

FOAMING SYSTEMS FOR SANDWICH PANELS

ULTRAMIX-PLUS Series



Complete solutions in
Cooperation with:

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SERVICE

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Sandwich Panel Production





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Range of application

Sandwich elements are mainly used in the construction of halls, industrial buildings, cold and deep-freeze stores as well as in office and residential buildings. Apart from a speedier execution of construction work and substantial cost savings, there are other benefits for architects: An entirely new generation of sandwich elements that does not only comply with the requirements of building physics and economic efficiency but also meets individual design options.



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High-Pressure Metering System ULTRAMIX-Plus





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Machine features:

Ultramix-Plus metering machines have always been a synonym for top-class high-pressure polyurethane processing and the centerpiece of countless polyurethane processing systems. Continuous sandwich panel production lines also rely on the Ultramix-Plus machine concept based on a well-planned arrangement of the individual units and top-quality components:

- Frequency-controlled drive units to enable automatic output adjustment
- Comprehensive process data acquisition including sensors for measuring pressure and temperature
- Flow rate control system via Mass flow-meters for high accuracy (option)
- Edge filters for low-maintenance and cost-effective operation



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The Mixhead

- Ultramix-Plus high-pressure mixheads of the MD type are operated on the impingement injection principle. The injector is designed as a distribution rake that applies the perfectly conditioned material to the lower metal facing in a laminar, large-surface and uniform flow. Special diaphragm injectors ensure optimum mixing results and reduce the temperature rise of the reactive mixture. The specific processing pressure can be set and reproduced any time by the machine control system.
- ISC is performing as well a Mixhead model HPLF10 with continuous recirculation with self-cleaning piston and less waste material during start and stop production.

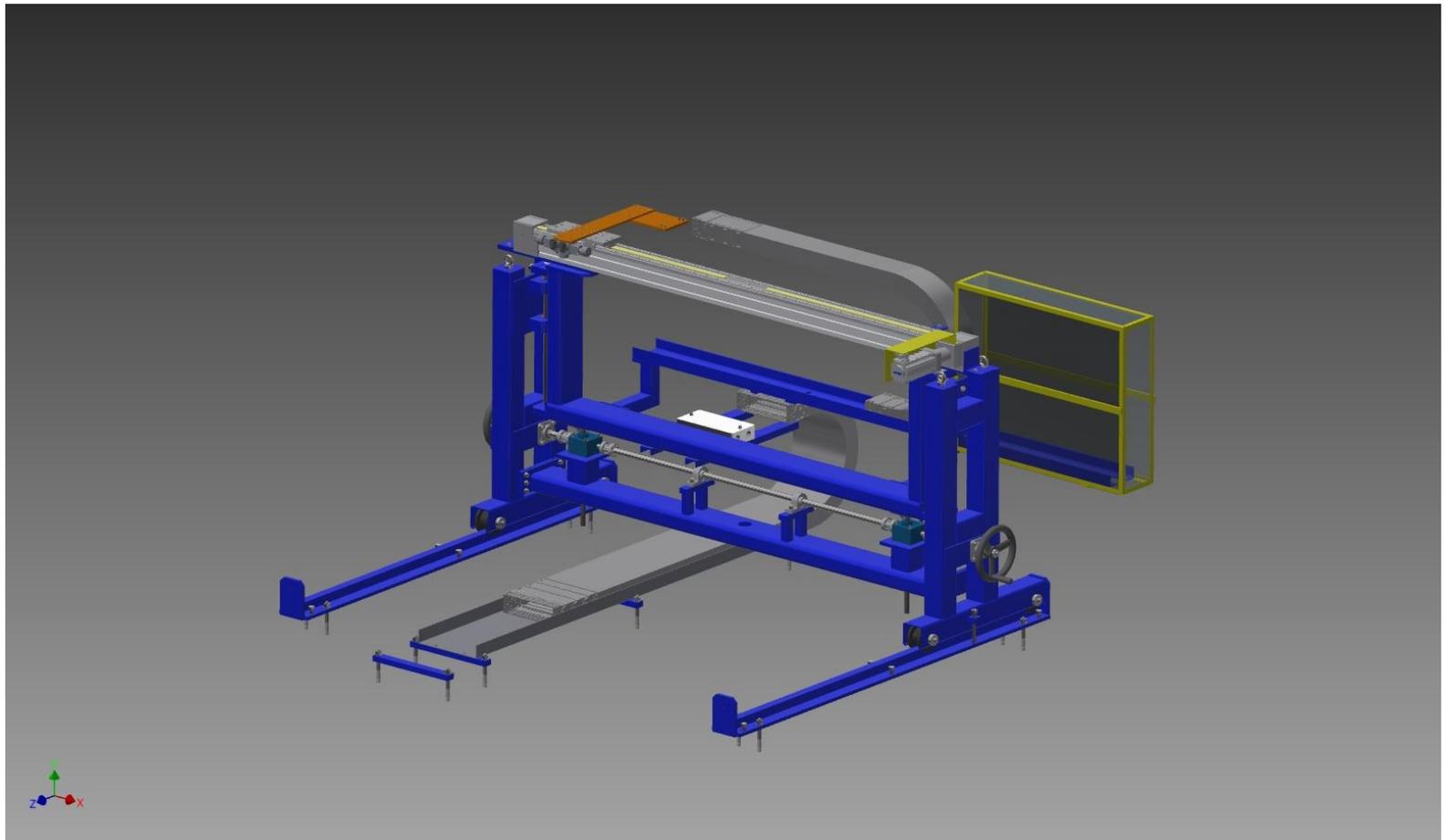




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The Foaming Portal





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- **Foaming portal:**

The foaming portal can even be even equipped with two mixheads that enable non-stop operation and changes on the fly without any quality loss. Apart from production reliability, the foaming portal ensures perfect production results at any time thanks to the homogeneous distribution of the reactive mixture. This is e.g. achieved by a high-speed toothed belt drive of the second generation and the motorized height adjustment of the mixhead that enables a pin-point adaptation to the production speed. The integrated control system also offers a wide range of possibilities when it comes to laydown height, oscillation width, oscillation speed and acceleration adjustment.

The latest experience has also allowed to have a very reliable system even with a still dispensing with long distributor achieving a better foam structure, more production speed and no wearing of mechanical parts of the foaming portal.



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C-Pentane Blowing Agent

In order to fulfill the actual requirements, the Ultramix-Plus high pressure machine can be equipped with additional unit suitable for C-Pentane or similar Blowing Agents request. As a very flexible system the same unit it is used as retrofit machinery for existing production lines. Tank storages systems are also available.





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REFERENCE LIST

SANDWICH PANELS

- | | | |
|------------------------------|--|-------------|
| ◦ Marcegaglia S.p.A. | Ultramix-Plus 4 Dosing Unit | Italy |
| ◦ Lattonedil | <i>C-Pentane Equipment</i> | Italy |
| ◦ Al Tabyan Group | <i>i-Mix 100 Foaming Machine</i> | India |
| ◦ Rasan Group | <i>i-Mix 100 Foaming Machine</i> | Iraq |
| ◦ Marcegaglia Taranto S.p.a. | <i>C-Pentane Dosing Unit</i> | Italy |
| ◦ Koper | <i>C-Pentane Storage Tank</i> | Italy |
| ◦ Metecno India Pty Ltd | <i>C-Pentane storage and Dosing unit</i> | India |
| ◦ F.Ili Re | <i>Ultramix 100 Foaming Machine</i> | Italy |
| ◦ TSSC | <i>Retrofit Continuous Line</i> | U.A.E. |
| ◦ NUH Panel | <i>Retrofit C-Pentane</i> | Turkey |
| ◦ Danesia LLC | <i>i-Mix 100 Foaming Machine</i> | Armenia |
| ◦ Metecno Industrie S.p.A. | <i>Retrofit C-Pentane</i> | Italia |
| ◦ Panel Tech International | <i>Ultramix 100 Foaming Machine</i> | Oman |
| ◦ Tecsedo S.A. | <i>Retrofit Continuous Line</i> | Switzerland |
| ◦ Tecfer S.p.A. | <i>i-Mix 30 Foaming Machine</i> | Italy |
| ◦ Indicon Logistics | <i>i-Mix 300 Foaming Machine</i> | India |
| ◦ S.C. Marcegaglia Romania | <i>C-Pentane Storage & Dosing Unit</i> | Romania |



REFERENCE LIST

SANDWICH PANELS

- | | | |
|-------------------------|-------------------------------------|----------------|
| ◦ Lattonedil DE | C-Pentane Storage Tank | Germany |
| ◦ Lattonedil Bosnia | <i>C-Pentane Equipment</i> | Bosnia Herz. |
| ◦ Roofings ME | Continuous Sandwich Panel Line | U.A.E. |
| ◦ RH Profiles | C-Pentane storage and Dosing unit | U.A.E. |
| ◦ Marcegaglia Buildtech | Retrofit of Continuous Line | Italy |
| ◦ Mammot FZC | Ultramix-Plus 4 Dosing Unit | U.A.E. |
| ◦ Metecno Italia | Dosing Unit Retrofit | India |
| ◦ Roofings ME | Ultramix-Plus 5 Dosing Unit | U.A.E. |
| ◦ NIMS | Ultramix 100 Foaming Machine | U.A.E. |
| ◦ Alu 27 Fzc | <i>Retrofit Continuous Line</i> | U.A.E. |
| ◦ GP Metal | Discontinuous Line | Kosovo |
| ◦ Dairpin S.A. | Continuous Sandwich Panel Line | Moldova |
| ◦ Emipanel S.A. | <i>Ultramix 100 Foaming Machine</i> | Moldova |
| ◦ Birka S.A. | Ultramix-Plus 5 Dosing Unit | Romania |
| ◦ Dialust Srl | Discontinuous Line | Romania |
| ◦ Dairpin S.A. | C-Pentane Storage Tank | <i>Moldova</i> |
| ◦ <i>Robor s.r.l.</i> | Ultramix-Plus 4 Dosing Unit | Italy |