# Stationary high pressure cleaner, type TEHA6000

The innovative solution, oil- and gas heated, an inexpensive alternative for industry and craft enterprises.



# Plug & Spray:

Simply connect with water, electricity, fuel as well as the chimney and the required hot water is at your disposal.

# **Outstanding features:**

- Only proven components are used:
   High pressure pumps by Speck, TEHA boilers manifold proven,
   solid safety and control elements from well-known manufacturers.
- Extremely easy mounting due to optimized console- and stand system allowing wall or ground mounting.
- Design tested oil and gas burner with high degree of efficiency.
- Easy to take-off stainless steel covers.
- Extremely easy to maintain due to good access to all important components.
- Approved for biodiesel (with the according modification )



# **Application areas:**

- General cleaning: vehicle workshops, fuel stations, wash facilities, washing bays, forwarding agencies, airports.
- Hygiene: abattoirs, meat production, milk factories, breweries, fast food industry.
- Availability of hot water in manufacturing plants: i.e. degreasing facilities.

### **Description:**

- All bearing pieces including the base plate are made from stainless steel 1.4301.
- Delivery either with standard equipment, or with several variations on choice.
- **Extremely** easy to maintain due to easy take off stainless steel cover and good access to all important modules.
- The types BR1000 oil, BR1000 Eco Plus and BR1000 gas are used in boilers only.
- Each boiler has its own separate control system and safety device.
- Uncomplicated mounting. The machines are entirely wired and piped.
- Upon fitting the machine, water, chimney and fuel have to be connected to the in- and outlet.

### **Digital thermostat:**

A digital control is available for a surcharge. The PTC sensor responds much faster than the standard capillary tube sensor in a one-step system if the burner switches off, and activates the system again. This is an advantage if high and constant temperatures are required.



Water connection



Speck motor-pump combination



Fixable rolls



Switch box TEHA6000

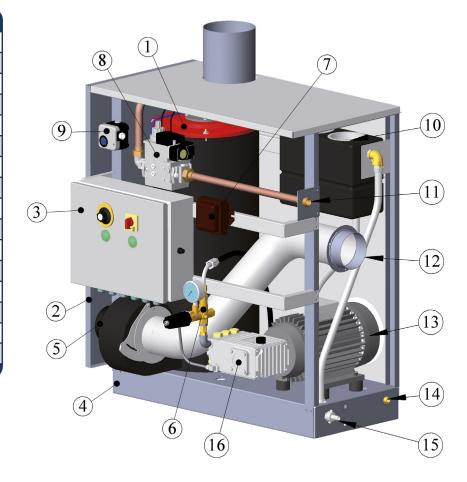
# **Sectioning**

Stationary high pressure cleaner, 110 / 230V, oil- and gas heated, type TEHA6000



Pos.	Description
1	Boiler
2	Outer case (optional)
3	Switch box
4	Bottom plate stainless steel
5	Fan motor
6	UL-valve
7	Ignition transformer
8	Gas valve
9	Pressure switch, air
10	Water tank with float control
11	Gas inlet
12	Outside air intake
13	Pump motor
14	Water outlet
15	Water inlet
16	High pressure pump

Type TEHA6000/1G is shown on the pictures. The oil heated version, type TEHA6000/1 is built up analog, only the oil specific parts have to be exchanged.



# Temperature diagram Stationary hotboxes 100 80 40 40 20 8 10 12 14 16 18 20 22 24 26 (I/min)

# Range of capacity

Type	TEHA6000		
Fuel	Oil	Gas	
Heating capacity [kW]	80	68	
max. volume flow [l/min]**	15	15	
max. water temp. at 15I/min [°C]	86	75	

Reduced quantities of water produce higher temperatures.

# **Functional description:**

# 1. Pressure production

Cold water is supplied from a draining container and compressed by a three piston crankshaft pump to the desired pressure.

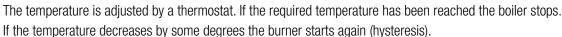
# 2. Heating up the water

The pressurised water is lead by an unloader valve to the boiler, in which it is heated up with oil or gas.

# 3. Pressure and quantity of water adjustment

Pressure and water are adjusted by an unloader valve. Reducing the pressure, the water flow will be reduced equally, and the unnecessary water is bypassed.

# 4. Temperature adjustment





# 5. Safety control

The safety of the machine is guaranteed by the following equipment:

- Excess pressure is released by a safety valve.
- An exhaust gas temperature limiter turns off the system if the temperature is too high.
- The flow switch starts the boiler if the quantity of water is sufficient and stops it if the quantity of water is insufficient.
- The pressure switch starts the boiler by reaching the minimum pressure.
- All safety devices mentioned before are connected in series.
  That means if one of the elements has a malfunction the boiler does not start.
  This guarantees the highest level of safety.

### 6. Pressure switch off

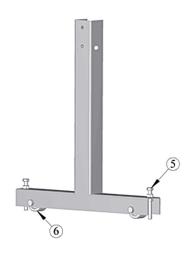
The machine is equipped with a pressure switch which stops the pump if the spray gun is closed. It starts again when it is opened.

# Possibilities of mounting, hotbox type TEHA6000

The installation of the facilities is flexible and extremely easy due to a well thought-out mounting system.

### Floor mounting

Two stands allow the mounting on the floor. Rolls (6) underneath the bracket stands simplify the movement. The height can be adjusted by screws (5) to a complete stop.





# Wall mounting

A telescope bracket allows a direct mounting to the wall. Guide rolls (3) simplify the movement (1) of the arms (2). A locking device screw (4) fixes the telescope arm. Easy maintainance is possible without removing the complete chimney. Wall bracket hotbox



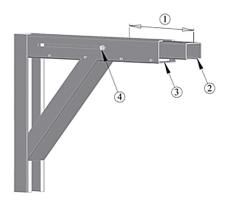


Illustration similar

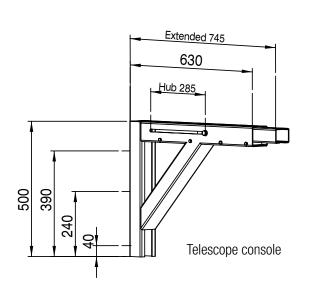


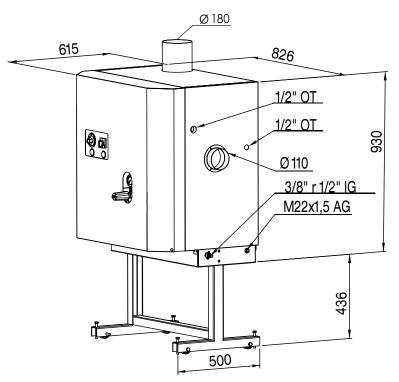
Description / Type	Oil heated - TEHA6000	Gas heated - TEHA6000G
Content, heating coil	4,17 Ltr.	4,17 Ltr.
Nominal width heating coil	3/8"	3/8"
Volume flow [Ltr./min]	15	15
Operating pressure [bar]	30 - 210*	30 - 210*
Allowed operating temperature [°C]	30 - 95	30 - 95
Dimension I x w x h [mm] **	866x615x930	866x615x930
Weight [kg] *	160,00	170,00
Weight of telescope console (pair) [kg]	19,40	19,40
Weight stand [kg]	9,20	9,20
Weight cover [kg]	19,00	19,00
Weight outside air intake [kg]	5,00	5,00
Tube lenght of heating coil [m]	32,00	32,00
Tube Ø of the heating coil [mm]	21,4	21,4
Operating voltage/ Frequency [V/Hz]	380V / 50Hz	380V / 50Hz
Capacity [A]	12	12
Standard motor power	5 KW	5 KW
Standard high pressure pump	Speck NP16/15	Speck NP16/15
Pressure of fuel	Oil pressure 10 bar	Gas pressure 20 - 100 mbar
Fuel consumption at max. efficiency	Heating oil EL = 6,92 - 9,15 l/h with 1,75 oil-nozzle	Natural gas H = 6-7 m³/h , Naturla gas L = 7-10 m³/h , Propane/Butane (liquid) = 2-3 kg/h
Heating capacity [kW]	Heating oil 80	Natural gas 70 Liquefied gas 55
Efficiency Combustion [%]	>=90	>=90
Max. exhaust gas temperature [°C]	190	210
Exhaust gas loss [%]	<=10	<=10
Soot value according to Bacherrach	0-1	0-1

\*We recommend 160 bar with the used motor under continuous operation. Otherwise you have to use an alternative.

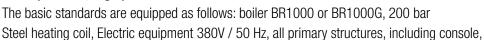
\*\*Dimensions and weights without mounting elements.

# **Dimensions**





### Gross price list, High pressure cleaner TEHA6000 380V / 50Hz





are made from stainless steel 1.4301, temperature controlling by a hydraulic thermostat, 8Ltr. draining container, pipes of galvanized steel, flow switch, pressure switch and safety valve made of brass, screws and fittings made of galvanized steel, Speck high pressure pump 15 l/min, 200 bar, direct flanged with 5 kW- motor, chimney adapter diameter 180mm.

Variations are added with "M- or V-product codes" i.e. V10480003 + M10470001 + V1043002101

Version/	TEHA6000 - Oil	TEHA6000G - Gas
Variety	Item number	Item number
High pressure cleaner, type TEHA6000, basic version	V10480003	V10480001-1
Mounting accessories		
Stand (pair)	B10470008	B10470008
Teleskope console (pair)	B10470005	B10470005
Stainless steel complete cover	B10480001	B10480001
Air intake	B10480002	B10480002
Additional and supplementary equipment		
Remote control box with 2 switches, COLD/WARM, CHEMICALS: ON/OFF and interference button: burner interf. suppressor	V1043002101	V1043002101
Heating coils made from stainless steel 1.4301	On request	On request
Inner-and outer boiler casing made from 1.4301	M10470001	M10470001-1
Suction of chemicals by vaccum pump with 40 I container and manual metering valve	V10480004	V10480004
Chemical suction as above, with electric magnetic valve	V1048000401	V1048000401
High pressure pistol Starlett II, 250 bar, 95°C	E10700116-1	E10700116-1
High pressure pistol, ST-2300, 310 bar, 150°C	E10700116	E10700116
Lance with insulating straight steel galv., 1000 mm	E10700117	E10700117
Lance w. insulating handle straight 1.4301, 1000 mm	E10400698	E10400698
Nozzle protection with support, 1/4" IG both sides	E10700118-2	E10700118-2
Flat nozzle 25/20, ¼" AG,stainless steel	E10400591	E10400591
Tuningset	B10400320	
Biodiesel version (oil pre-heater)	B10400326-1	X
Digital thermostat + PTC sensor	MP10400972-2	MP10400972-2

NOT included in the standard version: mounting element (telescope console or stand) cover, additional equipment (tube, pistol, lance, nozzle etc.). High pressure hose with pressed screwing, different length possible, please contact us.

All prices are ex works, + vat (value added tax), packaging not included

# List of materials of safety elements

Material HZ	Steel		Stainless steel	
Operating press. [bar]	300	500	300	500
Flow control	Brass	Stainless steel	Brass	Stainless steel
Pressure switch	Brass	Stainless steel	Brass	Stainless steel
Safety valve	Brass	Brass	Brass	Brass
Tubes	Steel galvanised	Steel galvanised	Steel galvanised	Steel galvanised
Fittings	Steel galvanised	Steel galvanised	Steel galvanised	Steel galvanised