



Efficient conveying for mineral water bottling plant in challenging urban environment

Challenge / Project goal

- Space saving conveying over five storey (20m) "vertical" production plant
- Conveying from two production floors to three truck loading and storage floors
- Handling of four different size PET bottle shrink-packs plus 5l & 20l individual bottles
- Throughput rates with up to 100 SKU's per minute / 6'000 SKU's per hour
- Highest reliability under heavy loads



Scope of delivery and performance

- Two Deniway conveyor systems (290m and 170m length)
- Three spirals, heights of 20m, 11m and 6m, diameter of 2.5m
- Three direct infeeds and two electromechanical pusher infeeds
- Three direct outfeeds and three outfeeds with electrochemanical deflectors
- Total load of up to 1.45 tons per minute
- Conveyor speed of 1 m/s
- Load coordinated drive system
- PLC based control and monitoring system

Customer details

- Bisleri International Private Limited
- Biggest water bottling company in India
- 125 bottling plants across India
- Turnover USD 220 million per year
- Production of 150 million bottles per month
- First "vertical" and tallest water bottling plant in India

Bisleri



Solution / Result

- One dedicated Deniway systems for different shrink-packs and single 5l bottles
- Shrink-packs: 250ml x 24 bottles, 500ml x 24 bottles, 1000ml x 12 bottles, 2000ml x 9 bottles
- Second dedicated Deniway system for single 20l bottles
- Fully automated loading from four high speed bottling lines
- Automated extraction for palletising, storage or truck loading
- Year of installation: 2018



Reason Why

- Smooth conveying solution over five floors
- Minimal space requirement
- Flexible 3D capable system design
- Robust and reliable technology
- Ready for future expansions

