

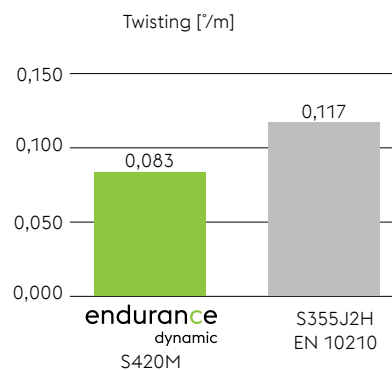
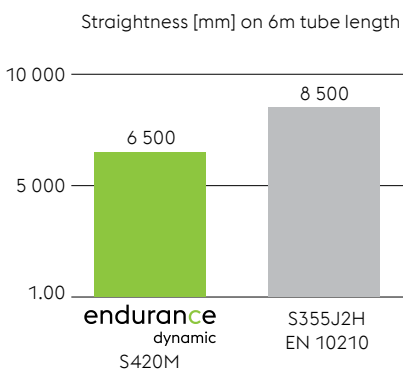
PROCESSABILITY & MECHANICAL CHARACTERISTICS

EXCELLENT PROCESSABILITY

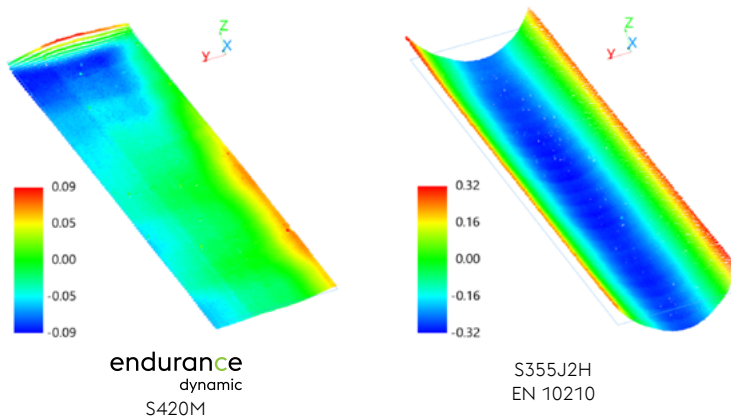
The very good degree of purity and the specially adjusted homogeneous microstructure of the steel grades used result in improved formability. In combination with adapted tube manufacturing, this offers advantages when expanding and bending the tubes. In addition, narrow chamfer dimensions can be realized.

- » Compared to EN10219, narrower chamfer dimensions are made possible - up to $1.25 \times T$
- » Dimensional tolerances from EN10219 can be limited

endurance dynamic is known for its high quality in straightness, twisting and flatness of plane surfaces. Especially in the automated processing of hollow sections there are advantages in manipulation. In addition, fewer imperfections occur, which in turn leads to a reduction in instability under compressive loads.



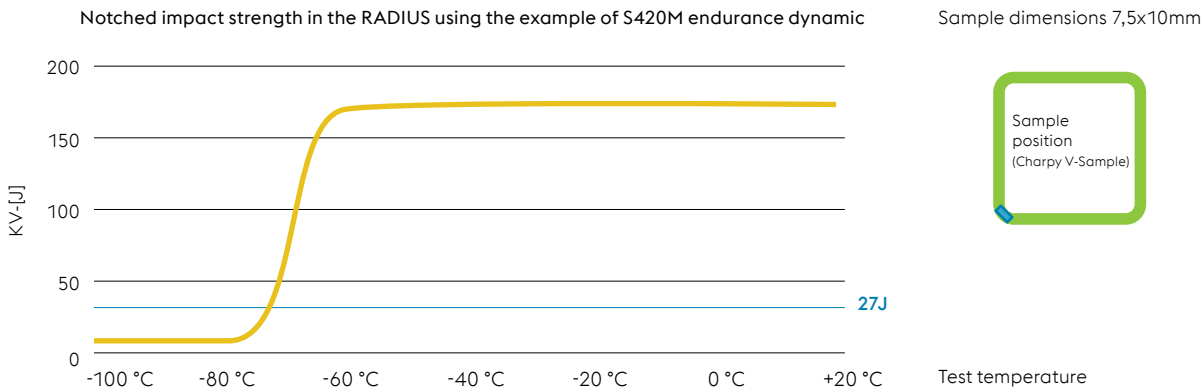
Flatness of plane surfaces on tubes



MECHANICAL CHARACTERISTICS

endurance dynamic meets all material requirements of EN10149-2. The very good degree of purity and the specially adjusted homogeneous microstructure also improve formability and notched impact strength.

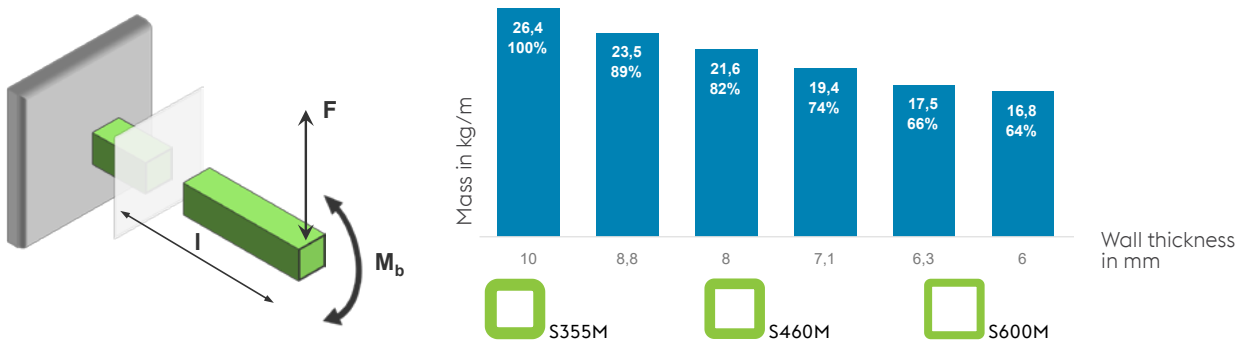
» verified notched bar impact values of 27J at -40°C in longitudinal direction up to incl. S600



LIGHTWEIGHT CONSTRUCTION BY REDUCING WEIGHT

By using **high-strength steel grades**, weight savings can be achieved while fully retaining the load-bearing capacity. This allows the **mass to be reduced by up to 36%**.

Example: Alternately loaded, clamped bending beam 100/100

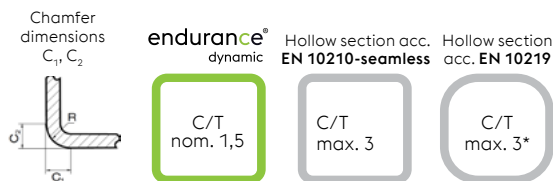


CHAMFER DIMENSIONS AND STIFFNESS

Compared to EN 10219, **narrower chamfer dimensions - up to 1.25 x T** - are possible.

A smaller chamfer dimension improves the weldability and increases the area moment of inertia I [mm⁴] or the tube stiffness.

This makes endurance dynamic mechanically more resilient while maintaining the same external dimensions.



* Edge dimensions depending on the nominal wall thickness

I to C/T-ratio using sample 100/100x10

