



VACUUM TANK DEGASSER – VD

PROVEN AND RELIABLE VACUUM PLANTS

With 40 years of experience and dozens of references all around the globe, Primetals Technologies is your reliable partner for vacuum degassing plants.

By treating the steel at vacuum the carbon, oxygen, nitrogen, hydrogen, and sulfur contents are reduced in different process steps depending on the melt composition. A vacuum alloy hopper system allows for compositional adjustments during treat treatment. This guarantees a good homogenization and high alloy yields due to clean addition atmosphere. Depending on the metallurgical reactions in the ladle, a freeboard of 600-1,200 mm is required. In order to increase productivity, the VD system can also be designed as (or extended to) a twin-vessel system.

DESIGN FEATURES

Highly flexible layouts: fixed and moveable vessel car, travelling cover, single or twin plant. As experienced supplier Primetals Technologies can offer tailor-made solutions for adding a vacuum degasser to existing melt shop and increase as an add-on the steel portfolio and quality of produced steel.

System can be designed for degassing purposes only and improved afterwards with top oxygen blowing for decarburization and chemical heating.



Efficient layout on smallest possible footprint



Efficient layout and modern dry mechanical vacuum pumps can make the VD highly profitable

VACUUM PUMP AND OFFGAS TREATMENT

The vacuum pump and the off-gas treatment (from metallurgical vessel to the chimney) is treated in order to reach the required standards of emissions or special needs to each customer.

Due to its in-house knowledge and experience, Primetals Technologies can offer customized solution for the vacuum pump. Either steam ejectors or dry mechanical, vacuum pumps can be offered to adapt the best to the customer requirements., Primetals Technologies can offer support among the complete lifetime from design to operation to keep the system in best performance.

LIFECYCLE SERVICES

Primetals Technologies provides competitive performance for plants at every phase of their lifecycle. Reliable technical support, efficient maintenance solutions, and permanent plant improvements are the basics to operate safe and cost-efficient.

To guarantee a long lifespan of metallurgical plants, we offer a wide selection of spare parts in OEM quality.

MAIN BENEFITS

- Accelerated reactions under vacuum conditions
- Achieving low contents of carbon, oxygen, hydrogen, nitrogen, and sulfur
- Improved steel cleanliness, especially with respect to oxides and sulfides
- Low investment and operational costs

SELECTED REFERENCES

- TYASA, Ixtaczoquitlan, Mexico
- SLR Metallics, Hospet, India
- Azovstal, Mariupol, Ukraine
- Çolakoğlu Metalurji A.S., Gebze, Turkey
- Adhunik Metaliks Ltd., Rourkela, India
- SSAB, Mobile (AL), USA
- Usha Martin, Jamshedpur, India
- Uralstal, Novotroitsk, Russia
- Tyasa, Ixtaczoquitlán, Mexico
- BMM Ispat, Hospet, India