



4B GROUP

ELEVATOR HANDLING CRUSHED GLASS

Provide engineering, design guidance and complete component supply of a new build bucket elevator handling crushed glass

Challenge

4B was contacted and asked to provide assistance with the design and complete component supply of a new bucket elevator to handle crushed glass using plastic buckets.

The elevator was to be situated indoors within the plant, and connected to two new in-feed and out-feed conveyors being commissioned at the same time. Because of this, there were several size constraints due to the limited space available in the factory. The elevator height, position of the inlet and outlet, and casing sizes were specified by the customer.

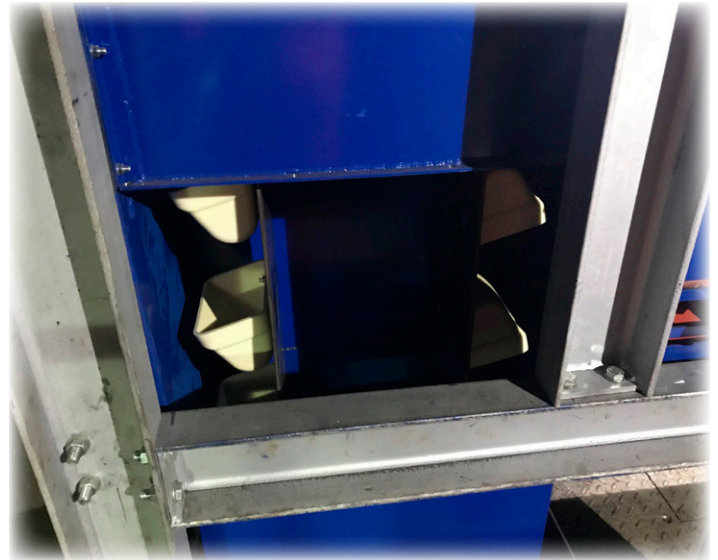
4B Engineers were required to propose an elevator specification that fell within the defined limits, but did not exceed the design parameters set by 4B Engineers. The output required was 15 TPH.



Solution

4B offered a detailed engineering proposal along with the supply of all the mechanical components in accordance with the customer requirements.

The Atlas AA85TN Toughened Nylon buckets offered a robust plastic option with good abrasion resistance. The 8" x 5" was the maximum allowable bucket that could fit within the casing sizes defined, and that provided an acceptable "pulley to bucket projection" ratio.



Results

4B Engineers helped provide a solution that met the customer's requirements. One year after the elevator was commissioned 4B were contacted to supply mechanical components for a second elevator identical to the first. The plant now operates two lines for coarse & fine product, both use the AA85TN and are performing well.

