

Dome with treatment plant included

In addition to storage DOMSTOCK dome may also contain a plant for dry or wet treatments. The plant typically occupies a quarter of the circle, the rest is used as storage.

DOMSTOCK







GEOLOGICAL SURVEY



LABORATORY TEST







CUSTOMER CARE

SOLUTIONS

LAYOUT DEFINITION & ENGINEERING

DEDICATED TURN-KEY



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DOMSTOCK Domes

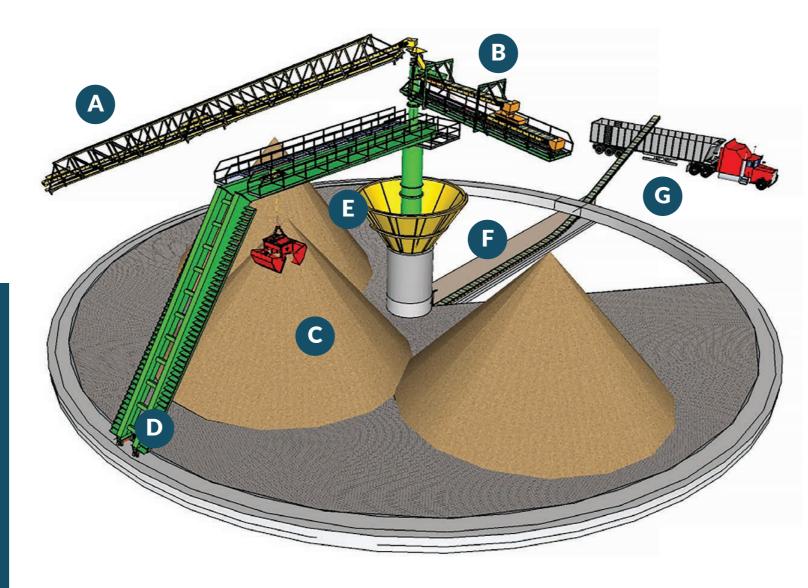
Automatic storage

A handyman tensile structure

DOMSTOCK domes are formed by an hemispherical 52 m diameter tensile structure. The stored material coming from the treatment plant (or from trucks), is introduced in the tensile structure by a conveyor belt and transferred to the rotating belt system that distributes the material inside the dome. Let eventually drain, the material is taken up by a bucket and downloaded into the central hopper which, via an underground tunnel, transports the material outside, ready to be loaded or for subsequent treatments.

Light and capacious tensile structure

The supporting structure of the DOMSTOCK domes is very light: an economic and rapid execution solution, easy to assemble, disassemble and move. The robustness of the frame is guaranteed by the reticular structure. For extremely cold climates applications a special wooden frame is available. DOMSTOCK domes may contain a volume of material till 12.000 m³. The maximum extraction capacity is of 750 t/h. The installed power goes from 70 kW to 280 kW (in function to the feeding and extracting capacity).



Double protection

The protection fournished by the dome preserves the material from the weathering. Vice versa, it's prevented external environment pollution (dust, smell) by the material.

Payloader no longer needed

Sand handling automation makes unnecessary the payloader use, ensuring economic saving, safety improvements and material's pollution reduction.

Draining floor

To improve the flow and the recovery of the water percolating from the piles, DOMSTOCK domes can be provided with draining floor: a very favorable solution where there is shortage of water. In 48 hours, for example, it is possible to reduce from 18% to 4% the average moisture of the storage, ideal percentage for the sale of many products (the drainage time depends on the nature and particle size of the stored product).

Sequence of automatic storage and extraction

- Belt conveyor **A** introduces the material into the dome.
- The rotating frame **B** has two belts: the first one fixed and the second one movable, allowing the full filling of the storage area.
- Let eventually drain, the material is taken up by the bucket C, constrained to the rotating crane D, and downloaded into the central hopper E. The load of the bucket occurs from the top of the pile, where the material is less humid.
- Inside the tunnel F, is positioned the belt G that transports the material from the hopper to the outside, directly to the truck loading or to subsequent treatment plants.



