

IntraBulk® EcoDock – Docking station

- Cost-effective version of the discharging unit for a wide range of walking floor truck applications
- Overfeeding protection
- Steady and controlled material discharge
- Compatible with a wide variety of bulk materials
- Smooth and reliable sealing system
- Easy installation
- Maintenance friendly design



Application

The **IntraBulk EcoDock** is used for smooth discharging of various types of walking floor trucks. The processed materials include a wide range of alternative fuels, typically:

RDF (Refuse-Derived Fuel):

- Shredded plastics
- Textile
- Paper
- Rubber (e.g., tire chips)

Biomass:

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

Sludge and granulates:

- WWTP sludge
- Coal sludge
- Animal meal

Or any combination of the above-listed materials.

Design

The **EcoDock** consists of two key components: the first is the active discharging element, which features a screw bottom design with three individual screws, each driven by its own motor to ensure efficient and continuous material discharge; the second is the reception box with accessories, designed for direct connection with walking floor trucks, where optimized sealing minimizes material spillage during unloading.

Operation

The discharging process begins by opening the roll-up gates, which remain closed when no truck is connected to the docking station. Gate opening is confirmed by end-position sensors, and a signal is sent to the driver to reverse the truck to the docking station. Correct truck positioning is verified by a light barrier; once aligned, the truck is stopped and the sealing system is activated. At this point, the screw bottom is switched on and the discharging process starts. Material discharge is monitored and controlled by a set of level sensors installed in the docking station. When not in operation, the **EcoDock** remains closed to prevent unauthorized access to the docking area.

EcoDock description

Roll-up doors



ATEX compliant design

Gear drives

Controlled by
frequency inverters.

Sealing flap

Trailer side seal

Screw

Free screw – with bearing on
one side

Bottom sealing

Sealing the bottom of the trailer

EcoDock variants

ECD Left configuration

Designed to feed material onto the conveyor from the left-hand side.

ECD Right configuration

Designed to feed material onto the conveyor from the right-hand side.

ECD – Left



ECD – Right



ECD – Short

In case of a standard twin-door truck, where no side barriers are present, the short type of EcoDock (Type S) can be used, allowing direct and unobstructed access for unloading.

ECD – Long

In case of a standard twin-door truck with side barriers, the long type of EcoDock (Type L) must be used to ensure proper access and secure unloading.

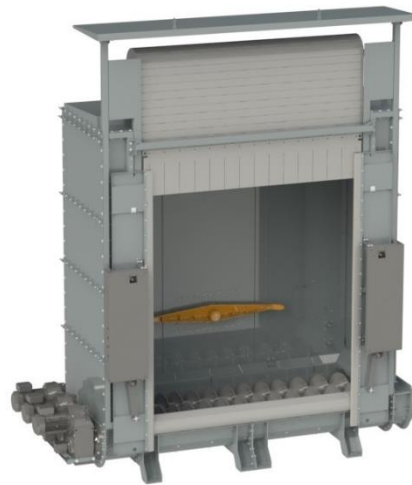


Option

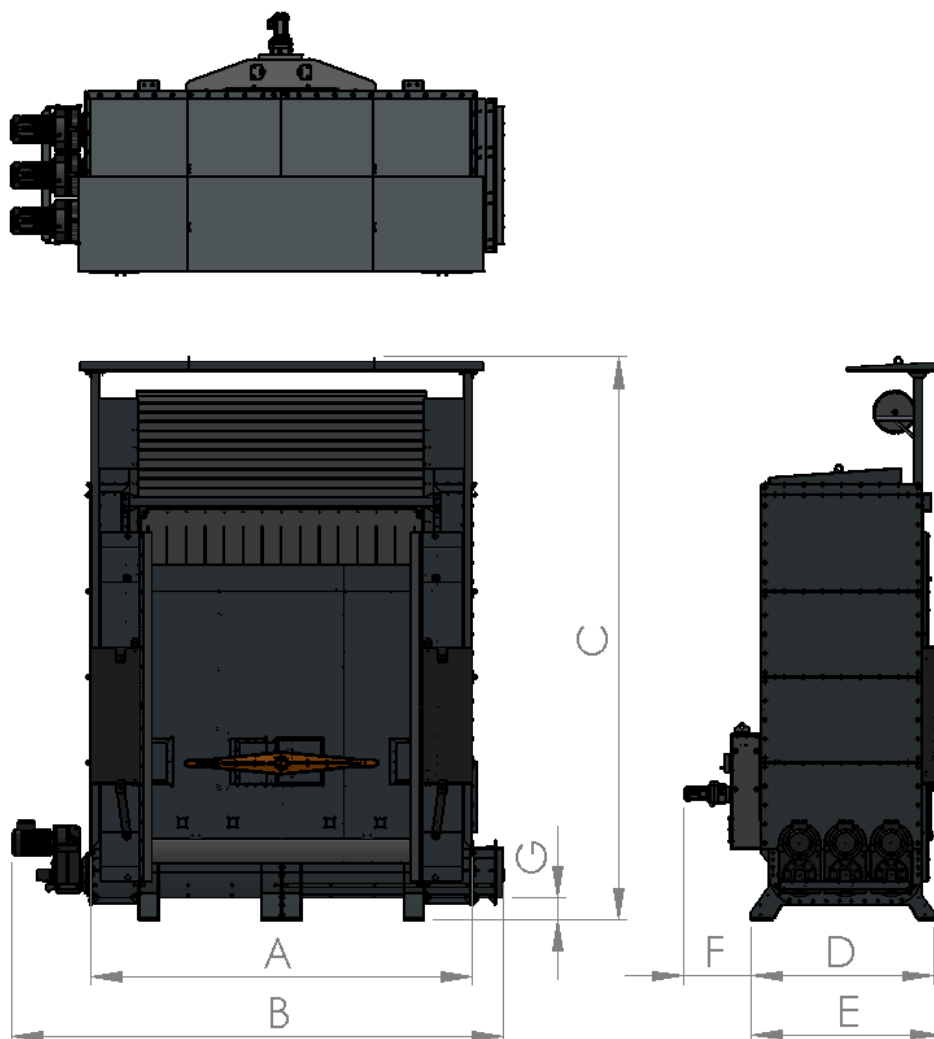
ECD – activator

The activator is used for materials with a tendency to bridge, ensuring continuous flow and preventing blockages.

The system is equipped with a hydraulic unit for reliable and powerful operation.



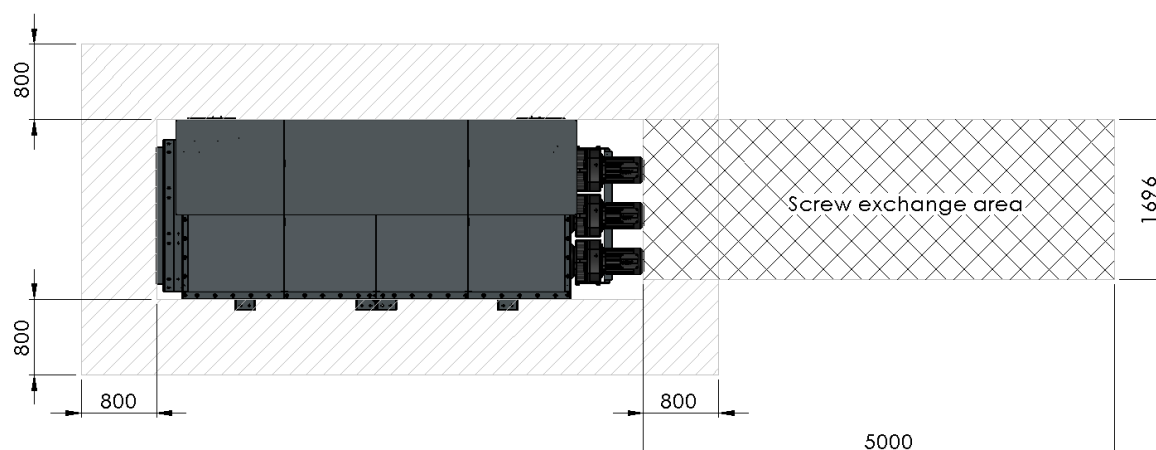
General Arrangement



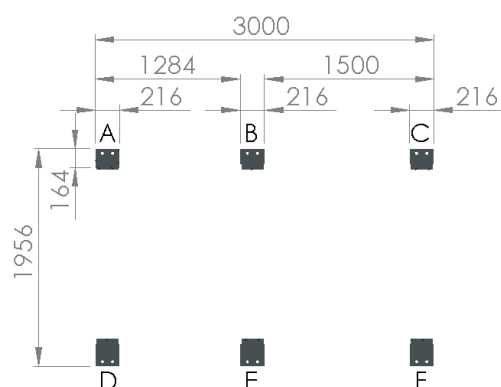
Model	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
ECD-S	4100	5380	5936	2195	2406	-	251
ECD-S-AG	4100	5380	5936	2195	2406	680	251
ECD-L	4200	6380	5936	2195	2406	-	251
ECD-L-AG	4200	6380	5936	2195	2406	680	251

Model	ECD-S	ECD-L
Max gravimetric feederate [t/h]	120	120
Max. volumetric feederate [m ³ /h]	150	150
Nominal/maximal particle size 3D [mm]	75	75
Screw diameter [mm]	455	455
Number of screws	3	3
Electric motor [kW]	5,5 - 11	5,5 - 11
Approx. weight [kg]	7440	8720

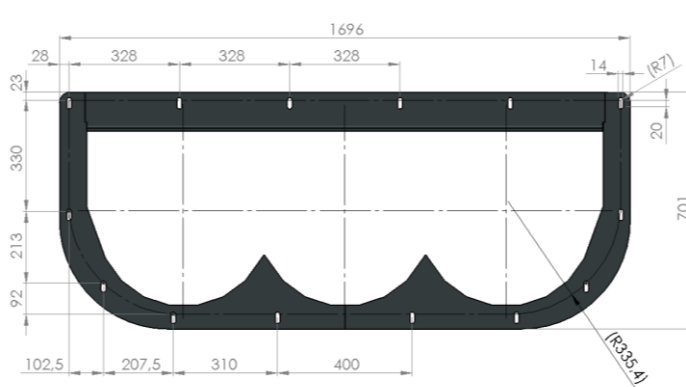
Recommended service area



General Anchor Loads



Conecting flange



Model	A [kN]	B [kN]	C [kN]	D [kN]	E [kN]	F [kN]
ECD-S	28	24	35	47	13	54
ECD-S-0,8 t/m ³	50	44	53	69	33	72
ECD-L	30	26	37	49	15	56
ECD-L-0,8 t/m ³	54	48	57	73	37	74

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