



## News Release

July 11th, 2022

Nippon Steel Engineering Co., Ltd.

### **Completion and Start-Up of Coke Dry Quenching Plant for East Japan Works (Chiba) of JFE Steel Corporation**

Nippon Steel Engineering Co., Ltd. (Representative Director and President: Yukito Ishiwa; Head Office: Shinagawa-ku, Tokyo; hereinafter, "NSE" ) has completed construction of one coke dry quenching (CDQ <sup>※1</sup>) plant (maximum coke throughput: 80 t/h, hereinafter, "the Plant") for the East Japan Works (Chiba), which was ordered by JFE Steel Corporation (Representative Director and President: Yoshihisa Kitano; Head Office: Chiyoda-ku, Tokyo; hereinafter, "JFE"), and handed over the Plant to JFE which has been started up and is now under operation.

The Plant is designed to be environmentally friendly by minimizing dust emissions during coke conveying and cooling process to make it suitable for an urban steelworks.

Although the project was implemented under various restrictions due to the COVID-19 pandemic, we avoided progress delays by revising our supply chain and establishing a remote manufacturing management system, which ended-up in achieving a smooth startup of the CDQ plant ahead of schedule.

Our group operates CDQ businesses not only in Japan but also internationally, such as in China, South Korea, Taiwan, Vietnam, India, etc. and has numerous track records<sup>※2</sup> both in Japan and internationally. All of the CDQ supplied by our group in Japan and international markets have achieved high rates of operation and highly efficient power generation, being complimented from customers in Japan and international markets for their technical advantages and reliability which is backed by our extensive track records as aforesaid, and our project management capabilities that enable us to ensure the startup of plants on schedule.

As a leading supplier of environmental and energy-saving plants in the steel industry, our group will continue to contribute to the sustainable development of the world's steel industry and the resolution of global issues such as climate change.

※1: Coke dry quenching plant (CDQ stands for "Coke Dry Quenching")

The plant cools red hot coke of approximately 1,000°C, which was carbonized in a coke oven using inert gas within the cooling chamber and recovers sensible heat of red hot coke as steam in the waste heat recovery boiler where previously the sensible heat was diffused. Electricity generated by CDQ is environmentally friendly and clean energy. In comparison with conventional wet quenching plants, it is superior in three ways: (1) less dust generation when cooling coke, (2) less CO<sub>2</sub> emissions through power generation by steam, and (3) higher quality coke suitable for use in blast furnaces.

※2: The completion of this construction brings the total number of CDQ delivered by our group to 154 plants (total for Japan and overseas).



[External view of the CDQ plant #3 at East Japan Works (Chiba) of JFE Steel Corporation]

[For more information, please contact below]

<https://www.eng.nipponsteel.com/english/contact/index.html>