



weco
Compact packaged chillers

Powerful and reliable.
Also for high ambient
temperatures.



Air- or watercooled compact chillers

Innovative technology

The new compact chillers are equipped according to the latest developments in technology. The use of powerful compressors together with standard designed components in the refrigerant circuit guarantees a high efficiency. Consequently the units are running at low operating costs, have a high reliability and long life.

The overall technical design of the unit and the precise measurement and control technology coupled with tailor made microprocessor control enable a high temperature stability for every application. The high capacity together with a compact footprint enable the chiller to be sited even in restricted areas.

Environmentally friendly

As a specialist manufacturer of energy-saving technology we are taking responsibility for the environment. For many years we have led the way in developing equipment using environmentally friendly refrigerants.

Therefore we decided to equip all our new products with the environmentally friendly refrigerant R134a, which avoids any risk for the ozone layer. A further advantage of R134a is its behaviour at high ambient temperatures – every production manager will appreciate the better performance and the higher reliability during hot summer days.

Quality guaranteed

All our chillers are quality products and the result of more than 35 years of experience in industrial cooling. Many units that have been delivered to machine manufacturers still work after more than 20 years under the toughest operating conditions. Important elements of our quality philosophy are:

- In-house development and manufacturing with skilled labour only.
- Exclusive use of renowned high quality components.
- Corrosion resistant materials for all water contacted components.
- Trial run before delivery on one of our test banks.
- Certified manufacturing procedures according to DIN ISO 9001.



Compact chiller model
weco 07 A with air-cooled condenser

Economic efficiency

Many industrial processes require the supply of heating or cooling energy. The excess process heat in the consumer is specifically extracted by means of cold water. The process quality is directly dependent on the stability of the cooling water temperature.

Due to varying conditions found both on the production site and within the environment globally producing constant cold water can only be achieved by the use of independent cold water chillers. In the low and middle capacity range this is the main application for compact packaged chillers.

In the protection of the environment it makes sense to use recirculating water chillers. Together with the global industrialization the cooling water consumption in nearly every branch of industry is increasing. Shortage



*Compact chiller model weco 250 AZ
with air-cooled condenser*

in water and the related increasing water costs in combination with stronger regulation of waste water control increases the need for these systems. The decision for the environment is easy because the chillers also offer possibilities to save on running costs. Also the recirculating high productivity chillers offer much lower operating and service costs than open systems resulting in a decrease in the cost of production.



Compact chillers model weco 300 AZ for outdoor installation

Technical features

The design details of the compact **weco** range emphasize our technical know-how:

- Cooling circuit with environmentally friendly refrigerant R134a.
- Suction gas-cooled efficient compressors with low energy consumption, designed as fully hermetic piston type compressors within the **weco range 01 to 03**, as fully hermetic scroll compressors within the **weco range 07 to 120** and as semi hermetic, continuously controlled screw compressors within **weco range 145 to 300**.
- Electronically controlled crankcase heater to avoid any damage to the compressor caused by fluid refrigerant in the oil sump of the compressor.
- Ready to plug in unit delivered with refrigerant and oil.
- Comprehensive safety chain to protect the units including filter dryer, sight glass with moisture indicator, high and low pressure switch, frost safety thermostat and flow switch.



Lockable control panel cover (optional)

- Large scaled evaporators, designed as copper coil for the **weco 01 to 03**, as co-axial evaporator for the **weco 07 to 09**, as plate evaporators for the **weco 11 to 35** and shell and tube evaporators for the **weco 48 to 300**.
- Air-cooled condensers and as an option water-cooled condensers with high exchange surface only available from **weco 07**.
- Powerful fan with pressure control.
- Microprocessor control with membrane type keyboard and clear text indication.
- Stainless steel water tank with level control and dry running protection for the pump.
- Powerful pumps and water circuits designed with corrosion free materials.

We offer a large number of useful options to adapt the compact chillers to the application or the special needs on site.

- Radial fan to connect the chiller to an existing air duct system available from **weco 11**. The air duct may be used to transport the air to the outside of the building or to heat the building.
- Additional water-cooled condenser for heat recovery.
- Condenser in split version for outdoor installation, for **weco range 35 to 300**.
- Additional equipment for outdoor installation of the complete chiller.
- Tropical insulation for installation in hot climates with high humidity.
- Communication modules for all common interfaces and remote stop/start.
- Special voltage.
- Individual painting in RAL colours.
- Fittings and flexible tubes.



Compact chiller model
weco 15 WB with
water-cooled condenser



Compact chiller model **weco 48 AB** with air-cooled condenser and axial fan

Technical information at a glance

Model weco	max. cooling capacity (kW)	Standard pump ¹⁾		Dimensions L x W x H (mm)	Weight (kg)
		max. flow (m ³ /h)	max. pressure (bar)		
01	1.7	3.6	3.8	675 x 735 x 1100	134
03	3.5	3.6	3.8	675 x 735 x 1100	134
07	9.0	4.2	4.7	777 x 835 x 1253	161
09	11.0	4.2	4.7	777 x 835 x 1253	170
11	11.0	4.2	4.5	1110 x 1060 x 1830	330
15	18.5	4.2	4.5	1360 x 1060 x 1830	365
24	29.0	7.2	6.0	1360 x 1060 x 1830	395
35	44.0	7.2	6.0	1900 x 1060 x 1830	610
48	58.0	9.0	6.3	2150 x 1215 x 2035	730
59	68.0	12.0	5.3	2150 x 1215 x 2035	770
71	83.0	12.0	5.3	2150 x 1215 x 2035	800
85	112.0	30.0	4.7	2650 x 1215 x 2035	1250
100	134.0	30.0	4.7	2650 x 1215 x 2035	1300
120	150.0	30.0	4.7	2650 x 1215 x 2035	1335
145	176.0	50.0	4.3	3825 x 1750 x 2350	2230
170	210.0	50.0	4.3	3825 x 1750 x 2350	2475
190	230.0	50.0	4.7	3825 x 1750 x 2350	2530
230	278.0	50.0	4.7	4645 x 1750 x 2350	2700
250	308.0	76.0	4.5	4645 x 1750 x 2350	2750
300	380.0	76.0	4.5	4645 x 1750 x 2350	3250

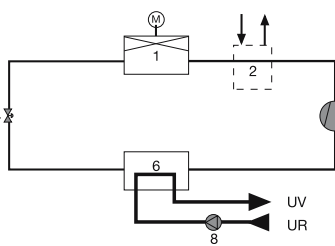
¹⁾ Process pumps with higher capacities for weco Z series optionally

Subject to technical modification without notice!

Tailor-made compact chillers for special pro

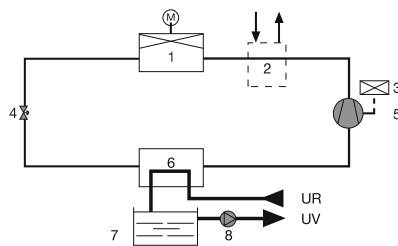


Available systems



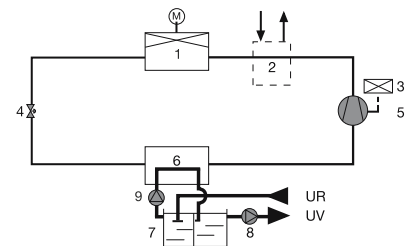
Basic Design (G)

Packaged chiller with pump, but without internal water tank, ready for use together with open consumer circuits such as existing cold water storage tanks or extrusion baths.



Standard Design (B)

Packaged chiller with pump and internal water tank. Ready for connection to cold water systems like mould cooling or hydraulic cooling of single injection moulding presses.



Central cooling plant (Z)

The unit is equipped with two pumps and a water tank with cold and hot water section. We recommend the use of this version together with several consumers and high variations in the cooling load of the connected system.

Legend: 1 = condenser / 2 = additional heating condenser* / 3 = temp. regulator / 4 = expansion valve / 5 = compressor / 6 = evaporator / 7 = water tank / 8 = process pump / 9 = evaporator pump / UV = to consumer / UR = from consumer / — = cold water circuit / — = refrigerant circuit / * = option

Production processes

According to the different industrial branches and the production processes applied, water chillers have to be adapted to the exactly controlled temperature range and the customer-specific demands. Out of a multitude of machine components water chillers can be produced in modular design as split or low temperature execution, explosion-protected as well as in combination with one or more temperature circuits. Our machines generally dispose of programmable microprocessor control systems, that control the time course and the temperature of the process. In order to select the correct machine size, we recommend to contact our process engineers.



Low temperature chiller with integrated heating circuit

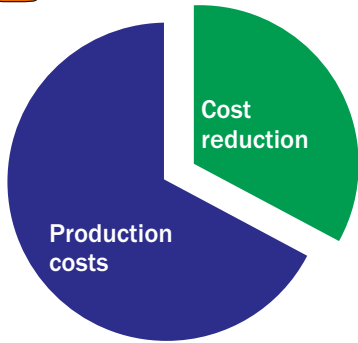


Chiller in Ex-design

Compact water chiller with 1000 kW cooling capacity



gwk Perfect cooling and temperature control

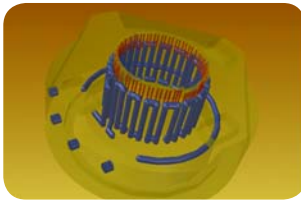


Increased productivity

In many areas of the industry, cooling and temperature control provides a great potential for increasing productivity and thus for lowering costs.

Many factors serve to improve productivity:

- Reduction of cooling time, therefore savings in required machine hours
- Increasing availability of production plants
- Improvement of product quality
- Decreasing running cost
- Reduction of maintenance cost



gwk-integrat 4D

Optimal product quality through homogeneous temperature distribution with close-to-cavity cooled mould inserts.



gwk-SKL/SKW

Reliable and economic supply of cooling water in the low temperature range, even under the toughest ambient conditions.



gwk-teco cs

The universal solution for standard applications in the temperature range up to 160°C. Provides efficient options for continuous process monitoring.



gwk-hermeticool hybrid

Innovative cooling system to decrease the running and maintenance cost in comparison to conventional cooling systems.



gwk-system integrat

Increase of productivity by means of specific and segmented control of the mould cooling.



gwk-moldclean

Increased productivity through effective, automatically controlled cleaning of heat exchange surfaces in cooling and temperature controlled circuits.



gwk-tecma

High process stability with customised temperature control solutions for all applications with high performance requirements up to 400°C.



gwk-active

Adjusting and maintaining optimum capacity by means of constantly clean water, delivered from a fully automatic water treatment device.



gwk-teco cw

Most economic system to extract heat from consumers at very low temperatures by patented cold water temperature control.



gwk-service

Decreasing the maintenance cost and protection of company owned resources through professional installation and service including maintenance of cooling water.

gwk

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