





# HEAT RECOVERY AND COLD GENERATION SYSTEMS ENERGY EFFICIENCY AND ENERGY SOURCE DIVERSIFICATION

We design and build heat recovery and cold generation systems based on absorption and compressor technologies. We equip the system with all the necessary supply installations, **TURNKEY COLD** low-current, hydraulic, cabling, as well as automation and control systems. We operate **SYSTEMS** using the "design and build" formula, providing turnkey systems. We implement solutions which significantly increase the energy efficiency of technological processes and facilities, resulting in considerable savings. We indicate opportunities COLD, HEAT, for efficient use of both utilities (electricity, heat, water) and natural heat sources in the ENERGY cooling process. We enable management of waste energy from technological processes which would otherwise be irrecoverably lost. We optimize systems in terms of functionality and costs. We carry out technical analyses and propose solutions which provide the highest energy efficiency – by utilizing waste heat or de-**CONSULTANCY** vices with increased efficiency. We reliably verify finished designs in order to eliminate any inconsistencies or solutions which are ineffective. We utilize cost-functional analyses and provide advice regarding device purchase. We are at your disposal at every stage of the project – from functional and technical analysis **TECHNICAL SUPPORT** to selection of equipment, design and implementation, to comprehensive post-sales support. **AND SERVICING** We provide servicing for operators of absorption devices of numerous brands.



### **ABSORPTION SYSTEMS**

We turn waste heat from electricity generation or production processes into utility heat or cold. We use cheap heat carriers, such as steam, hot water, oil, or combustion gas to generate heat with minimum electricity demand. It is a perfect solution for cooling process line and air conditioning halls and facilities.

## **AUTOMATION AND CONTROL SYSTEMS**

We enable cold centres management and control over all the elements of HVAC systems, such as pumps, cooling towers, chilled water compressor and absorption units, as well as remote monitoring and management of the cold generation process. This way we can provide the necessary cooling parameters in diverse, variable ambient conditions, optimizing energy consumption and reduce operating costs.

### **COMPRESSOR SYSTEMS**

When we have no access to a cheap heat source, we use electric compressor systems for cooling. In order to optimize energy consumption, we equip the system with components such as free cooling, heat recuperation systems, pumping system with variable efficiency, or automation systems which provide maximum cooling efficiency.

### **INDUSTRIAL, HIGH EFFICIENCY HEAT PUMPS**

We use low-temperature heat available on site, coming from technological processes, data centres or natural sources, to generate heat with operational parameters. This way, we reduce the costs of energy generation and transport, mitigate transmission losses and improve energy efficiency.

#### **HEAT RECOVERY SYSTEMS**

We recover heat from devices used in production and technological processes, as well as from cooling devices themselves. We use waste energy, which would otherwise be lost, for heating, heating utility water, or providing process heat for ventilation centres. This reduces the costs of production and operation.

DISTRIBUTION



EBARA REFRIGERATION EQUIPMENT & SYSTEMS CO., LTD. Tokyo, Japan

