



News Release

December 6th, 2021

Nippon Steel Engineering Co., Ltd.

Receipt of Hyundai Steel Order
for Coke Dry Quenching Systems in South Korea

Nippon Steel Engineering Co., Ltd. (Representative Director and President: Yukito Ishiwa; Head Office: Shinagawa-ku, Tokyo; hereinafter "NSE") received an order from Hyundai Steel (CEO and President: An Tong-il, Head Office: South Korea) for three Coke Dry Quenching^{*1} (CDQ) units for Hyundai's Dangjiin Integrated Steelworks.

Hyundai Steel is currently making large-scale investments toward decarbonization and low carbonization. They will be able to significantly reduce their GHG emissions by replacing their existing coke wet quenching systems with some of the largest coke quenching systems in South Korea (two CDQ units with a capacity of 200 tons/hour, and one CDQ unit with a capacity of 230 tons/hour).

NSE's CDQs were highly evaluated by Hyundai Steel for their top global level steam generation rates and abundant delivery record, high operating rate, stable operation results, and other factors, which led to this order.

While there are many steel companies abroad that have adopted energy-conservation and environmental-measure technologies that were developed in Japan, NSE's CDQs boast a particularly high CO₂ reduction effect among such technologies. With this recent order from Hyundai Steel (a consecutive order following the order from POSCO last year), a total of 13 NSE Group CDQs have been ordered in South Korea. Globally (including Japan, China, and Taiwan), there has been a cumulative total of 153 NSE CDQ units ordered to date. The CO₂ emission reduction effect^{*2} achieved by the CDQs delivered by the NSE Group exceeded 20 million tons of CO₂/year.

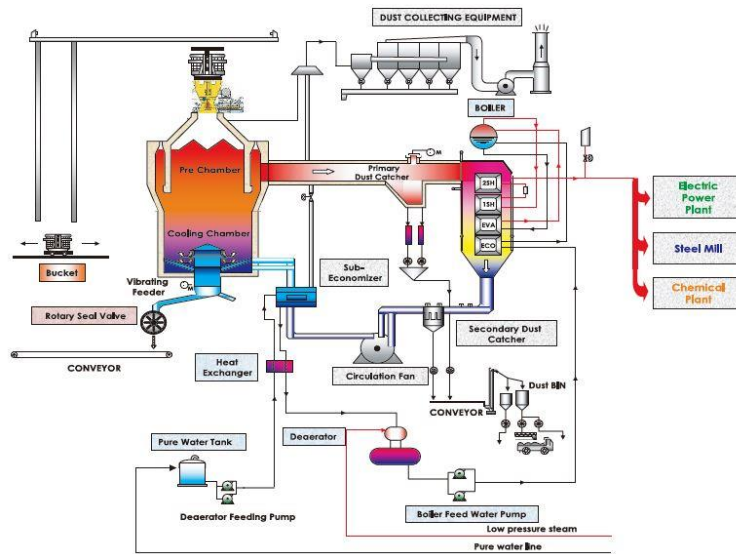
As a top supplier of environmental and energy-conserving facilities to the steel industry, NSE will continue to contribute to the sustainable development of the world's steel industry as well as to the resolution of global challenges, such as climate change.

※1: Coke Dry Quenching (or CDQ)

Red-hot, dry-distilled coke removed from a coke oven is cooled in a cooling tower using inert gas. At the same time, the sensible heat of the red-hot coke, which was conventionally released, is recovered as steam in a waste heat recovery boiler. The cooling tower is a closed space composed of a prechamber and cooling chamber. The CDQ has the following three effects: 1. Suppressing the dust that arises when cooling coke, 2. Reducing the emission of CO₂ by utilizing produced steam to generate electricity, and 3. Improving the quality of the coke suitable for use in a blast furnace.

※2: CO₂ emission reduction effect

The value estimated using the CO₂ emission coefficient of domestic power as the amount of power produced, and with an operating rate that takes facility characteristics into account as the given.



[Schematic View of a CDQ System]

[For more information, please contact below]

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