



# PROPORTIONAL EXTRACTOR

## THE BEST REPLACEMENT FOR SMU



### *The main advantages of Proportional Extractor:*

- ✓ **Completely interchangeable with any kind of SMU**, for dimensions and connections type (no changes required on press or existing moulds)
- ✓ **Drastic reduction of spare parts needed for standard regeneration**
- ✓ **It is easy and fast to adjust the machine** (unlike the manual control, the completely electronic control allows to adjust settings without having to stop the production)
- ✓ **Minimization of human errors** during ordinary working procedure (sensible parameters protected by password)
- ✓ **Memorization of all alarms** allows to retroactively check every problem occurred during production
- ✓ **Memorization of formulations** (both on internal memory and external to export through USB)
- ✓ **Tele-assistance** on electronic parts (with a significant saving on time and costs)

**Several ceramic industries all over the world already chose the Proportional Extractor with impressive results.**

**GRIZZANTE**  
MOULDS FOR TILES INDUSTRIES

**READY FOR YOUR BUSINESS  
LIKE NO OTHER**

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reliable fast worldwide

## **PROPORTIONAL EXTRACTOR**

*The best replacement for SMU*

*The operating principle of the **PROPORTIONAL EXTRACTOR** is very simple and at the same time very effective.*

***It can be installed on any type of press, which is equipped with SMU using the same fixing, same hydraulic connections and same moulds, without having to add any external hydraulic station.***

The movement of ejecting block (extraction and drop) is the same as in the SMU, with two hydraulic cylinders, which have been oversized, bringing them to 11 Ton compared to 7,5 Ton of SMU. In the SMU the position of thread mould frame and first drop are regulated mechanically, in the "Proportional Extractor" instead all the adjustments are managed by two proportional valves. The big advantage is that by changing a data on the control panel we can modify all the measures, both

for the first drop and thread mould frame and relative ejecting speed and drop.

All the internal mechanical parts have been removed from the "Proportional Extractor": limits stop, limiting devices, worm screws, second drop adjustment motor.

The positioning of ejecting block is controlled by two linear encoders that work in pursuit, maintaining the block planarity movement by default parameters.

The lack of mechanical parts reduces drastically the possibility of faults.

**Compared to SMU the costs of regeneration are halved and the interval of maintenance is doubled, allowing a considerable reduction of costs, which is a great economic advantage.**

Another advantage is the possibility to replace a damaged valve directly on the hydraulic block, without having to disassemble the "Proportional Extractor" from the press. Proportional valves, lock of valves, encoders and pressure switch are products with easy availability on the market. The "Proportional Extractor" can be equipped with ejecting magnetic block that allows a fast size change and the possibility to produce different sizes on the same extractor.

All these connections can be used on other Extractors, therefore if you have 4 presses and 5 Extractors, these are completely interchangeable and connectable to the same control boards.

It is important to specify that all movements of the extractor will be controlled, as now, from the press panel; only in case you want to modify the adjustments (thread mould

frame, first drop and speed movement) you will have to act on the touch screen panel and then return to use all from the press panel.

It is always difficult give a data on the Extractor's life span before its regeneration, as each company uses different speed and parameters, but observing the machineries currently in production, we can suppose an average life of about 2 ml. cycles (considering careful maintenance and cleaning procedure). One of the main problems of machines stop is the breakage of leather bellow, usually due to lack of cleaning or wrong procedure such as cleaning it with metal rod, which will damage the leather bellow.

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