

The custom steel curtain wall solution

An increasing desire for light, space and transparency has made glass the dominant design feature in contemporary architecture. As a result, the demand for strong, secure, durable and ever-slimmer support structures has grown. **Montanstahl** has risen to the challenge of meeting that need.

Demand for unique architectural products is continuously rising and Montanstahl has adapted to these market requests by focusing on manufacturing technologies that offer architects new possibilities to work with steel. Thanks to these innovations in steel processing, all kinds of design-sensitive glass support structures such as mullions, transoms, canopies and balustrades can become eye-catching elements of the building.

The two new manufacturing technologies that make this possible are laser fusion and Davex.

Laser fusion

Laser-fused steel sections produced by Montanstahl differ substantially from conventional fillet-welded products. The weld penetration can be perfectly calibrated according to the structural load requirements of the curtain wall. The seam created by laser fusion is very small, neat and barely noticeable. This is much appreciated by architects because a sharp contour with clearly defined shadow areas is maintained.

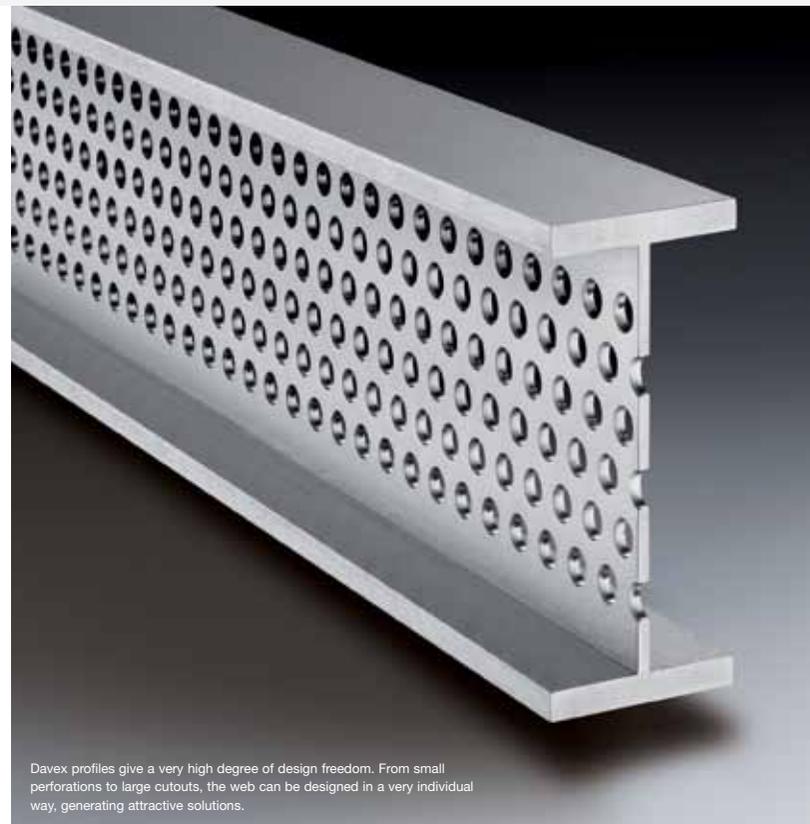
Laser-fused steel sections at a glance:

- custom design
- free combination of material thicknesses
- precise and barely noticeable weld seam
- parallel flanges with accurate rectangularity
- high precision on dimensions and geometry.

Davex

Similar to laser-fused sections, the single flat bar components are custom-defined in size and design. The big advantage of this technology comes into play when stainless steel is the material of choice. Without doubt, stainless steel is one of the trendiest materials in contemporary architecture, but at the same time, the typical surface finishes, like hairline, satin, scotch brite or mirror, can become very difficult to execute on complex geometries.

The Davex technology offers a substantial cost-saving potential because the single flat components can be polished prior to assembly.



Davex profiles give a very high degree of design freedom. From small perforations to large cutouts, the web can be designed in a very individual way, generating attractive solutions.



Rectangular hollow sections (RHS) are a very popular design on curtain walls. They not only have perfectly sharp outside corners independent from material thickness but they can be optimised to the requested loads by increasing wall thicknesses.

Davex steel sections at a glance:

- custom design
- high end surface finish on stainless steel
- precise and barely noticeable join grooves

- parallel flanges with accurate rectangularity
- high accuracy on dimensions and geometry.

Montanstahl is a dynamic company active in the production and service of high-quality special steel profiles. Established in 1983 in Switzerland, Montanstahl has more than 25 years of experience and ranks among the worldwide market leaders in its business segment. ●

Further information
Montanstahl
www.montanstahl.com