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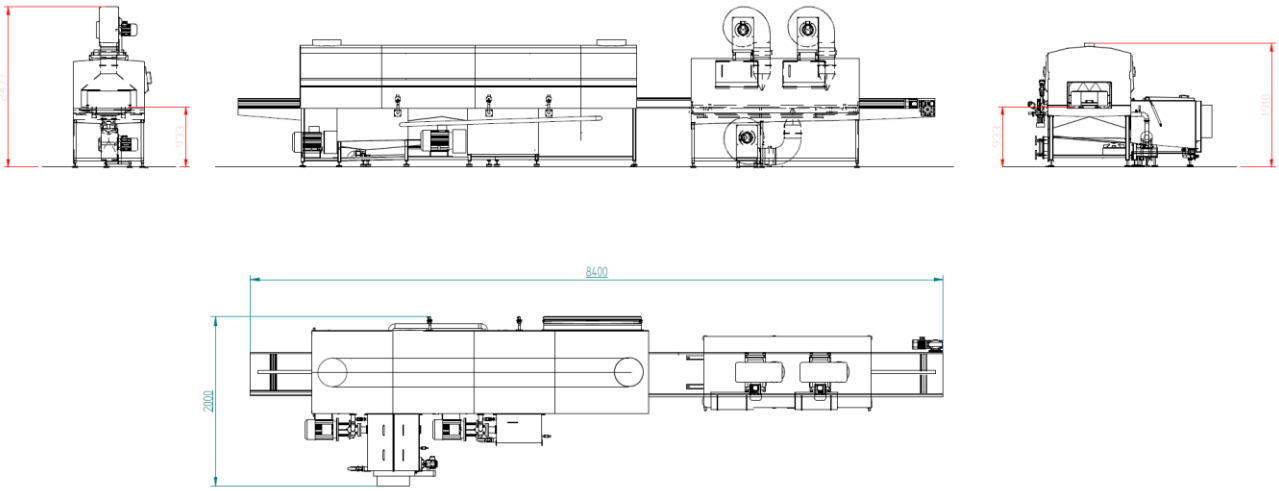
Tuesday, May 3, 2022

Quotation No. 202206-01 – EBW600

According to your “Technicka specifikace”, we are pleased to send you our offer on a washing line, according to your specifications.

The washing line consists of Washing machine and Drying tunnel.



Drawing no. 202206-001 - Washing line measurement will be adjusted according to your requirement.

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Commercial part:

Washing machine type EBW600	€	111.300,00
Blowing unit	€	64.000,00
Delivery, Travel and lodging, installation, training and commission	€	9.700,00
Total system price	€	185.000,00

Optional equipment for washing unit.

1.	Insulation for heat and noise for standard washing machine	€	incl.
2.	Steam heater	€	incl.
3.	Dosing Pump for automatic adding of 1-part liquid detergent adjustable	€	incl.
4.	Mechanical suction device for removal of steam and vapour with 2 kW polypropylene ventilator and 7-meter tube	€	incl.
5	1 pcs. Extra HMI panel	€	1.750,00
6.	Light tower and Internet connection	€	incl.
7.	Recycle Disinfection section with pump and nozzle spaying system for chemicals	€	incl.
8.	2 days travel, 3 days of supervising including: checking installation, training and commissioning	€	incl.
9.	Extra day of supervising for checking installation, training or commissioning	€	650,00
10.	Delivery	€	incl.
11.	Travel and lodging	€	incl.
12.	Spare part packed basic	€	by expenses

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Sales- and Supply Conditions

Prices:	Prices do not include VAT and Duty.
Time of delivery:	120 working days from receipt of order, confirmed layout, pre-payment and samples, subject to confirmation.
Terms of delivery:	DAP, inside CZ
Terms of payment:	40 % net at the order. 40 % 1 weeks before delivery. 20 % at handover before startup production.
Guarantee:	Echberg Manutech guarantees from handover up to 1 years, or up to 2,000 operating hours, whichever comes first. Commonly wear and damage caused by deficient maintenance or improper use are not covered by the warranty. Instructions in the supplied manual must always be observed and followed. Echberg Manutech is providing a spare part package that is separately invoiced, and after completing the warranty period Echberg Manutech replaces all parts which are covered by the warranty, VAT and tax not included. The size of the extended spare part package is normally between 2,5-7,5% of the total price, depending on the customer requirements. In the event of a claim working hours are free, and travel costs, accommodation and travelling time are chargeable.
Other terms:	All requirements for the offered equipment and its function must be recorded in writing of the final contract. Customer is invited for FAT 1 week before shipment, where all requirement for the offered equipment and its function will be approved and recorded in writing. All capacities are nominal speed, normal production efficiency is PE 70-95%, depending on quality of items to be handled/washed, and the contamination to items being fresh to give best washing result. SAT will be a 4 hours production day with trained operator or Echberg engineer, with uniformed and fresh items. Stops for adjustment or others, outside of normal planed brake doing production day, will count as part of production time. Test have to be repeated if capacity not reached. Annual maintenance for this type of washing machine is about 2-5 % in wear parts plus labour. We can offer a service agreement, where service can be done on annual basis. All information and other specifications in this offer are confidential and may not be disclosed or otherwise communicated in whole or in part to any third party by the buyer. Where nothing else is mentioned, this contract will follow ORGALIME SI 14.

Offer validity:	4 weeks from offer date.

Should you need further information, please do not hesitate to contact me.
We look forward to receiving your order which will make our utmost attention.

Yours sincerely

Echberg Manutech

Bjarne Echberg

General description:
All equipment and components are generally manufactured in stainless or non-corrosive materials unless stated otherwise. Stainless steel to be the quality AISI 304.

All equipment to be function tested prior to dispatch from our works.

Where nothing else is mentioned, all equipment will be in accordance with the “EC Declaration of Conformity for Machinery”.

All documentation will be written in English. Two (2) sets of documentation will be supplied, one soft and one hard copy. Documentation will include general drawings and a spare parts list.

Overall conditions:

- The working pressure to be minimum 6 bar at any time and the compressed air to be in sufficient volume (not specified air consumption will be advised on request).
- Any machine to be supplied separately with electrical power – 3x400 VAC +0 +PE, 50 Hz (Size of fuse will be advised on request).
- Supply with electrical power, compressed air and other types of power at interface of the machinery is the responsibility of the customer.
- All cleaning to be done with clean fresh water at normal pressure (below 4 bar).
- Unloading and transport into washing room must be done before Echberg Manutech engineers arrive on site.
- All utilities shown on connections drawing must be available at machine side before start of installation.

Machine description:

Baskets are manually loaded to the washing machine with pre-wash, main wash, after rinse, disinfection and drying tunnel. – The blow dry baskets are manually removed from washing line after washing process.

Basket dimension:
Baskets Type E1: 600 x 400 x 125
Baskets Type E2: 800 x 600 x 200

Capacity: 600 baskets per hour

Washing machine for baskets:

General:
Empty baskets are loaded upside down into the washing machine and cleaned, blow dried baskets are removed manually from the outlet conveyor.

Prewash:
Prewash with cold water at approx. 20-30°C (surrounding temperature), which is recirculating by a pump with a capacity to give washing water pressure at 3,5 bar.

The pump is mounted on the pre-washing tank, which contains the washing water. The tank is provided with combined overflow pipe/bottom drainer.

The recirculated water is filtered through a special tri-bar drum filter, with automatic removal of bigger parts from the baskets.

The suction pipes of the pump are provided with stainless steel strainers.

One stainless steel glycerine-filled manometer is mounted on the pressure pipes of the pump and a thermometer is mounted on the washing tank.

The washing water is flushed over the basket through number af nozzles. The V-jet nozzles are connected to the stainless steel nozzles pipes with unions, so that the individual nozzles can be independently adjusted and the optimum dispersion obtained.

The individual nozzle pipes are connected to the main pipes with special couplings, so that the nozzle pipes can be easily removed through an easily removable inspection shutter.

Main wash:
Main wash with heated water at 45-60°C (depending on soap type), which is recirculated by 15kW pump with a capacity to give washing water at a pressure at 13 bar.

The pump is mounted on the main washing tank, which contains the washing water. The tank is provided with combined overflow pipe/bottom drainer.

The recirculated water is filtered through normal filter, which are to be cleaned manually and with easily accessible space for removing garbage during running.

The suction pipes of the pump are provided with stainless steel strainers.

One stainless steel glycerine-filled manometer is mounted on the pressure pipes of the pump and a thermometer is mounted on the washing tank.

The washing water is flushed over the basket through nozzles. The V-jet nozzles are connected to the stainless steel nozzles pipes with unions, so that the individual nozzles can be independently adjusted and the optimum dispersion obtained.

The individual nozzle pipes are connected to the main pipes with special couplings, so that the nozzle pipes can be removed through easily removable inspection shutters.

The washing water is heated by steam heating units. Heat temperature controller, range 5-65°C, automatic water level control with level switches and a solenoid valve, and level switches for protection against un-primed running.

Detergent dispenser unit for automatic dosing of fluid one-part detergent, incl. sensor, pump and lance are mounted on the washing machine.

In the standard execution the washing machine will be delivered with a complete connection for heating system and the cabin will be with heat insulation. Washing tank and the upper cabin is insulated, so that most part of the surface will keep a temperature below 30°C. At certain points, i.e. assembling, the temperature will exceed 30°C. Insulation of washing tank in the main washing section is made with 50 mm mineral fibre. The insulation is placed between double 2 mm walls, which are fully welded. Choice of insulation also means reducing the energy consumption.

The noise level of the standard model is approx. 86 dB(A). Noise level measurement is taken from a distance of 1 m from the machine, at a level of 1.5 m above the floor and with a reverberation time of 1.3 sec.

Note: The washing machine will be delivered in one piece. Please examine access to the washing room before order.

Rinse sections:
After rinse with adjustable clean cold tap water through nozzles. The V-jet nozzles are mounted on stainless steel nozzle pipes with unions, so that the individual nozzles can be independently adjusted

and the optimum dispersion obtained. The rinse water can run to the main water tank as water supply, water saving for supply water.

The nozzle pipes are connected to main pipe with special couplings, so that the nozzle pipes can be easily removed through easily removable inspection shutters.

A solenoid valve is placed on the inlet pipe to the rinse nozzles. The switchboard is designed to ensure that pumps is running, and rinse water is applied only during the running of the transport chain (water saving).

Drying tunnel:
After washing, boxes are transported through the blowing tunnel where most of the water is removed by air knifes. Next boxes are entering into the insulated drying section, where air heated by electric heating elements on both side of the drying section, is blown around the boxes to deliver them only with a thin layer of residual water on boxes at the output of the machine.

Drying tunnel is equipped with steam heat exchanger on outgoing blower, and cabinet is insulated with double stainless-steel construction. In drying section is 3 pcs. stainless steel blower of 5,5 kW installed.

Installation:
Our quotation includes supervision/commissioning for 3 days by one person.

Before arrival of one Echberg Manutech field engineer, machine is expected to be in place on site and all utilities connected.

The commissioning is expected to be done within 3 working days, working at least 10 hours per day.

The training of the maintenance people and the operators will be done by the supervisor during the commissioning.

Exclusions:

We have not included for

- Any civil works.
- Installation or connection of power, compressed air or other energy sources.
- Any special lifting equipment.
- Anything not specifically included in the above.

Other extra equipment:
The system is equipped with functions and components that will ensure high functionality and reliability. Following is a list of equipment/ components that we earlier have supplied with likewise systems. It will therefore be possible on a later stage to expand the system with one or more of the following options:

Extra operator panel on strategic places; Light tower in different colours to indicate operation status; Modem connection for external control; Light curtain for easier access to the machine; Truck fence to protect the system; Mechanical exhaust of vapour and steam; Connection of drain to main drain; Insulation of cabin in the main washing section means reducing the energy consumption by approx. 40%; Insulation of all cabin soundproofing; Screen enclosure of motor and sensor; High hygienic design of welding and rounded corners; Build in CIP systems; Heat exchanger for indirect heating; Detergent dispenser unit for automatic dosing of fluid one-part detergent; The impurities are being transported through the filter and sorted out at the end of the filter. Drum filter for self cleaning; Frequency control for speed control of conveyor.