



## Nitrogen- and manganese-containing low-nickel and nickel-free high-temperature steels

Steels of H24N12AFTS2L (X24H12AΦTC2Л), H24N7G10S2AFTL (X24H7Г10C2AΦTЛ), H18N3G10C2AFTL (X18H3Г10C2AΦTЛ), H14G10 (X14Г10) brands exceed the standard H24N19S2L (X24H19C2Л) and other steels by the following characteristics:

- high-temperature strength on time to failure - 2-5 times;
- thermofatigue strength - 2-3 times;
- hot wear resistance - by 35-50%;
- fluidity, cracking resistance at casting - by 25-70%.



The steels are destined for the manufacture of cast tooling for heat-treating and roasting equipment; parts of machines and aggregates, which are exploited at 700-1100°C.

The use of the steels ensures the increase of the tooling durability 2-5 times. At the production of steels 50-100% of nickel (tungsten, niobium) are economized.