

May 14, 2018 NIPPON STEEL & SUMIKIN ENGINEERING CO., LTD

<u>About Receiving an Order for Movable Type KR Desulfurizing Unit for India/</u> <u>JSW Steel Limited</u>

NIPPON Nippon Steel & Sumikin Engineering Co., Ltd. (Representative Director and President: Shinichi Fujiwara; Head Office: Shinagawa-ku, Tokyo; hereinafter, "NSENGI") is pleased to announce that JSW Steel Limited (hereinafter, "JSW"), India's leading steel manufacturer has placed an order for one of our movable type KR desulfurizing unit, as part of their Dolvi Works expansion plan*.

There has been a rapid increase in the demand for high-quality steel in India. Desulfurizing units, as part of the treatment process for hot metal, are integral to the stable and efficient production of high-quality steel. The KR desulfurizing units** NSENGI has produced have had approximately 20 deliveries, both in Japan and overseas. Of the three KR desulfurizing units currently active in India, two are the movable type KR desulfurizing units that NSENGI delivered to JSW's Vijayanagar Works in 2016.

NSENGI's movable type desulfurizing units have the following benefits.

- (1) One movable type KR can desulfurize at multiple stations, which allows for a reduction in equipment cost as compared to owning multiple fixed type KR units.
- (2) Movable type KRs can engage in simultaneous desulfurizing and deslagging operations in multiple locations, which allows for a reduction in operation time.
- (3) Being able to utilize both the movable type KR and fixed type KR allows for more freedom in layout, and thus more flexibility to adapt to client needs and space limitations.

In addition to the above is the fact that these movable type KR desulfurizing units have had very few issues (vibrations, etc.), due to NSENGI's expertise, many years of experience, and original design methods. JSW was particularly impressed by this aspect, which led them to this order, this time for their Vijayanagar project. In the future, NSENGI will continue to utilize our distinctive KR desulfurizing units to meet India's high-quality steel production needs.

* Dolvi Works expansion plan

NSENGI is currently constructing the No. 2 blast furnace (furnace capacity: 5358 cubic meters). Construction is moving at a rapid pace, in preparation for operation in 2019.

Leading with Determination

** KR desulfurizing unit

Equipment in which a refractory coated impeller (rotor blade) is soaked in hot metal and spun, to mechanically mix the hot metal and desulfurization agent. The impeller is spun at high speeds to promote an efficient desulfurization reaction. It also allows for the use of inexpensive lime as a desulfurization agent, instead of the expensive magnesium, which dramatically decreases operation cost. (Reduces operation cost by approximately 45% as compared to using magnesium)

Equipment Overview:

KR Desulfurizing Unit, Dolvi Works, JSW Steel Limited Processing capability: 365 tons/heat Maximum processing amount: 45 heats/day

Image:



[For more information, please contact below] https://www.eng.nssmc.com/english/contact/index.html