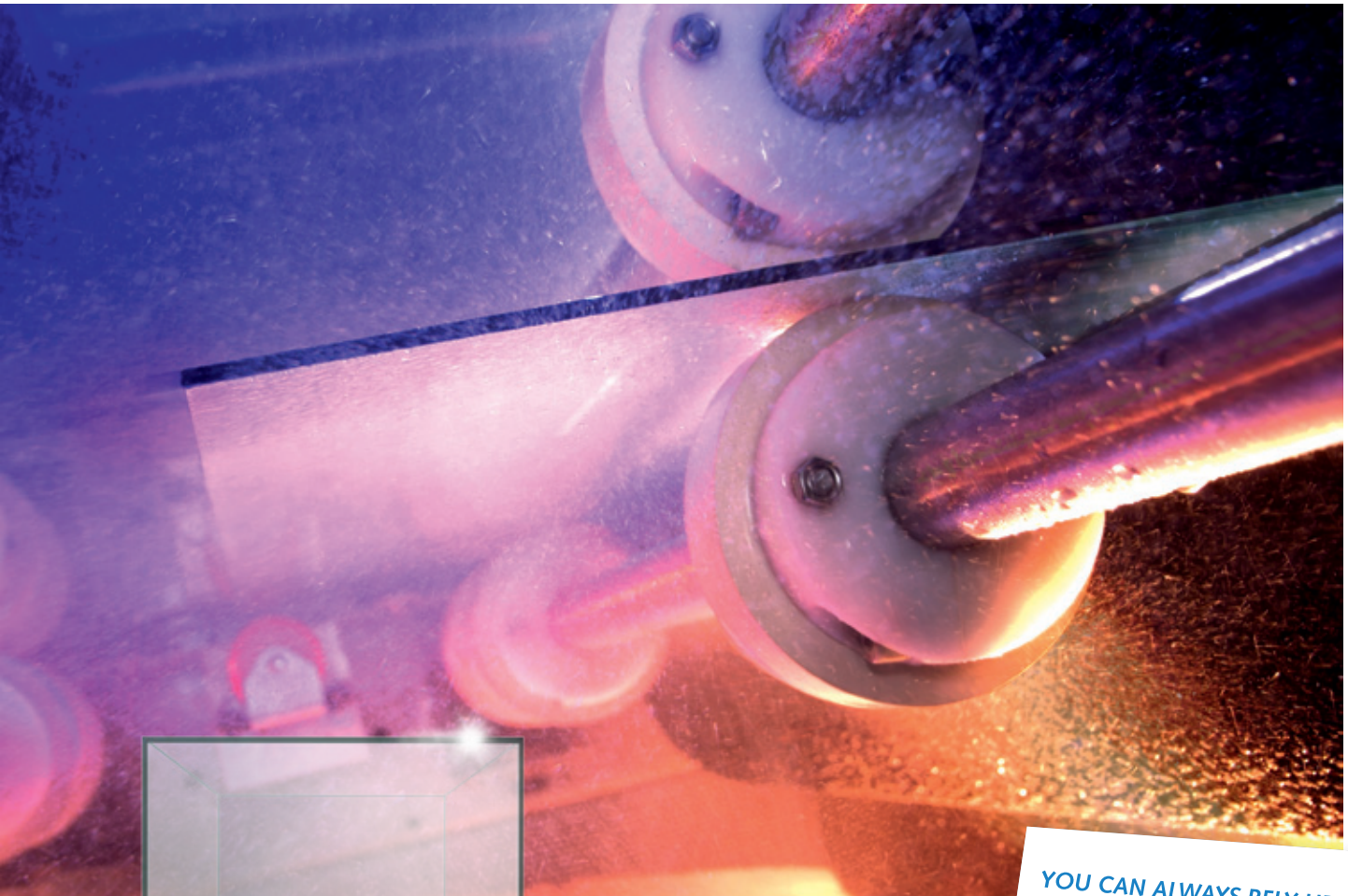


## GLASS PLATE WASHING MACHINES PURIFIED WATER CIRCULATION PLANTS



**YOU CAN ALWAYS RELY UPON:**

- German-Swiss quality standards
- High efficiency and reliability
- Worldwide after-sales service

### Clear benefits

- Energy-saving cleaning and drying of different glass thickness
- Chainless brush- and transport drives outside of the machine
- Maintenance-free, water protected bearings of the brushes
- Optimum cleaning results due to
  - alternating brush rotation directions
  - separated washing- and rinsing-zone
  - step less adjustment of transport speed
- Machine housing completely made of stainless steel, drying zone with sound protection

# CLEAN. ENERGY-SAVING. ECOLOGICAL.

## Glass plate washing machines with a long lifetime

You can reliably clean and dry glass plates in insulating glass production and the solar industry with **Bystronic glass** washing machines. In doing so, you also protect the environment through the demineralised water used that is free of chemical additives.

### cleaner GW-D

- Three separate brush-pair drives
- Synchronous drive of vertical transport shafts for slip- and distortion-free glass plate transport
- Symmetric design of brush shafts, bilateral suitable
- Water-tank with heater integrated in machine housing
- Air knife design blower-nozzles for optimum glass plate drying

### Options

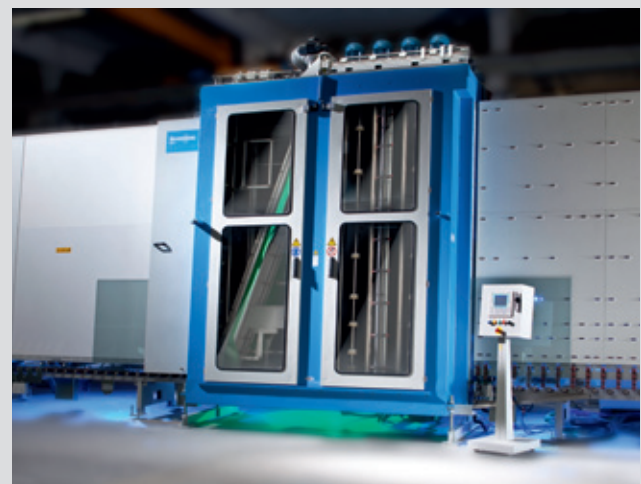
- Electronic frequency control of brush drives for especially sensitive coatings
- Inspection windows in front doors
- Reversible transport drive for glass plates
- Automatic coating recognition

### cleaner GW-SU

- Four separate brush-pair drives
- Synchronous drive of vertical transport shafts for slip- and distortion-free glass plate transport
- Automatic opening and closing of parallel guided brush- and transport shafts
- Constant brush contact depth if processing different glass thickness
- Symmetric design of brush shafts, bilateral suitable
- Air knife design blower-nozzles for optimum glass plate drying

### Options

- Brush-lifting equipment for coated glass plates
- Electronic frequency control of brush drives for especially sensitive coatings
- Reversible transport drive for glass plates
- Additional equipment for glass thickness up to 30 mm (1.18 in.) resp. 45 mm (1.77 in.)
- Automatic coating recognition



#### TECHNICAL DATA

Working heights	1.60 m / 2.30 m / 2.70 m (63.0 / 90.6 / 106.3 in.)
Processable dimensions	100 x 300 mm (3.9 x 11.8 in.) up to max. 2700 mm (106.3 in.) working height
Glass thickness	3 – 15 mm (0.12 – 0.59 in.)

#### TECHNICAL DATA

Working heights	1.60 m / 2.30 m / 2.70 m / 3.30 m (63.0 / 90.6 / 106.3 / 129.9 in.)
Processable dimensions	100 x 350 mm (3.9 x 13.8 in.) up to max. 3300 mm (129.9 in.) working height
Glass thickness	3 – 15 mm (0.12 – 0.59 in.) optional up to 45 mm (1.77 in.)

## Environment-friendly, energy-saving purified water circulation plants

Because we care

Water is systematically returned to the glass washing process via the pure water circulation systems. Two different systems are available for this purpose.

### Disc filter system

- Automatic back-rinsing of filter units due to permanent control of the filtration process
- Extremely low water consumption, only approx. 14 litres per filter rinse
- Short rinsing time, approx. 20 seconds
- Excellent water quality by filtering out tiniest particles
- Heated wash and rinsing circuit for optimum cleaning
- Effective filter back-rinse using water/air mixture
- Free programmable back-rinse parameter
- Very good filtration results with combination of surface and depth filtration
- Activated carbon filter for organic constituents
- Integrated, digital conductance meter
- Integrated ion exchanger

### Gravel filter system

- Essential reduction of water consumption due to recycling of the used water and return flow to the washing machine
- Procedure without chemicals for environment-friendly process
- Back washable gravel filters for mechanical filtering and coarse particles
- Candle filters for fine filtering
- Back washable carbon filter for organic particles
- Optical filter monitoring integrated in the circuit
- Digital conductivity meter, temperature-compensated (for type GW-SU)
- Automatic control of the functions
- Plants with 2 or 3 water circuits, depending on application and type of the washing machine

### Options

- Back washable pH-stabilizer controlling the acid content to protect the coat of the glass
- Ion exchanger for conductance improvement



## Ecological water demineralizing plant

- Plant for procuring of pure water, for the solid and careful cleaning of glass plates without remains of minerals
- Environment-friendly reverse osmosis procedure without chemicals for demineralization and disinfection of city- and drinking water
- Concentrate can be drained-off without retreatment
- High pure water yield by special diaphragm module and recovery system, desalting rate 97 – 99,5 %
- High efficient double water softening device
- Electronic process control

- Low expenditure of installation
- Demineralization plant is laid out for the particular location according to the required output and water analysis

## Options

- Additional reverse osmosis module for increase of pure water quality
- Iron extraction filter / Manganese extraction filter

