

## Nippon Yakin Kogyo Successfully Manufactures 4 Feet Wide Coils of Corrosion-Resistant High Ni Alloy NAS NW276 (UNS N10276)

Nippon Yakin Kogyo Co., Ltd.  
December 25, 2015

Nippon Yakin Kogyo Co., Ltd. (NYK) recently succeeded in manufacturing 4 feet (1219mm) wide coils of NAS NW276 (UNS N10276, 59%Ni-15%Cr-16%Mo-4%W-5%Fe).

The corrosion-resistant high nickel alloy NAS NW276 is widely used under severe corrosion environments. This alloy is now frequently used in the linings of reactors in flue gas desulfurization systems for coal-fired thermal power plants, which have attracted global attention due to environmental problems, and there is continuing demand for materials with wider widths in order to reduce welding lines. However, due to the extremely high strength of this alloy in the high temperature region, rolling of 1 meter wide coils had been considered the limit with NYK's hot rolling mill.

NYK recently succeeded in reducing the rolling load in hot rolling by incorporating newly-developed technology cultivated in the production of 1 meter wide coils in the production process, making it possible to manufacture 4-foot wide NAS NW276.

In the world, only few producers have the capability to manufacture 4 feet wide coils of this alloy. As a result of this technical development, NYK expects to be one of the widest-width high Ni coil producers.

Expected demand spans a wide range of applications, including not only flue gas desulfurization equipment but also plate-type heat exchangers, water treatment equipment, oil & gas refining equipment, chemical tanks and piping materials, among others. Thus, increased sales, also including shipments to special steel wholesalers, can be foreseen in the future.

NYK plans to begin full-scale production of this wide product in April 2016. The assumed available size range is thicknesses of 0.3-3 mm for cold-rolled strips and 4-6 mm for hot-rolled strips. Sales volume in FY 2016 is expected to be in the range of 400-500 t/y.

NYK also plans to try the production of 4 feet wide coils of NAS 625 (UNS N06625, 62Ni-22Cr-9Mo-3.7Nb-0.2Ti-0.2Al) alloy in April 2016.



Photo: 4 feet wide coil of NAS NW276