



Add-on products catalog 2019-4

AABO  IDEAL



LIST OF LEAFLETS

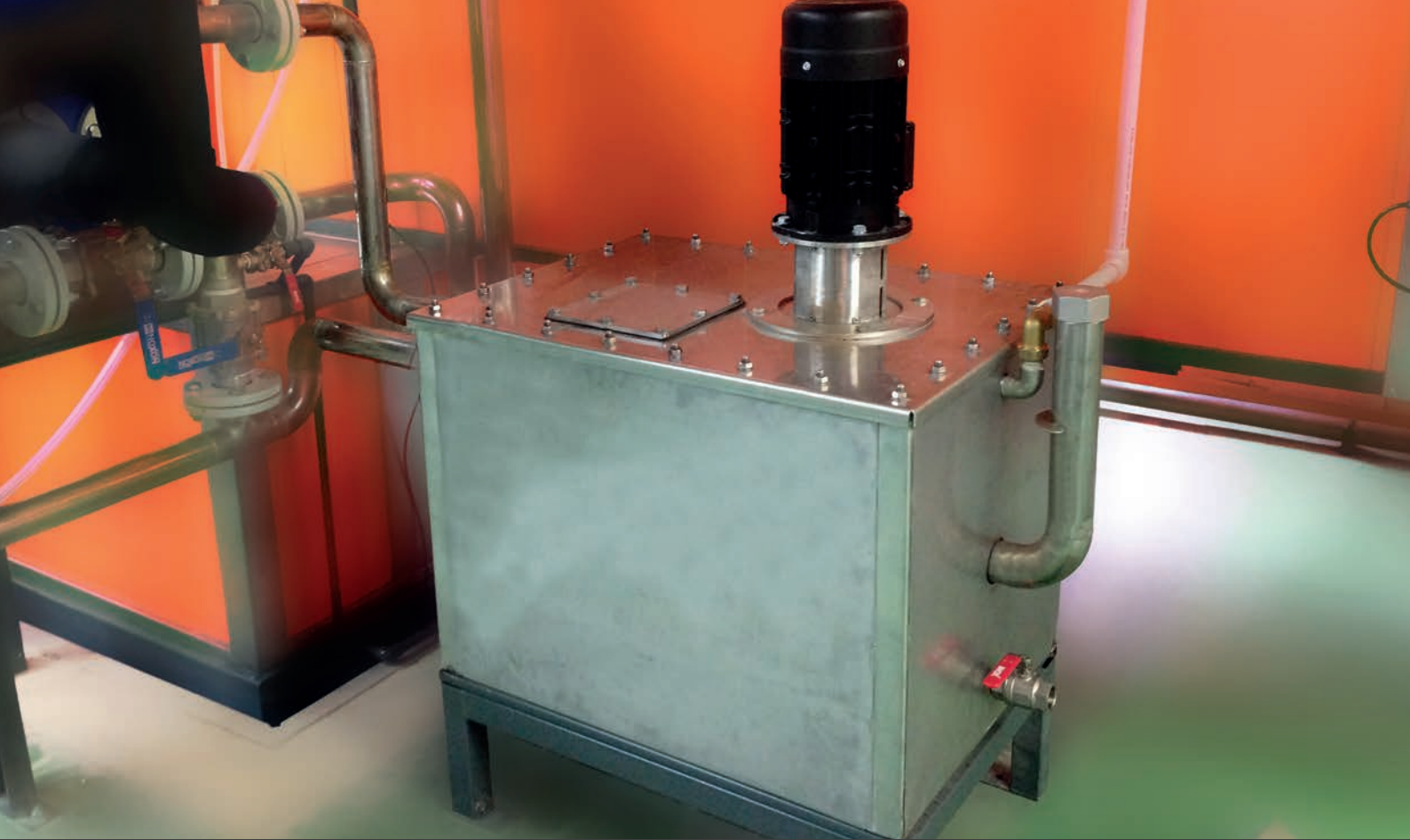
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TOPIC:

LEAFLET NO.:

Acid Rinse.....	1
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Acid rinse

Maintaining the pipes and plate heat exchanger

To avoid downtime during cleaning of the pipes, our acid rinse will be installed as a part of the line.

The acid rinse cleans the pipes from the pretreatment and therefore prevents unplanned downtime because of blocked pipes.

If your production is based on zink treatment and therefore is unable to shut down, it will be necessary with two acid rinses.



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Simple to operate

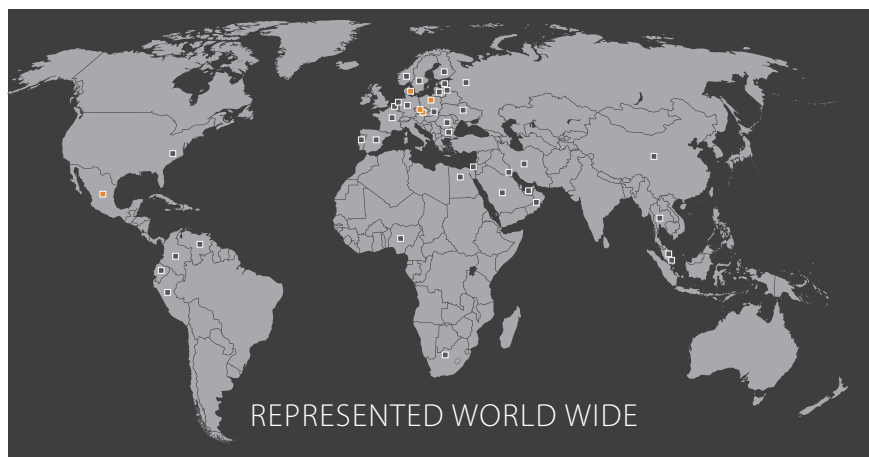
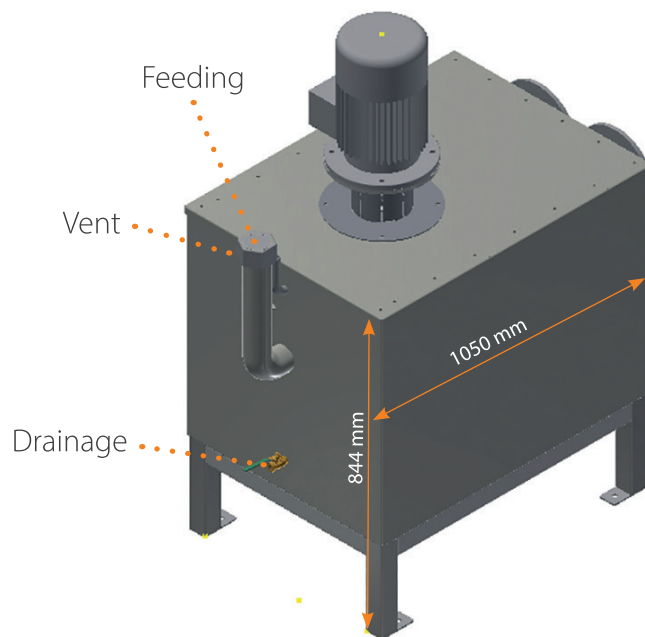
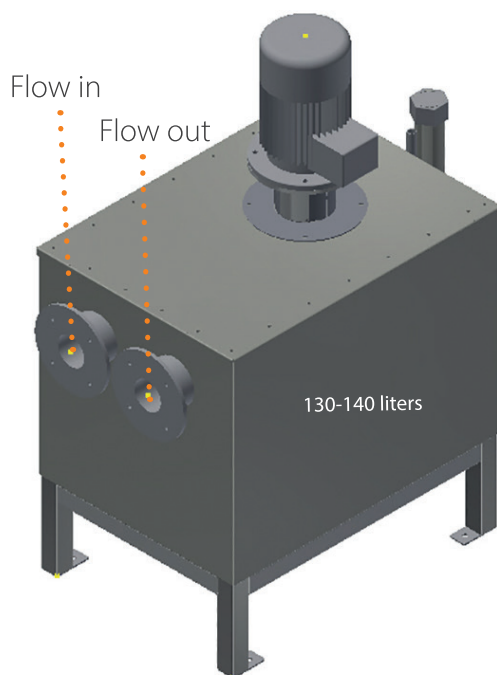
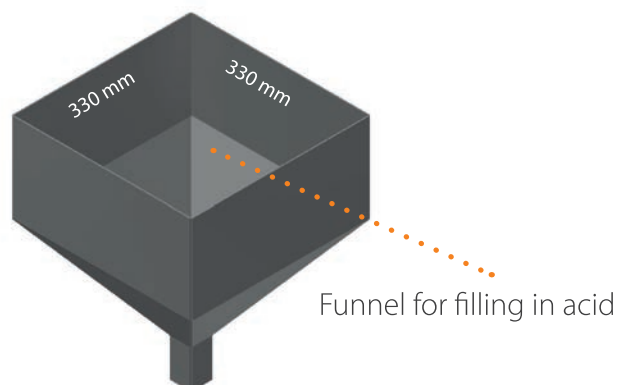
Keeping the system clean and effective

Avoiding unplanned down time

Longer intervals between disassembling
the heat exchanger

Easy retrofitting

CONSTRUCTION:



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Air curtain

Reducing loss of heat

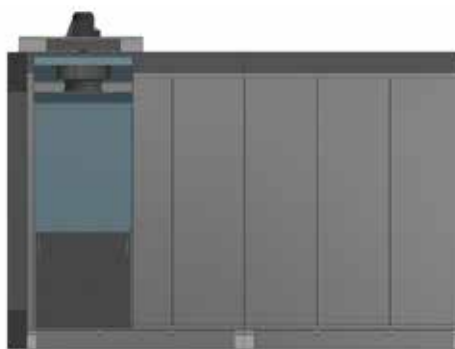
The function of the air curtains is to take the warm air, which due to temperature difference tries to escape at the top of the exits from the oven.

The warm air is reintroduced to the oven in the sides of the exits via a perforated plate.

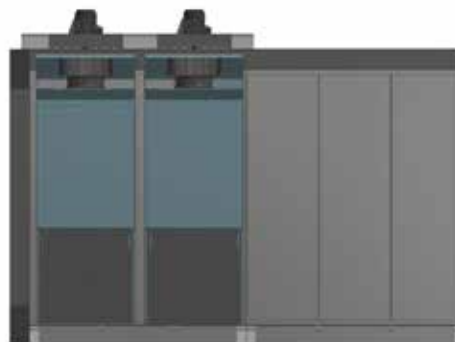
This limits the amount of cold air, which due to the temperature difference is trying to enter the oven at the bottom.

The loss of warm air is considerable, which is a very good reason for installing air curtains in your oven.

DRYING OVEN - 1 air curtain:



CURING OVEN - 2 air curtains:



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Recirculation

By installing the air curtains, the recirculated air is doubled reaching 5-6000 m³/hour per air curtain.

Easy cleaning

The perforated entry plate is removable, which makes the cleaning much easier. Keeping the plates clean is extremely important as limited airflow will make the loss of heat bigger.

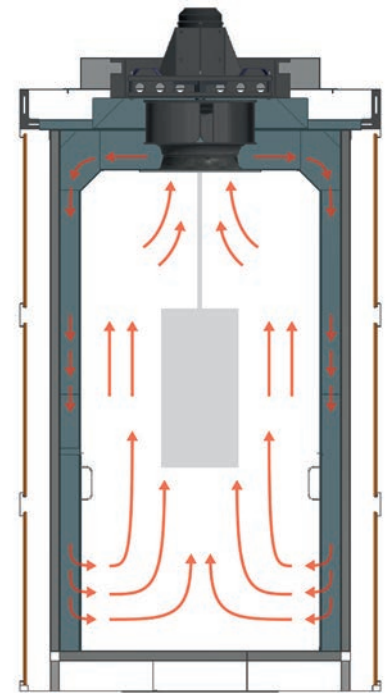
Baffle plates

If baffle plates are not already introduced to the oven, it will be a big advantage to install 3 sets per air curtain to reduce the airflow further.

The baffle plates are mainly introduced in the top of the oven.

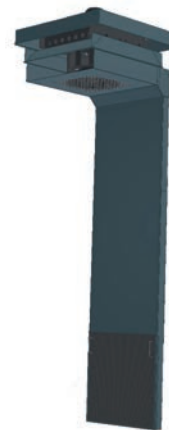
Baffle plates minimizes the opening of the air curtain to the space needed for the work piece to pass with the hanger.

CONSTRUCTION:



ENTRY PLATE:

Lower area of air curtain with removable perforated entry plate for easy cleaning.



Finacial advantage

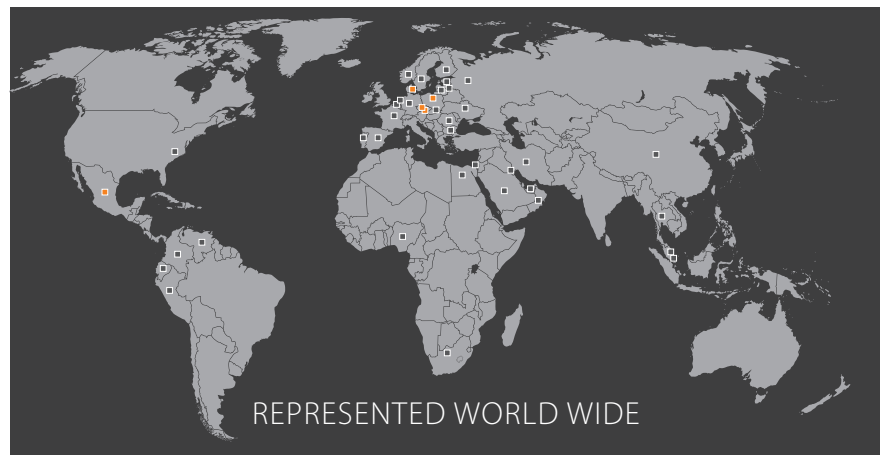
Easy cleaning

Reducing energy loss

Reducing noise

Recirculating air

Securing optimal function



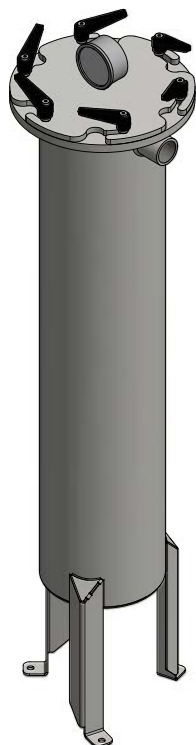


Bag filter

Bag filter in functional industrial design

- Larger active filter area
- Higher capacity
- Longer intervals between changing the filter bags

All in stainless steel 1.4404 (316 L).



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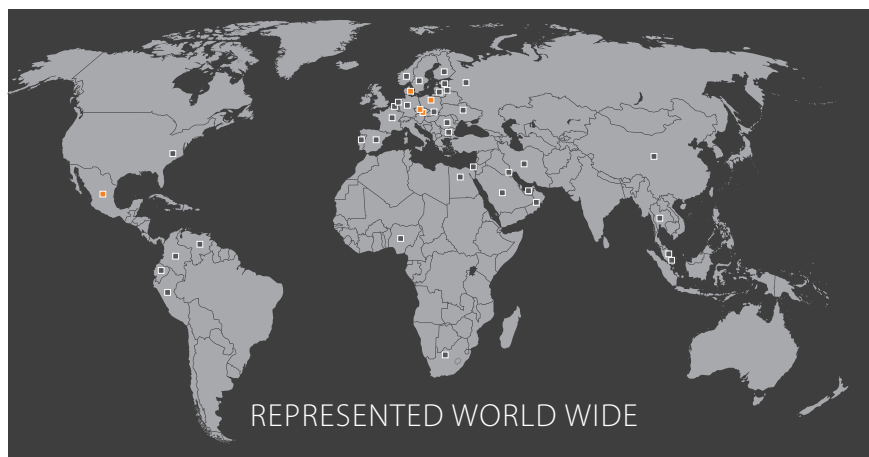
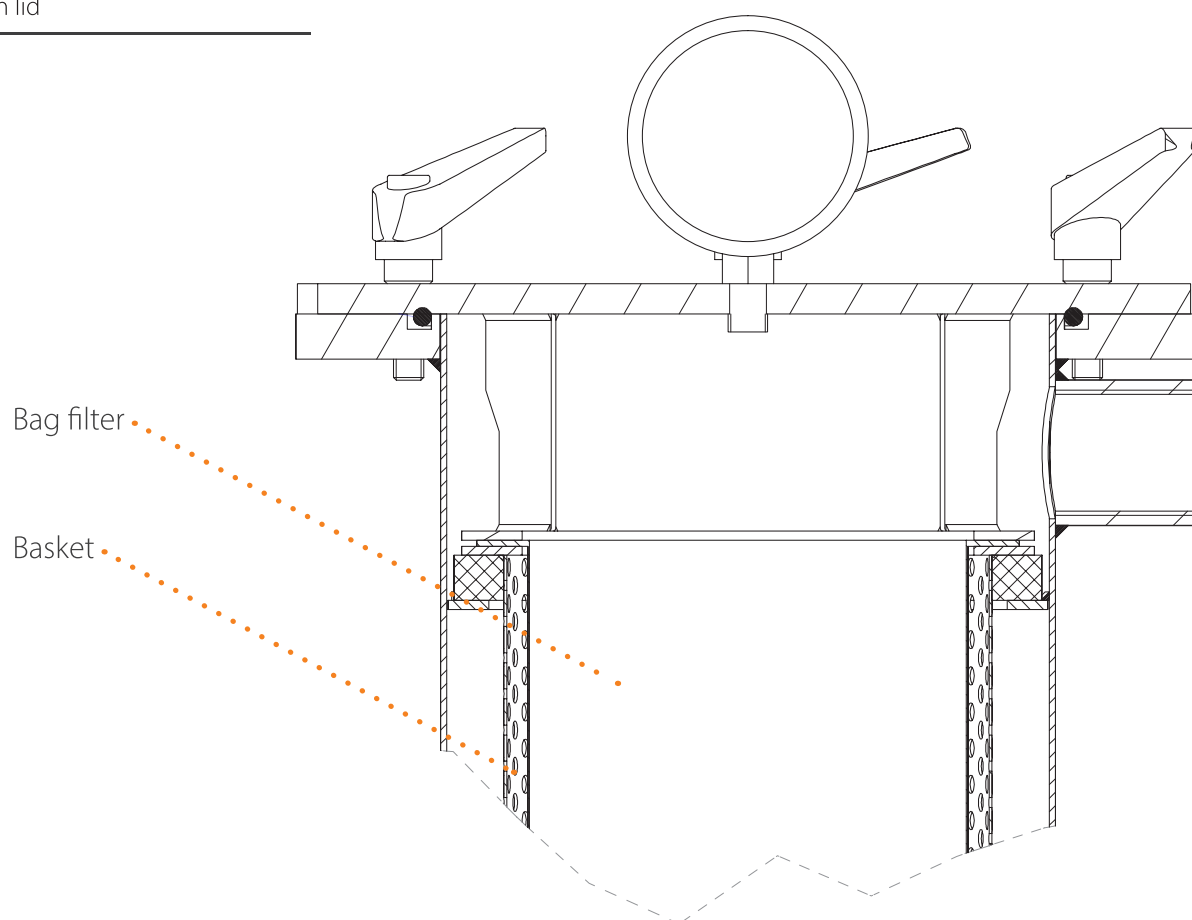
Outlet in the bottom

Easy to empty

Pressure measurement on top

Easy to open lid

CONSTRUCTION:





Cooling fans

Cooling and recirculation of air

Cooling of the products or items before application is essential. Too high a temperature when painting, will create problems in controlling the layer thickness. The final quality of the paint can be affected, visually as well as functionally.

The internal environment of a cooling zone is a benefit. During winter it might be nice to get free heat from the products, but in the summer you want the heat taken out of the room.

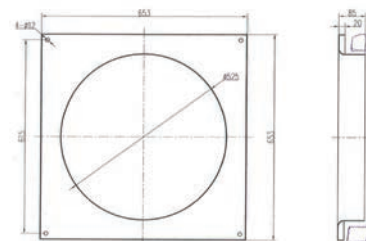
Our cooling fans therefore very often comes in a version enabling you to decide either to return the circulated air to the room, or to let it out of the building.



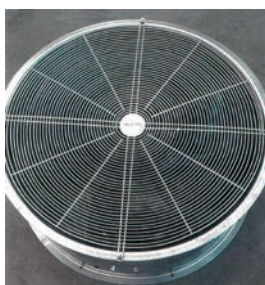
YWF 6D710



YWF 4D500



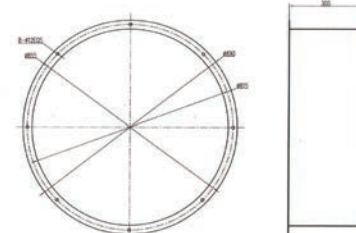
YWF 6D710



YWF 6D800



YWF 6D630



YWF 6D800

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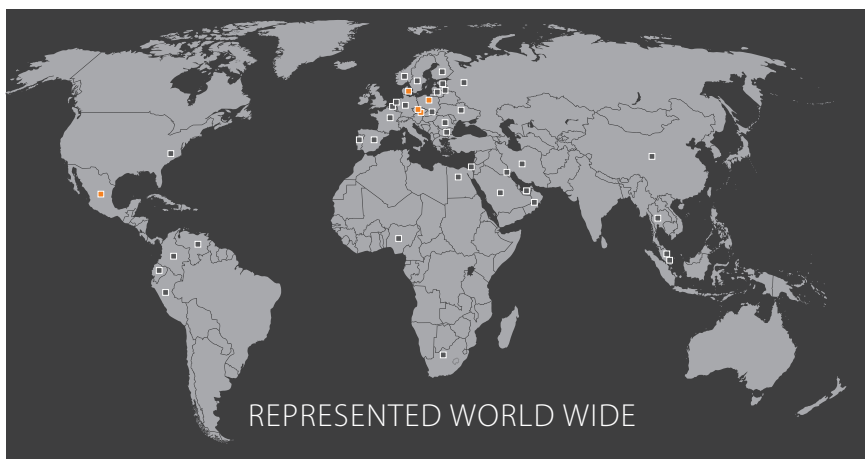
TECHNICAL INFORMATION:

TYPE	VOLTAGE (V)	FREQ. (Hz)	CURRENT (A)	INPUT PWR. (W)	SPEED (r/min)	WEIGHT (Kg)	NOISE (dBA)	AIRFLOW (m^3/h)	CURVE
YWF 4E630	220	50	3.70	800	1340	15.4	78	10850	1
YWF 4D630	380	50	1.60	850	1360	15.4	78	12260	2
YWF 5E630	220	50	2.50	520	900	15.4	72	8900	3
YWF 5D630	380	50	1.40	500	900	15.4	72	8900	4

TYPE	VOLTAGE (V)	FREQ. (Hz)	CURRENT (A)	INPUT PWR. (W)	SPEED (r/min)	WEIGHT (Kg)	NOISE (dBA)	AIRFLOW (m^3/h)	CURVE
YWF 6D710	380- Δ	50	2.45	1150	915	25.0	80	16080	1
	380-Y	50	1.65	850	680	25.0	75	13200	2

TYPE	VOLTAGE (V)	FREQ. (Hz)	CURRENT (A)	INPUT PWR. (W)	SPEED (r/min)	WEIGHT (Kg)	NOISE (dBA)	AIRFLOW (m^3/h)	CURVE
YWF 4E500	220	50	2.0	420	1350	10.0	72	6420	1
YWF 4D500	380	50	0.85	420	1370	10.0	72	6560	2
YWF 6E500	220	50	1.10	220	920	10.0	68	4850	3
YWF 6D500	380	50	0.62	220	920	10.0	68	4850	4

TYPE	VOLTAGE (V)	FREQ. (Hz)	CURRENT (A)	INPUT PWR. (W)	SPEED (r/min)	WEIGHT (Kg)	NOISE (dBA)	AIRFLOW (m^3/h)	CURVE
YWF 6D800	380- Δ	50	3.5	1790	890	35.0	82	20035	1
	380-Y	50	2.23	1230	680	35.0	82	16080	2





DEMI water

Demineralization

In the demineralisation plant, the salts in the raw water are dissolved and reduced to an acceptable level.

The unit consists of one cylinder with a strong acid cat ion resin followed by a cylinder with a strong alkaline anion resin. These resin beds are regenerated with hydrochloric acid and sodium hydroxide, respectively.

When passing through the cylinders, the dissolved salts in the water are exchanged with hydrogen and hydroxide, forming water. When the unit is exhausted, it is regenerated with hydrochloric acid and sodium hydroxide.

Regeneration

The programmed regeneration is initiated and consists in both cylinders of the following cycles: Backwash, draw of acid or sodium hydroxide and rinse.

The regeneration programme can be adapted individually proportional to the quality of the raw water and the working conditions of the plant.

Acid and sodium hydroxide are drawn from the delivered storage tanks of polyethylene. The acid and alkaline drain water from the plant are optionally led to a neutralisation plan.

Duration of a regeneration is approx. 2 hours.



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The rinse water is demineralized water. In order to keep the water consumption to a minimum, the water is recirculated over ion exchange demineralizers.

To obtain longevity of the mediums, the below max. concentrations in the raw water must not be exceeded:

Fe = 0.2 mg/l

Cl = 250 mg/l

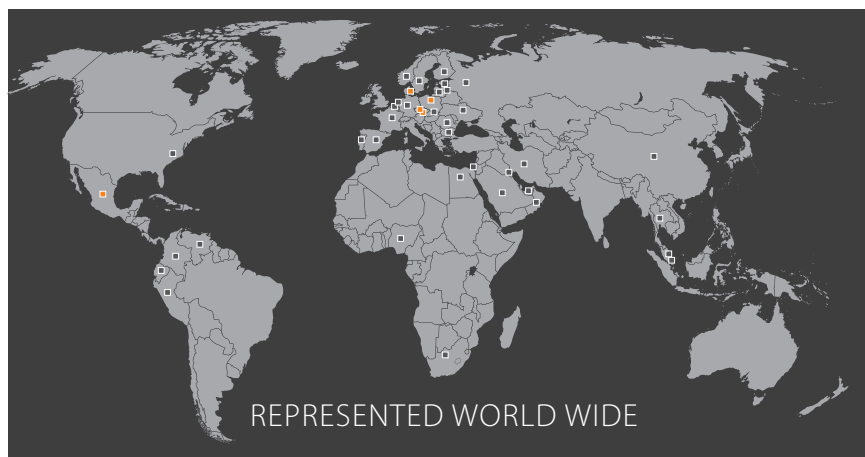
Mg = 0.05 mg/l

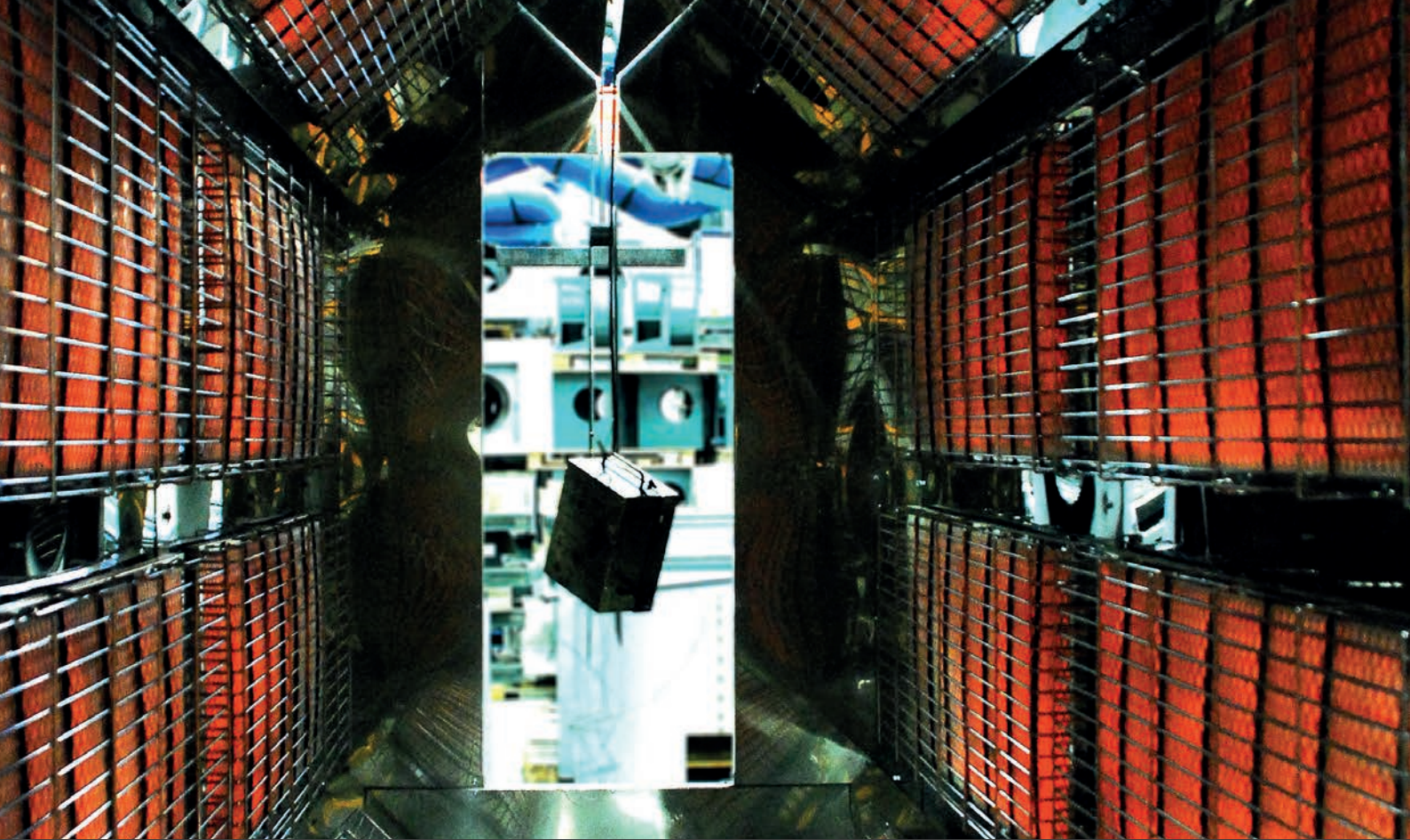
NVOC = 4 mgC/l

Min. pressure of raw water during operation = 2.5 bar

TECHNICAL INFORMATION:

Rating	(at pressure drop 0.8 bar)	m ³ /h	1
Basic capacity	(at 1odH)	m ³	80
Working capacity	(at e.g. 25odH)	m ³	3.2
Regeneration consumption	30% HCL	liters	10
Regeneration consumption	30% NaOH	liters	8
Regeneration vessel	volume	liters	130





Infrared ovens

This type of oven is constructed as a tunnel oven for the products to pass through, and is heated by gas or electricity.

We design the type, number and position of the lamps in close corporation with the customer. In order to obtain the optimal reflection of the infrared waves, the oven is constructed in stainless steel (high gloss).

An infrared oven is very often used as a booster before a convection oven. Also for very heavy items, e.g. gas bottles, this oven type is an advantage as it transfers a very high amount of energy in a very short time.

Heating

Infrared ovens can be electrically heated with short wave radiation, or catalytic gas heated with middle range waves.

Both have their separate advantages, and not just the availability of either should decide the type – we will help you to choose the optimal solution.

Function

Apart from the infrared radiation, the zones can be provided with certain convection in order to give higher heat transfer. If this type of oven pays off depends widely on the geometry of the products/items.

Insulation

The insulation is different in the infrared oven compared to convection ovens. In infrared ovens the reflection plays a role, and the combination of polished stainless steel, the geometry and traditional insulation all give a good heating economy.

Temperature zones

In connection with our intelligent PLC controls and sensors, we can offer to make the infrared oven in sections, allowing us to use only the part of the oven where the product will be. This option is mostly used with electrical heating, as it will react almost instantly.



6.1 INFRARED OVEN

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Application and use

- Curing/drying oven for wet painting
- Curing oven for powder coating

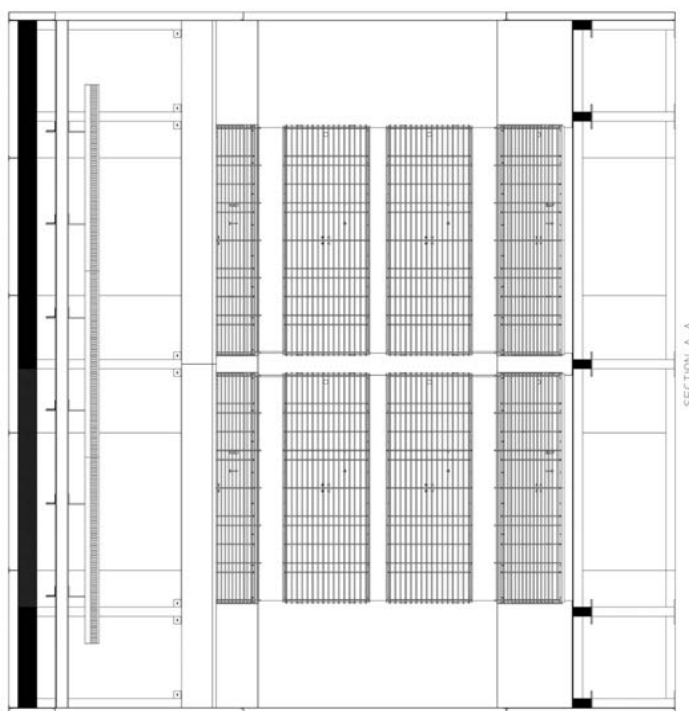
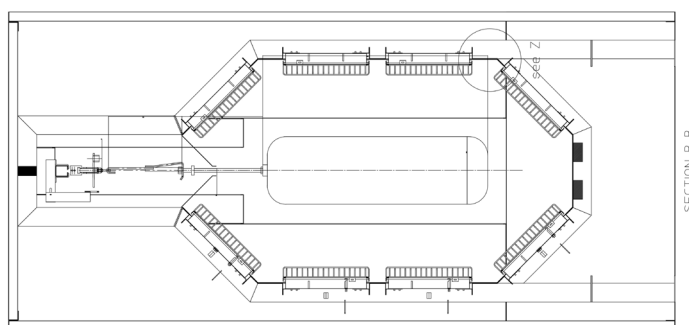
Materials

As standard, the ovens are constructed of high gloss stainless steel in order to give maximum reflection of the heat waves.

Contact

Contact us for more information.
On our website you will find your local AABO-IDEAL team for guidance and support.

CONSTRUCTION:



Tunnel oven

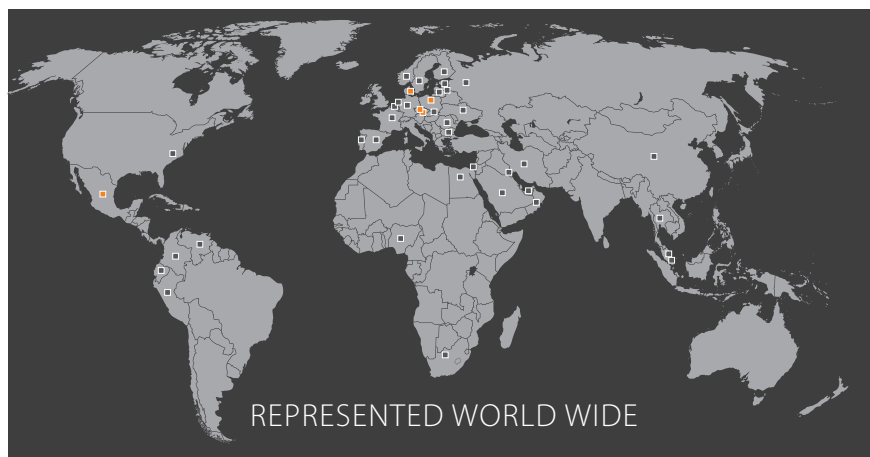
Gas or electricity heating

High gloss stainless steel for heat reflexion

High amount of energy very fast

Suited for heavy items or products

Can be set to function in sections





Level sensor IL-A

Level sensor IL-A (analog)

The level sensor IL-A is analog and has as many contact points as you can imagine. This group of points are programmed from the control system to give data from a single sensor.

Furthermore you can collect a variety of data from the tank such as quantitative indication, and intelligent functions for example connected to the chamber washers.

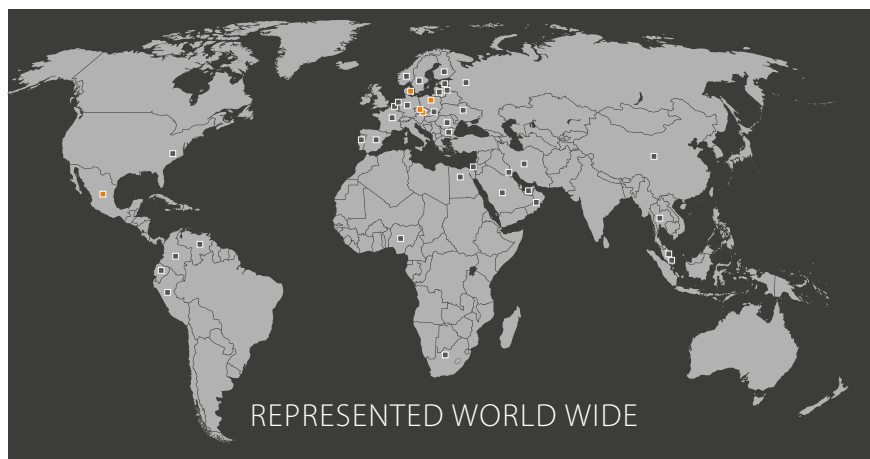
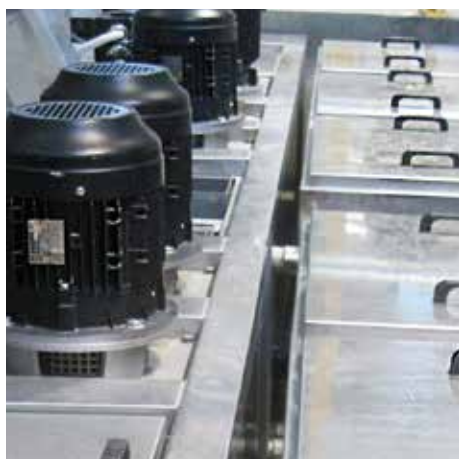
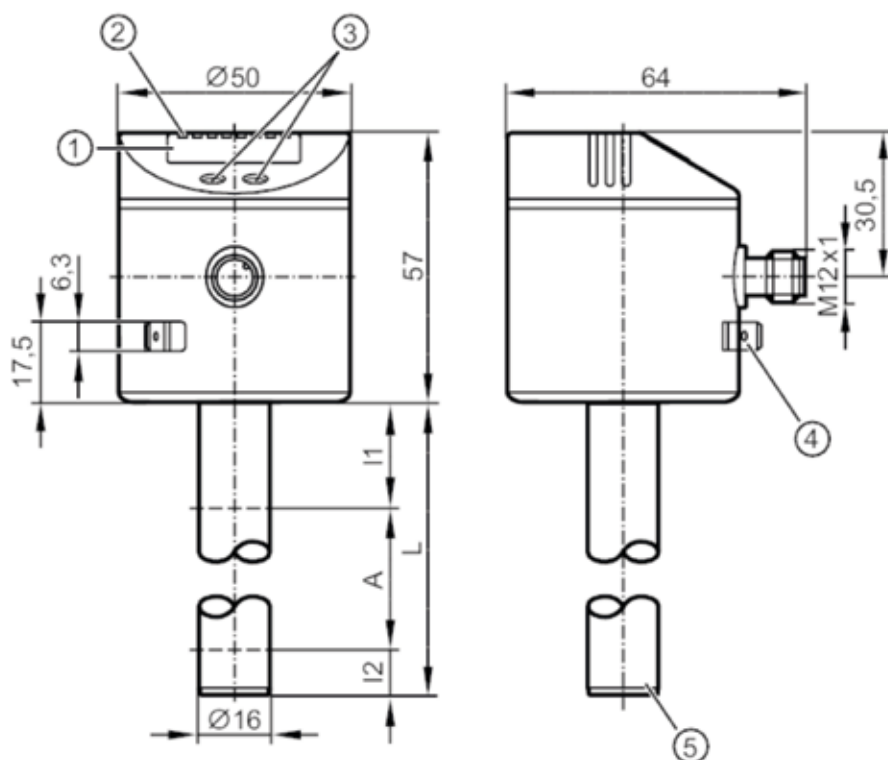


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TECHNICAL INFORMATION:

- 1) Alphanumeric display
- 2) Status LEDs
- 3) Keys for programming
- 4) Enclosed connection
flat-pin male connector
- 5) Placement of the temperature
measuring element



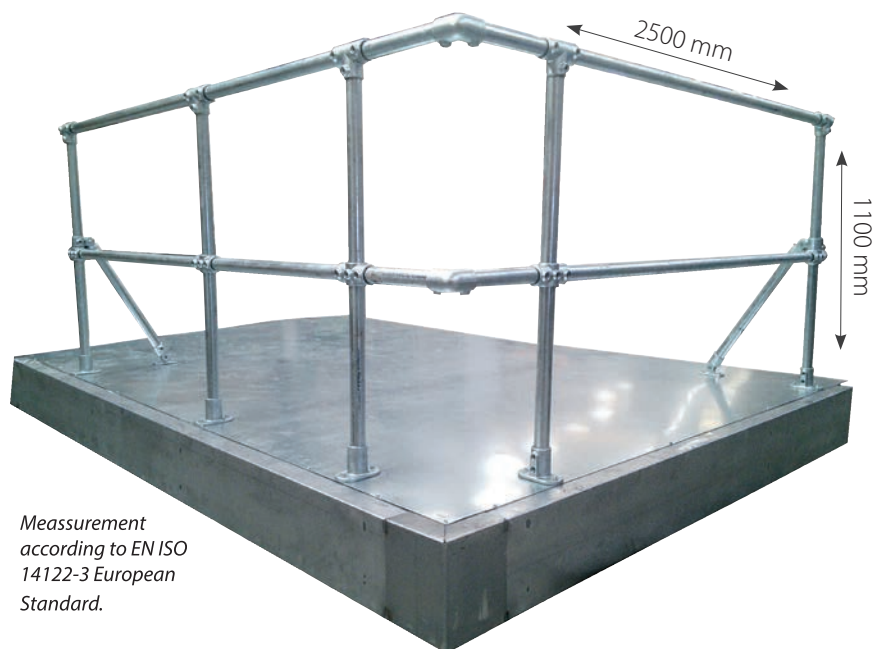


Railings

Safety first

AABO-IDEAL wants to create the possibility to put safety first and increase security at work.

Therefore, we offer a railing for installation in all areas of the facility. With a handrail designed for the plant and placed where you need to move around, you ensure an optimal working environment.



Measurement according to EN ISO 14122-3 European Standard.



1 1/4" galvanized pipe.



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YOUR CHOICE

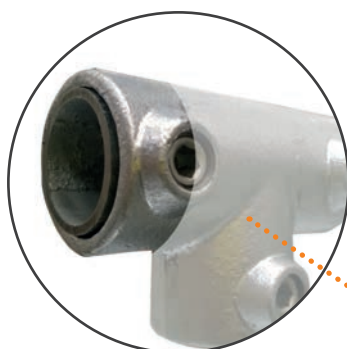
1) DIY

Order the parts through AABO-IDEAL and do the installation yourself. If your plant is not provided by us, project drawings must be sent to us.

2) Total supply

Let us handle the project for you (design, installation etc.). If your plant is not provided by us, project drawings must be sent to us.

Please note: When installing railings on existing facilities, control of top and strains must be performed prior to project start.



Increase safety

Reduce risk of falls

Ensure an optimal work environment

Meets the norm EN ISO 14122-3

CONSTRUCTION AND PARTS:

1 1/4" galvanized pipe
Item no. 11003005



Two socket cross 119C
Item no. 11005020



Two way elbow 125C
Item no. 11005030



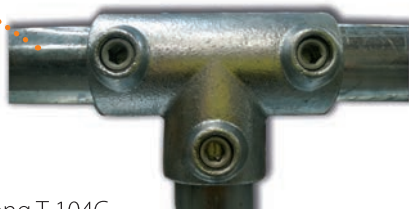
Single swivel 173C
Item no. 11005060



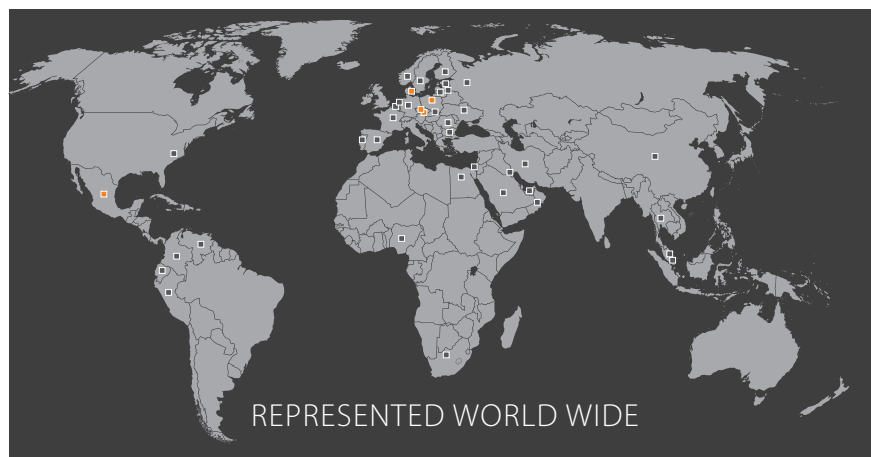
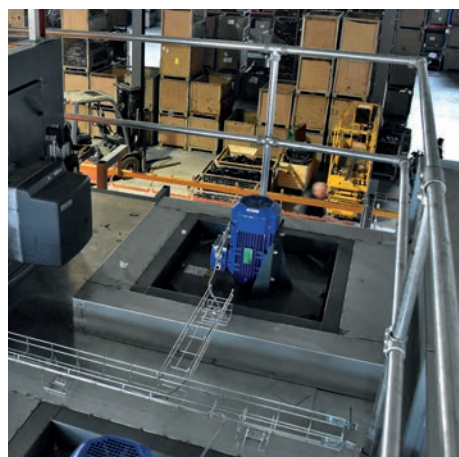
Swivel base 169C
Item no. 11005050



Long T 104C
Item no. 11005001



Railing base 132C
Item no. 11005040





Lowering station

Raising and lowering stations

AABO-IDEAL has developed a system for raising and lowering a delimited section of a single conveyor.

The system is used by surface treatment lines built for fairly tall work pieces and with the conveyor top position at the loading and unloading points.

If the same line is in use for lower work pieces as well, it is possible via linear motors to lower a stretch of the conveyor to create a more convenient work height.

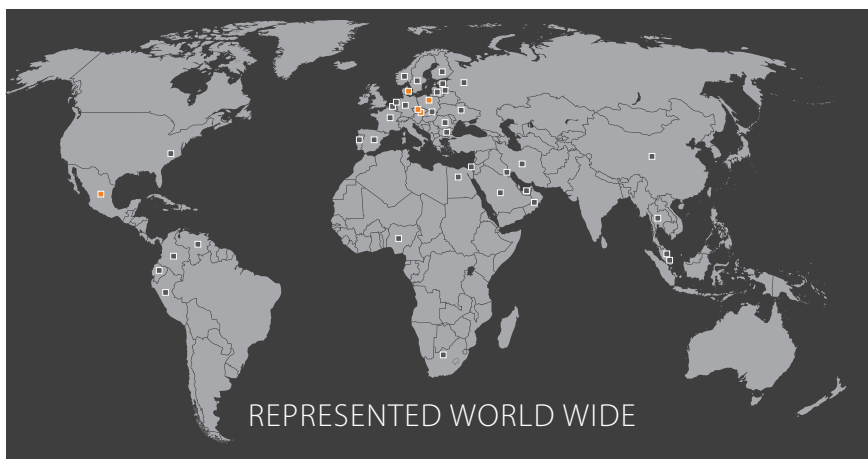


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HIGHLIGHTS

- Can be lowered up to 500mmt
- Electromechanical actuator
- Position control right beside loading point
- Normal position = top position





Pumps

HIGHLIGHTS

- Highly efficient
- Extremely low noise level
- Built of 3162 steel
- Vertical installation, no floor space needed
- No leakage on the floor
- Can run dry for a short time without destruction of seal
- Maintenance free, no shaft seal



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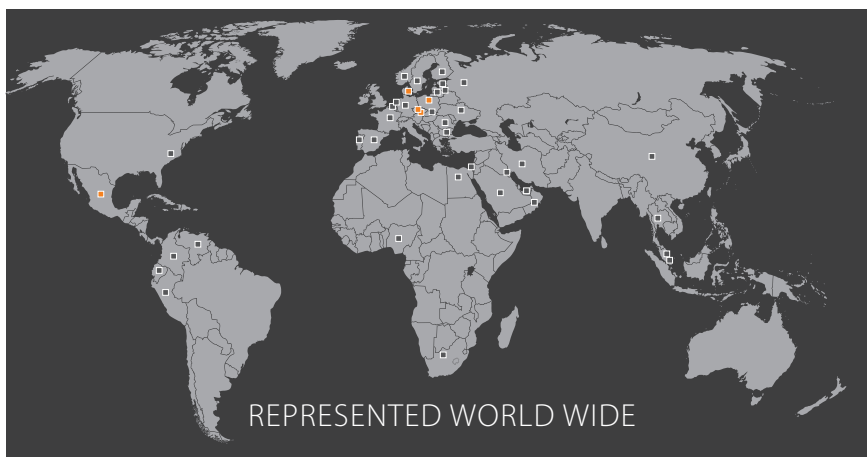
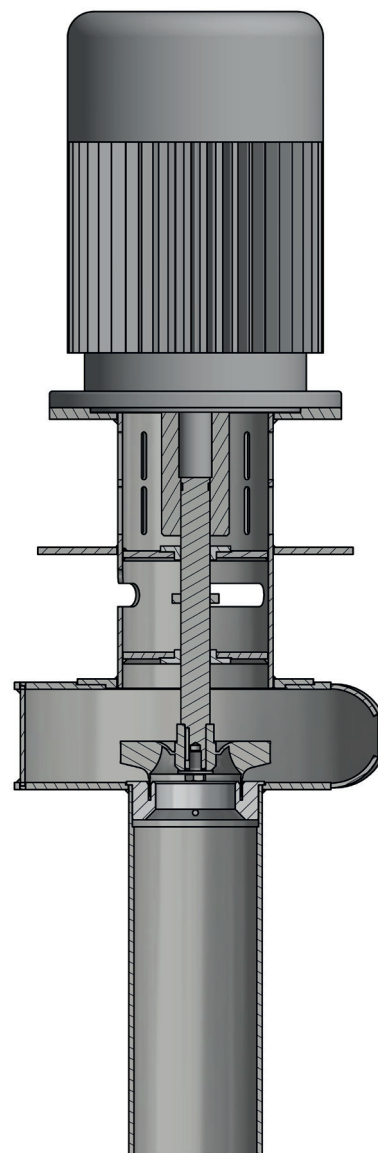
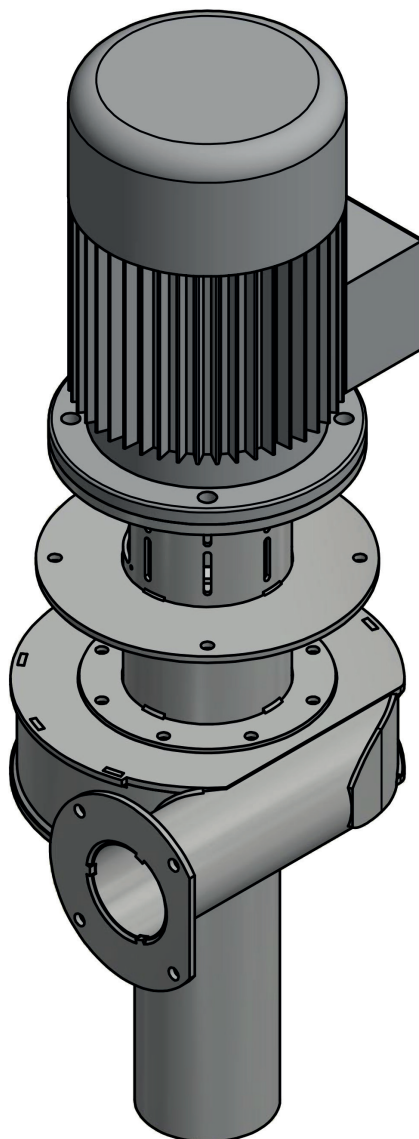
Maintenance free pumps

The AABO-IDEAL pumps are very efficient due to a highly developed impeller and low velocities in a big house.

They run at an extremely low noise level, and they are built of 3162 steel.

Our pumps are installed vertically and have no connection through the tank wall.

The AABO-IDEAL pumps are able to run dry for a short time, and the absence of a shaft seal make them maintenance free.



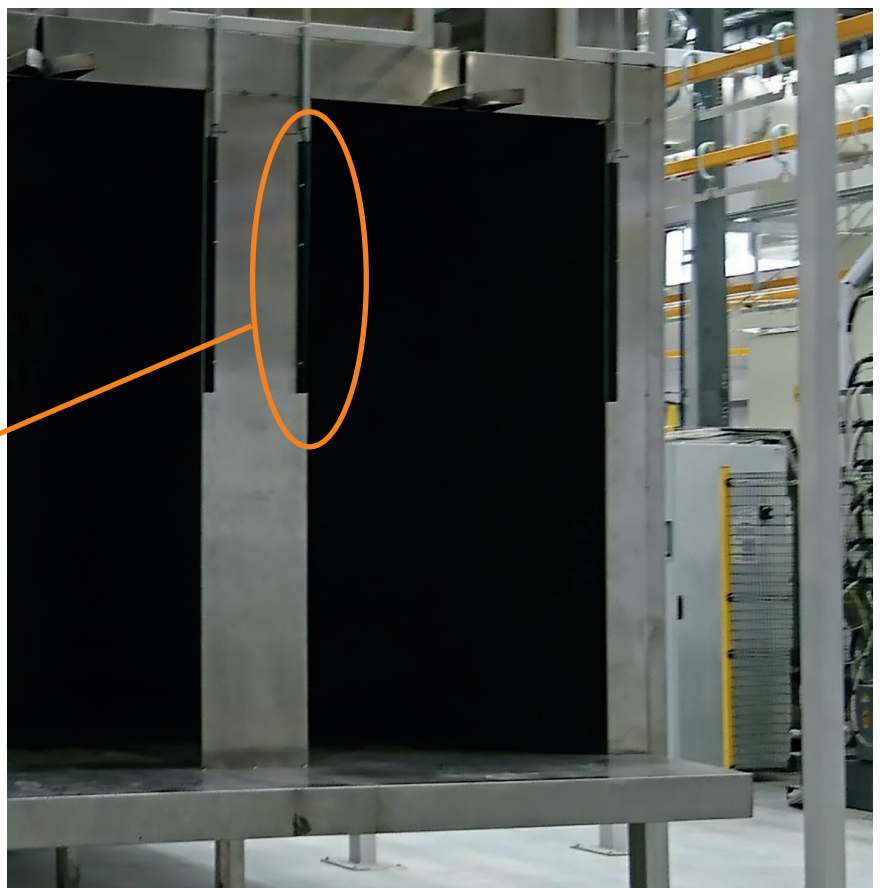
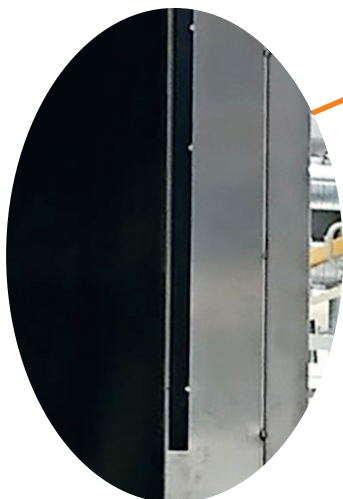


Gap control

Resource control

The gap control consists of a light curtain at the entrance of the pretreatment, and a software block for controlling the pumps.

The gap control monitors if a length of the conveyor is without items/products. The length of the gab that needs to activate the system, is set by the operator. When a gap is detected, the control system will disengage pumps/tanks as the gap passes.



BASICS & ESSENTIALS

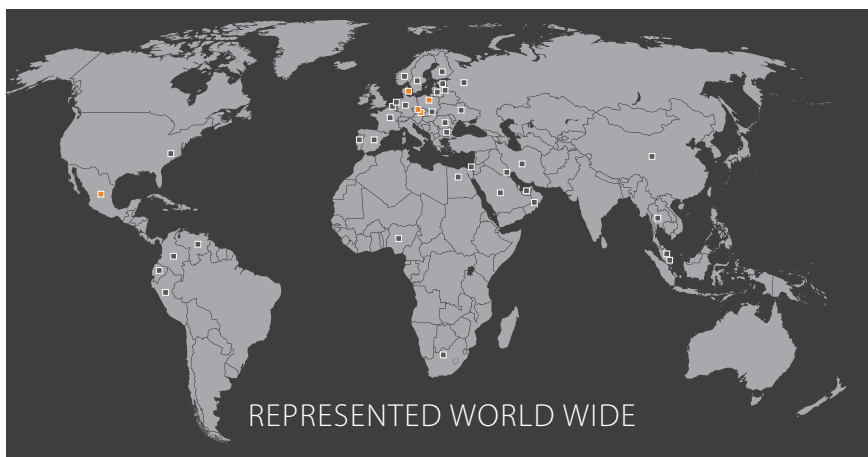
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ADDITIONAL INFORMATION

The gap control is an integrated standard part of the highly effective AABO-IDEAL control system, and it is directly linked to our ISO14001 environmental certification, ensuring a constant focus on saving resources – both internally and externally.

HIGHLIGHTS

- Ensures less heat consumption
- Ensures less chemical and water consumption
- Saves up to 90% energy when gap detecting
- No electricity consumption when the pumps are shut off
- Operated via the control system touch screen





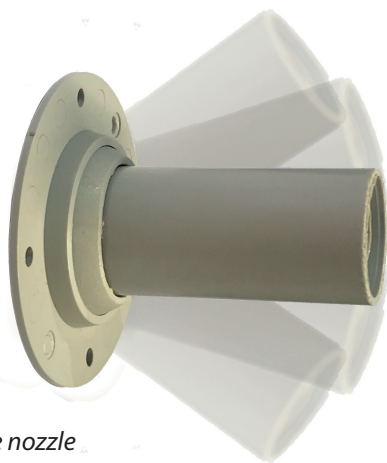
Blow-off zones

Function and purpose

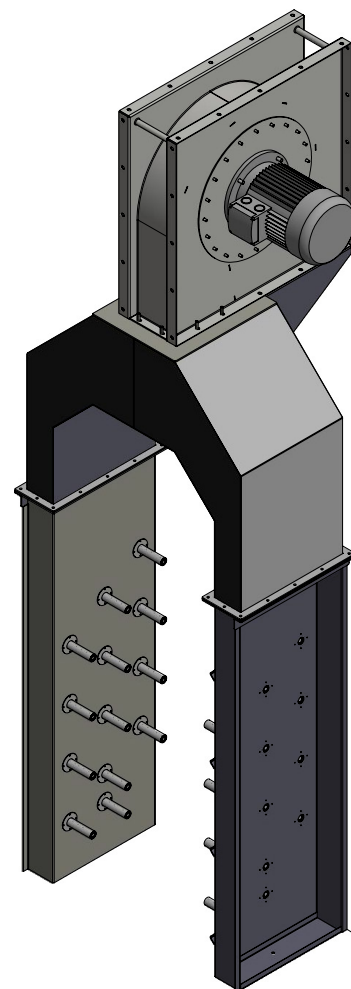
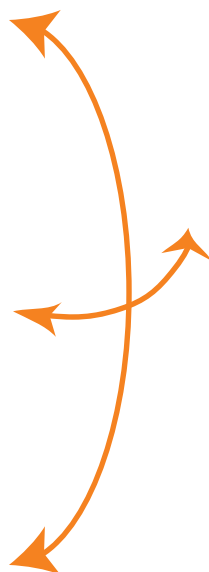
The blow-off system is generally placed in the exit of the pretreatment. It can however be an integrated part of the tunnel as well. The purpose is to remove surface water as well as pits of water captured due to hanging/geometry of the parts.

Flexibility

The special blow-off nozzles can be pointed in different directions and is designed to achieve high impact also at a distance. This combination make the zones very efficient with a low energy consumption.



The adjustable nozzle can be directed manually to perform optimally with a low energy consumption.



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TECHNICAL INFORMATION:

Energy saving

A blow-off zone reduces the water needed to be evaporated in the dryer and will therefore save energy for the dry-off oven.

Efficiency

The AABO-IDEAL blow-off zone has a frequency controlled motor. This allows the control to adjust the power according to the part/item. This again prevents smaller items from being blown off the jigs, and allows maximum impact at larger items with the same unit.

Materials

Where water contact is present, the blow-off zones are constructed in stainless steel.

Integrated or stand alone

The blow-off zone can be installed integrated in the tunnel or as a stand-alone unit after the exit. The blow-off zone can be installed on existing lines.

