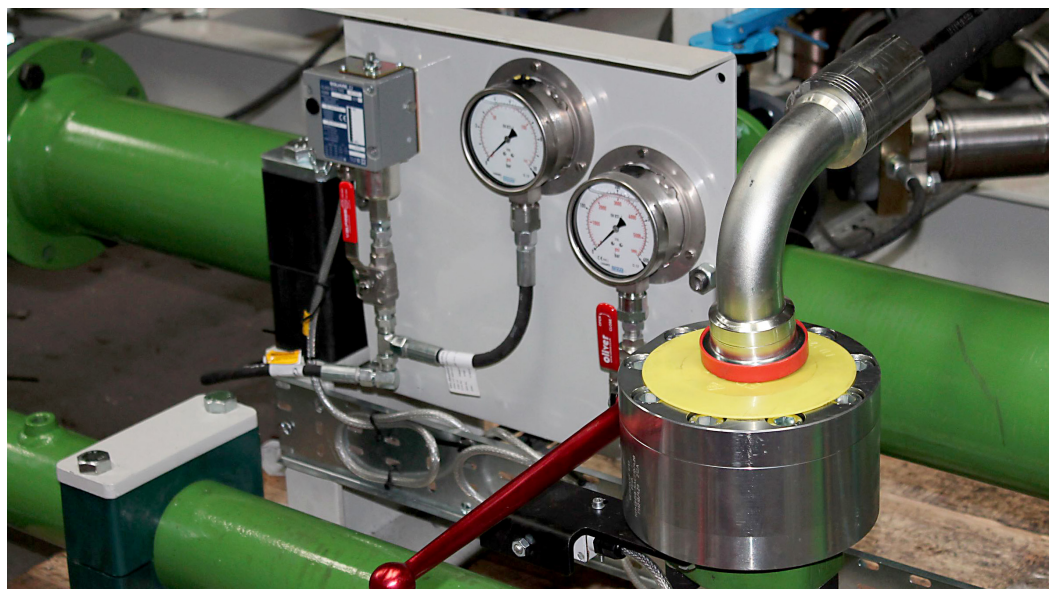


A Case Study for Heavy Industry

Primetals Technologies



Primetals Technologies has a decades-long history of promoting innovation for the steel industry. As a pioneer and world leader in metallurgical plant solutions, Primetals was founded in 2015, as a joint venture of Siemens (VAI) and Mitsubishi Heavy Industries.



CASE STUDY

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Background

Like most industries across the world, steel rolling mills are looking to improve efficiency and the quality of their product, by investing in technology, which has a short return on investment. A mill in Italy made the decision to invest in new descaling equipment, with a view to raising quality standards, while lowering overall energy and water costs.

Siemens VAI was asked to design a new system, which would offer guaranteed reliability and efficiency, to keep operating and maintenance costs to a minimum. The company partnered with RMI Pressure Systems, a leading high-pressure pump specialist to help them meet the needs and requirements of their client.

RMI were required to provide a pump, which could deliver hydraulic power at multiple pressures, using a variable speed drive and engineered nozzles. The technical design of descaling equipment is an exact science, requiring precision nozzle design and high hydraulic pressures, of up to 400 bar, that are calculated to deliver the best descaling results for a variety of steel variants, at minimum cost and maximum efficiency.

Solution

RMI Pressure Systems designed a bespoke solution, modelled from the Trimax Series of reciprocating plunger pumps. Capable of producing flow rates of 50-670 litres/min, at system pressures up to 1,000 bar.

Benefits

- Variable speed drive and engineered nozzles for controlled hydraulic pressure and precision impact
- Performance-tested for robust and reliable performance, lower maintenance and increased uptime.
- Reduced energy and water consumption
- Lower installation and maintenance costs, resulting in a payback period of less than 2 years.

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