In many fields where a high degree of precision is required, laser technology has become a basic feature. Like no other tool the laser is able to focus and discharge energy to a precise point. These are ideal conditions for a low-stress and reliable fusion of steel.

Equipment technology now developed utilizes the advantages of laser fusion to produce special sections with outstanding product characteristics. Special sections made of stainless steel have been successfully marketed world-wide in the most diverse industry sectors for a number of years. All necessary certificates and approvals for a broad range of applications have been obtained.

Markets serviced include, metal construction, windows and facades, textile, food, automotive, shipbuilding and petrochemical industries. The product range extends from standard structural products, to specific solutions which are developed in close cooperation with the customer.

Compared to conventional fillet welding laser fused sections ensure full penetration and weld continuity for the whole length of the bar. The result is a complete monolithic joint of the material. The seam created by the laser fusion is very small, neat and barely noticeable.

Sectional products are the result of perfectly calibrated raw material, precise production machinery and 100% process monitoring.

The process allows a high degree of flexibility which enables you to individually select the material thickness of both web and flange. Sections can thus be optimized to their specific use.

Section zones subject to lesser loads are produced using reduced material thickness, zones subject to high loads are designed with greater material thickness, all according to the structural engineer’s instructions. The high flexibility of the production machinery allows us to fulfill orders for projects where low batches are requested; also prototyping is not a problem.

The specifically developed fusion inspection system meets all the official standards and has been evaluated and accepted by both the German TÜV (German Technical Inspectorate) and the SLV (welding institute) of Munich. The inspection system is a true 100% inspection: each individual bar is checked from start to finish, ensuring full penetration and weld continuity over the whole length of the bar.

This strict and thorough quality control complies with all legal requirements deriving from product liability. Furthermore, the full penetration fusion means that engineers do not need to apply any weld correction factor, which in turn means that the sections evenly match standard sections as far as structural engineering is concerned. This prevents constructions from becoming unnecessarily heavy and as a result keeps costs down.

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