



## Introduction

Founded in 1945, Jansens & Dieperink has 70 years experience in engineering, fabrication and site assembly of large aluminum and stainless steel constructions. This experience combined with a range of services – from detailed engineering to on-site assembly – makes us the number one choice for a wide range of global customers, as indicated on this map.

We are ISO 9001 and EN 1090 certified.



### Stanriv® bolted silos

The concept: Prefabricated silo parts are delivered in sea containers and bolted together. It is simple and easy! No welders or specialized personnel are required!

The pre-fabricated silo parts can easily be assembled at site by your own staff or hired

contractor, using the detailed user manual, and a small crane.

A special patented design allows for a tight connection with a polyurethane seal. Since this seal is applied on the outside, and not between the flanges, proper tightness is guaranteed.



#### Stanriv® bolted silos are:

- Delivered as an assembly kit in prefabricated segments
- Shipped in standard 40 ft sea containers
- Assembled using a unique, patented design
- 100% tight, also at the T-joints

The design of the panels make it possible to visually inspect and maintain the sealing. Dismantling of the silo is not required. Besides this there is no risk of damaging the sealing during assembly.

### Shipping

The silo parts are shipped in standard 40 ft sea containers which ensures easy, safe and economic transport worldwide.

#### **Blenders**

Blending and homogenizing has gained importance in the petrochemical industry to ensure quality of the end product. Stanriv® silos can be equipped with blending internals.



3 Stanriv® silos in Uruguay.



6 Stanriv® silos in Malaysia.



6 Stanriv® silos in Turkey.



# **Assembly**

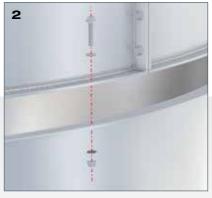
Assembly of Stanriv® silos is very easy and requires little time. A 200 m³ silo can be erected within 4 working days. Where other suppliers apply a sealing between silos segments, J&D applies the sealing on the outside. This innovative patented technology does not require gaskets, with risk of damage/leakage. The seal is a flexible one-component sealant, based on polyurethane with excellent mechanical resistance and sufficient elastic properties.

### Assembly, crane and manpower requirements

| Silo size          | Manpower<br># workers | Time<br># days | Cra<br>20 T | ne capacity [ho<br>50 T | urs]<br>80 T |
|--------------------|-----------------------|----------------|-------------|-------------------------|--------------|
| 400 m³             | 6                     | 4-5            | 30          | 10                      | -            |
| 300 m³             | 6                     | 4-5            | 30          | 10                      | -            |
| 200 m³             | 6                     | 3-4            | 25          | 8                       | -            |
| 150 m³             | 6                     | 2-3            | 22          | -                       | -            |
| 100 m <sup>3</sup> | 6                     | 2-3            | 20          | -                       | -            |



Bolting the vertical flanges.



Bolting the horizontal flanges.



Seal the flanges on the outside.

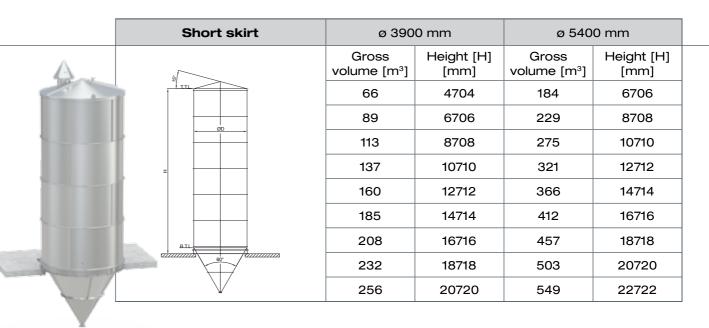


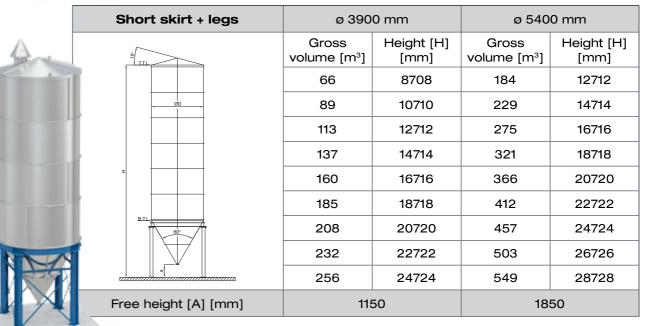
## **Technical data**

The material of construction for Stanriv® silos is aluminum or stainless steel. Stanriv® silos can be designed in standard sizes ranging from 50 to approx. 500m³. For customer specific requirements, or storage capacities not listed in this brochure please contact us.

| Material        | Aluminum / Stainless Steel | Product load | Eurocode       |
|-----------------|----------------------------|--------------|----------------|
| Roof angle      | 15°                        | Buckling     | Eurocode       |
| Cone angle      | 60°                        | Wind         | IBC / Eurocode |
| Design pressure | -5 / +50 mbarg             | Earthquake   | IBC / Eurocode |

|     | Long skirt           | ø 390                | ø 3900 mm          |                      | ø 5400 mm          |  |
|-----|----------------------|----------------------|--------------------|----------------------|--------------------|--|
|     | 5                    | Gross<br>volume [m³] | Height [H]<br>[mm] | Gross<br>volume [m³] | Height [H]<br>[mm] |  |
| · 1 |                      | 66                   | 8708               | 184                  | 12712              |  |
|     | OD                   | 89                   | 10710              | 229                  | 14714              |  |
| 1   |                      | 113                  | 12712              | 275                  | 16716              |  |
|     |                      | 137                  | 14714              | 321                  | 18718              |  |
|     | Ξ                    | 160                  | 16716              | 366                  | 20720              |  |
|     |                      | 185                  | 18718              | 412                  | 22722              |  |
|     | BTI 60°              | 208                  | 20720              | 457                  | 24724              |  |
|     |                      | 232                  | 22722              | 503                  | 26726              |  |
|     |                      | 256                  | 24724              | 549                  | 28728              |  |
|     | Free height [A] [mm] | 1150                 |                    | 1850                 |                    |  |





# Silo appurtenances

### Standard

- 1 Filling nozzle
- 2 Discharge nozzle
- 3 Vented manhole
- 4 Lifting lugs
- 5 Earthing lugs
- 6 Nameplate

### **Optional**

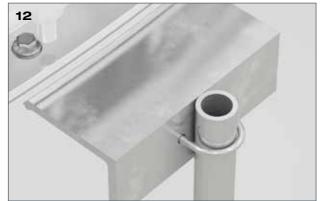
- **7** Handrail
- 8 Caged ladder
- 9 Aluminum filling pipe
- 10 Socket for level indicator
- 11 Sightglass
- 12 Cable protection pipe
- 13 Load cell package
- 14 Davit















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