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JX Nippon Mining & Metals Corporation

## **JX Nippon Mining & Metals Corporation to Introduce New Scalping Line in Precision Rolled Products Manufacturing at the Kurami Works**

JX Nippon Mining & Metals Corporation (head office: Otemachi 2-chome, Chiyoda-ku, Tokyo; president: Masanori Okada; hereinafter) has decided to introduce a new scalping line (hereinafter “New Line”) in its precision rolled products manufacturing process at the Kurami Works. A total investment of about 1.4 billion yen will be made.

The Kurami Works manufactures high-performance precision rolled products, including Hyper series products<sup>1</sup>, Corson alloys, and titanium copper. (With its current staff framework, the Kurami Works has a manufacturing capacity of 4,200 tons per month.) The New Line will be introduced in the scalping process<sup>2</sup> which is part of the manufacturing process (melting and casting → hot rolling → scalping → cold rolling into bare strip → trimming).

The New Line will harness the latest technology and expertise in scalping accuracy, surface quality, threading speed, and milling scrap processing. Improvements are anticipated in the yield, quality, productivity, and maintainability of precision rolled products, including those, such as titanium copper, where the cutting process is difficult. Moreover, the New Line is expected to result in increased quality, enhanced productivity, better operational stability, and further cost reductions.

In the past, it has not been possible to melt some types of milling scrap and use it as raw materials. The introduction of the latest technology in milling scrap processing will enable direct melting and use of this debris as raw materials. This will contribute substantially to reducing the burden on the environment.

This further enhancement of our supply framework for high-quality and high-performance precision rolled products will enable JX Nippon Mining & Metals to respond to user needs even more quickly and accurately than before.

1. Hyper series products: Developed by Nippon Mining & Metals, these products offer both high mechanical strength and high formability. This was achieved, without changing the chemical compositions of conventional materials and alloys, through precision control of the forming process. Hyper series product groups include hyper phosphor bronze and hyper titanium copper.
2. Scalping process: Scalping takes metal sheets that have been hot rolled to a thickness of about 10 mm and cuts away the oxidation layer on the surface and minor casting defects on the edges. Scalping is an extremely important process that determines product quality and properties.

(Reference)

## Manufacturing Process for Precision Rolled Products at the Kurami Works

