

## High-Production Laser and Plasma Welding Technologies for High-Speed Vessels Production

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**Abstract :** Application of hulls processing technologies, based on high-concentrated energy sources (laser and plasma technologies), allow improve shipbuilding production. It is typical for high-speed vessels construction using steel and aluminum alloys with high precision hulls required. Report describes high-performance technologies for plasma welding (using direct current of reversed polarity), laser, and hybrid laser-arc welding of hulls structures developed by JSC "SSTC".

**Keywords :** flat sections, hybrid laser-arc welding, plasma welding, plasmatron

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