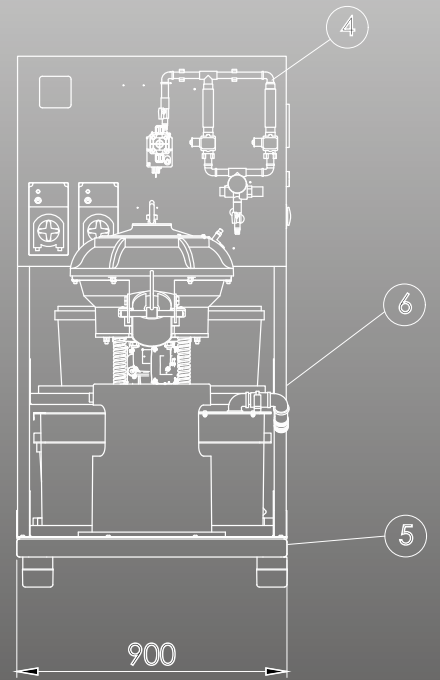
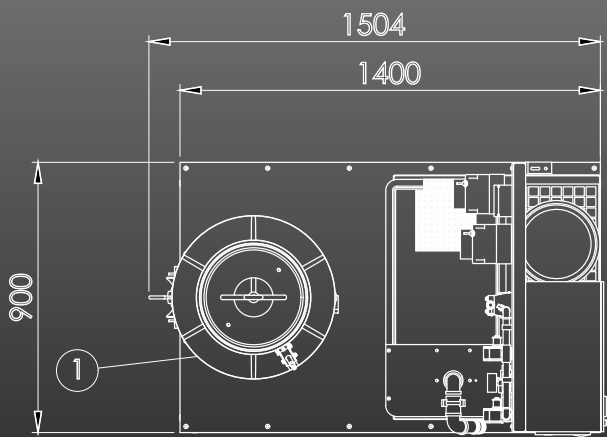
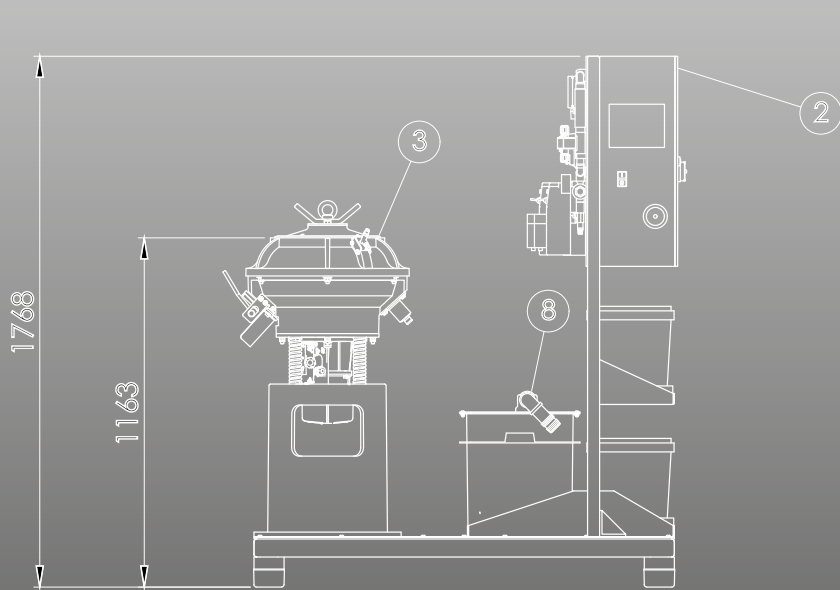
SPR (& SP3)

Mix-Kem-"N"MF__-__D

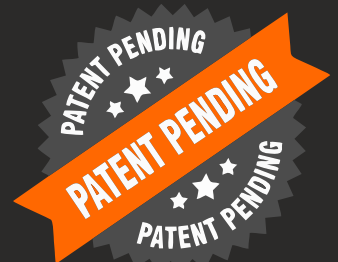


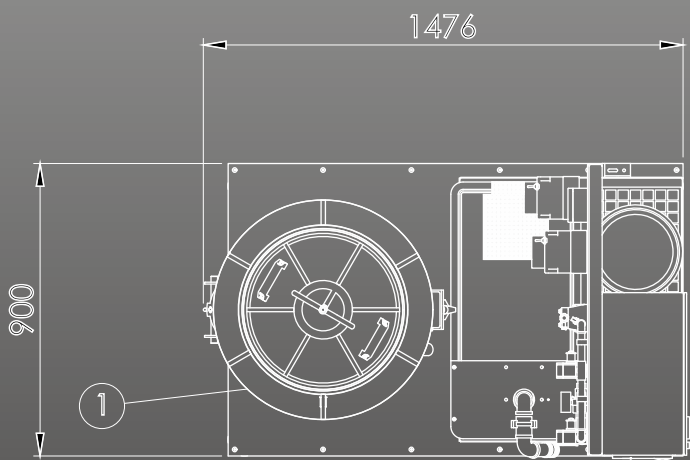
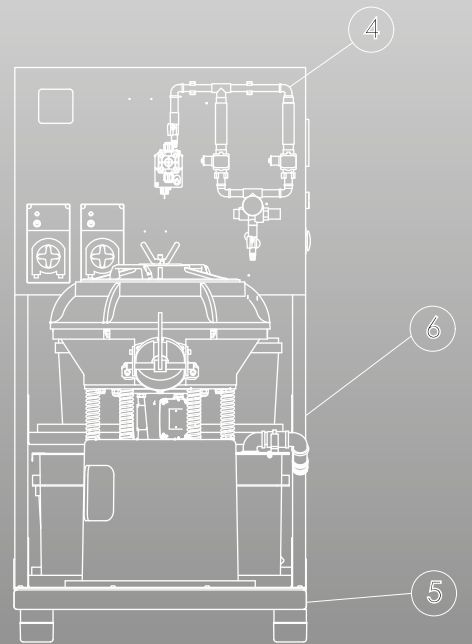
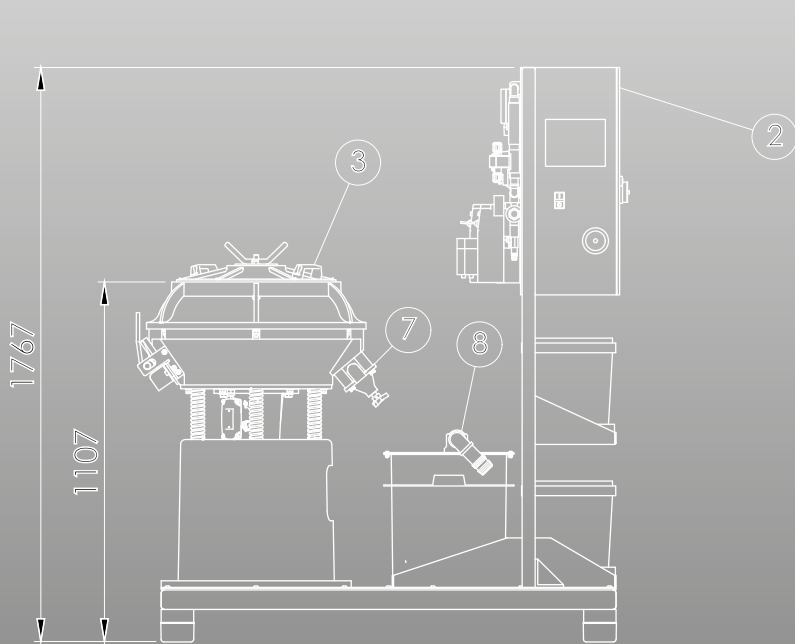
Stazione dosaggio Dosing station	Pompa 1 per liquidi* Pump 1 for liquids*	Pompa 2 per liquidi Pump 2 for liquids	Pompa 1 per gel* Pump 1 for gel*	Pompa 2 per gel* Pump 2 for gel*	Pompa 3 per gel* Pump 3 for gel*	Flussimetro 1** Flowmeter 1**	Flussimetro 2** Flowmeter 2**	Riduttore Press. Pressure Reducer
MIX-KEM-1MF-5-15L-08-15-D	5 l/h	15 l/h	OK	-	-	8 l/h	15 l/h	OK
MIX-KEM-1MF-5-15L-08-80-D	5 l/h	15 l/h	OK	-	-	8 l/h	80 l/h	OK
MIX-KEM-1MF-15-30L-15-150-D	15 l/h	30 l/h	OK	-	-	15 l/h	150 l/h	OK
MIX-KEM-1MF-15-30L-15-300-D	15 l/h	30 l/h	OK	-	-	15 l/h	300 l/h	OK
MIX-KEM-2MF-5-15L-08-15-D	5 l/h	15 l/h	OK	OK	-	8 l/h	15 l/h	OK
MIX-KEM-2MF-5-15L-08-80-D	5 l/h	15 l/h	OK	OK	-	8 l/h	80 l/h	OK
MIX-KEM-2MF-15-30L-15-150-D	15 l/h	30 l/h	OK	OK	-	15 l/h	150 l/h	OK
MIX-KEM-2MF-15-30L-15-300-D	15 l/h	30 l/h	OK	OK	-	15 l/h	300 l/h	OK
MIX-KEM-3MF-5-15L-08-15-D	5 l/h	15 l/h	OK	OK	OK	8 l/h	15 l/h	OK
MIX-KEM-3MF-5-15L-08-80-D	5 l/h	15 l/h	OK	OK	OK	8 l/h	80 l/h	OK
MIX-KEM-3MF-15-30L-15-150-D	15 l/h	30 l/h	OK	OK	OK	15 l/h	150 l/h	OK
MIX-KEM-3MF-15-30L-15-300-D	15 l/h	30 l/h	OK	OK	OK	15 l/h	300 l/h	OK





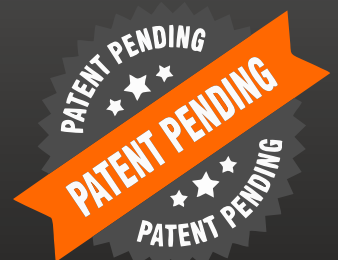
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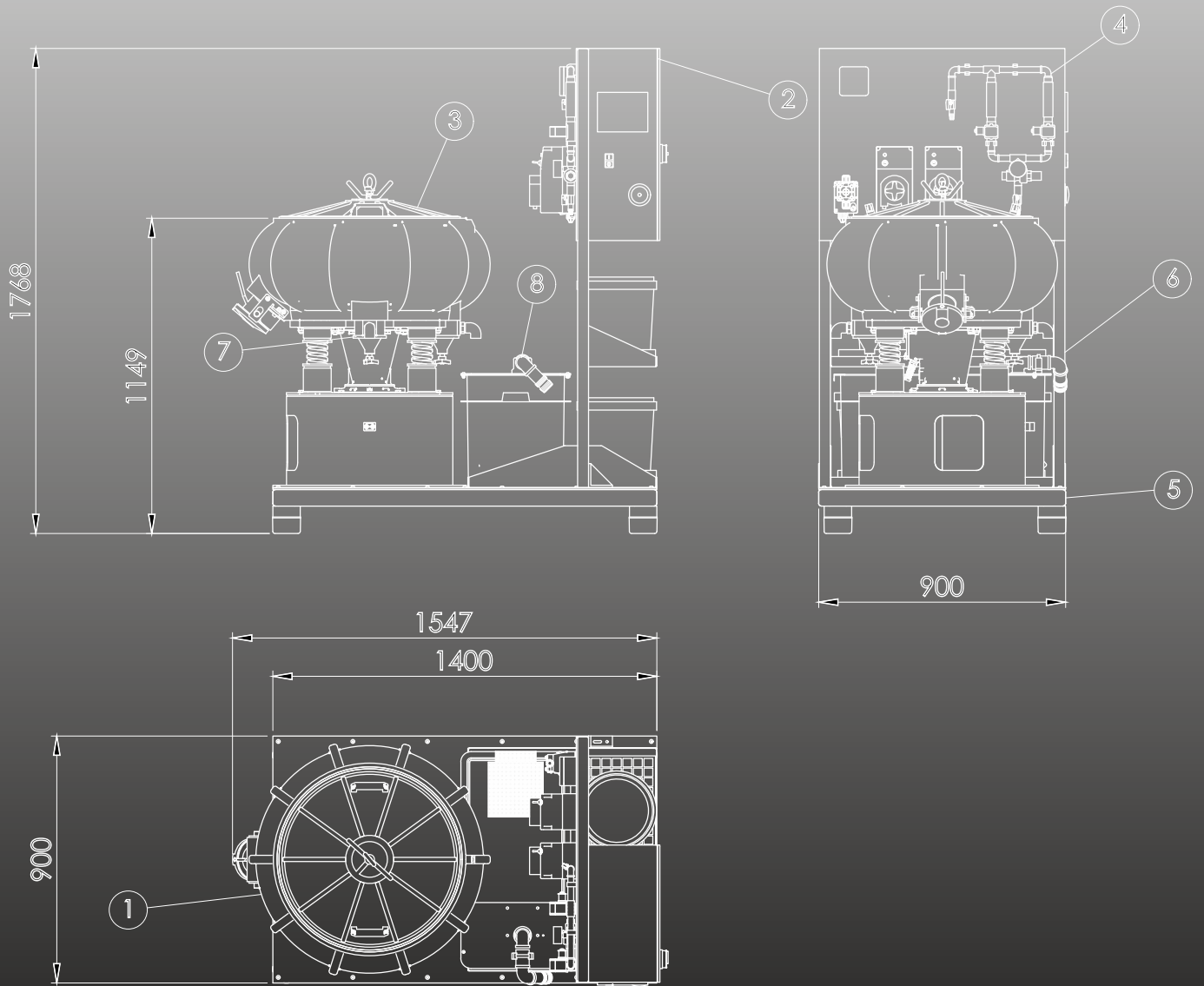




Surf PRO MicroFLUID

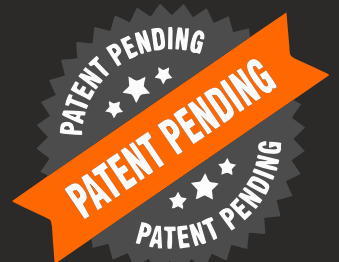
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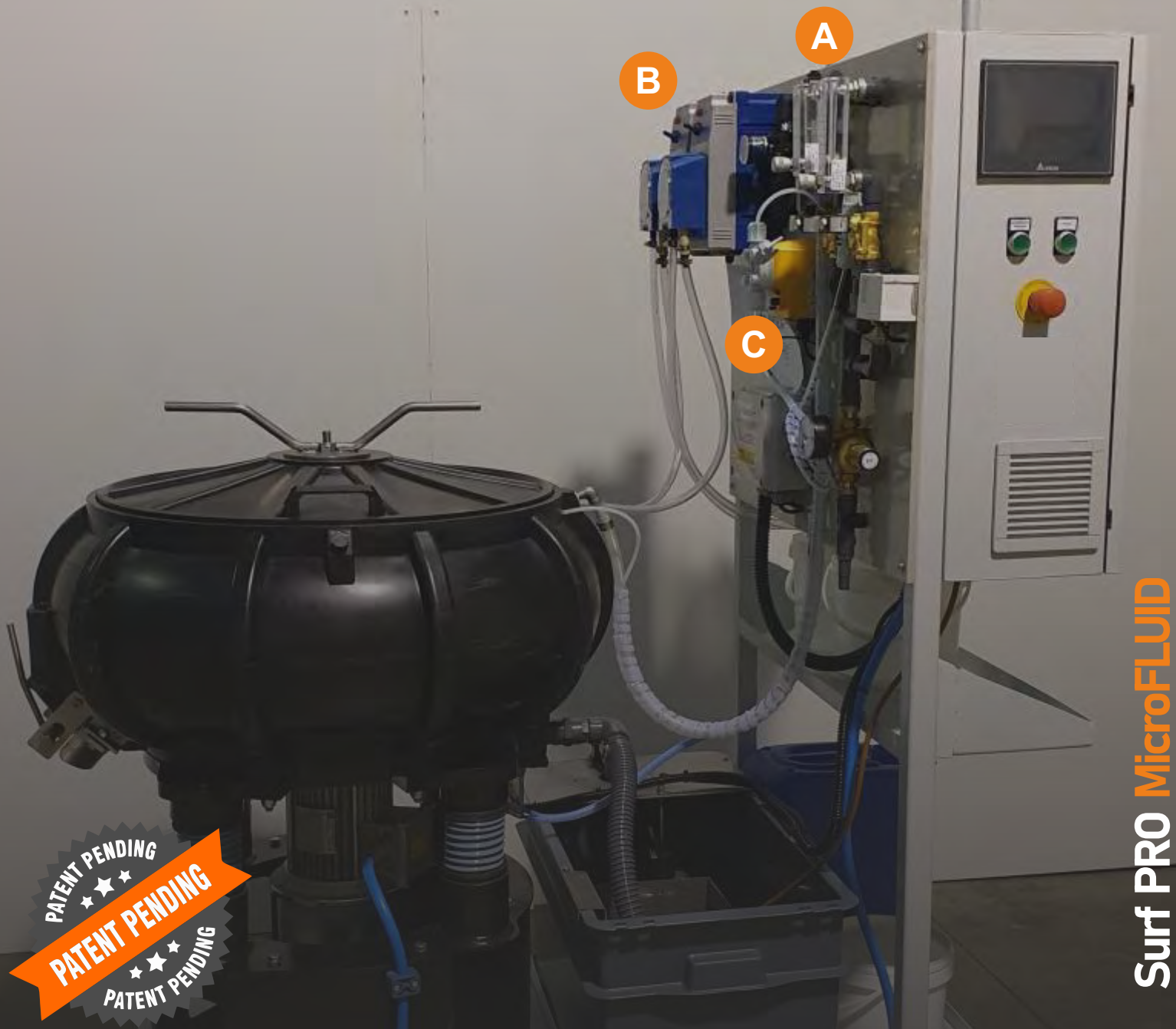




Surf PRO MicroFLUID

SPR-D-120-2MF-08-80-D





The technique of microfluid processes (patent pending - I) is simple and fully automated, from the first phase of the last of the cycle. It's enough to press START...

The objective of the station schedule is as follows:

1. Feed water drops (demi), in the main part of the process, through the pump A.
2. Dose the abrasive compound in gel, series Abragel, in parallel to phase 1. through the pump B.
3. Rinse with tap water* and cleaning compound, through the group C. composed of a pump (compound) a solenoid valve with flow meter (tap water) or, where required, just water without compound.

*(of good quality)

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MicroFLUID

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

#0125-SurfPRO_MicroFLUID-CA[uk]

UK

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