

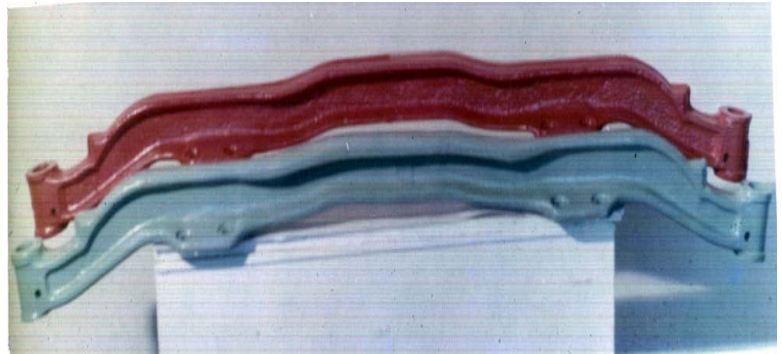


High-strength structural carbon and low alloy steels

Si-Mn-Cr-N-V steels for casting, rolling, forging of 25AFL (25АФЛ), 50AFL (50АФЛ), 30HAFL (30ХАФЛ), 14HGSAF (14ХГСАФ), 22G2AF (22Г2АФ), 32HG2SAF (32ХГ2САФ), 35HGAF (35ХГАФ), 45HAF (45ХАФ) and other brands are destined for the substitution of Ni- and Mo-containing steels of 30HGSFL (30ХГСФЛ), 35HNL (35ХНЛ), 40HNML (40ХНМЛ), 110G13L (110Г13Л), 12HN3A (12ХН3А), 15HSND (15ХСНД), 20G2AF_{PS} (20Г2АФ_{ПС}), 30HMA (30ХМ) and other brands.

They ensure:

- economy of per 1 ton of metallic products:
 - nickel - 10-40 kg,
 - molybdenum - 2.5 -3.5 kg,
 - vanadium - 1.0-2.0 kg,
 - chromium - 4.0-8.0 kg,
 - copper - 2.0-3.0 kg ;
- increase of :
 - $\sigma_B, \sigma_{0.2}$ - by 150-300 MPa,
 - KCU at 20-60°C - 2.0-2.5 times,
 - σ_{-1} - 2.0-3.0 times;
 - wear resistance - 1.5-2.5 times;
- lowering: weight of products - 15-20%.



Fields of application: gusher armature for oil and gas wells; track links; tractor rollers; drill and casing pipes, tubing strings; running gear parts; spars for trucks and tractors; bodies for dump trucks; rolled mine profiles; plates with a thickness up to 40mm.

