



AERZEN
EXPECT PERFORMANCE

Case Study

Durable solutions engineered for reliable operations

Net-zero initiatives, improving for the future

**1500 mbarg
differential pressure**

**15 Delta Screw
Compressors**

**0 unplanned
breakdowns**



Image credit: By The joy of all things - Own work, CC BY-SA 4.0

Overview

Committed to sustainability

AERZEN Machines are proud to say that our screw compressors have been part of net-zero initiatives, playing a significant role in the transition to clean energy as part of global climate change and net zero efforts. A former coal-fired power station has successfully converted from fossil fuel use to sustainable, low carbon, biomass electricity production. How was this accomplished?

Secure **reliable**
performance with
AERZEN Machines



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Our Solution

Reliable Technology

The power station sought a greener solution and decided to transition from coal to renewable energy by using biomass wood pellets. To achieve this a durable, energy and cost efficient solution was sought.

1

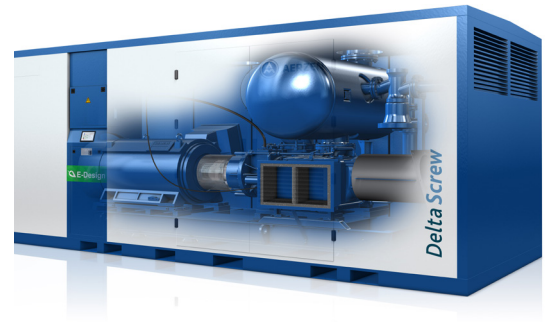
Required was a unit capable of delivering 1,600 Sm³/hr against a maximum differential pressure of 1,500 mbar(g). Our resilient direct-driven screw compressors met this specification.

2

We supplied 15x VML AERZEN E-class screw compressors. Given the critical nature of the operation, the power station required zero unplanned downtime. To ensure this, 12 compressors were purchased to convey the wood pellets into the furnace, while 3 remained on standby.

3

These AERZEN screw compressors were equipped with vibration sensors, enabling real-time monitoring and quick responses to potential issues. Installed in 2016, the compressors have continued to operate flawlessly.



Type of Technology	Screw Compressor
Design	Positive & Negative Pressure
Differential pressure	-850 to 3,500 mbar
Volume flow	350 to 15,000 m ³ /h
Conveying Media	Air, Neutral Gases, Aggressive gases

The Results

Reliable Operations

AERZEN Machines has been providing planned maintenance for this Power Station for 10 years, with scheduled servicing and overhauls for all 12 duty screw compressors. The result? Zero unplanned downtime. These screw compressors have consistently proven their reliability, supporting the Power Station in its commitment to a greener future.



Powering Sustainability

Summary

The Power Station has a very secure, reliable and green solution. They are energy efficient and they are using sustainable renewable resources to power their plants, helping the world with its net-zero initiative. Are you looking for a similar sustainable solution?

Let's Talk



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