



HyperCLEAN II

Technical Data Sheet

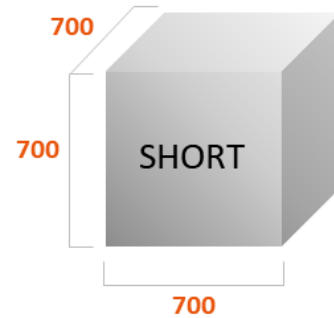
August 2024



COMBO I SHORT

with oscillation

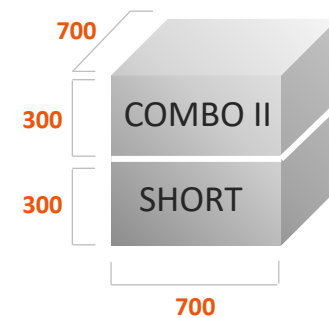
Usable space of basket:
700 × 700 × 700 mm
(W × D × H)



COMBO II SHORT

with oscillation

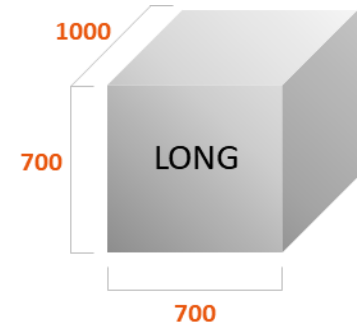
Usable space of basket:
700 × 700 × 2×300 mm
(W × D × H)



COMBO I LONG

no oscillation

Usable space of basket:
700 × 1000 × 700 mm
(W × D × H)



HyperCLEAN II Wash + Rinse (Tap/DI Water) + Drying

PROCESS DATA	
Machine dimensions (W × L × H)	1,650 × 2,500 × 2,300 mm (2,500 mm with open door)
· Including SHORT pushcart	1,650 × 3,200 × 2,300 mm
· Including LONG pushcart	1,650 × 3,550 × 2,300 mm
· Including transfer pump	2,250 × 2,500 × 2,300 mm
Weight (without liquid, accessories)	1,200 kg
Machine noisiness	L _{Aeq} <70 dB
Power supply voltage	3/N/PE AC 400/230 V 50 Hz 3/N/PE AC 400/230 V 60 Hz
Power input	32 kW
Average power consumption per cycle using predefined program "PCBA cleaning"	
Wash: 22 minutes; Temperature 60 °C	6.5 kW
1st Rinse: 8 minutes; Temperature 40 °C	
Drying: 20 minutes; Temperature 110 °C	
Total cycle time: 50 minutes	
Water consumption per cycle with partial rinse water exchange (Chemical Stop)	approx. 12–15 L (for 50Hz pump; for 60Hz pump will be higher) (can be adjusted via program configuration)
Maximum authorized load COMBO SHORT	50 kg per basket (incl. basket and clamping)
Maximum authorized load COMBO LONG	100 kg per basket (incl. basket and clamping)

ADJUSTABLE PARAMETERS	
Wash, Rinse and Drying time	Not limited
Cleaning medium temperature	up to 60 °C *
Rinse water temperature	up to 55 °C *
Drying temperature	up to 110 °C *
Number of recipes (programs)	Not limited

* Minimal operating temperature depends on operating environment and other factors.

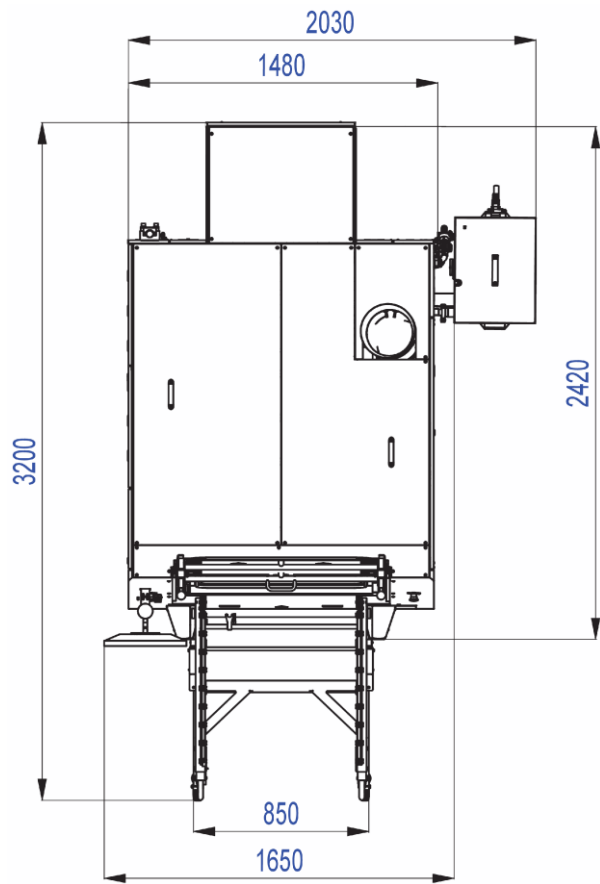
TECHNOLOGICAL PARAMETERS	
Volume of the storage tanks	114 L
COMBO 1 SHORT (50 Hz) Pressure on Nozzles	
Wash	2.2–3.2 bar
1 st Rinse	2.2–3.2 bar
COMBO 1 LONG (50 Hz) Pressure on Nozzles	
Wash	1.8–2.8 bar
1 st Rinse	1.8–2.8 bar
COMBO 2 SHORT (50 Hz) Pressure on Nozzles	
Wash	2.4–3.4 bar
1 st Rinse	2.4–3.4 bar
COMBO 2 LONG (50 Hz) Pressure on Nozzles	
Wash	2.3–3.3 bar
1 st Rinse	2.4–3.4 bar
COMBO 1 SHORT (60 Hz) Pressure on Nozzles	
Wash	3.0–4.0 bar
1 st Rinse	3.1–4.1 bar
COMBO 1 LONG (60 Hz) Pressure on Nozzles	
Wash	2.5–3.5 bar
1 st Rinse	2.6–3.6 bar

CONNECTION	
	Voltage: 3/N/PE AC 400/230 V 50 Hz
	Voltage: 3/N/PE AC 400/230 V 60 Hz
Mains electricity	Protection: 63 A circuit breaker with “B” tripping characteristic
	Connection: H07RN-F 5Gx16 CGSG (5-wires, cross-section 16 mm ² , 63 A); max. 10
	Type: TN-S (L1-L2-L3-N-PE outputs)
Isolation transformer (Needed only for operations with power supply other than 400/230 V)	Power: 32 kW
	Voltage: 400/230 V
	Frequency: 50/60 Hz
	Short-circuit protection: as per transformer manufacturer specifications
	Pressure: 0.5–0.8 MPa
	Class of air quality: 3.4.3 (according to ISO 8573-1)
Compressed air	Air purity class: ISO 8573-1:2010 [3:4:3] (microfilter)
	Connection: ø8 mm SMC hose
	Air consumption: 600 L/hour (machines with oscillation mechanism)
	Pressure: 1–5 bar
Water inlet	Flowrate: max. 30 L/min
	Connection: 1” hose
Wash tank discharge	Connection: 1” hose + control valve
Rinse tank discharge	Connection: 1” hose + control valve
	Capacity: 1,300 m ³ /h
Air exhaust	Under-pressure: 500 Pa (exhaust flap closed), 370 Pa (exhaust flap in operating position 45°)
	Connection: ø225 mm hose

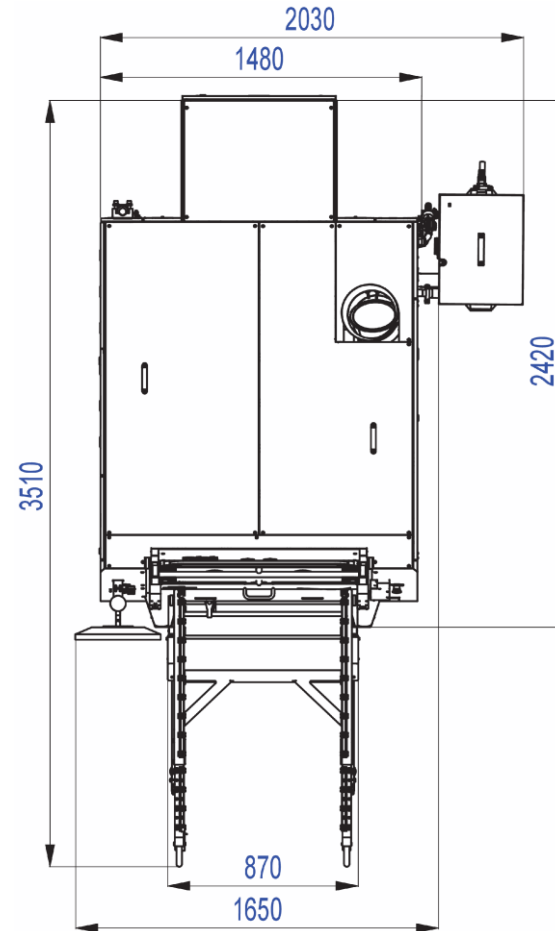
REQUIRED SPACE AND MAINTENANCE AREA	
From the front min. 1,400 mm	Space for machine operation and maintenance (access to tanks with liquids)
From the right min. 700 mm	Access to door for maintenance
From the left min. 1,000 mm	Access area into switchboard (in accordance with IEC 60364-1:2005), main switch
From the rear min. 600 mm	Space for manipulation with filtration carts, machine maintenance (filter cartridges replacement, etc.)
From the above min. 700 mm	Space for opening the door – ceiling height 2,500 mm
PUSHCART DIMENSIONS	
Pushcart SHORT – mechanical docking	837 × 948 × 1,033 (W × L × H)
Pushcart SHORT – pneumatic docking	855 × 968 × 1,033 (W × L × H)
Pushcart LONG – mechanical docking	837 × 1298 × 1,033 (W × L × H)

DIMENSIONS

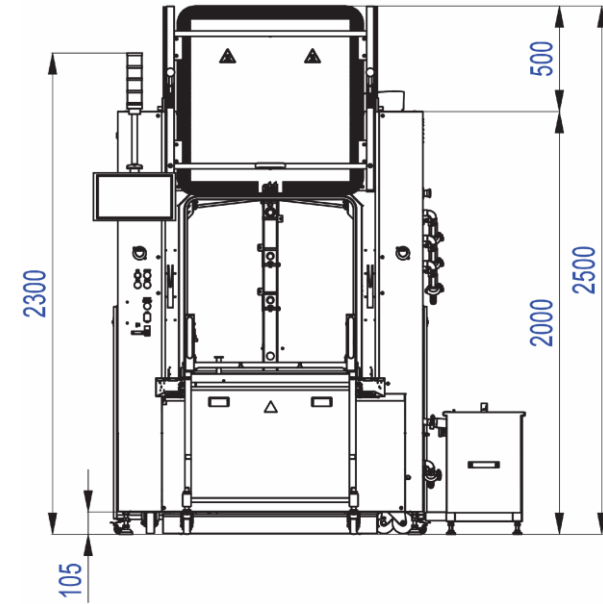
HyperCLEAN II SHORT



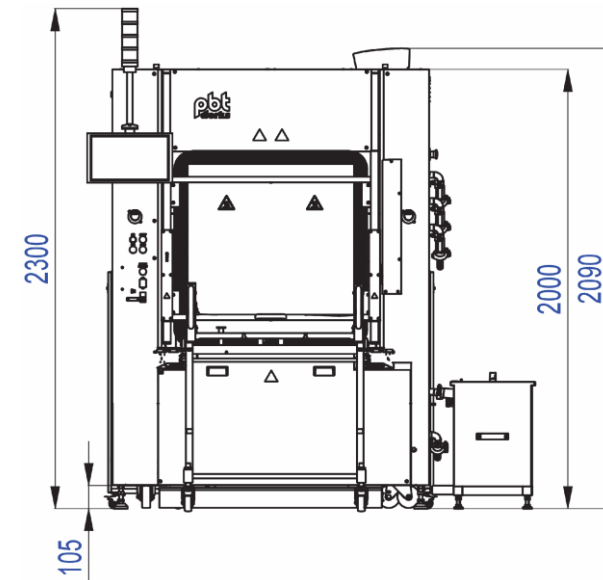
HyperCLEAN II LONG



Open Door



Closed Door



REQUIRED SPACE

