

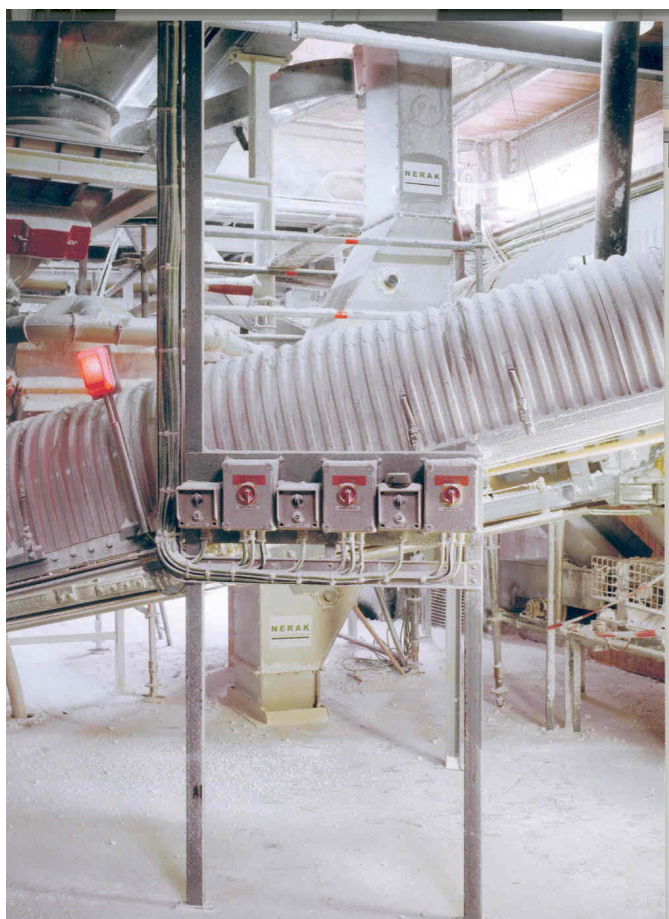
Vertical Conveying in tight quarters!



Solvay operates a large rock salt mine and a modern brine works in Borth, Germany, where salt qualities for various applications are extracted and purified. Continuous bucket conveyors have been operating for the combined horizontal-vertical conveying path of the “white gold” at this plant for many years. With NERAK’s bucket conveyor system, the plant was able to use a material handling solution with a number of unique advantages, such as low space requirements, gentle & non-segregating product transport, and an innovative layout with a combination of horizontal and vertical sections.

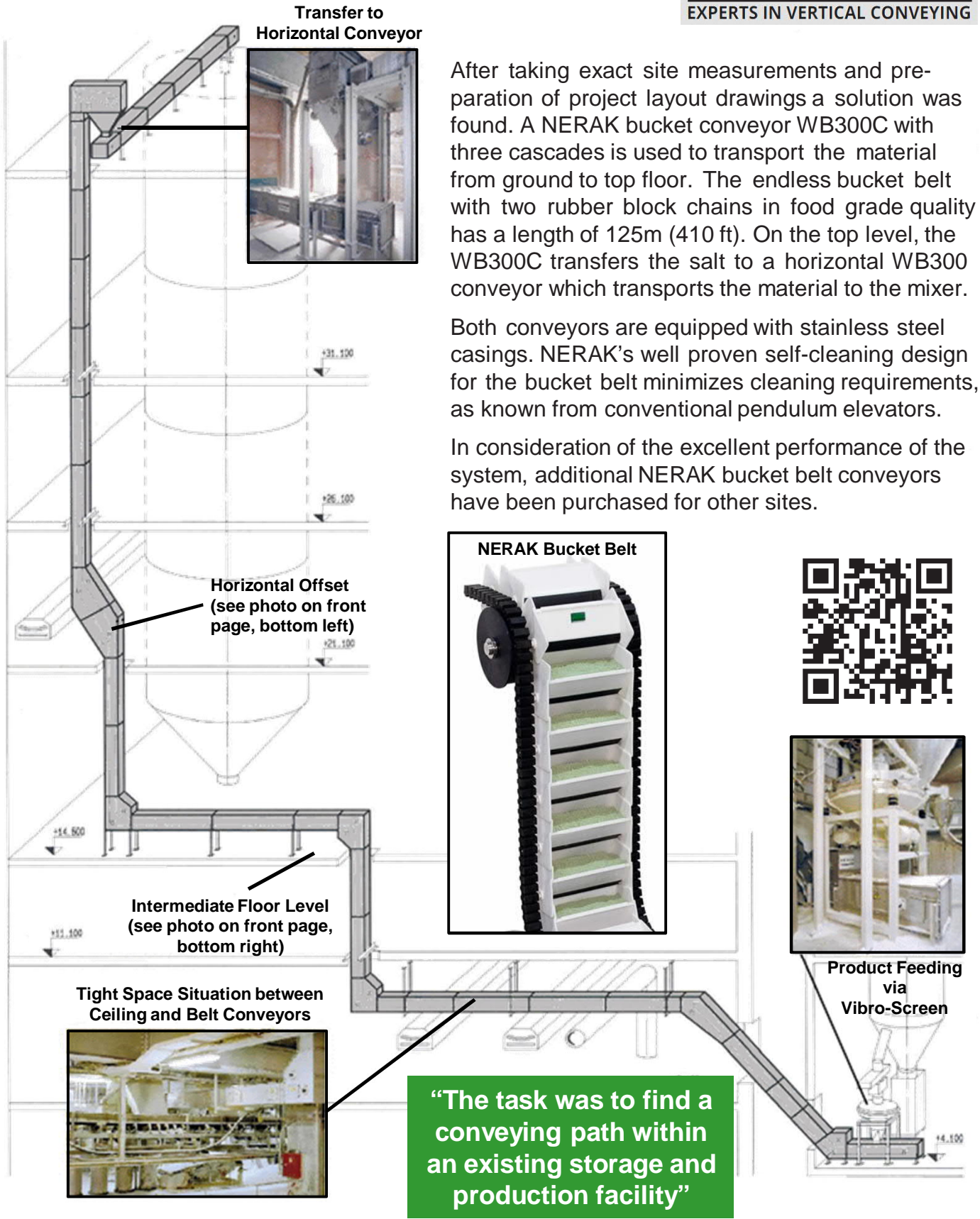


The task was to find a conveying path within an existing storage and production facility, without conflict with the installed conveyors, pipes, machinery and steel structures. The product had to be conveyed from a feed silo with screened salt on the ground floor to the mixing and packaging equipment for nitrite brine salt at an elevation of 38 m (126 ft). In addition to the vertical lift of 35m (115 ft), a horizontal distance of over 42m (138 ft) had to be bridged. The required conveying capacity was 15 metric tons per hour.



Vertical Conveying in tight quarters!

EXPERTS IN VERTICAL CONVEYING ↑



After taking exact site measurements and preparation of project layout drawings a solution was found. A NERAK bucket conveyor WB300C with three cascades is used to transport the material from ground to top floor. The endless bucket belt with two rubber block chains in food grade quality has a length of 125m (410 ft). On the top level, the WB300C transfers the salt to a horizontal WB300 conveyor which transports the material to the mixer.

Both conveyors are equipped with stainless steel casings. NERAK’s well proven self-cleaning design for the bucket belt minimizes cleaning requirements, as known from conventional pendulum elevators.

In consideration of the excellent performance of the system, additional NERAK bucket belt conveyors have been purchased for other sites.