



Production Engineering and Automation Systems for the Prefabricated Concrete Element Industry

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Stationary production/production lines and tilting tables

SOMMER offers a complete range containing numerous alternative technologies. All options are left open to ensure that every customer receives the most efficient system to suit specific needs.

The folding pallet

SOMMER was the inventor of the folding pallet, launched on the market at the same time as the double wall. Even today it is notable for its high operational reliability and efficiency, yet low price. An integrated heating system not only enables the pallet to be used twice per shift, but also ensures a high level of precision and efficiency in conjunction with the coordinated shuttering system.



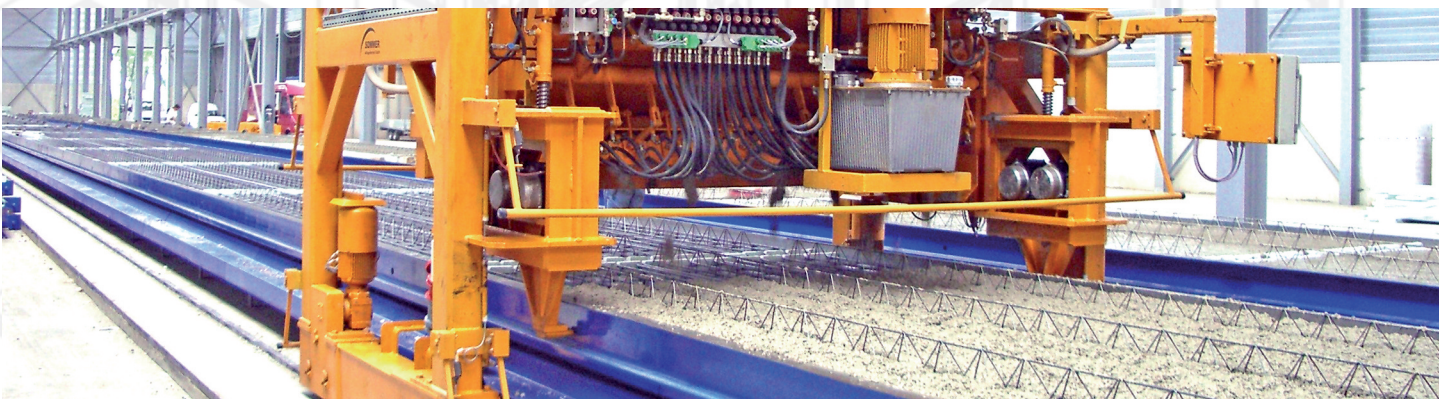
Tilting tables and grates

A particular feature of SOMMER's tilting tables and grates are their low overall height and the large number of different shuttering systems which are available to meet even the most extreme requirements. Matching compaction systems with infinitely variable control ranges guarantee concrete elements of optimum quality while creating a minimum of noise. High safety standards and largely trouble free operation are of course hallmarks of all machines and equipment built by SOMMER.



Line production

SOMMER has perfected the line production. Modern technologies combined with service-proven production units result in the production times required to obtain that vital leading edge. Cleaning and oiling machines, automatic cleaning, measuring and forming machines, plotters, manual and fully automatic concrete distributors, stripping devices, out feed carriages and magazine carriages are the components and automation modules on which competitive production is based. On all these machines the rail-less polyurethane chassis has proven to be the ideal solution. Now add SOMMER's coordinated shuttering and fastening systems and what you have is a production system that scores top marks for economy and technology.



Pallet circulating systems

SOMMER pallet circulating systems for the production of element ceilings, double walls and solid walls from standard and light-weight concrete are in use all over the world to the complete satisfaction of our customers. The production flow on circulating systems is as follows:

Preparation of contact faces

SOMMER offers individual units for cleaning the pallets and shuttering sections, for applying parting agents and for plotting the concrete elements. SOMMER can also supply space-saving combinations of these units.

Formwork

For the manual setting of formwork SOMMER offers service-proven systems which eliminate much of the physical effort. Automatic forming machines position the cross shuttering sections in addition to carrying out the cleaning and measuring. Robot systems are able to position solid wall shuttering for walls up to 400 mm thickness with an accuracy of ± 1 mm.

Concrete distribution

SOMMER concrete distributors, with their positive discharge systems, are suitable for standard and light-weight concrete of practically any consistency. They are available in portal, semi-portal or bridge designs, for manual or fully automatic operation. These concrete distributors are a good choice for all applications.

VSV Vario-Swing Compacting System

Noise produced during the compaction of large elements is reduced by the VSV system to between 70 and 75 dB (A). Horizontal and vertical oscillation guarantees proper compaction of even solid walls of standard or light-weight concrete design. Retrofitting to existing circulating systems is possible without having to make any structural alterations.

Finishing

Surface finishing requires special attention, particularly where light-weight concrete is concerned. SOMMER can supply vibrating rollers, finishing plates or finishing paddles, ideally integrated in the pallet circuit, depending on which solution is the best one for the consistency in question.

Curing

The curing regime is designed in accordance with the diversity of elements in the particular production range. Stacking systems, push-through shelving systems or single-shelf systems are available with all the necessary lifting and conveying units to guarantee a rational production flow. There are a variety of systems for the curing chamber and insulation which are designed to enable optimum curing conditions with low operating costs.

Stripping

Element out feed carriages, tilting stations for wall production and stripping units with telescopic lifts provide the basis for cost effective product stripping.



Multi-Funktions-Schalungsroboter



Betonieren



Vario-Schwing-Verdichtungs-System



Nacharbeit mit Glättbohle

Shuttering elements for skeleton structures

Skeleton member shuttering from SOMMER is particularly notable for its flexibility and ease of use.

Basic design

Long shutter life and accurately dimensioned finished concrete elements are guaranteed by solid and rigid basic design. Ease of use and precise setting make for an efficient, trouble-free production process.

Positioning and pressurising unit

The positioning and pre-stressing units are of mechanical, electrical or hydraulic design, depending on the particular application. All the shuttering elements are based on the same principle - a rigid foundation grate which supports the positioning platforms that act as mounts for the movement units and the top frames.

Pre-stressing shuttering element

The required pre-stressing forces can be applied directly into these elements.

Shuttering for special components

Variable rectangular shuttering/special shuttering

The facility to vary length, width, and wall thickness is vitally important in the production of concrete elements. This is the SOMMER shuttering system with shaped inserts machined on all sides. These shuttering inserts are interchangeable and adjustable. The system is used for shrink cores and conical shuttering elements. SOMMER designs and supplies customer-specific forms for all prefabricated concrete components.

Shuttering elements for transformer station and wet cells

Yet another area to benefit from SOMMER's wealth of experience as a builder of shuttering elements. Where else can you find the right type of shuttering and production system for specific element dimensions and requirements.

Garage shuttering

SOMMER builds garage shutters in various sizes and designs. These are some of the biggest single formworks we produce and require an extremely strong steel structure and a correspondingly powerful hydraulics system in addition to satisfying important mechanical finishing criteria, eg machine ground shuttering faces.

