

## CASE STUDY



# IPSEN BENEFITS FROM EDWARDS' DRY VACUUM TECHNOLOGY AND GLOBAL SUPPORT CAPABILITY

TO ENSURE HIGH PRODUCT QUALITY, IPSEN INTERNATIONAL GMBH HAS CHOSEN EDWARDS' DRY VACUUM PUMPING TECHNOLOGY FOR USE IN ITS HIGH VACUUM BRAZING FURNACES.

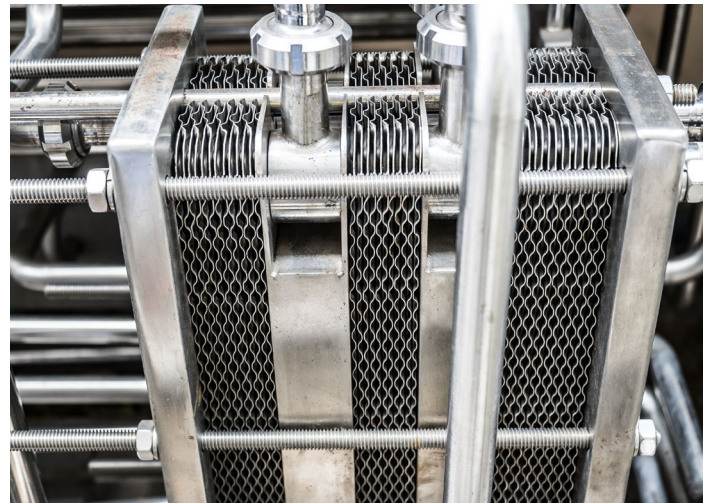
[edwardsvacuum.com](http://edwardsvacuum.com)

## COMPANY INTRODUCTION

Ipsen International GmbH, headquartered in Germany, is a global manufacturer of heat treatment technologies and systems.

Regarding the collaboration, Michael Simon, System Expert at Ipsen, commented, 'We are impressed with the quality and performance of Edwards' vacuum systems. Working with Edwards as a single source partner and utilising their local servicing and support capabilities were significant benefits to us'.

Ipsen brazing furnaces equipped with Edwards' vacuum systems have been delivered to the customers in China.



## KEY FACTS

Each furnace uses a combination of an Edwards' GXS250 with a mechanical booster and two STP4503 turbomolecular pumps. Being oil-free dry pumps, these do not oil contaminate the furnace. Unlike cryogenic pumps that require regular maintenance, STPs are low in maintenance and power and utilities consumption, yielding a lower cost of ownership.

Being directly mounted to the chamber, STPs are compact, saving plant floor space along, and have shorter downtimes, resulting in increased productivity.

Edwards' GXS dry screw industrial pumps provide robust and reliable operation even in harsh industrial applications. Innovative automated remote control enables consistent output and a safe operation, reducing utilities and energy costs.



## HEAT TREATMENT TECHNOLOGY AND SYSTEMS

### 1. CHALLENGE

Traditionally these kinds of furnaces used cryogenic pumps, which trap gases and vapours by condensing them on a cold surface; these pumps need recovering occasionally.

### 2. SOLUTION

Edwards supplied a solution for the furnace each use a combination of an Edwards' GXS250/2600 a dry screw vacuum pump in combination with mechanical booster, and two STP4503 turbomolecular pumps. These are all dry pumps which are oil free and so do not run the risk of any oil contaminating the furnace.

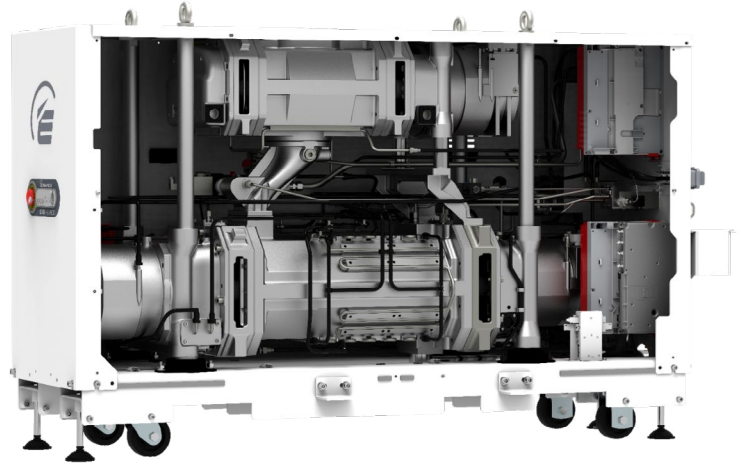
### 3. OUTCOME

The Edwards system solution offers:

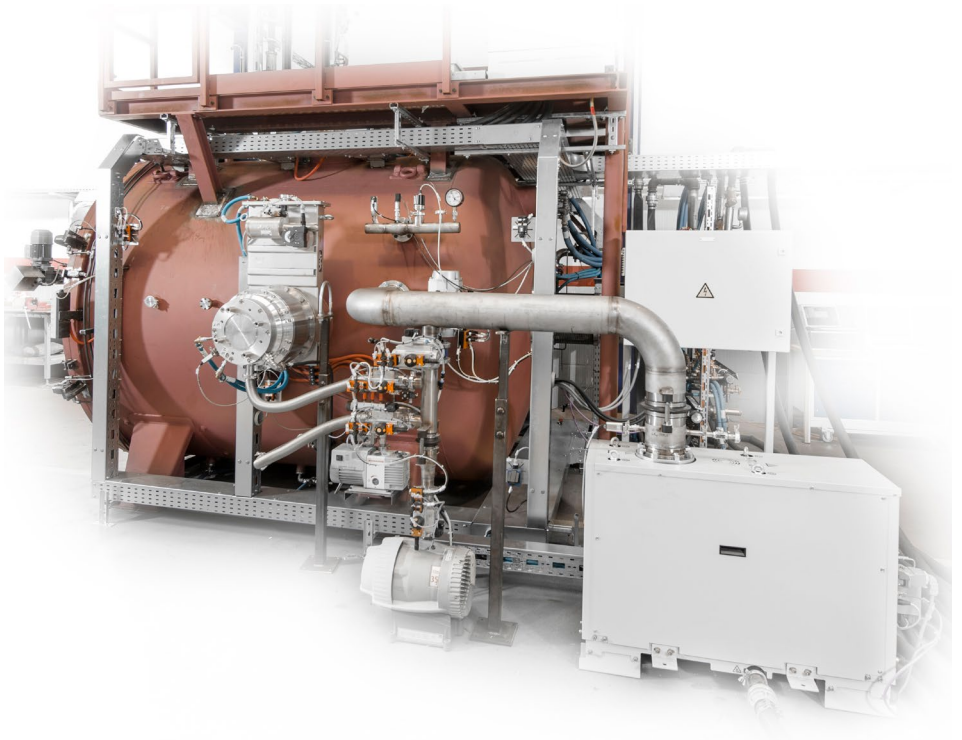
- Smaller footprint
- Reduced energy consumption
- Decreased environmental impact

**STPs Turbopump** brings the advantage of being directly mounted to the chamber, meaning no elbow is needed, which can reduce suction capacity. Their compact size means plant floor space is also saved. Furthermore, pump down time is faster to operating vacuum pressure, resulting in increased productivity.

The **GXS dry screw** industrial pumps and their integrated mechanical booster provide robust and reliable operation even in harsh industrial applications, and they have an innovative automated remote control which enables consistent output and a safe operation. The GXS has a long pump service life and requires minimal maintenance, which together with low utilities and energy usage costs make it the most economical vacuum pump for industrial applications.



*GXS dry screw vacuum pump series*



*Ipsen installation*