

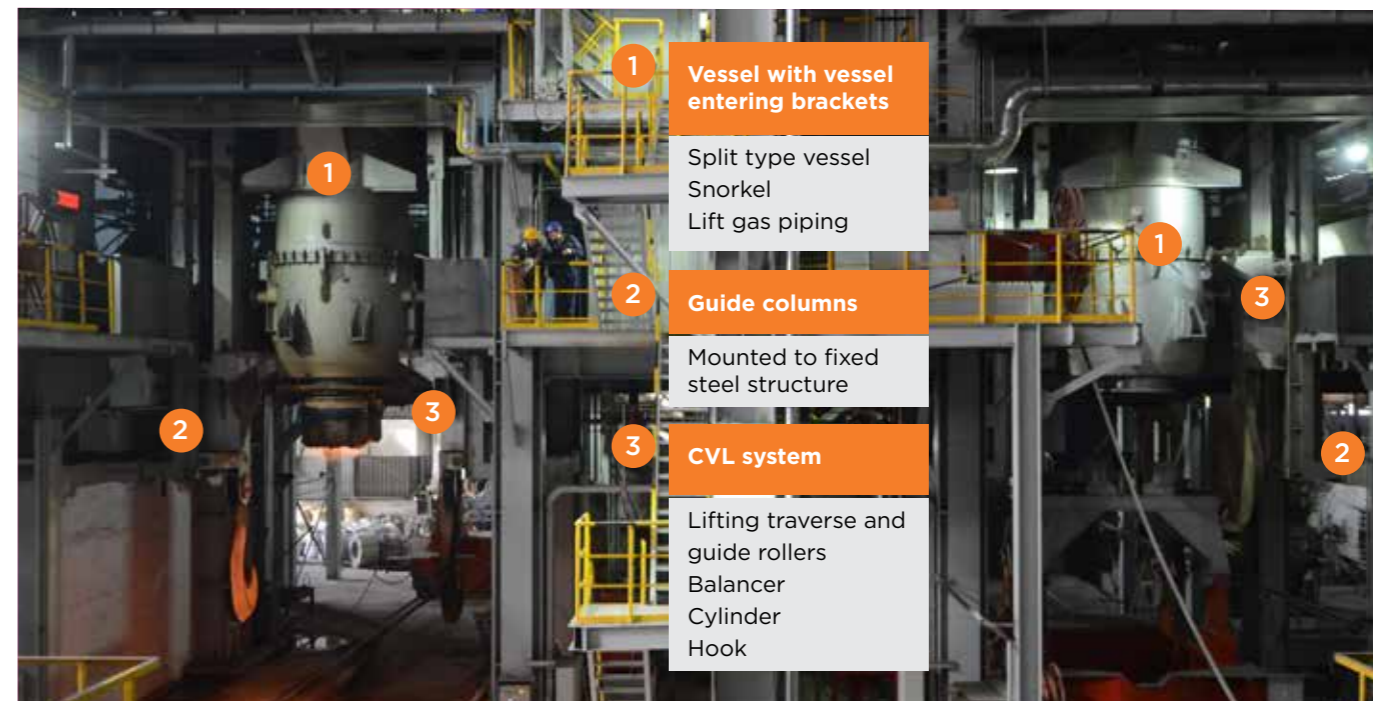


HIGHLY EFFICIENT TWIN RH
WITH GROUNDBREAKING CVL
LIFTING SYSTEM AND MECHANICAL
VACUUM PUMPS

HIGHLY EFFICIENT TWIN RH WITH GROUNDBREAKING LIFTING SYSTEM AND FLEXIBLE MECHANICAL PUMPS

MAIN BENEFITS MECHANICAL PUMPS

- Reduced operational cost
- Optimized energy consumption by demand actuated control (frequency controlled motors)
- Maximum flexibility
 - energy consumption only during operation
 - no extra personal costs
- No contact of process dust with pumps due to low tolerances of pumps
 - utilization of vacuum bag filter mandatory
- Low maintenance cost
- Less design height compared to steam injector pumps



- 1 Vessel with vessel entering brackets**
 - Split type vessel
 - Snorkel
 - Lift gas piping
- 2 Guide columns**
 - Mounted to fixed steel structure
- 3 CVL system**
 - Lifting traverse and guide rollers
 - Balancer
 - Cylinder
 - Hook

Highly efficient Twin RH with CVL system and mechanical pumps

The demand for high quality steel is increasing significantly. As a consequence, Primetals Technologies has decided to develop a revolutionary RH degassing plant. A reliable, save and maintenance friendly RH process is the challenge of every producer.

Primetals recently commissioned a Twin RH, which is a high end solution to decrease cost as a consequence of operating efficiency.

SOLUTIONS

High quality production based on twin RH that offers highest flexibility in steel grades and highest energy efficiency.

In combination with the newly developed CVL (Combined Vessel and Ladle lifting) system the plant provides flexibility, on a very small footprint since it combines ladle lifting and vessel exchange capabilities.

It is an optimized logistics solution being accessible from both sides and allows a "drive-through" material flow. Even RH treatment in areas unreachable for cranes will be possible.

With the modern mechanical vacuum pumps, which offers maximum flexibility, it is the perfect combination.

MAIN BENEFITS CVL (COMBINED VESSEL AND LADLE LIFTING SYSTEM)

- Less investment cost for steel structure and foundation
- Less design space needed
- Combined ladle lifting and vessel exchange
- Less crane actions needed
- High safety due to reduced squeezing zones
- Accessibility from both sides
- Linear lifting and lowering movement
- Possibility to retrofit existing steel plants, even from other vendors
- Safe and clean plant environment, due to less movable parts and thereby tighter connections



SCOPE OF SUPPLY

- Twin RH 110 t
- Combined Vessel and Ladle Lifting System
- Suction line, gas cooling
- Vacuum pump house
- Mechanical vacuum pump, modular design
- Vacuum bag filter

PLANT DATA

Twin Ruhrstahl Heraeus

Heat size	110 t
Vacuum pump suction capacity	2500 kg/h at 80 mbar
and	270 kg/h at 1 mbar
COB Lance	Spark plug ignition
Vessel diameter	2500 mm
Plant design	Twin RH/ Ladle lifting by CVL
Produkt Mix	ULC, LC, MC, HSLA, TRIP



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Brochure No.: T02-O-N270-L4-R-V2-EN

Printed in Austria

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