

A Case Study for Heavy Industry

Howden Power



Howden Power is a global leader of air and gas-handling equipment, that specialises in helping power stations improve everyday processes and increase productivity.

Howden Power is part of the Howden Group of companies - an established global engineering business, with over a century of experience.



CASE STUDY

File No: 001ENG
Date: April 2019
Revision: 1

Howden Power is a global leader of air and gas-handling equipment, that specialises in helping power stations improve everyday processes and increase productivity. Howden Power is part of the Howden Group of companies - an established global engineering business, with over a century of experience.

For more information, contact your RMI representative or visit us at: www.rmipsl.com

ALABAMA
6599 OLD BIRMINGHAM HIGHWAY
JASPER, ALABAMA
35501-8216
UNITED STATES
+1 (205) 483 0350

BEIJING
ROOM A050
10TH FLOOR OF NEXUS CENTER
NO. 19 OF EAST THIRD RING RD
CHAOYANG DISTRICT, BEIJING
CHINA
+86 21 3756 6696

GUJARAT
MAHADEV FALIYA
DANTESHWAR
PRATAPNAGAR ROAD
VADODARA
GUJARAT, INDIA
+91(0) 85058 95050

MANCHESTER
WOLVERTON STREET
MANCHESTER
UNITED KINGDOM
M11 2ET
+44 (0) 8444 145 145

CARDIFF N.S.W
40 ARUMA PLACE
CARDIFF
NEW SOUTH WALES 2285
AUSTRALIA
+61 (02) 4954 0163

SHANGHAI
1619 HUNGANG RD
XIDU TOWNSHIP
SHANGHAI, 201401
CHINA
+86-21-3756-6696

Background

Howden Power identified the need to develop a range of high-pressure washers, able to withstand the challenges of the power station environment. The equipment needed to operate efficiently and effectively, in a potentially hazardous environment, where operators must work remotely, due to the gaseous atmosphere.

Howden Power asked RMI to work in collaboration with them, applying our knowledge and expertise to develop a bespoke range of washers, that could meet these environmental requirements, and improve plant performance.

Challenges

Howden Power stated that the new high-pressure washers needed to:

- Be reliable and easy to repair and replace.
- Have automated control for remote operation.
- Be flexible to suit different applications and to clean a range of equipment such as fans, flues and heaters.
- Integrate with existing power station control technology.

Solution

The new range of equipment included:

- High pressure washers for gas reheaters and flue gas desulphurisation (FGD) plant.
- High pressure washers for soot blower air heaters.
- Enclosed construction of pump systems to prevent ingress from contaminants and protection against build-up of airborne dust.

Benefits

The FGD washers were developed for the RMI Trimax S50 pump series, designed to provide a safe and reliable supply of high-pressure water. The crankshaft-driven reciprocating pumps provide high-efficiency pumping, at pressures up to 120 bar. The range is characterised by heavy-duty design and construction (resistance to heat, water, acidity and dirt), which prolongs equipment life, maximising productivity and profit for our clients.

- The washers featured a fully-automated retractable lance, enabling them to be used in gaseous atmospheres and other hazardous environments.
- The FGD systems can be used in environments ranging from freezing to high ambient temperatures, making them suitable for the full range of environmental conditions.

Tech-Facts

Equipment List

- Trimax S50 Pumps
- Acoustic enclosure
- Control and safety valves
- Electronic controls

“Developing our product range with RMI Pressure Systems has enabled us to expand into new markets and help substantially reduce power station sulphur emissions.”