

Metinvest tests welding process with a new steel grade

Metinvest, in partnership with ESAB, a leading Ukrainian producer of welding materials and equipment, developed a welding process for S460M grade steel (DSTU EN 10025-4:2007) and tested the process at a recognized research institution.

ESAB served as partner and technical consultant on the project.

The quality and mechanical properties of joints welded with the new process were confirmed by a testing record (WPQR), issued by the E. O. Paton Electric Welding Institute, a Ukraine-based research institution.

The welding process was developed to advance and popularize the consumption of high-strength and thermomechanical

[steel grades](#)

in the manufacturing of metal structures and frames of buildings, constructions and bridges. High strength steel grades manufactured with thermomechanically controlled rolling technologies have been used in Europe for construction projects for more than 20 years. For example, the use of S460M and S460ML steel grades with a 460MPa strength class (analogue to C440 GOST 27772-88) allows for reducing the weight of steel structures by 15-25% and savings on the costs of production, installation and fire protection of steel structures.

This summer, Metinvest started supplying high-strength construction plates and provided fixed residual hot-rolled S460M grade (C440 strength class) plates at its service metal centre in Kyiv.

The first clients are using these materials to produce structures with shallow slabs in historical building reconstruction projects in Kyiv.

[More information about the product](#)

.