

Commercialization of extra-wide plates made from a highly corrosion- and heat-resistant
Nickel-based alloy

Nippon Yakin Kogyo has commercialized extra-wide and extra-thick plates (3900 mm wide × 50 mm thick) of NAS NW276 (UNS N10276) Nickel-based alloy after the commercialization of NAS 800T and NAS 625.

■Significance of commercialization

This alloy is applicable for the environment of high temperatures. However, it is generally recognized that it is very difficult to hot-roll. With our great efforts, we have endeavored to expand the rolling dimensions of 5 feet-wide continuous cast slabs applying the wide hot-rolling mill of Nanjing Iron and Steel Co., Ltd.,. We have collaborative partnership with them through our joint venture of Nisco Nippon Yakin Kogyo Nanjing Co., Ltd.,. We have produced the extra-thick plate applying our advanced hot-rolling technologies along with the above partnership. As a result, we could have commercialized one of the largest sizes in the world for this Ni-based alloy.

■Uses and advantages of extra-wide, extra-thick material

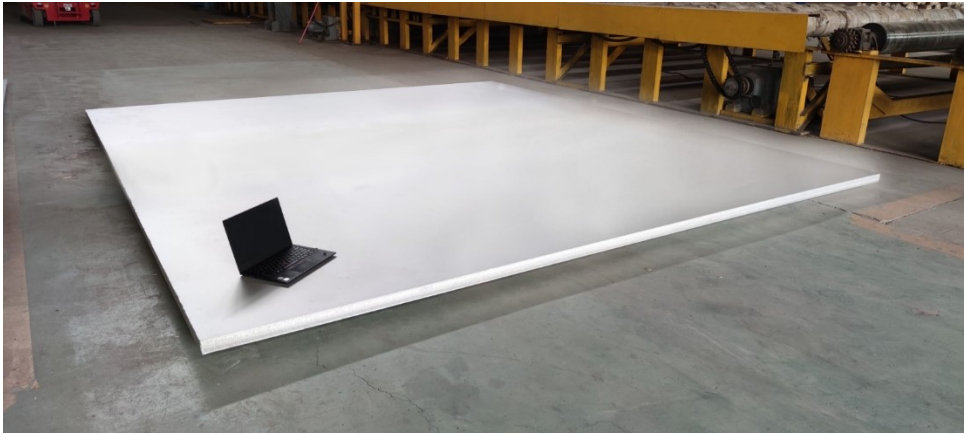
NAS NW276 is an alloy widely applied for chemical plants, oil fields, exhaust gas desulfurizers, heat exchangers, centrifuges, dryers, reaction vessels, and salt manufacturing plants. Fabricators strongly desire our extra-thick material of 50 mm thickness because large-scale structures are more easily assembled by the materials of the extra-thick plate than the conventional plates. In addition, the materials for these large-scale structures are produced after joint by welding. Extra-wide materials require less welding process enabling cost reduction along with shorter delivery times. This commercialization satisfies the needs of both extra-wide and extra-thick materials to assemble the large-scale structures.

■Superior transportation

One drawback of extra-wide plates lies in that they are hard to be transported over land for long distances. However, we are able to solve that issue by manufacturing, selling, and transporting them within China through our joint venture partner.

■Synergy with our joint venture partner

We will endeavor to increase customer satisfaction so as to meet increasingly sophisticated customer needs with carrying on strengthening our ties with Nanjing Steel, our joint venture partner.



NAS NW276 extra-wide plates, one of the largest in the world at
3,900×5,000×50 mm

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