



IONPURE™ continuously eliminates metals polluting the chromium (III) baths in order to guarantee optimal concentration and constant parts quality.

**4 kg of polluting metals collected in one cycle !**

### Quality parts. Guaranteed.

Zero bath contamination due to the build-up of metal impurities.

Top quality, every time.

### Increased productivity.

No production line interruption.

Reduced maintenance frequency.

### Durable and profitable investment

Removal of a significant part of the cost linked to maintenance.

Reduced environmental footprint thanks to minimal effluent disposal.

### A revolution for the chrom (III) bath treatment.

Traditionally, to avoid massive pollution of the treatment baths, baths are often completely drained and refilled with brand new chromium (III) solution.

Such maintenance as a significant cost : it leads to a full stop of the production, a major quantity of effluent to treat and a non-negligible cost of brand new solution.

IONPURE™ treats the chromium (III) bath continuously, keeping metal ion pollution to a minimum. Thus, there is no interruption in production and the volume of effluent is minimal compared to the traditional method.

Once the ion exchange resin is saturated (50 g of metal for 1 litre of resin), IONPURE™ switches to regeneration mode to clean the resin of impurities in order to reuse it in the next cycle.

*Note: As IONPURE™ does not have an integrated analysis system, regular monitoring and analysis of the chrome plating bath is necessary to trigger the resin regeneration mode.*





### 10 µm pre-filtration

Removes fluid particles upstream of the ion exchange resin tank. Extruded PP cartridge.



### 100% polypropylene pneumatic valve

Allows process automation and excellent chemical resistance for maximum durability.



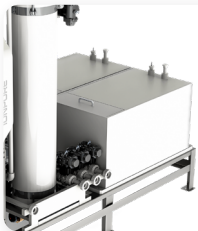
### Ion exchange resin (40 or 80 l)

This resin developed especially for this application guarantees an efficient removal of metal pollutants. Treats ~ 3 m<sup>3</sup> of bath / 40 l.



### Special resin strainer

Allows to keep the resin in the tank: avoids the decrease of performance, the filling of the resin tank and the pollution of the treatment bath.



### Storage of regenerating solution

Two PP tanks (100 l each) allow the storage of resin regeneration solutions (acid + base).



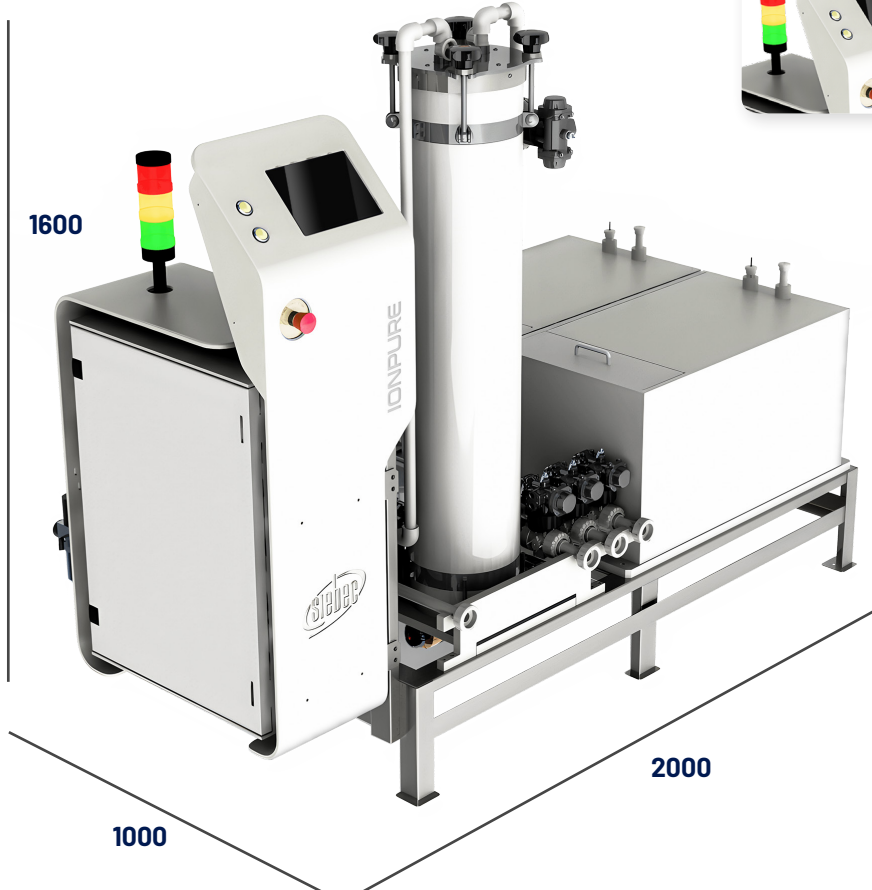
### Compact design

Stainless steel 316L frame of 2x1 m. Pump powered by 230V single phase. Pneumatic supply of 5 bar (minimum) required.



### Touch screen interface

Control of the process status and selection of modes (automatic, pause, automatic regeneration, machine stop).



## Automatic regeneration mode

When the bath analysis reveals an abnormal level of polluting metals, it means that the resin is saturated and that it is time to regenerate it.

The operator then activates the "automatic regeneration" mode. The IONPURE will then successively evacuate the metals and regenerate the resin.

## Machine stop mode

This mode allows the IONPURE™ circuit to be completely emptied and cleaned in order to avoid any risk of crystallization inside its various elements.

