

# SPECIFICATION

## **VORTEX 12m<sup>3</sup> FLEX-LOADER ON TWISTLOCKS FOR SUCTION AND BLOWING OF WET AND DRY PRODUCTS**



Recipient Company:  
Recipient Name:  
Quotation Number: N/A  
Date:  
Doornbos Representative:  
Quotation Type: Specification  
Valid Until: N/A  
Payment Terms: N/A  
VAT: N/A

## VORTEX 12m<sup>3</sup> FLEX-LOADER ON TWISTLOCKS FOR SUCTION AND BLOWING OF WET AND DRY PRODUCTS

- CE marked;
- Tank built according to: PED-guidelines
- Tank product content - 12 m<sup>3</sup>
- Max. Vacuüm: 100%
- Max. admissible working pressure: 1 bar (o), 2 bar (a);
- Test pressure: 1,43 bar (o), 2,43 bar (a)
- Diameter: 1.800 mm
- Rear door locks: Hydraulic
- Diameter manhole: 500 mm
- Tipping weight tank minimal approx. 20 tonnes
- Content hydraulic tank: 130 litres
- Length approx: 7200 mm
- Width approx: 2500 mm
- Height approx: 2750 mm
- Empty weight body unit approx: 8.000 kg
- Opening angle rear door: 90°
- Filters: BIA certificate:
- Filtration main filter: 99,95%
- Tipping angle approx: 50°
- Suction connection: DN 150 or DN 200 choice
- Blowing connection: DN 150



Steel Cylindrical Tank with re-enforcement ring. Hydraulic tipping. Equipped with a hydraulic fully opening rear blowing door with hydraulic locks. Blowing system with removable aeration insert, venturi, 6" ball valve, air diverter and butterfly valves. Filter compartment water and pressure tight integrated in the front of the tank with fully opening hydraulic top door. Conical partition with discharge into the tank through a large oval hatch with quick release clamps. Quick exchange main filter system in carrier plate for easy inspection. Clean side equipped with reverse air cleaning. Side inspection hole and level sensor. Tank fitted with advertisement boards, walkways with railing, top manhole, level sensor, internal pre-separator. Support frame fitted on the chassis with the pump installation, tipping system, hydraulic unit with return filter, lockable tool box storage, and various other parts. Pump installation built in a sound insulated enclosure with suction-, blowing- and cooling air silencer. Pump drive by a separate 6-cylinder liquid cooled diesel engine. Control system and operating panel built in a water tight box.

The pump:

### Aerzen Blower GM 90 SM

- |   |                                  |
|---|----------------------------------|
| Max. Vacuüm continuous (intermittent):        | 80% (90%)                        |
| Max. over pressure continuous (intermittent): | 1,9 bar (a) 2 bar (a)            |
| Max. air volume at 80% vacuum:                | approx. 4500 m <sup>3</sup> /hr  |
| Required drive power at 80% vacuum:           | approx. 180 kW                   |
| Max. Free air flow uncharged:                 | approx. 8000 m <sup>3</sup> /uur |





### **Material & Coating Specification:**

The following parts are Stainless Steel:

The tank chute, blowing system, internal aeration, silencers internally, storage box, valves and discharge valve.

Suction channel from wear resistant HARDOX steel and exchangeable wear plate with welded anti-abrasive coating.

The support frame and tipping frame made of St. 52-3. Other components from Rst 37.2.

The tipping cylinders front and rear hard chrome coated.

Filter material polyester needle felt 550gr/m. Filter carrier frames steel with powder coating.

Finish:

Steel parts blasted, coated in 2-pack epoxy primer and finished in 2-pack paint. Colour in client's choice.

### **Detail Specification:**

Level sensor fork type in the filter compartment and tank. Pneumatic butterfly valves between filter compartment and tank, in the suction line, free air connection and blow off DN 200. Butterfly valves in the rear door, blowing system 3 pieces DN 125 hand operated. Air diverter valve and ball valve hand operated DN 150. Turning air connection suitable for 10bar in DN 150. Hydraulic tank with filling, discharge, level indication and return filter. Hand operated automatic return hydraulic operating handles. Two hand operation for rear door locks. Removable aeration in blowing system. Suction- and blowing connection with coupling of your choice. Hose hooks on the tank and rear door. Air and electric lines are in protective sleeves. Safety devices for high pump temperature, under pressure & over pressure. A 24volt warning light connection. Tank support for Maintenance.