Boss Vakuum

3 AUTOMATIC VACUUM MACHINES AND PACKAGING LINES


## AUTOMATIC VACUUM MACHINES

## TITAN-F 1000 A

with automatic transport belt


## Programmable sensor controller Z 3000

- intuitive control panel that is protected against sprayed water
- exact vacuum and gas sensor
- 99-programme memory
- vaporisation point detection, soft ventilation available
- quick stop button, button lock
- staged vacuum, vacuum shock function
- continuous running service program



## Vacuum pump

- high-performance pump from Busch
- maximum vacuum value from 99.9 \%
- various pump sizes available ( $160 / 250 / 300 \mathrm{~m}^{3} / \mathrm{h}$ )
- pump in oxygen version possible
- external setup possible

The machines of the TITAN A series are ideally suited for speeding up the packaging process through the automatic transport belt.

| Internal chamber dimensions | $1015 \times 675 \times 210 / 280 \mathrm{~mm}^{*}$ |
| :--- | :--- |
| Seal length | $550 / 980 \mathrm{~mm}$ |
| Vacuum pump | $160 / 250 / 300 \mathrm{~m}^{3} / \mathrm{h}$ |
| External dimensions | $1.33 \times 1.0 \times 1.1 \mathrm{~m}^{*}$ |
| Weight | approx. $350 / 420 \mathrm{~kg}$ |
| Electrical connections | 3 phases, $230 / 400 \mathrm{~V}, 50 \mathrm{~Hz} *$ |

* Width x depth x height/ effective height above the transport belt
**Special voltage available on request


## Sealing system



* Other sealing systems available on request.



## Welding system

- high-pressure welding for optimal sealing pressure
- consistent results even with thicker types of bags
- standard double welding with double sealing seam
- optional separation of the bag overhang is possible
- individual initiation of the welding systems
- lifting mechanism without cables



## Transport belt

- automatic transport belt that is manually adjustable for height
- easy installation and dismantling for optimal cleaning conditions
- effective height above the transport belt up to 210 mm (optional)
- manual stainless steel roller track possible (optional)


## Options / accessories

Gasification with long stainless steel nozzles • Simple cut-off sealing • Separately adjustable cut-off seal • Top/bottom sealing • Soft ventilation • Inspection glass in the lid • Automatic lid shift • Movable bridging roller track at the right and left side of the machine • Control from the side or the rear at a stainless steel arm

## LAYOUT VARIANTS TITAN-F 1000 A

## TITAN-F 1000 A

The modular construction of our packaging lines allows adaptation to individual needs in steps. At the maximum expansion stage we aim for a high capacity with the lowest amount of time required for operator attention. The module system allows integration into existing conveying systems.


Capacity: 1 vacuum machine, L-sealing max. 960 bags per hour ( $230 \times 350 \mathrm{~mm}$ ) max. 480 bags per hour ( $300 \times 400 \mathrm{~mm}$ ) max. 240 bags per hour ( $400 \times 500 \mathrm{~mm}$ )

## Advantages

- cost-effective entry into the automation of packaging
- modular construction of the packaging line
- reduction of operator time required through short routes
- compact and ergonomic construction
- increase in packaging capacity through automated roller belt
- modular expansion with up to two machines is possible



## Advantages

- modular construction with the TB 1 transport belt: up to four TITAN-F 1000 A units possible
- larger drying and shrinking tunnels possible
- reduction of operator time required through short routes
- integration into existing lines is possible
- maximum economy and efficiency
- parallel welding beam construction offers increased packaging capacity
- redundant system ensures process reliability
- modular expansion with up to eight machines is possible


## AUTOMATIC VACUUM MACHINES

## TITAN-F 1000 A / XL

with automatic transport belt


## Programmable sensor controller Z 3000

- intuitive control panel that is protected against sprayed water
- exact vacuum and gas sensor
- 99-programme memory
- vaporisation point detection, soft ventilation available
- quick stop button, button lock
- staged vacuum, vacuum shock function
- continuous running service program

The machines of the TITAN A series are ideally suited for speeding up the packaging process through the automatic transport belt.

| Internal chamber dimensions | $1015 \times 805 \times 210 / 280 \mathrm{~mm} *$ |
| :--- | :--- |
| Seal length | $600 / 680 / 980 \mathrm{~mm}$ |
| Vacuum pump | $160 / 250 / 300 \mathrm{~m}^{3} / \mathrm{h}$ |
| External dimensions | $1.33 \times 1.17 \times 1.1 \mathrm{m*}$ |
| Weight | approx. $380 / 450 \mathrm{~kg}$ |
| Electrical connections | 3 phases, $230 / 400 \mathrm{~V}, 50 \mathrm{~Hz}$ ** |
| * Width $\times$ depth $\times$ height/effective height above the transport belt |  |
| **S Special voltage available on request |  |

## Sealing system


*Other sealing systems available on request.


## Welding system

- high-pressure welding for optimal sealing pressure
- consistent results even with thicker types of bags
- standard double welding with double sealing seam
- optional separation of the bag overhang is possible
- individual initiation of the welding systems
- lifting mechanism without cables



## Transport belt

- automatic transport belt that is manually adjustable for height
- easy installation and dismantling for optimal cleaning conditions
- effective height above the transport belt up to 210 mm (optional)
- manual stainless steel roller track possible (optional)


## Options / accessories

Gasification with long stainless steel nozzles • Simple cut-off sealing • Separately adjustable cut-off seal • Top/bottom sealing • Soft ventilation • Inspection glass in the lid • Automatic lid shift • Movable bridging roller track at the right and left side of the machine • Control from the side or the rear at a stainless steel arm

## LAYOUT VARIANTS TITAN-F 1000 A / XL

## TITAN-F 1000 A / XL

The modular construction of our packaging lines allows adaptation to individual needs in steps. At the maximum expansion stage we aim for a high capacity with the lowest amount of time required for operator attention. The module system allows integration into existing conveying systems.


Capacity: 1 vacuum machine, parallel sealing
max. 960 bags per hour ( $230 \times 350 \mathrm{~mm}$ ) max. 720 bags per hour ( $300 \times 400 \mathrm{~mm}$ ) max. 240 bags per hour ( $400 \times 500 \mathrm{~mm}$ )

## Advantages

- cost-effective entry into the automation of packaging
- modular construction of the packaging line
- reduction of operator time required through short routes
- compact and ergonomic construction
- increase in packaging capacity through automated roller belt
- modular expansion with up to two machines is possible



## Advantages

- modular construction with the TB 1 transport belt and up to four TITAN-F 1000 A / XL units is possible
- larger drying and shrinking tunnels possible
- reduction of operator time required through short routes
- integration into existing lines is possible
- maximum economy and efficiency
- parallel welding beam construction offers increased packaging capacity
- redundant system ensures process reliability
- modular expansion with up to eight machines is possible


## TITAN-X 950 A

with automatic transport belt


## Programmable sensor controller Z 3000

- intuitive control panel that is protected against sprayed water
- exact vacuum and gas sensor
- 99-programme memory
- vaporisation point detection, soft ventilation available
- quick stop button, button lock
- staged vacuum, vacuum shock function
- continuous running service program



## Vacuum pump

- high-performance pump from Busch
- maximum vacuum value from 99.9 \%
- various pump sizes available ( $\left.250 / 300 \mathrm{~m}^{3} / \mathrm{h}\right)$
- pump in oxygen version possible

Our TITAN-X 950 A vacuum machine guarantees an interruptionfree packaging process through the double chambers.

| Internal chamber dimensions | $1060 \times 860 \times 210 / 280 \mathrm{~mm}$ |
| :--- | :--- |
| Seal length | $950 / 700 \mathrm{~mm}$ |
| Vacuum pump | $250 / 300 \mathrm{~m}^{3} / \mathrm{h}$ |
| External dimensions | $2.25 \times 1.22 \times 1.18 \mathrm{~m}^{*}$ |
| Weight | approx. 700 kg |
| Electrical connections | 3 phases, $230 / 400 \mathrm{~V}, 50 \mathrm{~Hz} *$ |

*Width x depth x height/ effective height above the transport belt
**Special voltage available on request

## Sealing system



## Welding system

- high-pressure welding for optimal sealing pressure
- consistent results even with thicker types of bags
- standard double welding with double sealing seam
- optional separation of the bag overhang is possible
- individual initiation of the welding systems
- lifting mechanism without cables



## Transport belt

- each chamber has an automatic transport belt
- manually adjustable for height
- easy installation and dismantling for optimal cleaning conditions
- effective height above the transport belt up to 210 mm (optional)


## Options / accessories

Gasification with long stainless steel nozzles • Simple cut-off sealing • Separately adjustable cut-off seal • Top/bottom sealing • Soft ventilation • Inspection glass in the lid • Automatic lid shift • Movable bridging roller track at the right and left side of the machine - Control from the side or the rear at a stainless steel arm

## LAYOUT VARIANTS TITAN-X 950 A

## TITAN-X 950 A

The double chamber construction of our packaging lines allows an interruption-free packaging process. The modular construction of our packaging lines allows adaptation to individual needs in steps.


## Advantages

- cost-effective entry into the automation of packaging
- modular construction of the packaging line
- reduction of operator time required through short routes
- compact and ergonomic construction
- increase in packaging capacity through automated roller belt


Capacity: 2 vacuum machines max. 1.440 bags per hour ( $230 \times 350 \mathrm{~mm}$ ) max. 960 bags per hour ( $300 \times 400 \mathrm{~mm}$ ) max. 720 bags per hour $(400 \times 500 \mathrm{~mm})$

## Advantages

- modular construction with the TB 1 transport belt: up to four TITAN-X 950 A units possible
- larger drying and shrinking tunnels possible
- cost-effective entry into the automation of packaging
- modular construction of the packaging line
- redundant system ensures process reliability
- reduction of operator time required through short routes
- increase in packaging capacity through automated roller belt
- ergonomic construction
- modular expansion with up to eight machines is possible


## DIP TANK / SHRINKING TUNNEL

ATT 77/6


Shrinking procedure


## Configuration features

- optimal insulation protection through double-walled stainless steel housing
- automatic transport belt with integrated cleaning position
- product detection via photocell
- programmable controller with touch function and timer

ATT 1600


Shrinking procedure


## Configuration features

- optimal insulation protection through double-walled stainless steel housing
- switchable heating elements guarantee efficiency and economy
- running speed of the automatic transport belt and working direction are freely selectable

The ATT 77/6 dip tank offers an ideal entry into automatic shrinkpackaging. A generously sized dipping basket and the automatic product transport guarantee an increase in packaging capacity.

| Dipping basket size | $700 \times 650 \mathrm{~mm}$ |
| :--- | :--- |
| Immersion depth | 250 mm |
| External dimensions | $0.90 \times 1.25 \times 1.75 \mathrm{m*}$ |
| Connection exhaust air hose | $\varnothing 90 \mathrm{~mm}$ |
| Water tank | approx. 170 liter |
| Weight | approx. 230 kg |
| Electrical connections | 3 phases, $230 / 400 \mathrm{~V}, 50 \mathrm{~Hz} / 19 \mathrm{~kW}$ ** |
| Heating system | steam / electric heating |
| "width $\times$ depth $\times$ height |  |
| *" Special voltage available on request |  |

- dipping time can be set individually, automatic water filling system
- running speed and working direction can be set freely
- run-through switching without dipping function

The ATT 1600 is especially suitable for operations with high capacities. Powerful heating elements and interruption-free transport ensure optimal packaging results.

| Max. product width | 700 mm |
| :---: | :---: |
| Max. product height | 300 mm |
| External dimensions | length approx. $1.60 \mathrm{~m} /$ 1.90 m with roller tracks |
| Connection exhaust air hose | $\varnothing 90 \mathrm{~mm}$ |
| Water tank | approx. 200 liter |
| Weight | 592 kg |
| Electrical connection | 3 phases, $230 / 400 \mathrm{~V}, 50 \mathrm{~Hz} / 40 \mathrm{~kW}$ ** 59 kW with additional heating |
| Heating system | steam / electric heating |

- run-through switching without shrinking function
- dry running and overflow protection, automatic water filling system
- programmable controller with touch function and timer


## T 1100 A



## Configuration features

- automatic transport belt, easily removal for optimal cleaning convenience
- product detection via photocell
- air nozzles can be aligned individually

T 1600 A


## Configuration features

- automatic transport belt, easily removal for optimal cleaning convenience
- product detection via photocell
- continuously variable setting of the running speed, working direction freely selectable

The T 1100 A dryer achieves optimal drying results through the use of a high-performance fan and a movable fan nozzles.

| Max. product width | 650 mm |
| :--- | :--- |
| Max. product height | 250 mm |
| External dimensions | $0.90 \times 1.25 \times 1.50 \mathrm{~m}^{*}$ |
| Weight | approx. 200 kg |
| High-pressure fan | $3 \mathrm{~kW}, 26 \mathrm{~m}^{3} / \mathrm{min}$. |
| Electrical connections | 3 phases, $230 / 400 \mathrm{~V}, 50 \mathrm{~Hz} / 3.1 \mathrm{~kW} *$ |

* width $x$ depth $x$ height
**Special voltage available on request
- fan can be switched separately
- robust stainless steel construction, requires little maintenance
- intuitive control unit

In the model T 1600 A the drying results are improved at high capacities through two high-performance fans and the flexibly adjustable fan nozzles.

| Max. product width | 700 mm |
| :---: | :---: |
| Max. product height | 300 mm |
| External dimensions | length approx. $1.60 \mathrm{~m} /$ 1,90 m with roller tracks |
| Connection exhaust air hose | $\varnothing 90 \mathrm{~mm}$ |
| Weight | approx. 460 kg |
| High-pressure fan | 6 kW , approx. 52 m ³/min. |
| Electrical connections | $\begin{aligned} & 3 \text { phases, } 230 / 400 \mathrm{~V}, 50 \mathrm{~Hz} \\ & 6.1 \mathrm{~kW} \text { ** } \end{aligned}$ |

**Special voltage available on request

- air stream of the high-performance nozzles the be aligned individually
- stainless steel construction optimised for hygiene
- intuitive control panel
- run-through switching without drying is possible


## ATT 46 A

Manual dipping tank for machines with manual removal


Shrinking procedure
(1)


## Configuration features

- optimal insulation protection through double-walled stainless steel housing
- tipping dipping basket for easy cleaning
- user-friendly pushbutton


## AT 1

packing table


The ATT 46 A manual dipping tank offers an ideal entry into shrink-bag packaging. The powerful heating system can be adjusted by a thermostat that is protected against sprayed water. The generously-sized manual pushbutton offers optimal operating convenience.

| Dipping basket size | $600 \times 400 \mathrm{~mm}$ |
| :--- | :--- |
| Immersion depth | 250 mm |
| External dimensions | $0.70 \times 0.67 \times 1.45 \mathrm{~m}^{*}$ |
| Weight | approx. 110 kg |
| Electrical connections | 3 phases, 230/400 V,50 Hz/9.5 kW** |
| Heating system | Electric heating |

* width $x$ depth $x$ height
**Special voltage available on request
- rollable plug-in unit, two rollers can be fixed
- thermostat that is protected against sprayed water
- powerful heating element

The AT 1 packing table offers optimal support when filling bags. All the required packaging materials can be sorted and put down in a structured fashion. The filling aid is especially suitable for the packaging of larger pieces of meat and can be adjusted for height.

| External dimensions | $1.50 \times 0.87 \times 0.80-0.95 \mathrm{~m}^{*}$ |
| :--- | :--- |
| Weight | approx. 80 kg |

* width x depth x height


## Optionally available

- Bow at the rear for bag box
- Bag box, small (for vacuum bags max. $300 \times 400 \mathrm{~mm}$ )
- Bag box, large (for vacuum bags max. $400 \times 600 \mathrm{~mm}$ )
- TE 9 filling aid made of stainless steel
- Insertion plate / undershelf (width approx. 350 mm)


## TB 1 -

Transport belt


| Length | approx. 2.60 m |
| :--- | :--- |
| Belt width | 0.70 m |
| Speed | approx. 1 m per second |
| External dimensions | $1.00 \times 2.65 \times 0.85-1.20 \mathrm{~m}^{*}$ |

## AS 2 / AS 3

Draining stations as alternatives to the DT 1500 rotary plate.


| External dimensions AS 2 | $1.00 \times 0.74 \times 0.80-1.10 \mathrm{~m}^{*}$ |
| :--- | :--- |
| Weight | approx. 40 kg |

External dimensions AS $31.50 \times 0.74 \times 0.80-1.10 \mathrm{~m}^{*}$
Weight approx. 60 kg

## DT 1500

Rotary plate


| External dimensions | $\varnothing 1500 \mathrm{~mm}, 0.80-1.10 \mathrm{~m} * *$ |
| :--- | :--- |
| Weight | approx. 75 kg |
| Electrical connections | 1 phase, $230 \mathrm{~V}, 50 \mathrm{~Hz} / 0.70 \mathrm{~kW} *$ |

Direction and speed of rotation can be set

All dimensions are approximate.
We reserve the right to make technical changes and
improvements without notice.

* width x depth x height
** Special voltage available on request
*** Other dimensions available on request


## Helmut Boss Verpackungsmaschinen KG

