Socomap

MACHINES AND AUTOMATION SYSTEMS
FOR THE PRECAST CONCRETE INDUSTRY


# CNP 741

## A VERSATILE FINISHING CONTROL CENTER FOR PRECAST WALLS

Achieve the look of polished concrete or granite — vertically. Socomap creates precision architectural panel finishes with water-controlled processing to eliminate silica dust.

# INTRODUCING THE SOCOMAP MACHINE & RAIL SYSTEM

Socomap is a fully programmable vertical finishing system designed to transform precast concrete panels into high-value architectural surfaces. Engineered for precision, repeatability, and production efficiency, the system enables manufacturers to produce polished, textured, and engraved finishes that traditionally require extensive manual labor or multiple processing steps.

Already in operation across Italy, Denmark, Norway, Sweden, Spain, Serbia, Saudi Arabia, and New Zealand, Socomap has helped international precasters expand architectural capabilities, improve consistency, and unlock new revenue opportunities. North American producers now have the opportunity to differentiate themselves by adopting a technology not yet widely established in the region — positioning their operations at the forefront of architectural precast innovation.

## SOLVING THE LIMITATIONS OF TRADITIONAL FINISHING METHODS

Unlike horizontal finishing systems or handheld grinding equipment, Socomap processes panels vertically while both the panel and machine remain fixed in controlled positions. This eliminates vibration, machine bounce, and operator variability — common causes of uneven surfaces, inconsistent finishes, and costly rework.

Traditional handheld methods depend heavily on operator skill and physical labor, often increasing production time while producing variable results. Socomap replaces labor-intensive finishing with automated precision, delivering uniform surface quality and repeatable results across entire production runs.

The result is improved surface flatness, consistent texture depth, reduced rework, and significantly increased production efficiency.

## ADVANTAGE OF THE SOCOMAP RAIL SYSTEM

At the core of the system is the Socomap rail and parallel panel mounting configuration. Unlike horizontal machines that process one panel at a time, the rail system allows multiple panels to be staged simultaneously along extended production lines.

**Key Advantages:**

- Reduced crane movement and panel handling during finishing
- Consistent finishing quality across entire production runs
- Scalable finishing capacity capable of supporting large architectural projects
- Outdoor installation options with protective coverings, reducing the need for additional indoor production space
- Lower labor requirements and improved return on investment per finished panel

## EXPANDED ARCHITECTURAL DESIGN POSSIBILITIES

Socomap supports a wide range of mix designs and aggregate exposures, enabling finishes ranging from honed concrete to granite-like architectural surfaces. Controlled grinding, honing, brushing, and texturing processes allow producers to create signature finishes tailored to architectural specifications.

This flexibility allows precasters to move beyond standard gray panels and compete in higher-margin architectural markets where customization, appearance, and consistency command premium pricing.

## LEADING THE NEXT GENERATION OF ARCHITECTURAL PRECAST

For North American precast manufacturers, adopting Socomap represents more than an equipment investment — it is an opportunity to expand production capability and market position.

Early adopters can offer architectural finishes and design complexity that competitors cannot easily replicate using conventional methods.

By reducing labor dependency, increasing finishing precision, and expanding design possibilities, Socomap helps precasters:

- **Differentiate product offerings**
- **Win higher-value architectural projects**
- **Improve production efficiency**
- **Maximize margins on finished wall panels**

Socomap empowers forward-thinking manufacturers to set a new benchmark for architectural precast production.

# ACHIEVE THE HIGHLY DESIRABLE LOOK OF POLISHED CONCRETE AND GRANITE WITH SOCOMAP!

## Model CNP 741

**A bridge vertically slides on this structure and carries:**

- 7 spindles for polishing, brushing and bush hammering
- 1 vertical-axle spindle for inside edge engraving
- 2 spindles for engraving with vertical stripes and false joints

**A second bridge mounted on the side of the structure carries two spindles for engraving with horizontal strips and false joints**

**Available option - Coverings for outdoor installation.**

**Easily program the Socomap machine to execute combined processes—such as honing and bush-hammered stripes defined by false joints—and preview the results through video simulation before production.**

# SOCOMAP MACHINE FEATURES:

**Socomap combines precision engineering and programmable technology to produce consistent, high-quality architectural concrete finishes.**

- Composed of a self-propelled oblique frame running on rails and equipped with interchangeable functional attachments
- Automatically detects panel, door, and window dimensions during honing and bush hammering operations, eliminating manual data input
- Performs a wide range of surface treatments including polishing, brushing, engraving, grooving, line detailing, honing, bush hammering, sand blasting, and the creation of false joints and rustication features
- Combined processes — including honing and bush-hammered stripes delimited by false joints — can be programmed directly on the machine and visualized via onboard video monitoring.
- Programmable through an external PC using AutoCAD systems for precise design control and repeatability
- All metal components exposed to wear or water are manufactured from stainless steel or sand-blasted and coated with polyurethane double-component protective paint
- Equipped with an automatic greasing system to ensure smooth operation and reduced maintenance
- Solenoid valves on each spindle regulate water flow, activating only during operation to minimize water consumption
- Fixed post walls installed parallel to the rails allow multiple panels to be processed in a single run cycle

# SPINDLE HEAD FEATURES:

**Precision-engineered spindle heads deliver accurate positioning, adaptive movement, and consistent finishing performance.**

- Honing and bush hammering spindle heads are equipped with pneumatic lifting for controlled positioning and efficient operation
- Engraving spindle heads for stripes and false joints feature electromechanical side shifting, height display, and electromechanical vertical movement, automatically following panel cambers via integrated distance sensors
- A rotating bridge-mounted spindle head enables diagonal engraving of stripes and false joints, allowing virtually unlimited architectural design configurations

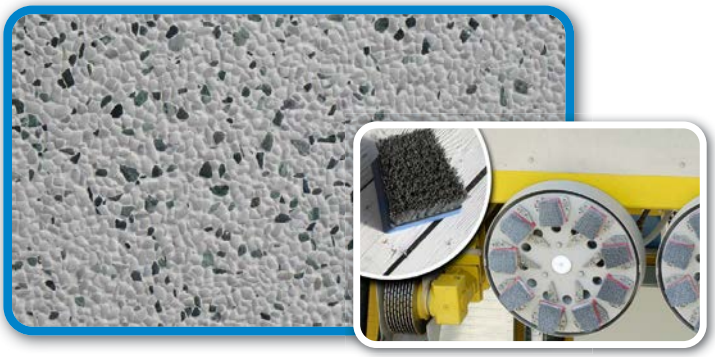
# SOCOMAP TOOLS AND CAPABILITIES

## POLISHING

## BUSH HAMMERING

## CUT LINES

## BRUSHING



## FAKE JOINTS & RUSTICATION

## DESIGN AND ENGRAVING

## WET SANDBLASTING

## PILLAR & COLUMN CAPABILITY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