

STEAM PLANT





Steam Plant - Technical data

Body material

Stainless steel AISI 304 (BA)

Boiler material

Stainless steel AISI 304

(with interchangeable heating element)

Rated Voltage

440 V

Current type

60 Hz 3~

Rated Power Boiler

33,6 kW

Rated Power vacuum

3,6 kW

Max Rated Power

37,8 kW

Rated Steam Pressure

600 KPa - 6 bar

Permissible Steam Pressure

1200 KPa - 12 bar

Max. Steam Rated Flow

905 g/min - 54,6 Kg/h

Max temperature

165° C

Max. inlet water pressure

600 KPa - 6 bar

Min. inlet water pressure

50 KPa - 0,5 bar

Kickback forces

<20 N

Vibration hand-arm

<2,5 m/s²

Sound pressure level L_{Pa}

98,7 dB

Sound power level L_{wa}

111,4 dB

Mass

266 Kg





The causes which push factories to purchase steam belt cleaners are:

- It is an ecologic cleaning method which permits to reduce or even eliminate the usage of chemical products. This feature is very important especially in food industries.
- It is a cleaning method which substitutes the job that was previously performed using the manual labour which was resulting to be very slow and expensive in terms both of manpower itself and of production stop time.
- It is a cleaning method which resolves the problem of those industries where the high cost of manual cleaning was being compensated with the periodical replacement of the belt itself, purchasing a new one.
- It is a cleaning method which permits not to stop ever the belt and therefore not to lose in production capacity.
- It is a cleaning method which resolves technical problems of machineries, which, because of the dirt on the belt, were creating high quantitative of production discards.





Fig. 1



Fig. 2

Fig. 3

Steam Plant Functions

- ◆ Automatic mains water feeding (fig.1)
- ◆ Integrated pressure reducer
- ◆ Integrated water treatment filter with cationic resins (water softener) (fig.2)
- ◆ Completely automated system for the vacuumed liquid discharge (fig.3) (the discharge is executed automatically by a special pump and by an electrically commanded valve)
- ◆ Automatic cleaning of the vacuumed liquid container
- ◆ Automatic boiler maintenance (once the maintenance interval expires, the system automatically discharges and refills the boiler in order to clean it)

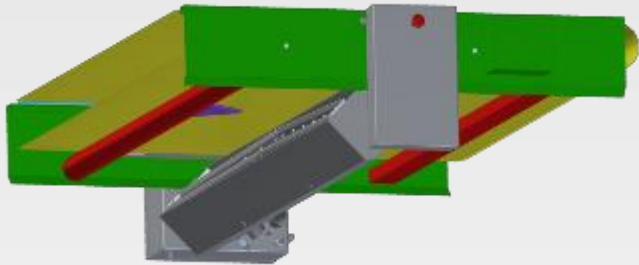
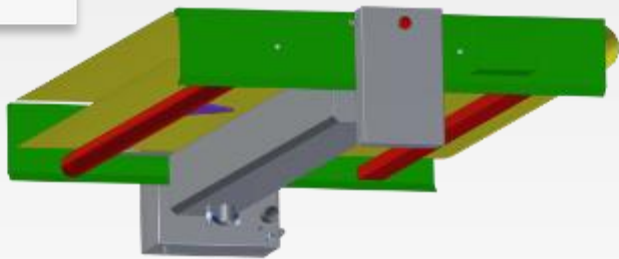


Fig. 4



Steam Plant Functions

- ◆ Automatic positioning and opening of the belt cleaning system (the system goes into working position with «cleaning start» activated and returns into open position once the set cleaning time expires) – fig.4
- ◆ Automatic cooling system for the vacuumed steam/liquid (such system permits to avoid the steam re-circulation through the vacuum turbine) – fig.5
- ◆ Anodizing treatment of the vacuum turbine for its protection against corrosion – fig.6
- ◆ Automatic stop function for “arrested belt” (in case the cleaned conveyor belt is arrested, Steam Plant automatically interrupts the cleaning phase).



Fig. 5



Fig. 6

ALIME



Fig.
7

Steam Plant Functions

- ◆ Status signals on the light/acoustic indicator (fig.7):

 ok

 phase of automatic maintenance

 breakdown

- ◆ 7" touchscreen panel as machine/operator interface (fig.9)

- ◆ Simplified menu to start the cleaning, two buttons only

- ◆ “Start and Stop”.

- ◆ Cleaning time setting (fig.8)

- ◆ Failure diagnosis

- ◆ Multilingual menu



Fig.
8

Fig.
9

Electrical connection

- Keep the devices OFF, connect the motor power supply cables and the steam hose to the respective connectors on the steam generator (refer to the figures 1 and 2)





Connection of the vacuum

- Connect the two edges of the vacuum hose to the appropriate couplings on the belt cleaning head and on the steam generator





Connection of the steam hose and of the cooling liquid (water)



Steam hose



Water hose (belt cleaning head)



Water hose (steam generator)

Connection of the water mains and of the discharge hose

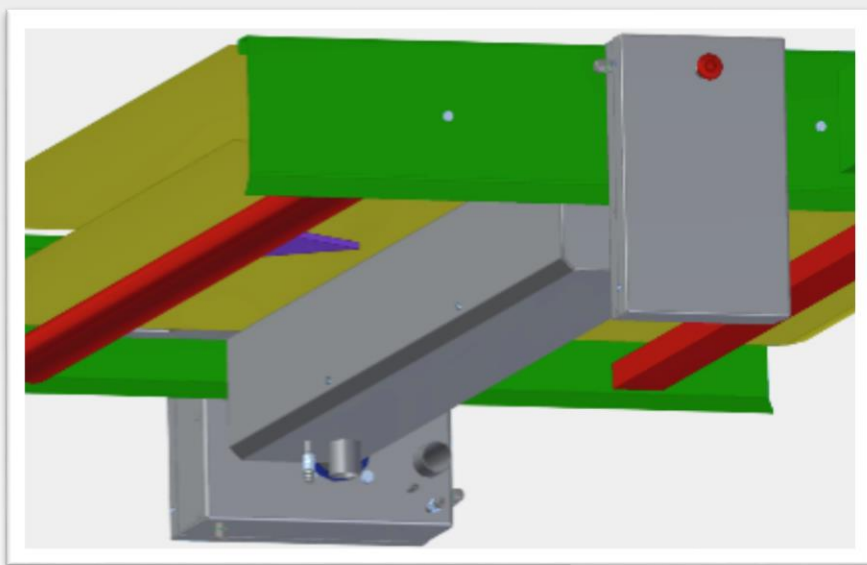
- Connect the two edges of the vacuum hose to the appropriate couplings on the belt cleaning head and on the steam steam generator



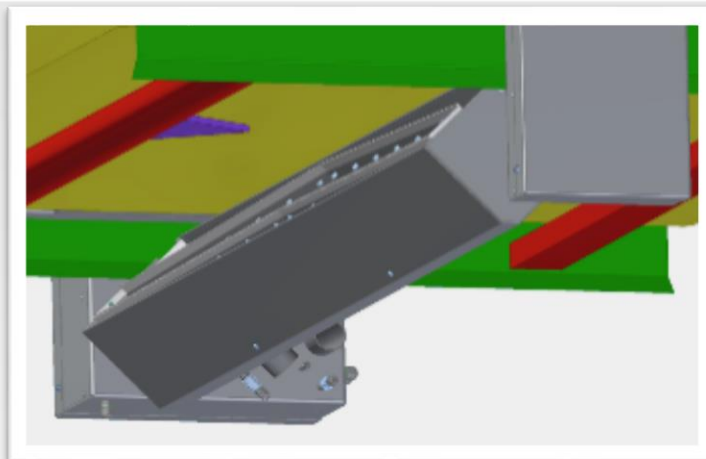


Use the touchscreen display in order to set the opening and the closing of the belt cleaning head

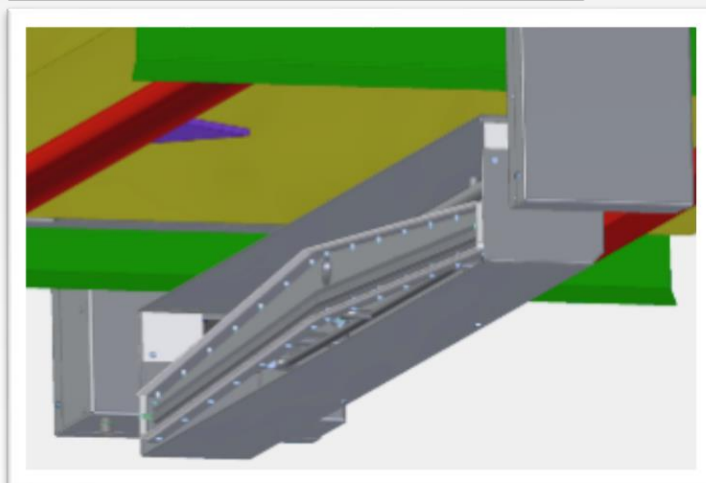




CLOSED position



SEMI-OPEN position



OPEN position

Use the touchscreen display in order to set the working cycle duration

