

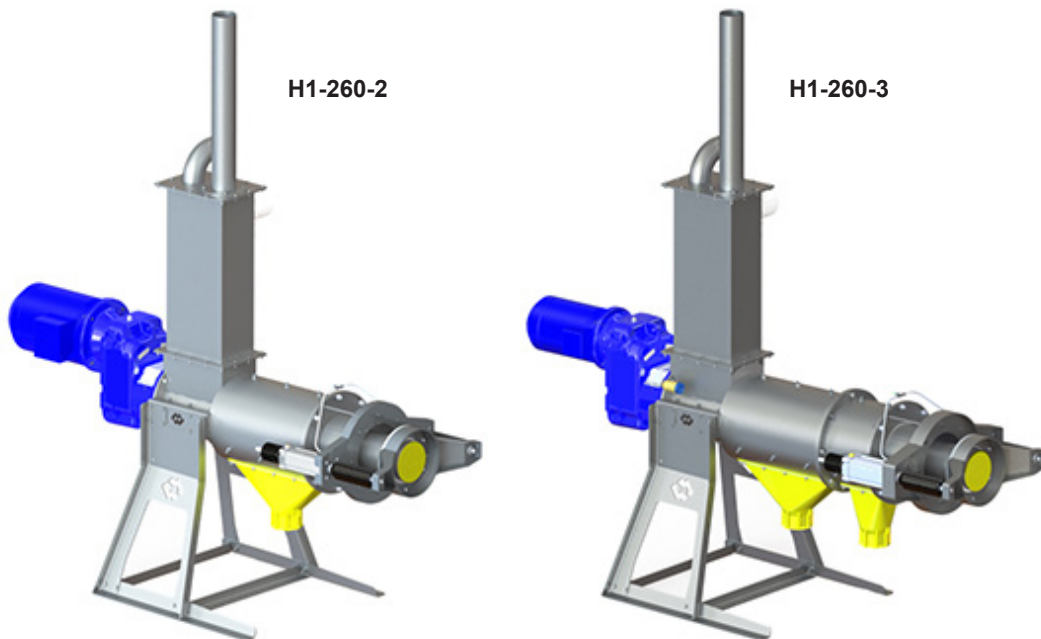


# SEPCOM® Bedding

*SEPBEDH - SOLID-LIQUID  
SEPARATOR*

1

## TECHNICAL CATALOGUE



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ORIGINAL INSTRUCTIONS IN ENGLISH

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All the products described in this catalogue are manufactured according to **WAMGROUP S.p.A. Quality System procedures**. The Company's Quality System, certified in July 1994 according to International Standards **UNI EN ISO 9002** and extended to the latest release of **UNI EN ISO 9001**, ensures that the entire production process, starting from the processing of the order to the technical service after delivery, is carried out in a controlled manner that guarantees the quality standard of the product.

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## 1.1 General description of equipment

The separator **SEPCOM® Bedding** features a loading zone consisting of a compensation tank with overflow unloading hopper, a stainless steel body that houses an screw which conveys the material toward the outlet of the separator; the separation occurs through a screen that completely wraps the screw (housed as well inside the separator body). The liquid flows through the screen while the solid part is pushed toward the outlet spout on which it has been provided a pneumatic pressor. The pneumatic pressor creates a counter-pressure on the material outlet and generates a plug; this enables the automatic operation of the separator and prevents the flowing out of the liquid phase contained by the material handled.

The drive unit consists of an electric motor and a flanged gear reducer fitted on the screw shaft.

The separator has to be installed within a plant that provides for the proper supply and that envisages a liquid and solids separated collecting system all managed by means of an electric control board and specific controlling devices.

### IMPORTANT NOTE:

The operation hours of the separator have to be monitored by means of a counter, already fitted on the control panel which can be supplied as accessory.

This aspect is very important especially as regards possible wear problems.



### Important

**The terms “equipment” and “separator ” used in this manual refer to the same machine. The separator, control panel and air compressor (that provides the pneumatic pressure) must be considered a machine and, consequently, must bear the CE marking. It is forbidden to start the equipment unless the machine/plant in which it is to be installed has been declared compliant with the Directive 2006/42/EC and further modifications.**

## 1.2 Permitted use and environmental operating limits

The separator SEPCOM® BEDDING has to be used for the separation of cattle manure according to the indications provided by manufacturer on condition that the material can be pumped into the compensator tank with a suitable chopper pump and on condition that the solid content does not exceed 5 % and 12 % TS.

The separator is to be used in the absence of overpressure or negative pressure.

**Every other use must be considered improper, therefore not permitted.**

Given that fact that **SEPCOM® Bedding** is to be installed in a plant, the working of the equipment and its performances are also strictly linked to the entire plant condition and layout, it is therefore very important to follow all the recommendations listed at page 3 and 4.

Unless otherwise specified, the equipment concerned can be used only within the indicated limits.

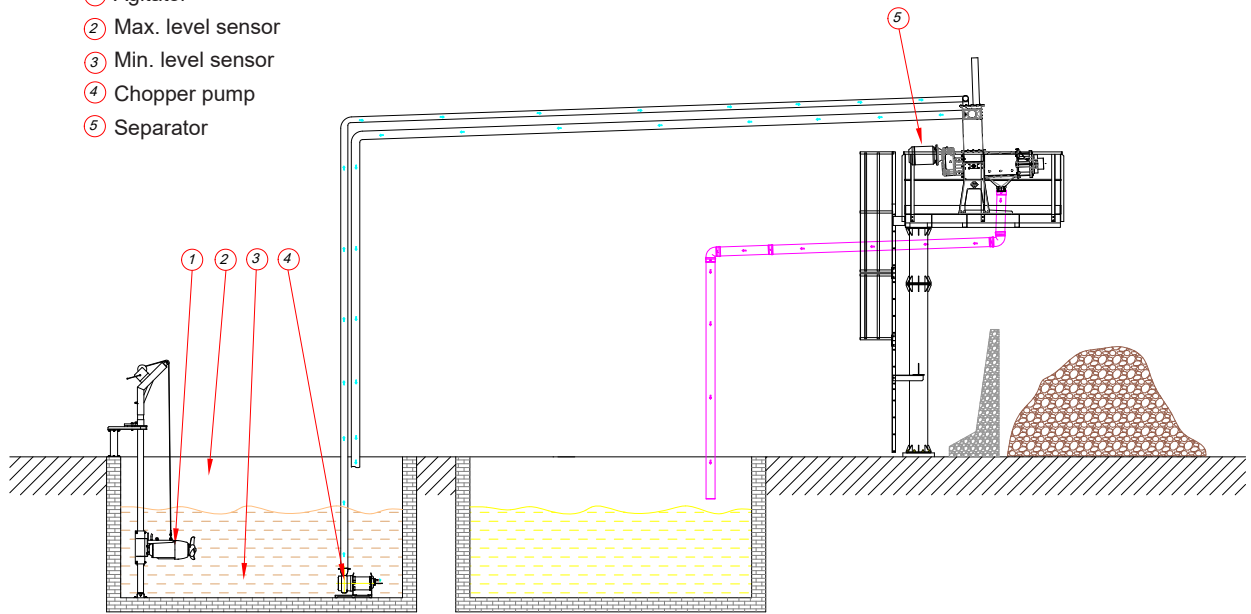
- Altitude: less than 1,000 m at sea level
- Ambient Temperature: between 0 and + 40 °C
- Cold environment: with temperatures below - 5 °C use only oil and lubricants suitable to the operating temperature.



2.1 Configurations available

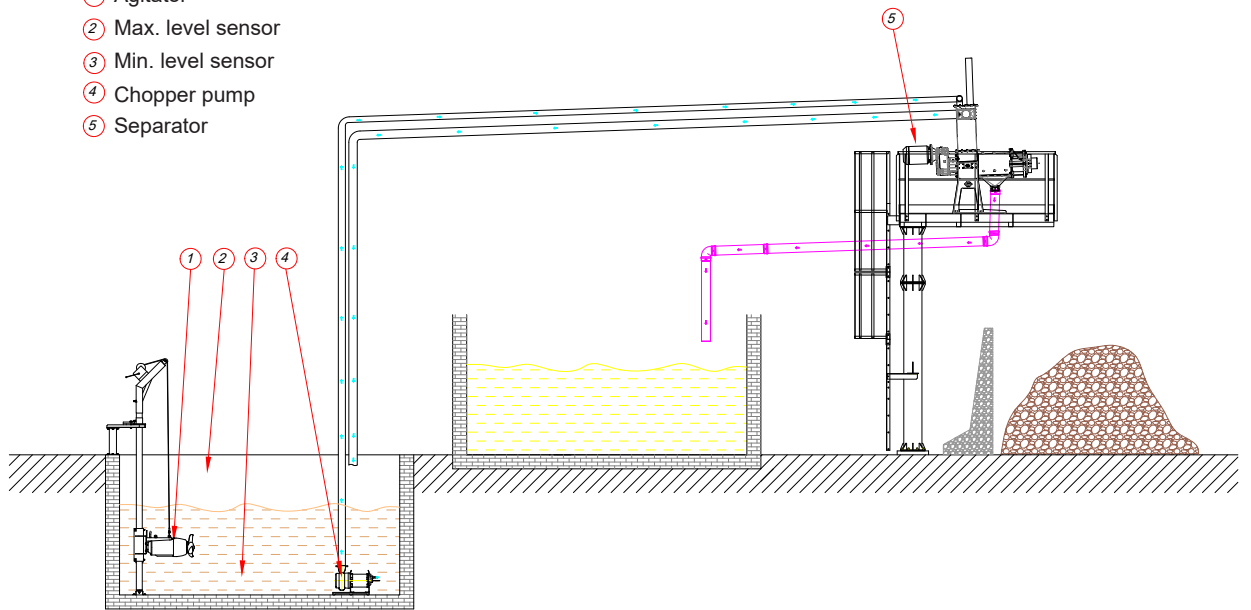
Plant with tower structure and underground separated liquid tank

- ① Agitator
- ② Max. level sensor
- ③ Min. level sensor
- ④ Chopper pump
- ⑤ Separator



Plant with tower structure and separated liquid tank above the ground

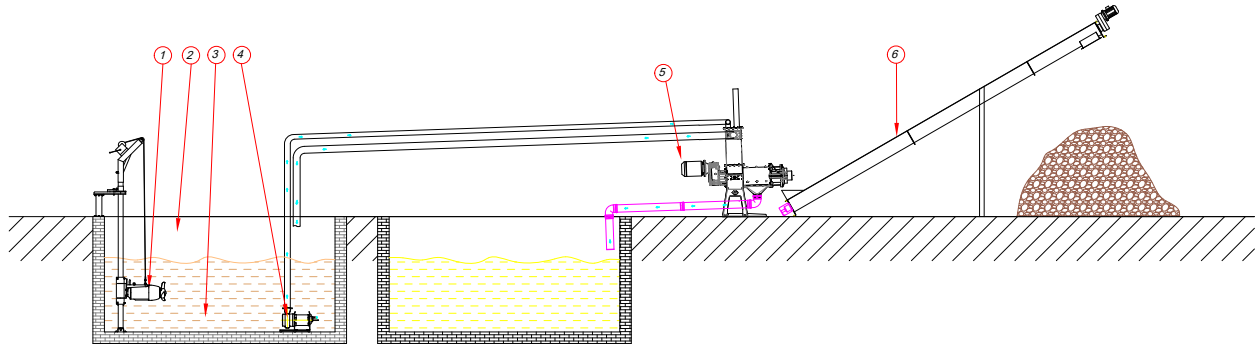
- ① Agitator
- ② Max. level sensor
- ③ Min. level sensor
- ④ Chopper pump
- ⑤ Separator





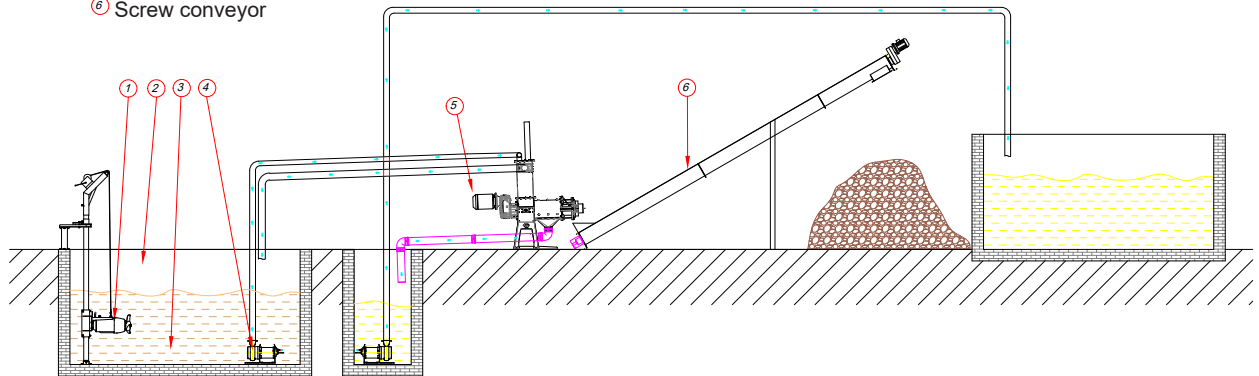
Ground plant with screw conveyor and underground separated liquid tank

- ① Agitator
- ② Max. level sensor
- ③ Min. level sensor
- ④ Chopper pump
- ⑤ Separator
- ⑥ Screw conveyor



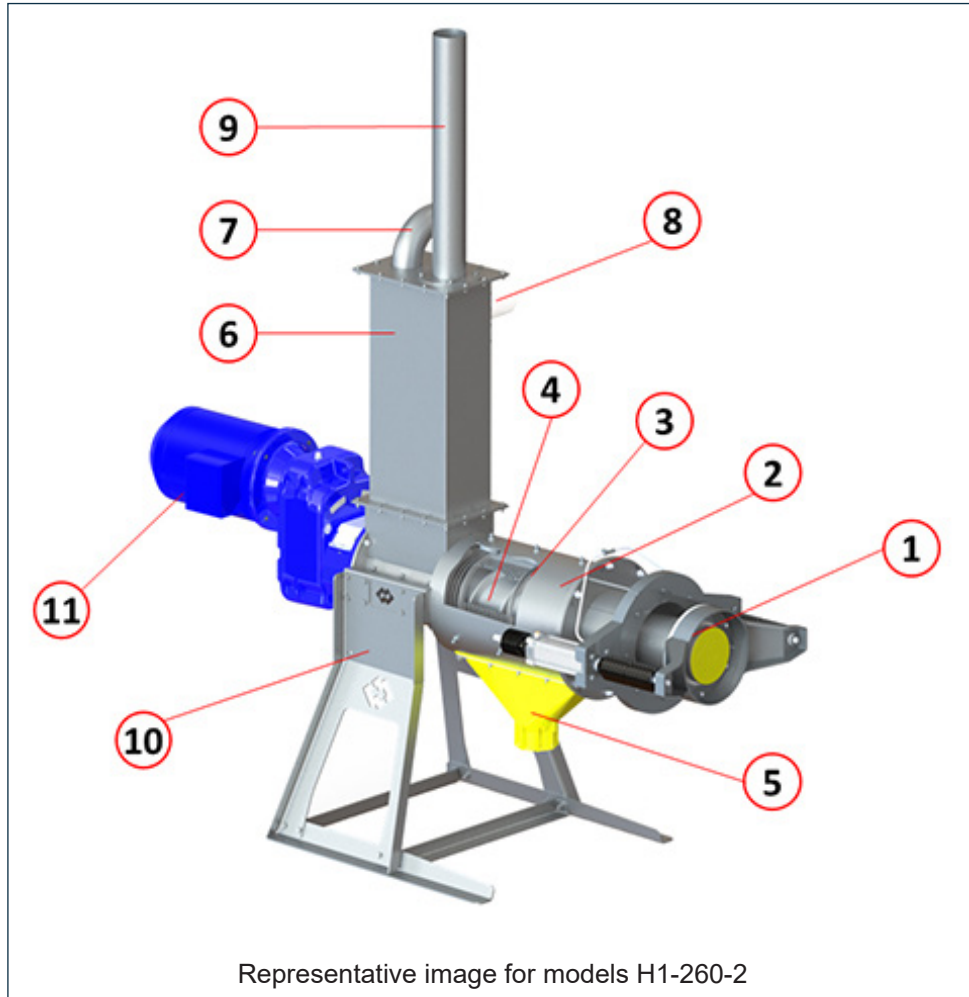
Ground plant with screw conveyor and separated liquid tank above the ground

- ① Agitator
- ② Max. level sensor
- ③ Min. level sensor
- ④ Chopper pump
- ⑤ Separator
- ⑥ Screw conveyor

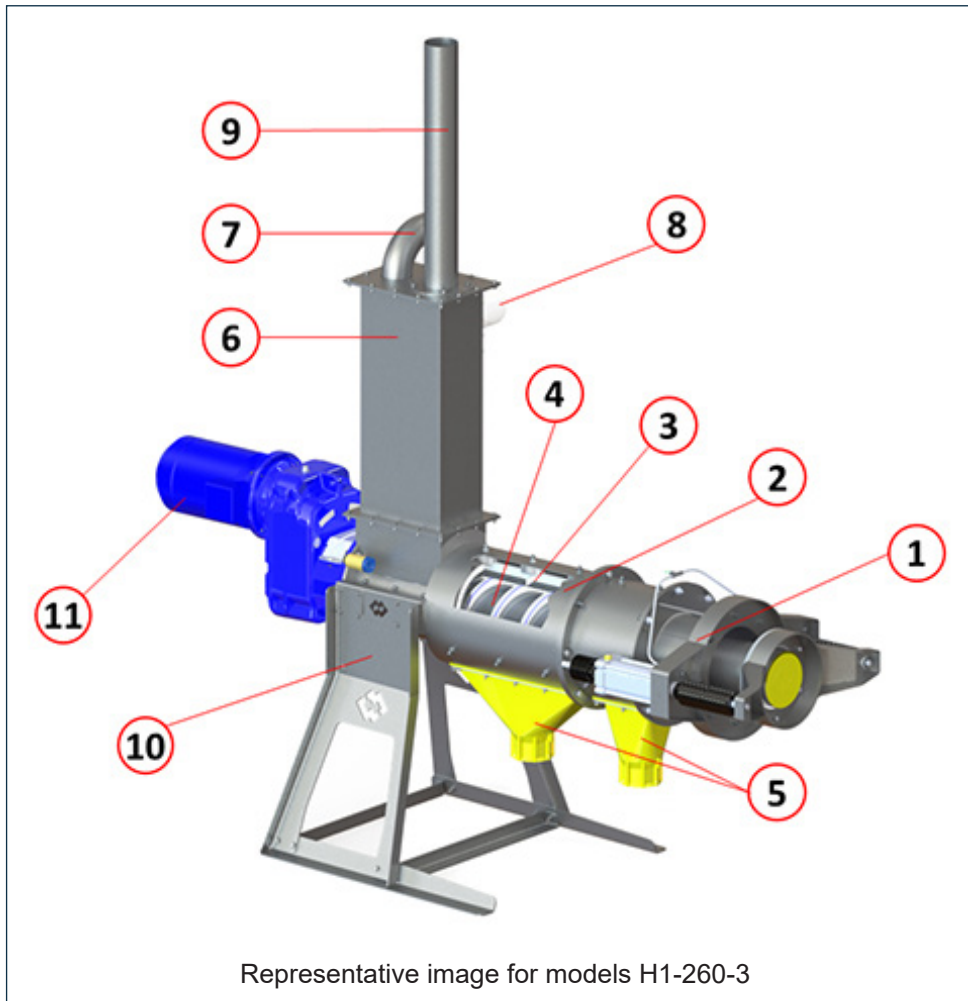




3.1 Standard supply: main components





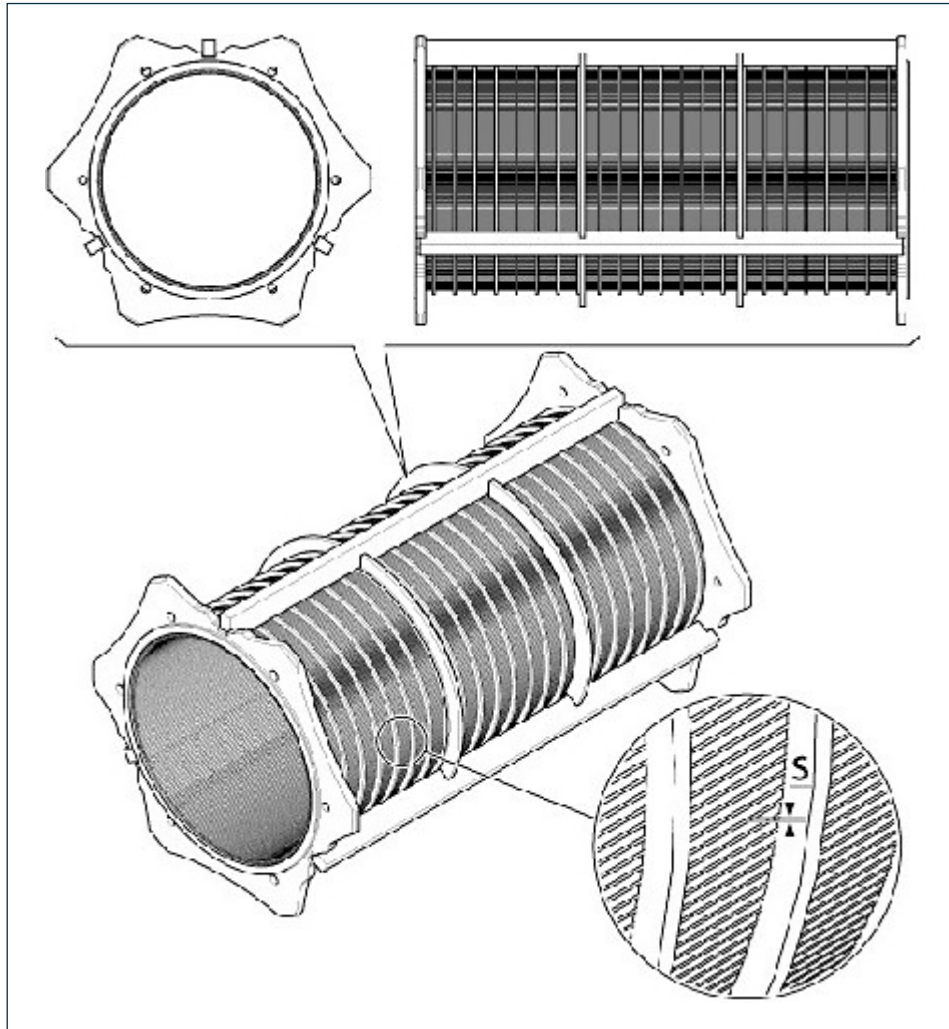


Pos.	Description
1	Pneumatic pressor
2	Casing
3	Screen basket
4	Auger
5	Liquid phase discharging hopper
6	Compensator tank
7	Material inlet pipe
8	Overflow
9	Venting air pipe
10	Support feet
11	Motor and gear reducer.

CONFIGURATION OPTIONS	
Auger	SS 304L
Screen basket	0.75 - 0.90 mm
Cylinders	Ø80 - Ø100 mm






3.2 Screen details



MODEL	SINGLE SCREW SCREEN	ADDITIONAL SCREEN
	S = sizes available [mm]	S = sizes available [mm]
H1-260-2	0,75 - 0,90	-
H1-260-3	0.75	0.90



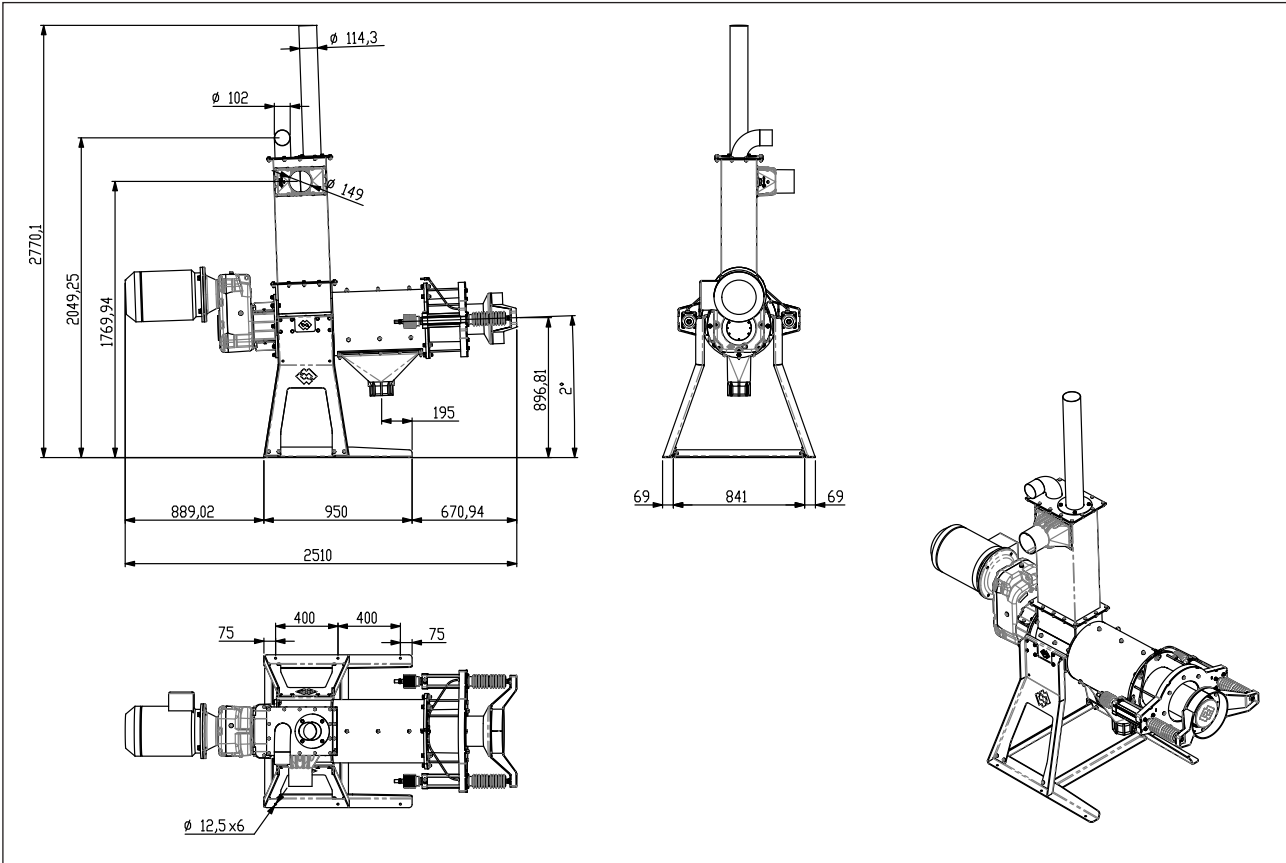
3.3 Accessories

	<p>24 liters compressor, flow rate 250 litres/min, 2 cylinders 1 stage, pressure 10 bar (145 psi), installed power 1.5 kW, voltage 230 V, 50 Hz with dryer and filter. Packaged separately from the machine.</p>
	<p>SIP-BED control panel version <i>Full</i> for a complete management of the separation plant. Frequency: 50/60 Hz. Voltage: 210/240V, 360/480V. Packaged separately from the machine.</p>
	<p>SIP-BED control panel version <i>Easy</i> for a smart management of the separation plant. Power supply: 24 VDC from main power switchboard. Packaged separately from the machine.</p>



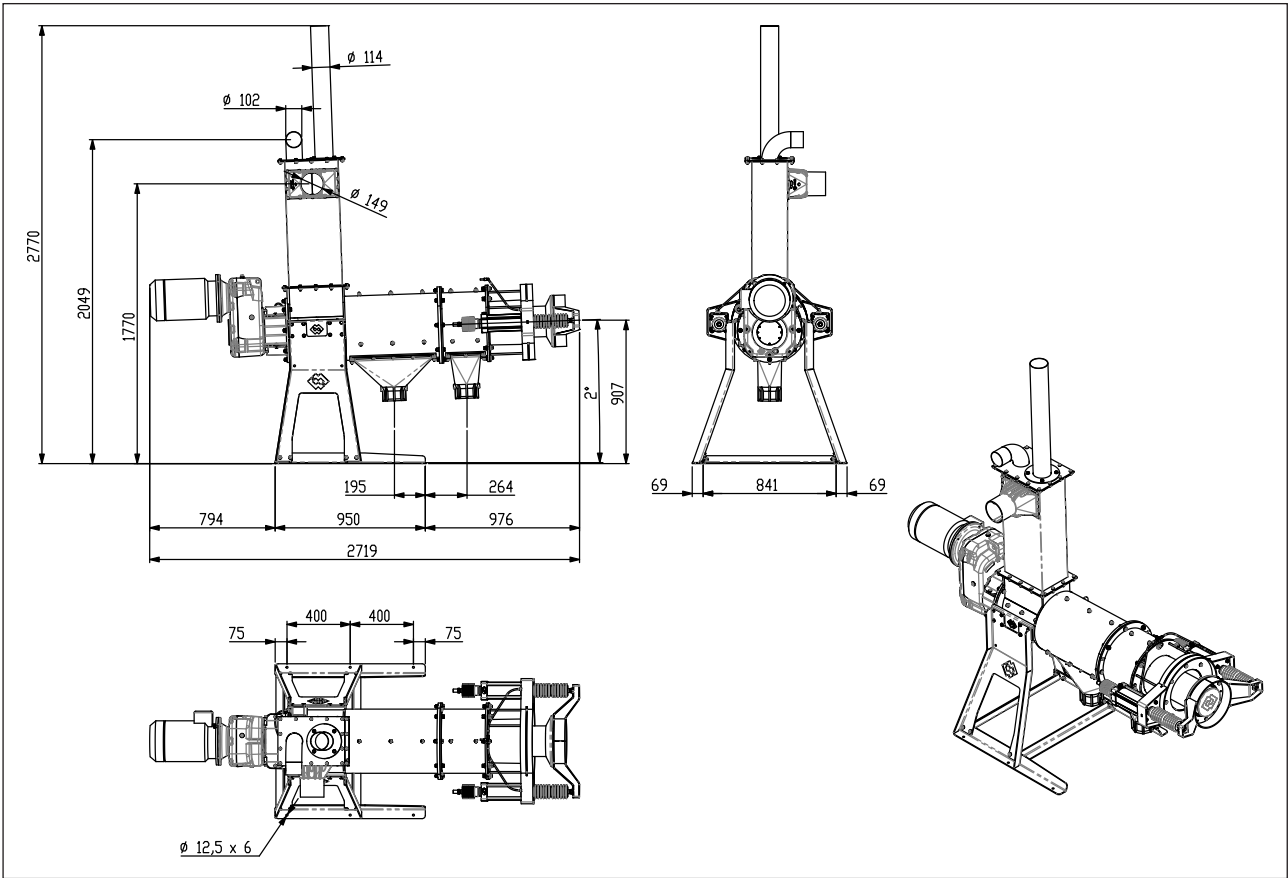
4.1 Overall dimensions

Overall dimensions model H1-260-2





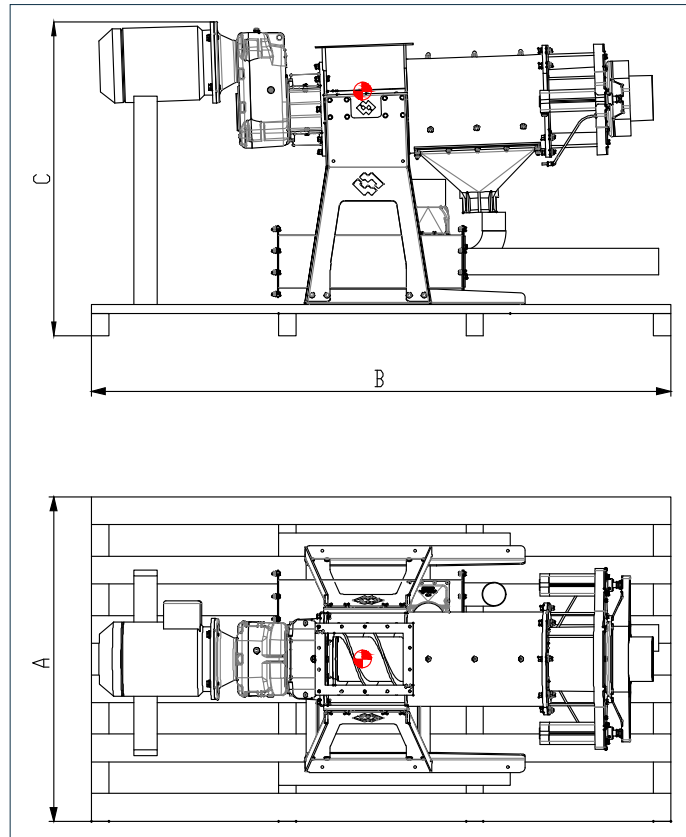
Overall dimensions model H1-260-3





4.2 Packaging dimensions for shipping

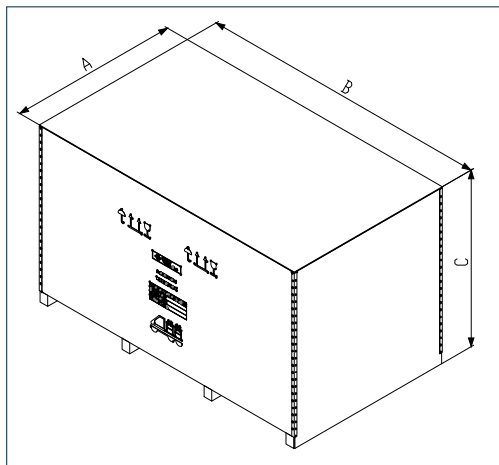
PACKAGING PALLET + NYLON SHRINK-WRAP



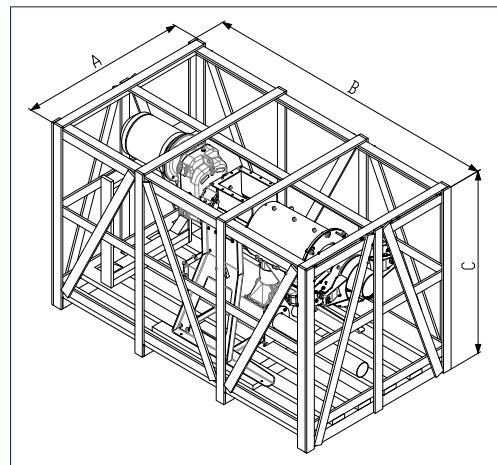
Important

The centre of gravity in the picture above is only an indicative in relation to the packed equipment. However, all necessary precautions must always be taken to handle the material correctly.

PACKAGING INCLUDING THE CRATE + BARRIER BAG



PACKAGING INCLUDING CAGE + NYLON SHRINK-WRAP





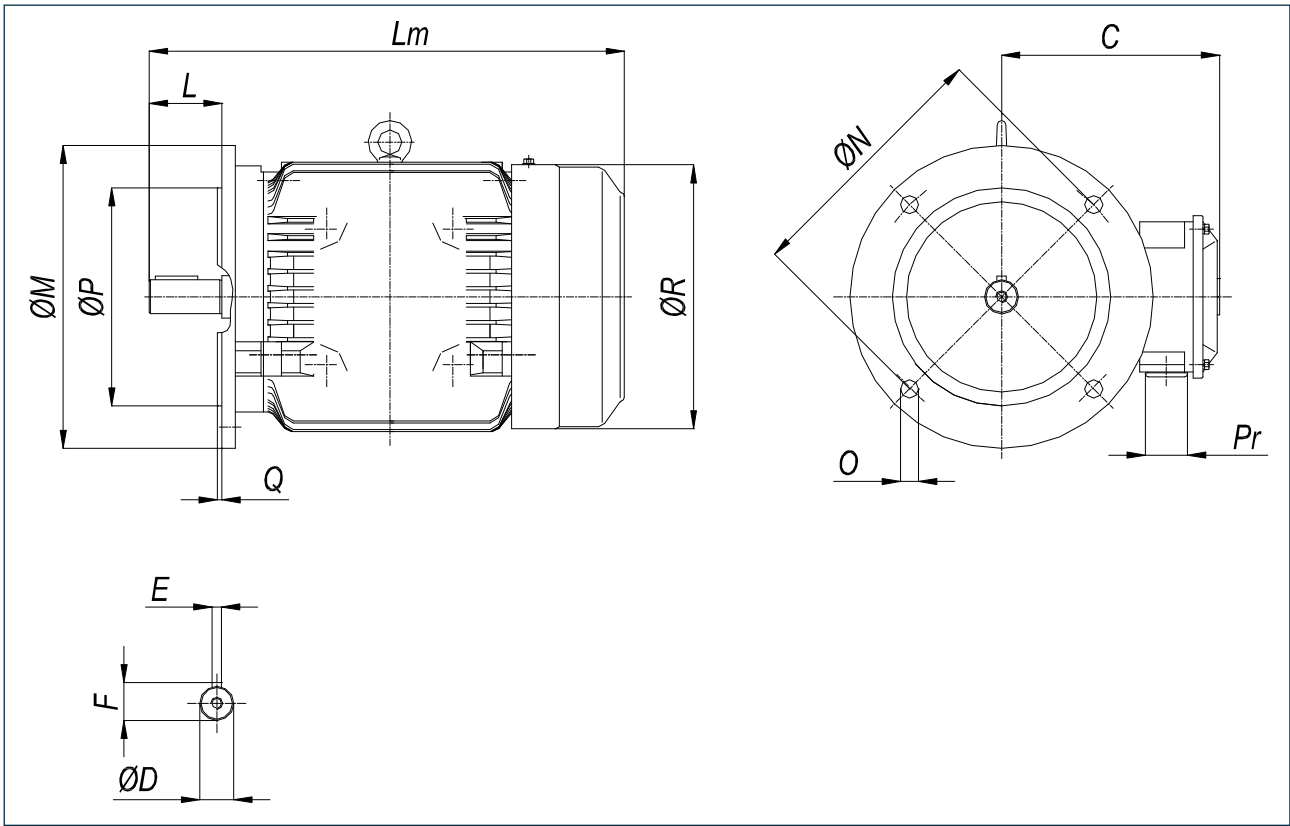
4.0 INFORMATION REGARDING HANDLING AND TRANSPORT

Model	Packaging type	Dimensions [mm]			Weight [kg]		
		A	B	C	Equipment	Packaging	Equipment + packaging
H1-260-2	PALLET + heat-shrink film	1050	2700	1355	575	40	615
	CRATE + heat-shrink film	1080	2700	1450		65	640
	CASE + barrier bag	1050	2700	1450		90	665
H1-260-3	PALLET + heat-shrink film	1050	2700	1350	625	40	665
	CRATE + heat-shrink film	1080	2700	1450		65	690
	CASE + barrier bag	1050	2700	1450		90	715

**5.1 Inquiry form**

<b>PLANT</b>										
Separator fed by: Pump	YES	<input type="text"/>	NO	<input type="text"/>	Which type?	Volumetric	<input type="text"/>	Centrifugal	<input type="text"/>	
Is it a chopper pump?	YES	<input type="text"/>	NO	<input type="text"/>	Kw	Head H (m)	<input type="text"/>			
Pump-Separator horizontal distance [m]	<input type="text"/>				Pump-Separator vertical distance [m]	<input type="text"/>				
Pre-mixed material	YES	<input type="text"/>	NO	<input type="text"/>						
Pump controlled by inverter	YES	<input type="text"/>	NO	<input type="text"/>						
Separator controlled by inverter	YES	<input type="text"/>	NO	<input type="text"/>						
Geographic areas	<input type="text"/>									
Frequency [ Hz ]	<input type="text"/>	Volt [V]	<input type="text"/>				No. of phases	<input type="text"/>		
<b>APPLICATION/SECTOR</b>										
FARMING	Cattle farming sector	<input type="text"/>		Other Livestock sector (specify)						
	Pig farm sector	<input type="text"/>		<input type="text"/>						
BIOGAS:	Livestock sector	<input type="text"/>		Other sectors (specify)						
	F.O.R.S.U.	<input type="text"/>		<input type="text"/>						
Other applications: please describe the process and where the separation is required										
<input type="text"/>										
<b>MATERIAL</b>										
Manure	YES	<input type="text"/>	NO	<input type="text"/>						
Presence of straw	YES	<input type="text"/>	NO	<input type="text"/>	Dimensions [mm]	<input type="text"/>				
Other bedding material (specify)										
<input type="text"/>										
Does the material come from stable washing systems?	YES	<input type="text"/>	NO	<input type="text"/>						
Digestate	YES	<input type="text"/>	NO	<input type="text"/>						
Material description										
<input type="text"/>										
Total floating solids %	<input type="text"/>				Temperature (°C)	<input type="text"/>				
Other	YES	<input type="text"/>	NO	<input type="text"/>						
Material description										
<input type="text"/>										
Total floating solids %	<input type="text"/>				Temperature (°C)	<input type="text"/>				
<b>PURPOSE</b>										
Dry solids	<input type="text"/>	Clean liquid	<input type="text"/>	N or P separation						
<input type="text"/>										
Other										
<input type="text"/>										
Liquid phase use										
<input type="text"/>										
Solid phase use										
<input type="text"/>										
<b>OPERATION CONDITIONS</b>										
Operation hours per day	<input type="text"/>		[h/day]							
Operation hours per day	<input type="text"/>		[m³/h]							
<b>ACCESSORIES</b>										
Equipped with compensator tank of 1 m³	YES	<input type="text"/>	NO	<input type="text"/>						
Moisture Sensor	YES	<input type="text"/>	NO	<input type="text"/>						
Output solid support	YES	<input type="text"/>	NO	<input type="text"/>						
SCP control panel	YES	<input type="text"/>	NO	<input type="text"/>						
Raised tower platform for separator installation	YES	<input type="text"/>	NO	<input type="text"/>						
<b>PACKAGING</b>										
Pallet and nylon shrink film	<input type="text"/>									
Cage provided with protective salt and rust protective bag for transport over sea	<input type="text"/>									
Crate with shrink film for air transport	<input type="text"/>									





kW	Poles	Size	Code	C	D	E	F	L	Lm*	M	N	O	P	Q	R	Pr		Values	
				[mm]										$\varnothing$	n°	[mm]	n°		[mm]
5.5	8	160Mb	87004456	251	42	12	45	110	608	350	300	19	4	250	5	314	2	M40 x 1,5	89

The cable glands are made of plastic.

The junction box is on the LH side of the motor (seen from the guard).

\* With different brands  $\pm 50$  mm tolerances are possible.

**N.B.:** Assembled on the separator it is painted in gentian blue RAL 5010; as a spare part it is rust-proof coated.

The motors in the table are manufactured by **WAM**® and comply with the European standards IE3 as well as with EN 50262 regulations with regard to the joints (cable glands) in the terminal block. This means that the user can employ any motor brand as long as they follow the same standards, without having to change drive unit completely.