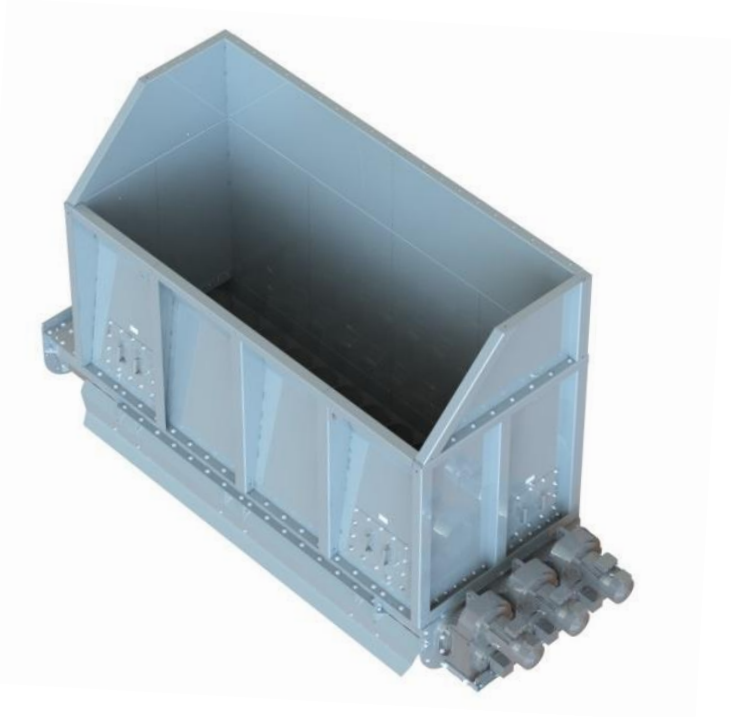
# IntraBulk® – EcoBin Distribution station

- **Suitable for a wide range of alternative materials**
- **Automatic discharging; capacity up to 200 m³/h**
- **Feeding via front loader**
- **Steady and continuous material discharge**
- **ATEX-compliant design**
- **Maintenance-friendly construction**
- **Equipped with blockage protection and other safety features**



## Application

The **EcoBin** device is used for discharging bulk solid materials and granulates delivered by trucks with folding flatbeds, bucket excavators, or cranes. The **EcoBin** is suitable for processing various types of alternative fuels, including:

RDF (Refuse-Derived Fuels):
- Shredded plastics
- Textile
- Paper
- Rubber (tire chips)

Biomass:
- Wood (chips, pellets)
- Straw
- Agricultural waste

Sludge and granulates:
- WWTP sludge
- Coal sludge
- Animal meal

The system is also capable of handling any combination or mixture of the materials listed above.

## Design

The **EcoBin** consists of two main components: a screw trough and a pre-hopper. The trough contains a screw assembly with three screws, each equipped with an electric gear drive to ensure efficient material discharge. The pre-hopper serves as a buffer for temporarily holding the transported material.

## Operation

This docking station serves as the initial point in the conveying process, primarily receiving material from front loaders and directing it toward the combustion discharge area. Reliable and continuous material flow is ensured by three screw conveyors, each equipped with a blockage detection system featuring an automatic stop function.

## Properties

- Installation at ground level
- Easy maintenance and long term support
- Keeps loading area clean
- Large discharge area to prevent material clogging and bridging
- High variability of subsequent conveyor configurations - ideal for chain conveyor with side inlet (belt, tube, etc. possible with extended civil works)

**Pre-hopper**

Seals the trailer during the discharging operation.

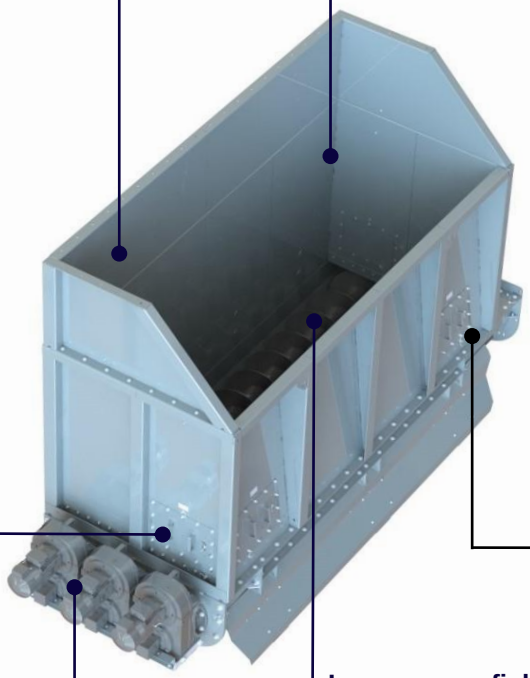
**Pre-hopper**

Primarily serves as discharge cover, sealing element, and buffer for discharged material.

**Maximum level sensor**

The reception box entry is equipped with an overfill protection sensor.

ATEX compliant design.



**Inspection window**

**Inspection window**

**Gear drives**

Automatically controlled, reliable drive system operated via electronic frequency inverters.

**Large screw field entry**

Optimized for alternative fuels and designed to prevent material bridging.

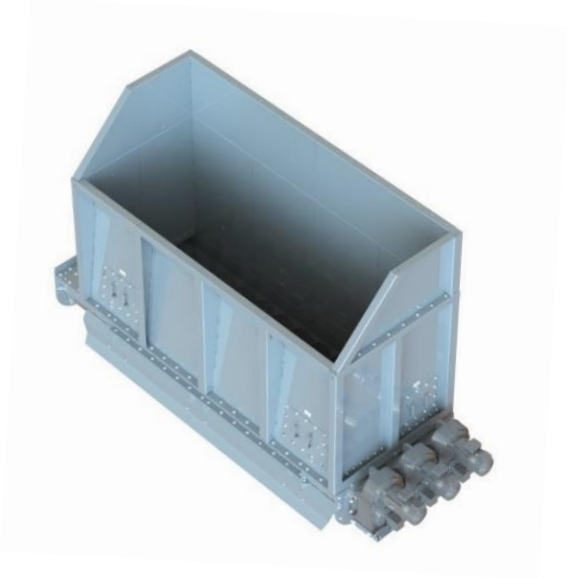
## General Data

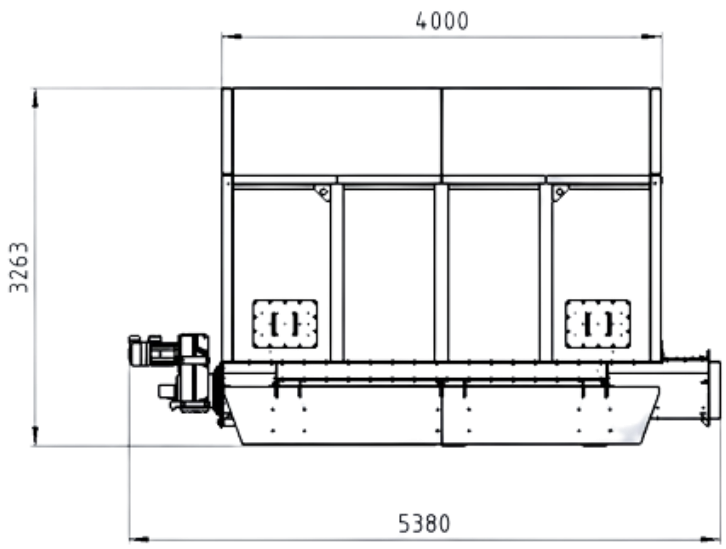
| Screw Ø [mm] | Max. volume [m3] | Material lump size [mm] | Max. volumetric flow [$m^3/h$] | Approx. main gear drive [kW] |
|---|---|---|---|---|
| 455 | 12 | < 100 | 200 | 7,5 - 11 |

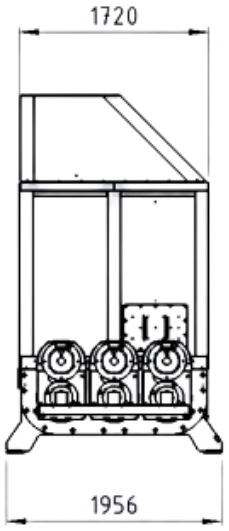
## EcoBin variants and dimensions

**EcoBin L** – left side distribution

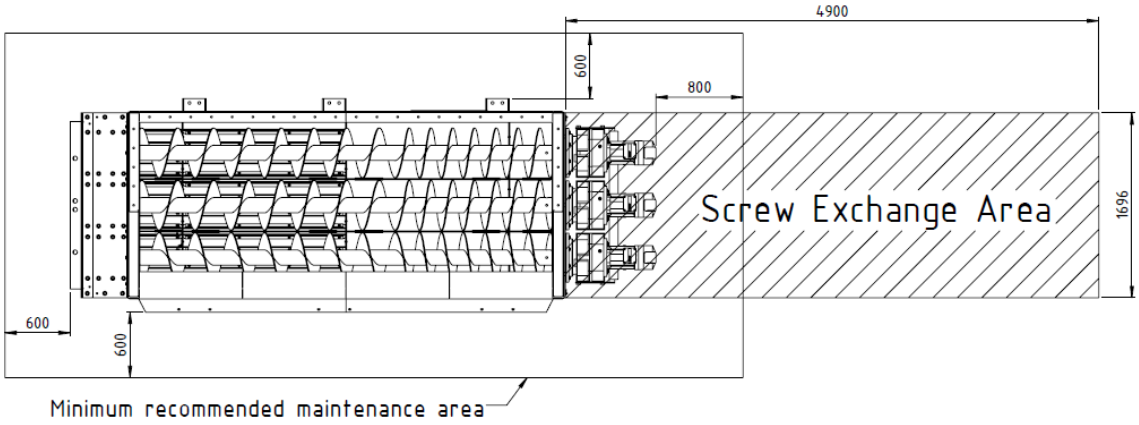
**EcoBin R** – right side distribution





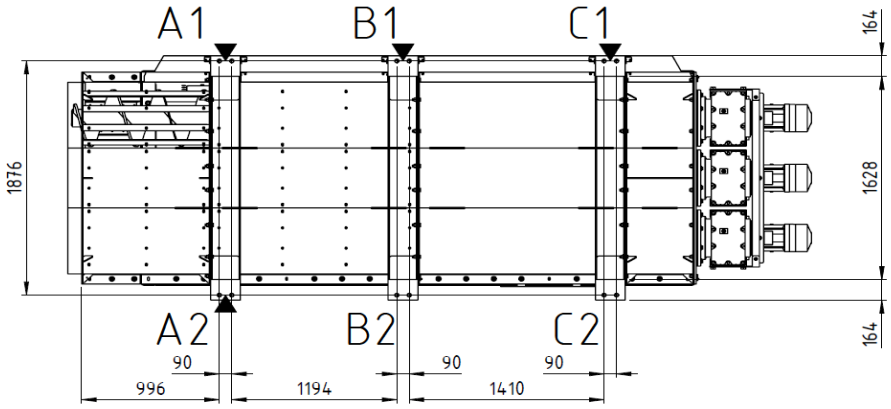



## Recommended maintenance area




## Maximum possible load on foundations (for bulk density 800kg/m$^3$)

| Foundation point | Empty | Full of mat. 800 kg/m$^3$ |
|---|---|---|
| A1 [kN] | 7,5 | 25 |
| A2 [kN] | 7,5 | 25 |
| B1 [kN] | 11,5 | 37 |
| B2 [kN] | 11,5 | 37 |
| C1 [kN] | 13,5 | 35 |
| C2 [kN] | 13,5 | 35 |

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