# 2001/2 - 2001/4

#### Compact and efficient

Product range 2001/2 and 2001/4 comprises two mono water stills without storage tank, for bench mounting, that produce two and four litres of distillate per hour.

Their easy handling makes them an indispensable help in producing high-quality distillate.



**2001/4** Mono Water Still 4 I / h, for bench mounting

#### **Specifications and Features**

- good distillate quality, conductivity approx. 2.3 μs / cm at 25 °C
- for drainage and cleaning, evaporator is easily accessible by lifting the condenser. Material: stainless steel, material no. 1.4301
- condenser (cooler) with baffle.
   Material: stainless steel, material
   no. 1.4301
- heating element made of stainless steel, material no. 1.4876
- thermostatic low water cut-off, to protect the heating element in case of low water
- thermometer to display the temperature of the cooling water
- energy-saving through distillation of the heated cooling water
- distillate withdrawal through drain tube on the front of the unit
- cooling water inlet and outlet on the right-hand side of the unit
- ▶ water connection: cooling water inlet 1/2 inch (inner Ø 12.7 mm), cooling water outlet 1/2 inch (inner Ø 12.7 mm)
- degassing of carbon dioxide through vent in the condenser
- main switch with pilot lamp on the front of the unit
- housing electrostatically powdercoated with epoxy resin
- power connection through mains connection cable with German shock-proof type (Schuko) plug

Model Order No.	Capacity l / h	Cooling water requirement I / h approx.	Exterior dimensions mm approx. Width Depth Height		X.	Electrical connection*	Weigh	t kg approx. gross cardboard box	Packing volume approx. m <sup>3</sup>
2001/2	2	20	280	250	490	230 V / 5060 Hz / 2.0 kW	7.5	10	0.10
2001/4	4	40	280	250	490	230 V / 5060 Hz / 3.0 kW	<b>7.5</b> * Oth	<b>10</b> ner voltages avai	0.10 lable on request

Tubes for water inlet and outlet can be supplied as accessories.

## 2002 - 2012

#### Comfortable and reliable

Models 2002 – 2012 with automatic operation supply two, four, eight and twelve litres of distillate per hour, depending on the model type.

The built-in distillate storage tank accepts double the hourly capacity of the Water Still. All models have successfully proved in every-day laboratory routine. They dispose of an electronic monitoring function which ensures a continuous production of distillate.

#### **Specifications and Features**

- ▶ good distillate quality, conductivity approx. 2.3 µs / cm at 25 °C
- ▶ heating element made of stainless steel, material no. 1.4876
- thermostatic low water cut-off, to protect the heating element in case of low water
- energy-saving through distillation of the heated cooling water



- degassing of carbon dioxide through vent in the top
- evaporator with baffle is easily accessible by lifting the lids. Material: stainless steel, material no. 1.4301
- storage tank for distillate accepts double the hourly capacity of the unit. Material: stainless steel, material no. 1.4301
- condenser (cooling coil) in the storage tank, easily exchangeable.
   Material: stainless steel, material no. 1.4301
- water supply through a built-in solenoid valve with connection for water pressure hose 1/2 inch (inner Ø 12.7 mm)

- ➤ cooling water pressure required: > 3 bar to max. 7 bar. After switching on the main switch the solenoid valve opens the water supply and closes it once the storage tank is full, thus avoiding unnecessary waste of water
- cooling water outlet with hose connection 3/4 inch (inner Ø 19 mm). Water that has not been condensed flows off through the cooling water outlet
- distillate withdrawal through the drain cock on the front of the unit. The drain cock can be opened in either continuous or touch position
- ➤ an electronic level switch switches the still off when the storage tank is full and restarts it automatically when distillate is withdrawn

- an electronic impurity detector switches the unit off in case of high degree impurities in the evaporator, the red pilot lamp "Clean" will glow
- drainage of the evaporator through drain cock on the right-hand side of the unit
- main switch and pilot lamps (yellow pilot lamp for operation and red pilot lamp for cleaning) are on the front of the unit
- double-walled housing. Housing is made of electrolytically galvanized sheet steel, electrostatically powdercoated with epoxy resin
- power connection through connection cable; 2 and 4 litre units have German shock-proof type (Schuko) plug

Model Order No.	Capacit I / h	ty Storage Co tank r Contents / I	oling wate equiremen I / h approx.	it m	m appr		Electrical connection*	Weight net	t kg approx. gross cardboard box	Packing volume approx. m <sup>3</sup>
2002	2	4	30	540	290	420	230 V / 5060 Hz / 1.5 kW	15.4	18.5	0.16
2004	4	8	48	620	330	460	230 V / 5060 Hz / 3.0 kW	20.2	24.0	0.16
2008	8	16	72	780	410	540	400 V / 3ph/N/PE / 5060 Hz / 6.0 kW three-phase current	30.7	41.0	0.34
2012	12	24	198	780	410	670	400 V / 3ph/N/PE / 5060 Hz / 9.0 kW three-phase current	43.0	47.0	0.48
							* Ot	her volta	ages available o	n request

Tubes for water inlet and outlet can be supplied as accessories.

# 2102 - 2108





Control panel with clear symbols for easy monitoring of operation

#### **Specifications and Features**

- excellent distillate quality, conductivity of mono-distillate approx.
   2.2 μs / cm at 25 °C; conductivity of bi-distillate approx.
   1.6 μs / cm at 25 °C
- evaporator and baffle of the mono stage are easily accessible by lifting the condensers. Material: stainless steel, material no. 1.4301
- condensers (coolers):
   1st stage made of stainless steel,
   material no. 1.4301;
   2nd stage including baffle made of
   DURAN® / Borosilicate glass 3.3
- ► heating elements made of stainless steel, material no. 1.4876
- water supply through built-in solenoid valve with connection for water pressure hose 1/2 inch (inner Ø 12.7 mm)

- required cooling water pressure: > 3 bar to max. 7 bar. After switching on the main switch the solenoid valve opens the water supply
- cooling water outlet with hose connection 3/4 inch (inner Ø 19 mm). Water that has not been condensed flows off through the cooling water outlet
- energy-saving through distillation of the heated cooling water
- distillate withdrawal: stop valve made of Borosilicate glass 3.3 with PTFE plunger for mono distillate, outlet with dust guard shield made of Borosilicate glass 3.3 for bi-distillate
- ▶ low water cut-off: float switch and thermostatic over-temperature cut-out

- an electronic impurity detector switches the unit off in case of high degree impurities in the 1st stage evaporator, the red pilot lamp "Clean" will glow
- degassing of carbon dioxide through vent on the condensers
- main switch and pilot lamps to monitor both distillation stages are on the front of the unit
- ➤ two-part housing made of electrolytically galvanized sheet steel, electrostatically powder-coated with epoxy resin; upper part easily removable through quick-release catches
- power connection through connection cable

Model Order No.	Capacity I / h	Cooling wate requirement I / h approx.	m	m appro	ox.	Electrical connection*	Weight net	t kg approx. gross carton packe on pallet	Packing volume approx. d m³
2102	2	72	500	260	470	230 V / 5060 Hz / 3.5 kW	20.9	47.0	0.62
2104	4	120	550	280	570	400 V / 3ph/N/PE / 5060 Hz / 7.0 kW three-phase current	27.5	54.0	0.67
2108	8	198	700	390	700	400 V / 3ph/N/PE / 5060 Hz / 11.5 kW three-phase current	44.6	72.3	0.92
						*	Other vo	oltages available	on request

Tubes for water inlet and outlet can be supplied as accessories.

### 2202 - 2304

#### Excellent Quality and Technology

Due to their extremely low content of metal ions in the distillate our Glass Water Stills count among the top-end products in the market. GFL produces a range of five fully automatic models.

Three models produce mono distillate of two, four and eight litres / hour. For bi-distillation, we offer two models with capacities of two and four litres per hour.

#### **Specifications and Features**

- excellent distillate quality, conductivity of mono distillate approx.
   2.2 μs / cm at 25 °C; conductivity of bi-distillate approx.
   1.6 μs / cm at 25 °C
- evaporators, condensers and overflows made of DURAN® / Borosilicate glass 3.3. Condensers with dribble guard
- water supply through built-in solenoid valve with connection for water pressure hose 1/2 inch (inner Ø 12.7 mm)
- required cooling water pressure: > 3 bar to max. 7 bar. After switching on the main switch the solenoid valve opens the water supply
- cooling water outlet with hose connection 1/2 inch (inner Ø 12.7 mm).

- Water that has not been condensed flows off through the cooling water outlet
- energy-saving through distillation of the heated cooling water
- heating element with quartz sheathing
- sterilisation of the condensers by steam
- electronic level control during the whole distillation process
- water level control in the condenser with automatic power cut-off in case of water shortage
- electronic impurity detector induces automatic water change to rinse and clean the evaporator

- degassing of carbon dioxide through a vent on the condenser
- main and function switches as well as pilot lamps for monitoring are on the front of the unit
- distillate withdrawal at the righthand side of the unit through hose connection
- visible distillation process through easily removable, unbreakable front screen that does not steam up
- housing made of electrolytically galvanized sheet steel, electrostatically powder-coated with epoxy resin
- power connection through connection cable (models 2202, 2204 and 2302 with German shock-proof Schuko plug)

Model Order No.	Capacity l / h	Cooling water requirement I / h approx.	mı	n appr	ox.	Electrical connection*	Weigh net	t kg approx. gross cardboard box	Packing volume approx. m <sup>3</sup>
<b>2202</b> Mono	2	48	650	200	390	230 V / 5060 Hz / 1.5 kW	16	22.0	0.34
<b>2204</b> Mono	_	96	650	200	390	230 V / 5060 Hz / 3.0 kW	17	22.0	0.34
<b>2208</b> Mono	8	144	650	365	390	400 V / 3ph/N/PE / 5060 Hz / 6.0 kW three-phase current	24	30.0	0.34
<b>2302</b> Bi	2	96	650	365	390	230 V / 5060 Hz / 2.9 kW	24	30.5	0.34
<b>2304</b> Bi	4	144	650	365	390	400 V / 3ph/N/PE / 5060 Hz / 5.8 kW three-phase current	24	31.5	0.34
							* Other vo	oltages availabl	e on request

Tubes for water inlet and outlet can be supplied as accessories.

# Accessories / Pretreatment

# Pretreatment for all GFL Water Stills 2001/2-2001/4, 2002-2012, 2102-2108, 2202-2304



Order No. 2904

# **Spare Filling** for Dechlorite Filter **Order No. 2905**

#### **Dechlorite Filter**

eliminates chlorine particles in the tap water added by the local water works. Complete with connections for pressure hose 1/2 inch \* (inner Ø 12.7 mm), including first filling. The filling should be exchanged every six months.

\* Tubes for water inlet and outlet are not included in the standard scope of supply

Order No. 2906

# **Spare Filling** for Phosphate Cartridge **Order No. 2907**

Order No. 2912

# **Spare Candle** for Pre-Filter **Order No. 2913**

#### **Phosphate Cartridge**

prevents scale formation in the condenser by phosphatising the tap water. Can be used from 4-15°dH (German hardness). Complete with connections for pressure hose 1/2 inch \* (inner Ø 12.7 mm), including first filling. The filling should be replaced according to the consumption.

\* Tubes for water inlet and outlet are not included in the standard scope of supply

#### Pre-Filter 1 µm

for pre-cleaning the tap water, and to protect the unit from pre-mature contamination. Food safe according to FDA regulations. Complete with connections for pressure hose 1/2 inch \* (inner Ø 12.7 mm), including filter candle. The candle should be replaced every six months.

\* Tubes for water inlet and outlet are not included in the standard scope of supply

# Accessories for Order Nos. 2904, 2906, 2912



Wall Bracket

for one filter, with screws to fix the filter to the wall bracket

Order No. 2921



Wall Bracket

for two filters, with one sleeve to connect the filters and screws to fix the filters to the wall bracket

Order No. 2922



Wall Bracket for three filters

for three filters, with two sleeves to connect the filters and screws to fix the filters to the wall bracket

Order No. 2923

# Accessories



2001/2 - 2001/4



**Hose Set** consisting of hoses for water inlet and outlet (1.5 m) and hose clips

Order No. 2940



2002

#### **Separate Water Supply**

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water.

The pretreated water is not switched off automatically when the storage tank is full.

Efficiency of the still is reduced by approx. 10 - 15 %.

This accessory must definitely be installed in our factory.

Order No. 2901



**Hose Set** consisting of hoses for water inlet and outlet (1.5 m) and hose clips

Order No. 2941



consisting of hoses for water inlet and outlet (1.5 m) and hose clips, in connection with Separate Water Supply 2901

Hose Set

Order No. 2946

## Accessories



2004

#### **Separate Water Supply**

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water.

The pretreated water is not switched off automatically when the storage tank is full.

Efficiency of the still is reduced by approx. 10 - 15 %.

This accessory must definitely be installed in our factory.

Order No. 2901

#### Separate Water Supply with Solenoid Valve

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water. The solenoid valve switches the pretreated water off when the storage tank is full. Efficiency of the still is reduced by approx. 10-15%.

This accessory must definitely be installed in our factory.

Order No. 2909



Level Control Switch for an External Storage Tank

to switch off power and water when the external storage tank is full (not included in our scope of supply).

This accessory must definitely

be installed in our factory. The internal storage tank will be without function if Level Control Switch 2910 is installed.

Order No. 2910



**Hose Set** 

consisting of hoses for water inlet and outlet (1.5 m) and hose clips

Order No. 2941



Hose Set

consisting of hoses for water inlet and outlet (1.5 m) and hose clips, in connection with Separate Water Supply 2901 or 2909

Order No. 2946

## Accessories



2008 - 2012

#### **Separate Water Supply**

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water.

The pretreated water is not switched off automatically when the storage tank is full.

Efficiency of the still is reduced by approx. 10 - 15 %.

This accessory must definitely be installed in our factory.

Order No. 2901

#### Separate Water Supply with Solenoid Valve

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water. **The solenoid valve switches the pretreated water off when the storage tank is full.**Efficiency of the still is reduced by approx. 10 – 15 %.

This accessory must definitely be installed in our factory.

Order No. 2909



#### Level Control Switch for an External Storage Tank

to switch off power and water when the external storage tank (not included in our scope of supply) is full.

This accessory must definitely

be installed in our factory. The internal storage tank will be without function if Level Control Switch 2910 is installed.

Order No. 2910

**Heating with Thermostat for the Internal Storage Tank** to maintain sterility of the distillate.

This accessory must definitely be installed in our factory.

Order No. 2911



**Hose Set** consisting of hoses for water inlet and outlet (1.5 m) and hose clips

Order No. 2941



Order No. 2946



Hose Set consisting of hoses for water inlet and outlet (1.5 m) and hose clips, in connection with Separate Water Supply 2901 or 2909



2102 - 2108

#### Separate Water Supply with Solenoid Valve

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water. Both cooling and pretreated water feed are automatically controlled by the unit.

Efficiency of the still is reduced by approx. 10 - 15%.

This accessory must definitely be installed in our factory.

Order No. 2903

#### Level Control Switch for an External Storage Tank

to switch off power and water when the external storage tank (not included our scope of supply) is full.

This accessory must definitely be installed in our factory.

Order No. 2910





Hose Set

consisting of hoses for water inlet and outlet (1.5 m) and hose clips

Order No. 2941



Hose Set consisting

consisting of hoses for water inlet and outlet (1.5 m) and hose clips, in connection with Separate Water Supply 2903

Order No. 2947



2202 - 2208

#### **Separate Water Supply with Solenoid Valve**

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water. Both cooling and pretreated water feed are automatically controlled by the unit. Efficiency of the still is reduced by approx. 10 - 15 %.

This accessory must definitely be installed in our factory.

Order No. 2902



Order No. 2908



Order No. 2943



Order No. 2948

#### Level Control Switch for an External Storage Tank

to switch off power and water when the external storage tank (not included in our scope of supply) is full.

This accessory must definitely be installed in our factory.

#### **Hose Set**

consisting of hoses for water inlet and outlet (1.5 / 1.0 m), distillate withdrawal (0.5 m) and hose clips



consisting of hoses for water inlet and outlet (1.5 / 1.0 m), distillate withdrawal (0.5 m) and hose clips, in connection with Separate Water Supply 2902



2302 - 2304

#### Separate Water Supply with Solenoid Valve

to feed the evaporator with softened or desalinated water (pressure > 1 bar) and the cooling coil (pressure > 3 bar) with phosphate-treated or normal tap water. Both cooling and pretreated water feed are automatically controlled by the unit.

Efficiency of the still is reduced by approx. 10 – 15 %.

This accessory must definitely be installed in our factory.

Order No. 2902



Order No. 2908

# Level Control Switch for an External Storage Tank to switch off power and water when the external storage tank (not included in our scope of supply) is full. This accessory must definitely

#### Hose Set

consisting of hoses for water inlet and outlet (1.5 / 1.0 m), distillate withdrawal (0.5 m) and hose clips

be installed in our factory.





Order No. 2949

#### Hose Set

consisting of hoses for water inlet and outlet (1.5 / 1.0 m), distillate withdrawal (0.5 m) and hose clips, in connection with Separate Water Supply 2902