



Formia Construction Oy

Made of steel – the house of the future

A specialist in roll forming machinery for producing sheet metal products, the Formia Technology Group has recently established a new partnership that is expected to open up new opportunities for making steel houses a truly viable solution.

Technological and business development in the steel house business has progressed relatively modestly over the last 10 years. The players in the field have tended to focus on closed solutions, rather than on developing new concepts. Business innovations have been thin on the ground as well.

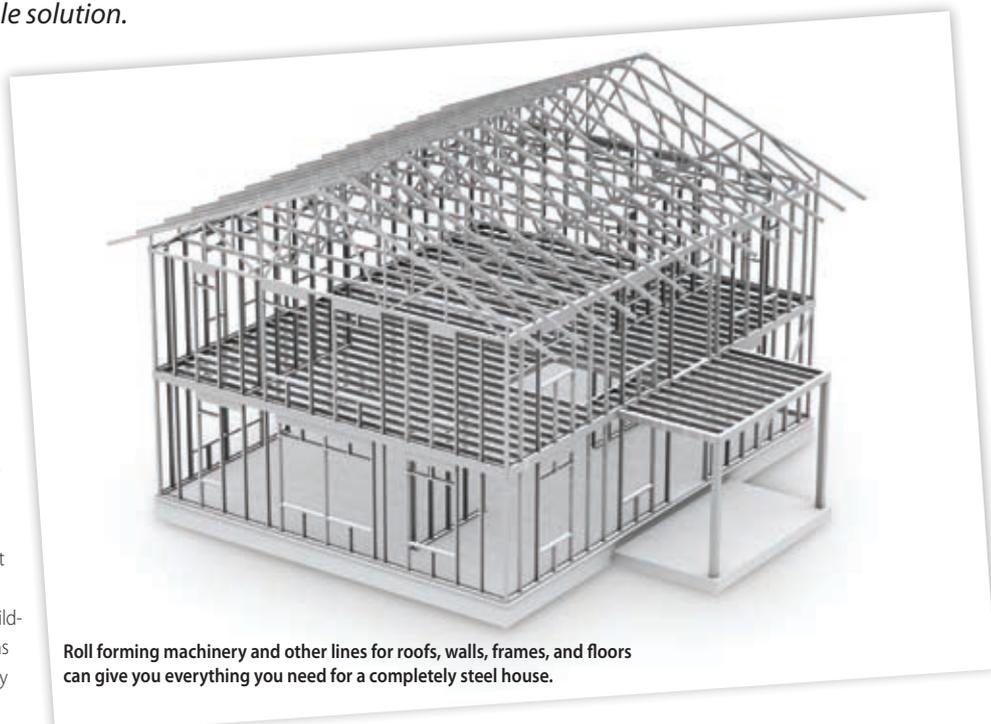
Steel offers many advantages over other materials, particularly for framing and cladding roofs and walls. Steel houses are easy to insulate and fast to erect, for example, and are cost-effective and very robust, even capable of withstanding earthquakes.

This has been reflected in a growing interest in the material's potential among designers and architects. The introduction of new European building standards – known as Eurocode specifications – represents an important milestone here, as they provide a good foundation for developing steel houses into a real solution for long-lasting, modern homes.

Work is moving ahead to develop new 'design-type' materials and encourage their uptake to take advantage of this situation, and produce new end-products and update existing ones. A growing stream of new architecture for small steel houses is also emerging.

COMPREHENSIVE GLOBAL PACKAGE

This is where roll forming comes in. This technique represents the most efficient technique for shaping



Roll forming machinery and other lines for roofs, walls, frames, and floors can give you everything you need for a completely steel house.

sheet metal, particularly when dealing with large areas or runs of material. It is already widely used in the construction industry – in areas such as roofing, cladding, framing, and insulation. Roll forming requires a low level of labour per square metre of metal processed, is excellent for round-the-clock operations, and can be easily integrated with other automated processes, such as perforation, bending, or joining.

Despite these multiple benefits, however, a lot of the potential inherent in the technology has gone

untapped until now. Formia has now established a partnership with leading Canadian company, SAMCO (www.samco-machinery.com), to offer production solutions for all the sheet metal-based products used in the construction industry.

Both SAMCO and FORMIA have been major players in roll forming, sheet metal processing, and material handling solutions since the 1970s – and have specialised in producing machinery for producing sheet metal for construction applications, racking and shelving, and HVAC and automotive uses.



Roll forming is an excellent technique for construction industry needs. It requires a low level of labour input per square metre of metal processed, is excellent for round-the-clock operations, and can be easily integrated with other automated processes.



The 'ideal factory' vision envisages levels of efficiency and productivity that current units simply cannot achieve.

The SAMCOFORMIA Alliance is designed to capitalise on SAMCO's strong presence in North, Central, and South Americas, and India; and Formia's strong presence in Europe and Russia, Ukraine, Kazakhstan, and the other countries of the former Soviet Union.

AMBITIOUS GOALS

The needs of the construction industry lie at the heart of the SAMCOFORMIA Alliance's business mission – and it already offers a total package of roll forming machinery and other lines for roofs, walls, frames, and floors. In fact, everything you need for a completely steel house.

Work in the future will focus on eliminating bottlenecks and ensuring maximum utilisation of production capacity by improving production follow-up and analysis – drawing on the Alliance's know-how in manufacturing, machinery, control systems, and services.

The ultimate goal of the Alliance is to build a new type of high-efficiency, high-tech sheet metal processing plant – an 'ideal factory' – that can offer major benefits compared to existing solutions for manufacturers producing all types of components and modules for steel houses.

This represents a major step forward in an industry that traditionally tends to see buying a machine as the solution, rather than buying production capability or specific production capacity.

Key improvement areas that have been identified include introducing faster profiling machines, with superior computer-aided manufacturing systems, and using more efficient production controls systems that can enhance the performance of individual machines. These improvements will help reduce throughput times and improve production capacity.

The plan is also to introduce new and improved joining methods that will allow the faster and better

assembly of building elements and result in stronger structures. Better logistics systems for handling raw materials and end-products will also be developed. Sustainability will be given greater priority by placing more emphasis on environmentally compatible products and life-cycle thinking.

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