

# AIRPREHEATERS

The first commercial rotary regenerative air preheater was developed in the 1920s through a partnership between Fredrik Ljungström, the inventor of the technology, and Howden. We have been at the forefront of air preheater design for almost 100 years.

Three Important Developments One Effective Result UltraGen



## Elements

The effectiveness of the air heater is dependent on the heat transfer properties of the elements, and their resistance to plugging and fouling, which can present extreme challenges depending on the fuel being burned. Through continuous research and development, we have developed a range of advanced profiles and enamels that minimise the tendency for contaminants to adhere to the elements, blocking the airflow, and offer enhanced cleanability to clear any fouling that does occur. To counteract any wear or fatigue from element movement or vibration, our SurePack Elements™ computerised system packs the elements within their baskets at precisely the right pressure. All Howden elements and SurePack Elements™ baskets can be supplied for any existing air preheater, offering a cost-effective route to enhanced performance without the investment in time and money required to replace an entire heater unit.

## Dirive System

Howden rotary heat exchangers can be supplied with centre column or bottom girder support to suit local circumstances and preferences, and either central or peripheral drives. Our central drive system uses an inverter speed control with a high ratio gearbox, and offers the options of multiple electric motors, an air motor, or both types together to support and guide the rotating element matrix. We fit spherical roller bearings bath-lubricated with high-viscosity oil, an approach that has proven to be outstandingly reliable.

## Enerjet Cleaning System

The Howden Enerjet™ cleaning system is another product of long-term research and exhaustive field testing. Incorporating a completely restructured nozzle design and a moving lance system that gives complete coverage of the array of elements, it uses high-pressure water, steam or air to clean the elements and clear plugging while the heater is in normal operation. By removing contaminants as part of the everyday operation of the heater, it maintains effective operation and can repay its investment in a very short time.



Güç size geri döner™