



Flexible Solutions for Solid Alternative Fuel Handling

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Solid Alternative Fuels



High Calorific Fraction (HCF) for direct use in combustion chambers (i.e. HotDisk™ or PREPOL™)

- Grain size: <300 mm
 - Heat value: 14 - 16 MJ/kg
 - Bulk density: 0.3 – 0.5 t/m³
- or used as **feedstock** for RDF- & SRF-production



Residue Derived Fuel (RDF) for Calciner

- Grain size: 50 - 100 mm
- Heat value: 15 - 18 MJ/kg
- Bulk density: 0.2 – 0.4 t/m³



Solid Recovered Fuel (SRF) for main burners

- Grain size: <15 - 30 mm
- Heat value: 20 - >26 MJ/kg
- Bulk density: 0.1 – 0.25 t/m³



Whole tires

- Size: 500 - 1400 mm
- Heat value: up to 28 MJ/kg
- "Bulk density": 0.3 t/m³



Shredded tires

- Size: 50 - 150 mm
- Heat value: up to 28 MJ/kg
- Bulk density: 0.6 – 0.8 t/m³



Fine Materials (Saw Dust, Meat and Bone Meal, Sewage Sludge ...)

- Grain size: 0,5 - 5 mm
- Heat value: 12 - 25 MJ/kg
- Bulk density: 0.5 – 0.7 t/m³

Solid Alternative Fuel Handling Challenges

- Handling various materials with different properties and characteristics
- Ability to feed material to multiple points from a single system



Case Study No.1 – Handling Multiple Materials

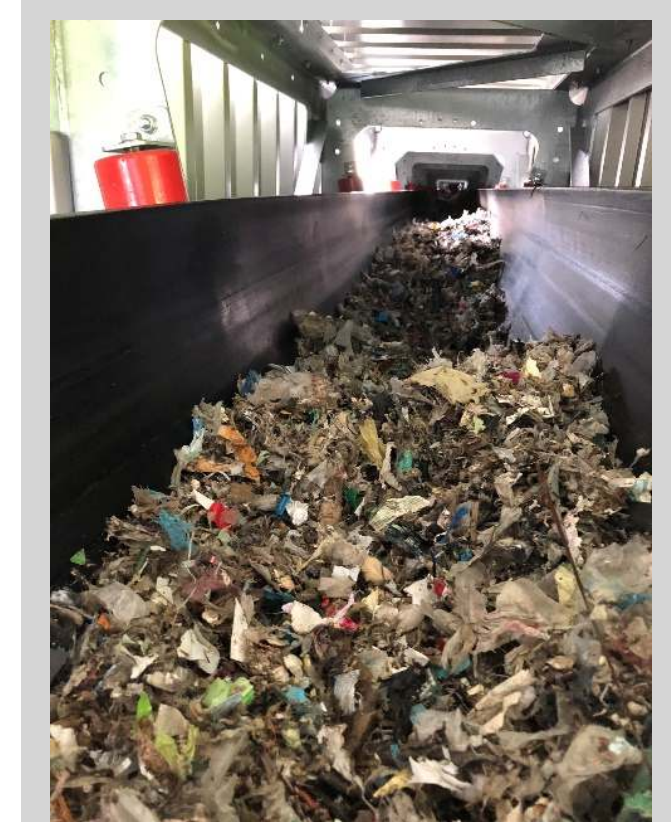


The conveying system must be able to handle the current fuel material and potential future fuel materials.

U-Shape Belt Conveyor

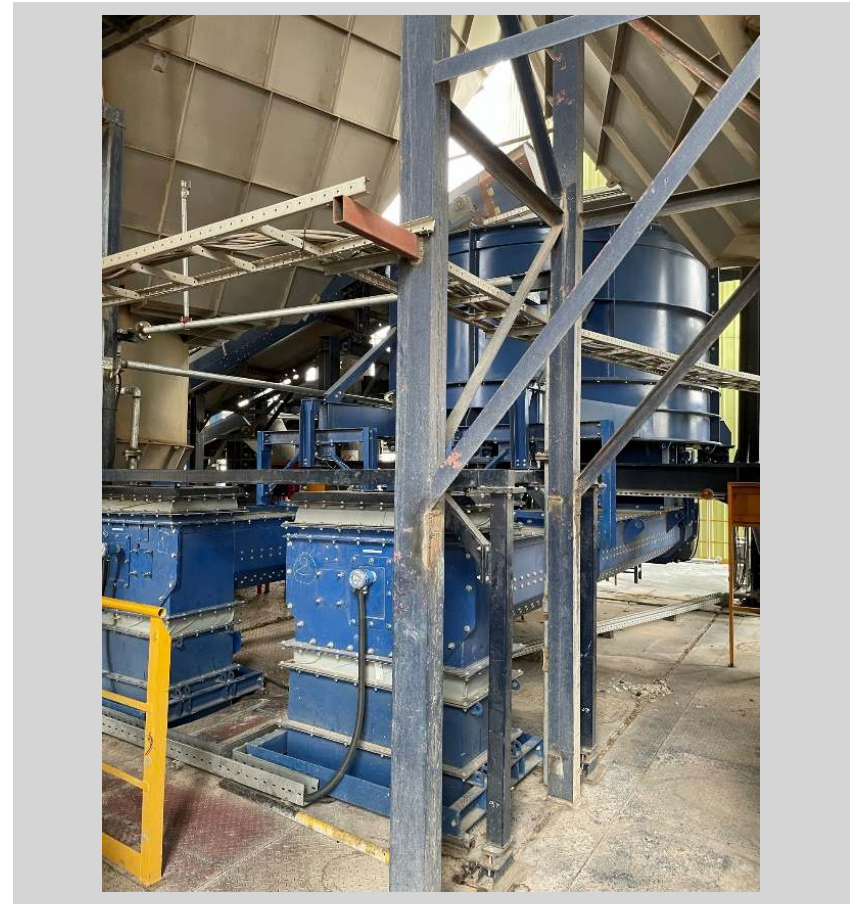
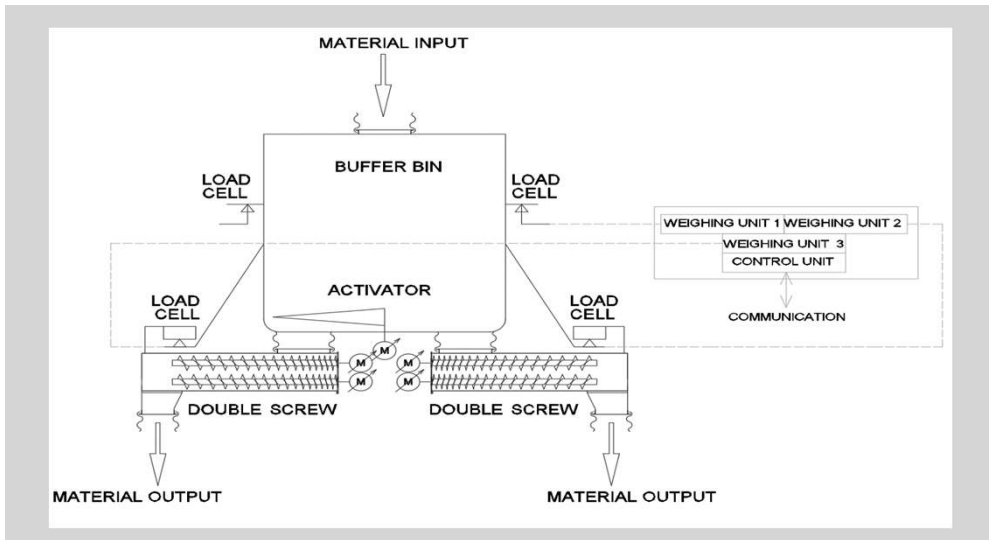
Main Features

- Allows bigger lumps or irregular feed
- Keeps all advantages of pipe conveyors
 - ✓ closed form
 - ✓ vertical and horizontal curves (single flight)
 - ✓ steep inclines up to 25°
 - ✓ light and compact structure



Case Study No.2 – Split Material Stream into Two Lines

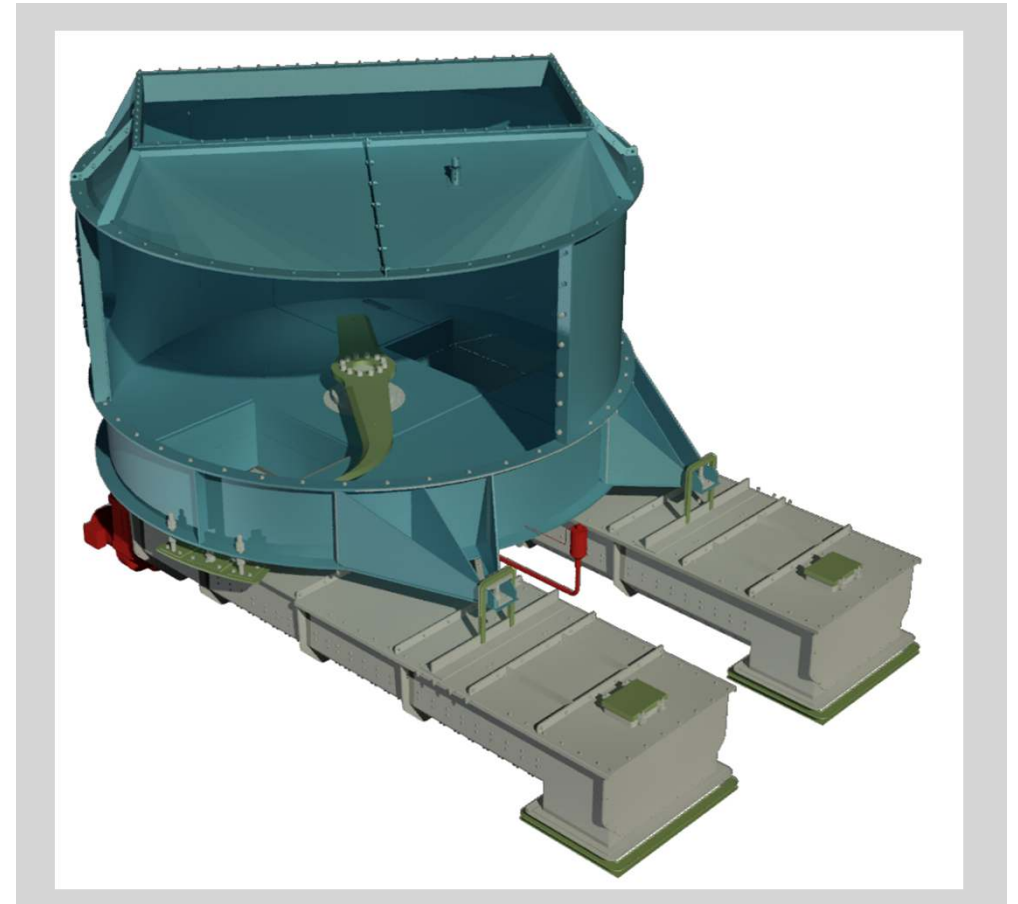
- Feed material to two points in the calciner *to maintain burning efficiency max. 15 tph per infeed point*
- Feed material to both the main burner and a satellite burner



Screw Weigh Feeder for two lines

Main Features

- Two independent feeding double screws each with its own weighing electronics, accuracy +/- 1.5%
- Closed, dust tight
- Pre-bin as material buffer
- Bottom activator for easy material flow
- On-stream calibration





Thank you for your attention!

Please direct any questions or inquiries to:

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