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Founded in 1954, Alapala Machine is the oldest and the most well-known company of the Alapala Group. It takes its place among the leading companies of the world in its sector, with a vision to be the leader.




## PASSION FOR MILLING SINCE 1954

Alapala Machine builds turnkey plants of any desired capacity and is one of the top 500 exporters in Turkey, exporting 95% of its production. It has a considerable number of turnkey references in more than 85 countries in all the 4 continents including developed and industrial countries such as Germany, France, Italy and U.S.A.

It provides best pre-sales and after-sales services with its staff of highly specialized personnel in the industry and strong overseas representation which includes strong service networks and spare-part stocks. Alapala manufactures high quality and performance machinery which are manufactured in a state of the art production facility with the most advanced CNC machinery.

### Alapala supply program:

- ▶ Flour mills - soft, hard and durum wheat
- ▶ Maize mills
- ▶ Rice mills
- ▶ Feed mills
- ▶ Silos and storage systems for all products
- ▶ Weighing, conveying and packaging systems
- ▶ Flour blending systems
- ▶ Port handling facilities
- ▶ Spare parts



# milling section

- ROLLER MILL SIMILAGO II
- ROLLER MILL SIMILAGO
- ROLLER MILL
- AURORA PLANSIFTER
- QUADRO PLANSIFTER
- ARION PURIFIER
- PURIFIER
- VIBRO SIFTER

- CONTROL PLANSIFTER
- BRAN FINISHER
- TURBO CONTROL SIFTER
- IMPACT DETACHER
- DRUM DETACHER
- VIBRO FEEDER
- INFESTATION DESTROYER FOR FLOUR
- SILO DISCHARGER





# New Generation ROLLER MILL SIMILAGO II

## SCOPE OF USE

SIMILAGO II Roller Mill, which has joined Alapala family, is used for milling grains to produce flour by conveying the grain through cylindrical rolls.





## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina plants
- Other food processing plants

## ▶ INNOVATIONS

Operationally, a feeder conveys the grains between a pair of rollers rotating at different speeds, with ground or threaded surfaces depending on the purpose of use, and these rollers mill the grains.

Structurally, the roller mill has a sturdy structure with excellent features, designed to obtain maximum efficiency and to maintain its position at every stage of the milling process.

The internal parts of SIMILAGO II, where the product does not contact directly but may adhere on the surfaces because of dusting, are made of stainless steel.

All front structures of SIMILAGO II, including discharging hopper, are isolated against condensing and adhering.

SIMILAGO II provides quick and easy access by means of separately opened side doors, enabling quick dismantling of rollers with the door opened from above the roller.

Silent operation thanks to the proven belt drive provides the advantage of grease-free and clean environment.

Furthermore, the roller mill's structure allows for the very quick replacement of rollers as a set or separately.

The disassembling of a roller set and

the assembling of a new roller set are performed in 20 minutes, so the downtime of the milling section is minimized.

The roller set can be replaced without any special tools thanks to the practical solutions used for all assembly details, by dismantling minimum number of parts and using a simple cart for the roller set instead of a lifting apparatus, as is the case for other machines.

## ▶ FUNCTIONAL PARTS

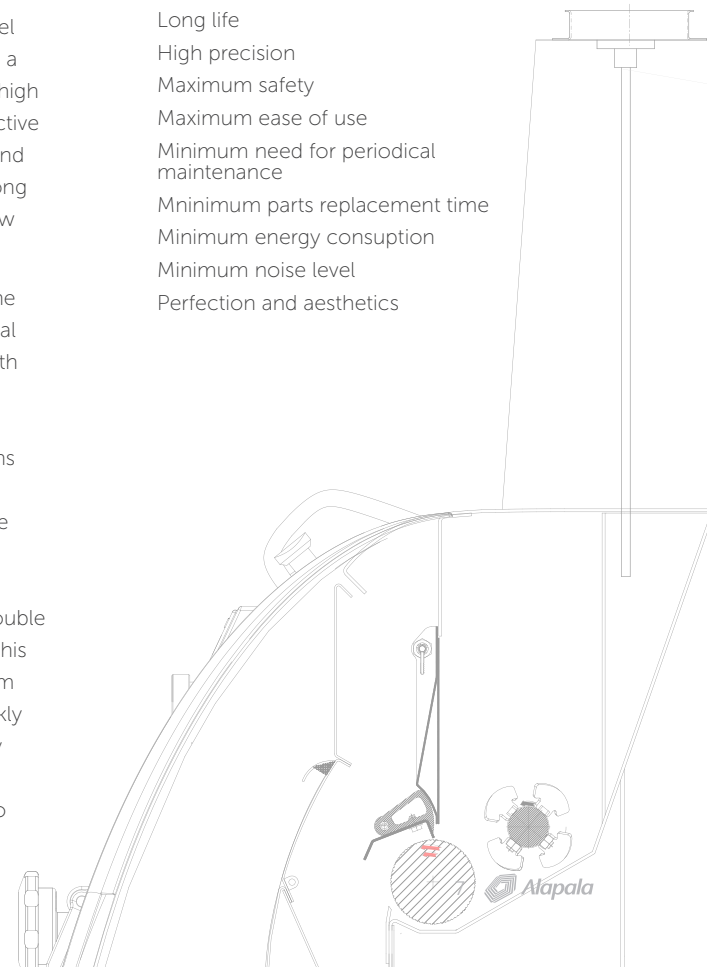
The carrier frame is desk type. The bearings and rollers are directly mounted on this frame. It is machined with CNC as a whole with precision parallelism, and is made of high strength special quality carbon steel material in welded structure. It has a sturdy construction, and provides high efficiency, high performance, effective and efficient operation, reliability and long service life, precision and strong structure, complete sealing and low maintenance.

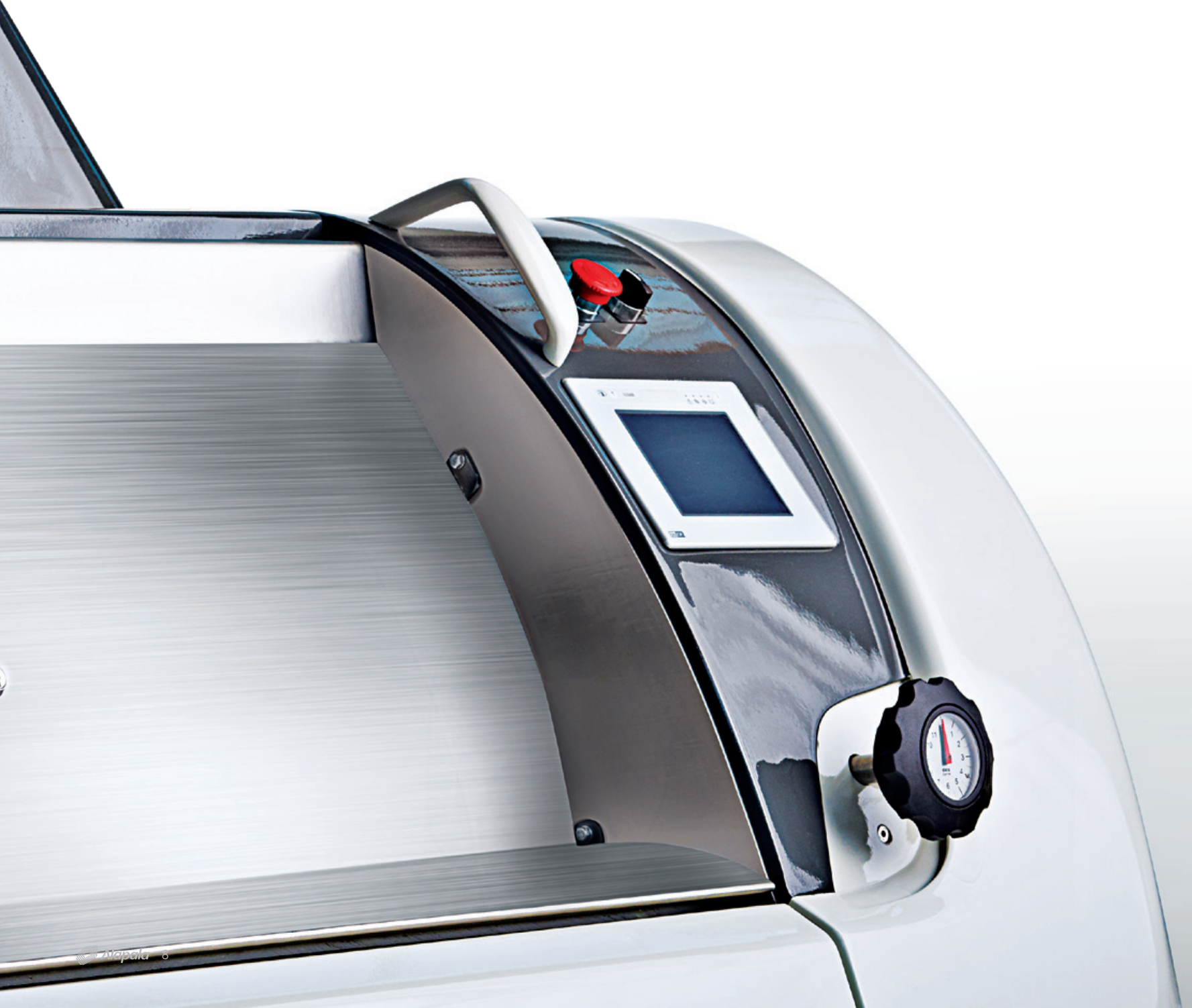
In the hygienic milling chamber, the rollers differentially driven by special profiled belt and pulley group – with tensioning pulley – carry out the milling operation; the overheating of the rollers is controlled by means of the air circulation delivered by the aerodynamic structure, and the chamber is free of dust-catching corners and details. For control purposes, an isolated door with double walls (Alapala design) is provided, this door operates with a weight system without a latch, and it can be quickly mounted/dismounted without any bolted connection. For maximum hygiene, all surfaces are smooth to

prevent dust-catching and even the remotest parts are designed to allow easy access and quick cleaning. Especially the inaccessible chamber in feeding roller section can be accessed by opening the front door and the automatic sliding of the feeding rollers to the front and above, and allows for easy cleaning.

## ▶ FEATURES & ADVANTAGES

- High quality
- High performance
- High efficiency
- High capacity
- Maintenance
- Long life
- High precision
- Maximum safety
- Maximum ease of use
- Minimum need for periodical maintenance
- Minimum parts replacement time
- Minimum energy consumption
- Minimum noise level
- Perfection and aesthetics







# A New Generation

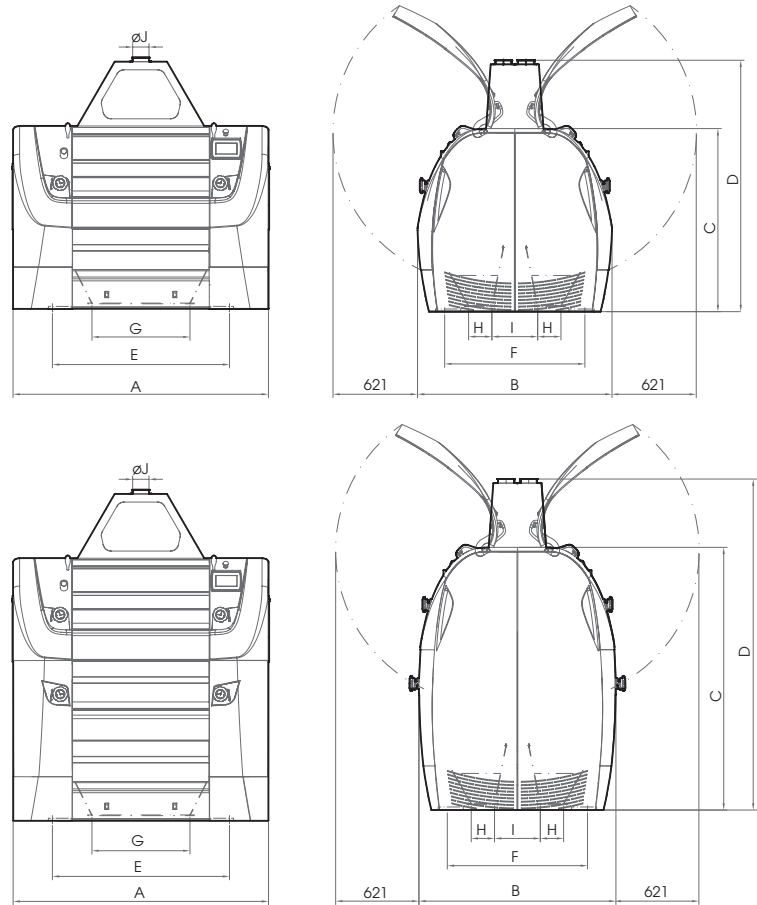
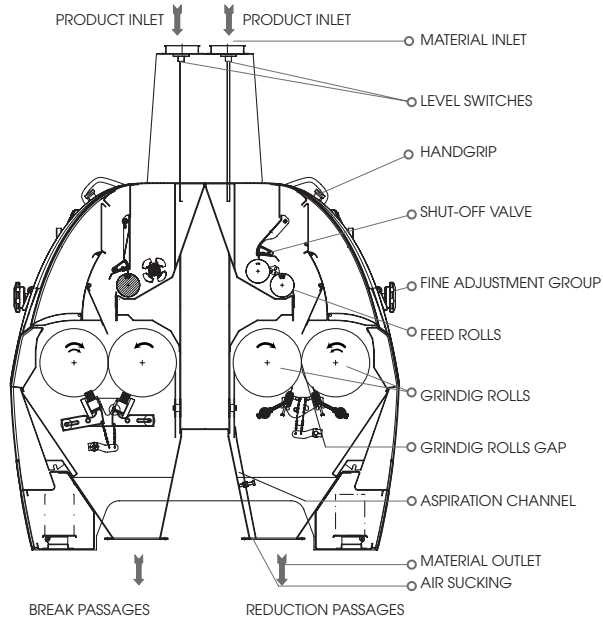
the world was waiting for.

- All product contact parts in stainless steel
- Easy-to-remove assembly
- Single high and double high models
- Accurate roll positioning
- Optional roll adjustment automation
- Special software solutions, graphical and touch-screen
- Roll replacement within 20 minutes

**Next Generation roller mill.**  
The versatility & power  
you can always count on.



# ROLLER MILL **SIMILAGO II**



## Dimensions [mm]

Model	A	B	C	D	E	F	G	H	I	$\varnothing J$	Feed Rolls (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
												Net	Gross	
DAVS II 4 x $\varnothing$ 250 / 800	1675				1100		525				0,75	2920	3000	7,4
DAVS II 4 x $\varnothing$ 250 / 1000	1875	1430	1350	1850	1300		725			3140		3442	8,1	
DAVS II 4 x $\varnothing$ 250 / 1250	2125				1550		975			3380		3709	9,1	
DAVS II 8 x $\varnothing$ 250 / 800	1675				1100	1030	525	171	336	$\varnothing$ 120 $\varnothing$ 150		5252	5565	8,8
DAVS II 8 x $\varnothing$ 250 / 1000	1875	1450	1935	2435	1300		725					5770	6107	9,8
DAVS II 8 x $\varnothing$ 250 / 1250							975					6550	6916	10,9
DAVS II 4 x $\varnothing$ 300 / 1250	2125	1430	1350	1850	1550			725	216			245	4465	4818
DAVS II 8 x $\varnothing$ 300 / 1250			1935	2435						7950		8349	12,5	

## Technical Features



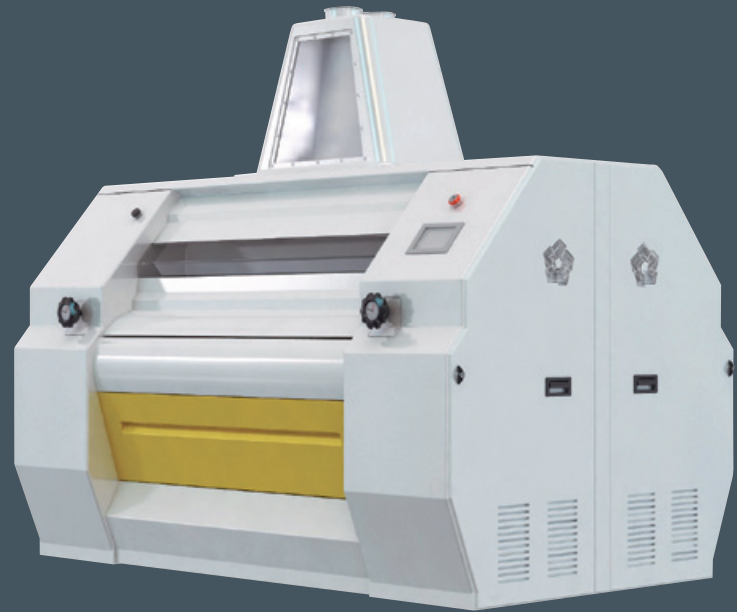
 Alapala

 Alapala

# ROLLER MILL DAVS SIMILAGO

## SCOPE OF USE

Similago Roller Mill, which has joined Alapala family under the model name DAVS, is used for milling grains to produce flour by conveying the grain through cylindrical rolls.





## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina plants
- Other food processing plants

## ▶ INNOVATIONS

Operationally, a feeder conveys the grains between a pair of rollers rotating at different speeds, with ground or threaded surfaces depending on the purpose of use, and these rollers mill the grains.

Structurally, the roller mill has a sturdy structure with excellent features, designed to obtain maximum efficiency and to maintain its position at every stage of the milling process.

The internal parts of DAVS, where the product does not contact directly but may adhere on the surfaces because of dusting, are made of stainless steel.

All front structures of DAVS, including discharging hopper, are isolated against condensing and adhering.

DAVS provides quick and easy access by means of separately opened side doors, enabling quick dismantling of rollers with the door opened from above the roller.

Silent operation thanks to the proven belt drive provides the advantage of grease-free and clean environment.

Furthermore, the roller mill's structure allows for the very quick replacement of rollers as a set or separately.

The disassembling of a roller set and the assembling of a new roller set are performed in 20 minutes, so the

downtime of the milling section is minimized.

The roller set can be replaced without any special tools thanks to the practical solutions used for all assembly details, by dismantling minimum number of parts and using a simple cart for the roller set instead of a lifting apparatus, as is the case for other machines.

## ▶ FUNCTIONAL PARTS

The carrier frame is desk type. The bearings and rollers are directly mounted on this frame. It is machined with CNC as a whole with precision parallelism, and is made of high strength special quality carbon steel material in welded structure. It has a sturdy construction, and provides high efficiency, high performance, effective and efficient operation, reliability and long service life, precision and strong structure, complete sealing and low maintenance.

In the hygienic milling chamber, the rollers differentially driven by special profiled belt and pulley group – with tensioning pulley – carry out the milling operation; the overheating of the rollers is controlled by means of the air circulation delivered by the aerodynamic structure, and the chamber is free of dust-catching corners and details. For control purposes, an isolated door with double walls (Alapala design) is provided, this door operates with a weight system without a latch, and it can be quickly mounted/dismounted without any bolted connection. For maximum hygiene, all surfaces are smooth to

prevent dust-catching and even the remotest parts are designed to allow easy access and quick cleaning. Especially the inaccessible chamber in feeding roller section can be accessed by opening the front door and the automatic sliding of the feeding rollers to the front and above, and allows for easy cleaning.

## ▶ FEATURES & ADVANTAGES

High capacity and efficiency

Centrifugally casted parallel operating rolls

Easy and minimum periodical maintenance

Low operation and maintenance cost

Minimum consumption of spare parts

Low energy consumption

Depending upon grain amount, by means of capacitive level indicators, automatically actuated flexible feeding control system

Minimum time consumption during erection and dismantling of the rolls

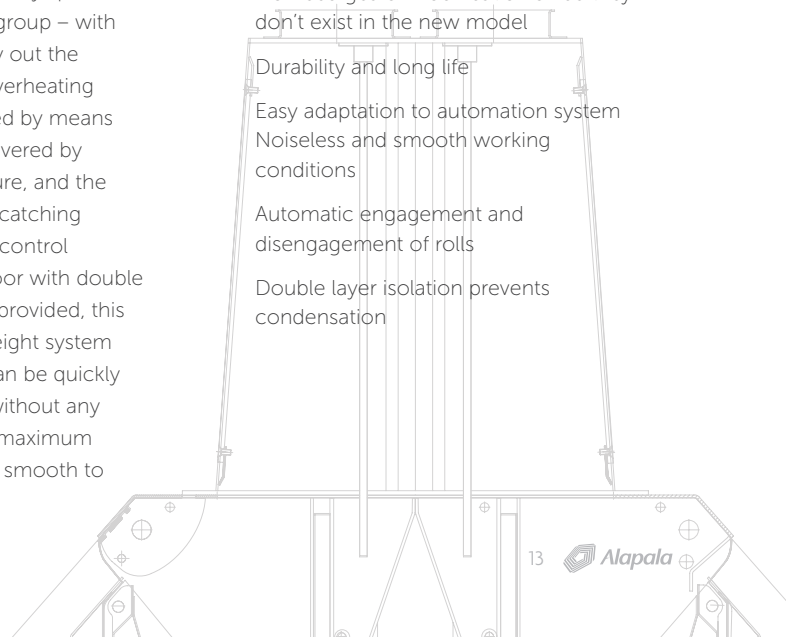
No need gears modification since they don't exist in the new model

Durability and long life

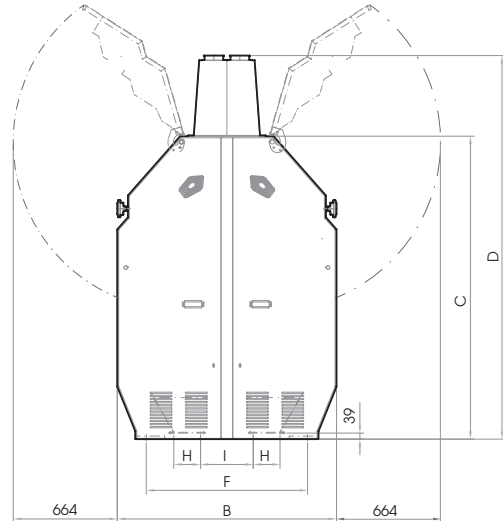
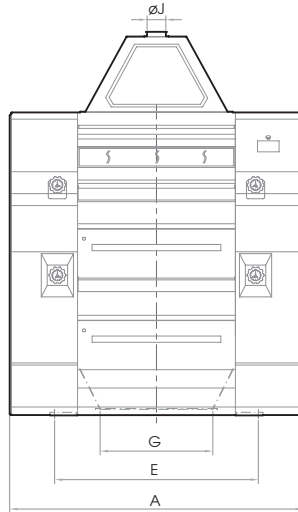
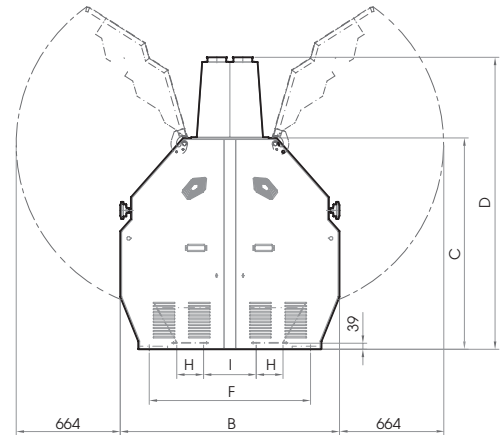
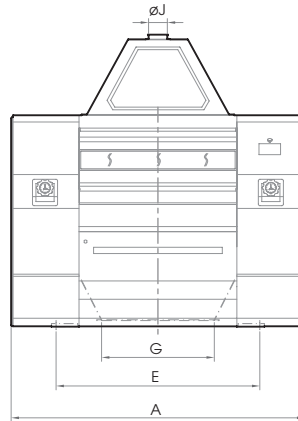
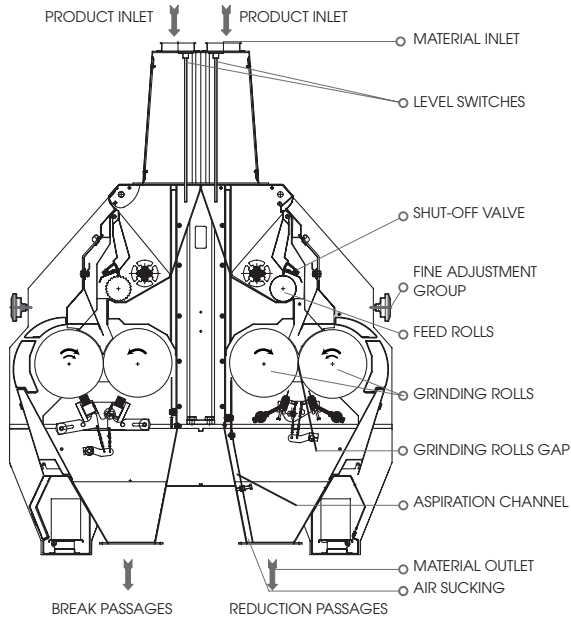
Easy adaptation to automation system  
Noiseless and smooth working conditions

Automatic engagement and disengagement of rolls

Double layer isolation prevents condensation



# ROLLER MILL **DAVS SIMILAGO**



## Dimensions [mm]

Model	A	B	C	D	E	F	G	H	I	øJ		
DAVS 4 x 250 / 800	1675	1400	1350	1865	1100	1030	525	171	336	120		
DAVS 4 x 250 / 1000	1875				1300		725					
DAVS 4 x 250 / 1250	2125				1550		975					
DAVS 8 x 250 / 800	1675		1100	525	150							
DAVS 8 x 250 / 1000	1875		1935	2450	1300		725	975	216		245	
DAVS 8 x 250 / 1250												
DAVS 4 x 300 / 1250	2125		1350	1865	1550		725	216	245			
DAVS 8 x 300 / 1250			1935	2450								

## Technical Features

Feed Rolls (Kw)	Weights (Kg)		Gross Volume (m³)
	Net	Gross	
0,75	2920	3000	7,4
	3140	3442	8,1
	3380	3709	9,1
	5252	5565	8,8
	5770	6107	9,8
	6550	6916	10,9
	4462	4818	10
	7950	8349	12,5





# ROLLER MILL DAVM

## SCOPE OF USE

It is used to grind and crush the grain in the cereal processing plants. It is designed to obtain flour and semolina in the flour and semolina mills by processing cleaned grain.





## ▶ APPLICATION FIELDS

### At food industry

- Flour & semolina mills
- Corn, barley, rye and similar cereal processing plants

### At other food industries for rolling, crushing and other similar processes

## ▶ INNOVATIONS

Our DAVM model of the roller mill is equipped with a belt system, which provides several advantages to the user compared to the geared type roller mill.

Since gearbox is not used, consequently, there is no need to modify gears because their size get smaller in geared type roller mills due to calibration of the rolls.

There is no need to inspect oil periodically. Periodic maintenance is minimized and there is no oil consumption.

The consumption time for maintenance and replacement of worn -out parts is minimized.

The erection and dismantling time of the rolls is very short comparing to the geared type roller mill.

Cost of operation and maintenance is very low.

The source of noise, which is caused by using geared type roller mill, is eliminated. Nevertheless, the machine is isolated against of noise.

The DAVM type roller mill is equipped with a very flexible feeding control system, which can automatically be adjusted.

## ▶ WORKING PRINCIPLE

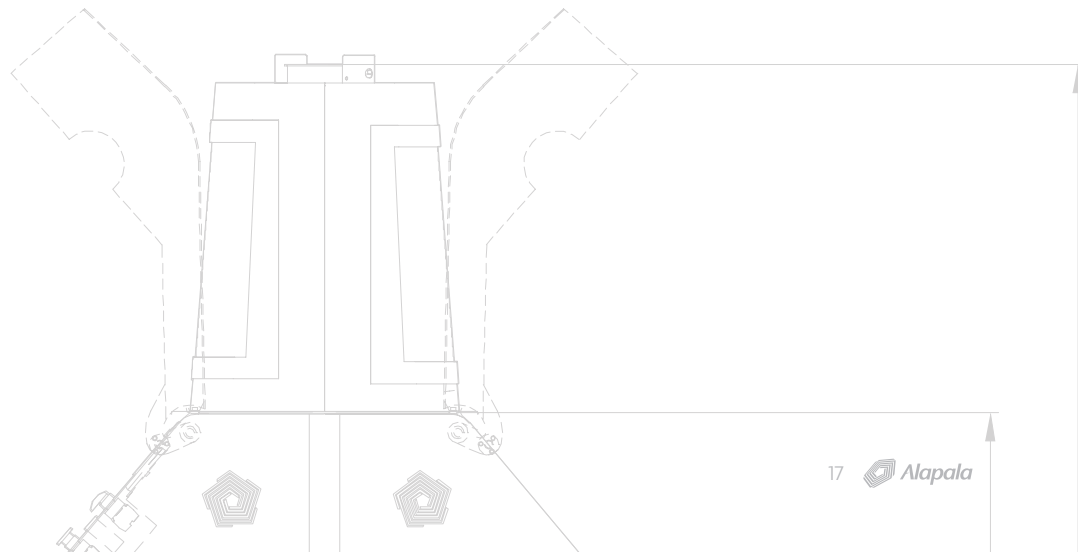
The parallel working rolls are automatically opened and closed by pneumatic system, which is actuated by an electronic control unit. The clean grain enters the roller mill through a glass spout and the grinding process starts. Capacitive level indicators adjust the amount of grain, which enters the roller mill from its inlet, which controls the feeding rolls. The grain, which flows regularly through the rolls, undergoes processing.

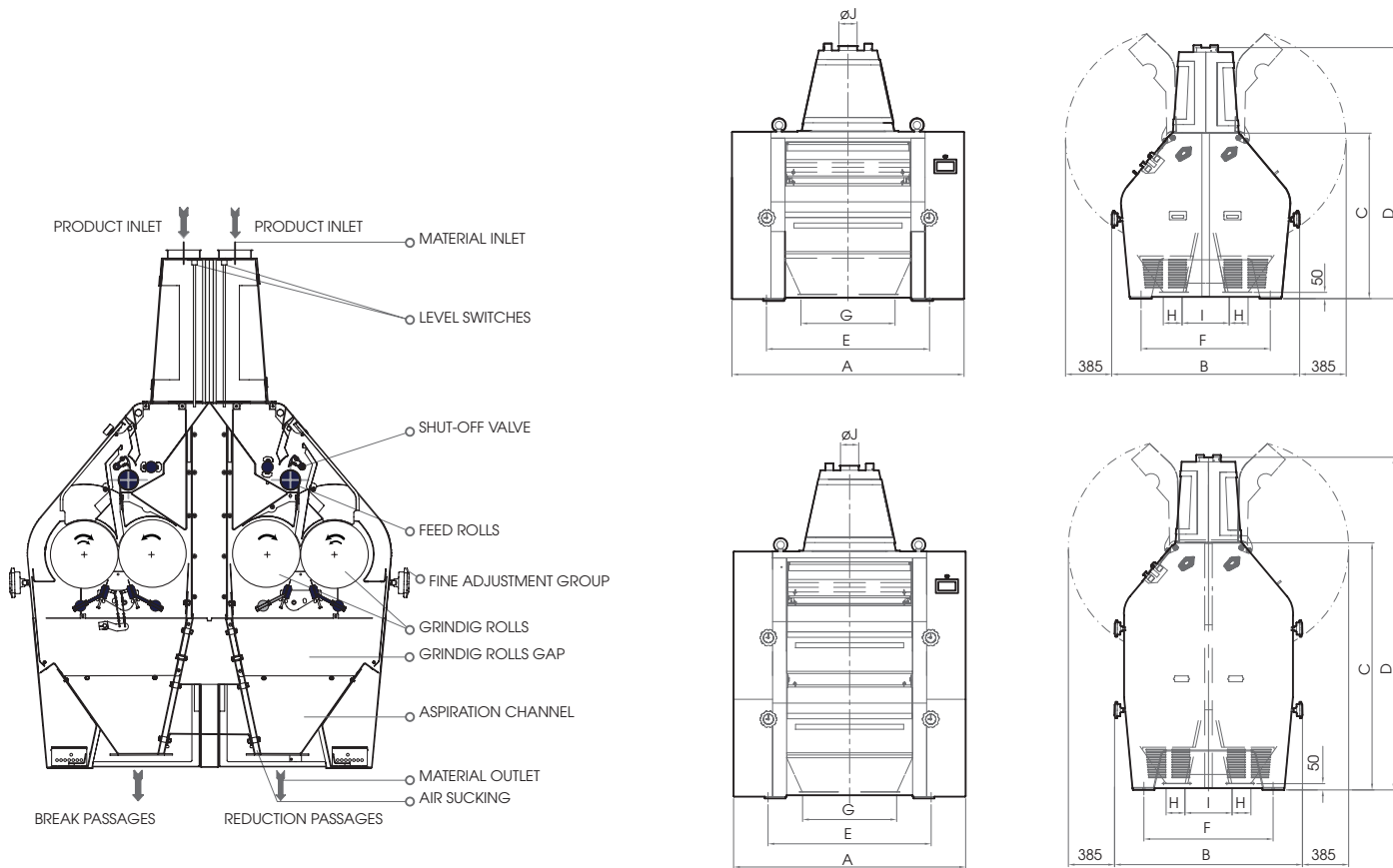
The adjusting system, which provides a very precise approach of the rolls to each other, can be easily integrated to the automation system.

The air, which is sucked by means of a pneumatic system via specially created air channels, provides regular flow of grain between the rolls. The efficiency of the roller mill is increased due to such feature.

## ▶ FEATURES & ADVANTAGES

- High quality
- High performance
- High efficiency
- High capacity
- Maintenance
- Long life
- High precision
- Maximum safety
- Maximum ease of use
- Minimum need for periodical maintenance
- Mnimum parts replacement time
- Minimum energy consumption
- Minimum noise level
- Perfection and aesthetics





**Dimensions [mm]**

Model	A	B	C	D	E	F	H	G	I	øJ
DAVM 4 x ø250 / 800	1650				1100		525			ø120 ø150
DAVM 4 x ø250 / 1000	1850	1480	1350	1988	1300	1030	725	171	334	
DAVM 4 x ø250 / 1250	2100				1550		975			
DAVM 4 x ø250 / 800	1650				1100		685			
DAVM 4 x ø250 / 1000	1850	1480	1800	2438	1300	1030	885	307	315	
DAVM 4 x ø250 / 1250	2100				1550		1135			
DAVM 4 x ø350 / 1250	2125	1680	1380	1938	1426	1230	970	270	335	
DAVM 4 x ø350 / 1250			1900	2468			1135	407	270	

**Technical Features**

Feed Rolls (kw)	Weights (Kg)		Gross Volume (m³)
	Net	Gross	
0,75	2920	3000	7,4
	3140	3442	8,1
	3380	3709	9,1
	5252	5565	8,8
	5770	6107	9,8
	6550	6916	10,9
	4465	4818	10
	7950	8349	12,5



B1 819 5  
1234



# New Generation QUADRO PLANSIFTER AURORA

## SCOPE OF USE

The square sifter offers many advantages for sifting processes at high capacities. It provides large sifting area in very limited space. The maximum sifting area can be obtained by using different types of boxes. It is used to sift the broken and floury products and classify different kinds of grains.

### **Modular plansifter**

There are differences in the new model modular plansifter in terms of production, hygiene and assembly-disassembly as well as increasable and reducible passage.

### **Production**

Quick deadlines can be ensured in response to customer demands by producing standard serially produced cabinets without order.

### **Hygiene**

All parts and surfaces to which product contacts within the plansifter are made of stainless (inox) steel. In this way, maximum hygiene is ensured.

### **Assembly – Disassembly**

The cabinets which are produced by serial production method are quickly assembled and disassembled in the same way.

### **Increasable and Reducible Passage**

A plansifter with 4 passages can now be transformed into a plansifter with 6 or 8 passages and exact opposite action is possible at the same time. Thanks to the cabinets produced in a standardized way, this component can be added or removed in a short time.



## ▶ APPLICATION FIELDS

### **At food industry**

- Wheat, rye, oats, barley and corn processing plants
- Coffee and similar products processing plants

**And other food products processing plants**

## ► STRUCTURE

The machine is produced in three different types. Types are classified according to the size of sifting area and manufacture method. While DPAK has a normal sifting area, AURORA has a high sifting area. In addition, the model with assembly and disassembly facility is MODULAR AURORA.

This machine consists of three main parts. Two sieve boxes and a central framework containing the drive unit. These parts are assembled by means of screws and transversal beams. It is possible to separate the machine into three main parts for an easy make handling, shipping and hoisting to the installation floor.

- 2 pieces symmetrically designed sieve boxes
- 1 piece drive housing
- 2 pieces carrier arms
- 1 set of suspension group including suspension rods

The inner framework comprises all the parts dealing with the machine motion, in particular, the electrical motor, shaft and the counterweight mass. The whole shaft - counterweight unit is bedded by double ball bearings. The drive unit is easily accessible by removing the large side panels covering the central framework.

## ► WORKING PRINCIPLE

The product comes from above through one or two inlets and is sifted in the sieve nest, this operation being due to rotary motion of the machine and gravity. In this way from 5 (five) to 7 (seven) selections (sorts of product) with different granules can be obtained at the horizontally divided passages and 12 (twelve) selections at the vertically divided passages. A special device fitted at the inlet of channels provides a very precise separation of the product load along the entire width of the upper sieves for a remarkable increasing of the sifting of the single passage. The great numbers of superimposed sieves and their square shape also guarantee an effective sifting action and a precise classification of the products, positively affecting the final grinding yield.

Each machine is completed with its own product inlet and outlet boards, the discharge control spouts and the connection sleeves made of fabric permeable to the air.

The machine is easy in maintenance for it's quite an easy matter to install and dismantle and insert the telero frames into the boxes.

The special and even structures of sifters do not allow insects and moths to shelter.

## ► FEATURES & ADVANTAGES

High sifting capacity can be obtained by using different frame heights and intermediate frames (spacers). In this way, below and above sifting paths can be adjusted

Effective sifting possibility at high capacities. It is possible to increase 22 % sifting area by using "G" type sifter boxes

Each sifting cabin can accommodate up to 28 sifters. A special pressure-clamping device provides proper and tight closing of access doors

Two-way product flow

The sieves, square shaped and having an unchange able structure, are made of first quality stable wood and are completely covered with laminated plastic (Formica)

More sifting area is provided by changing the sieve frames position in right angle

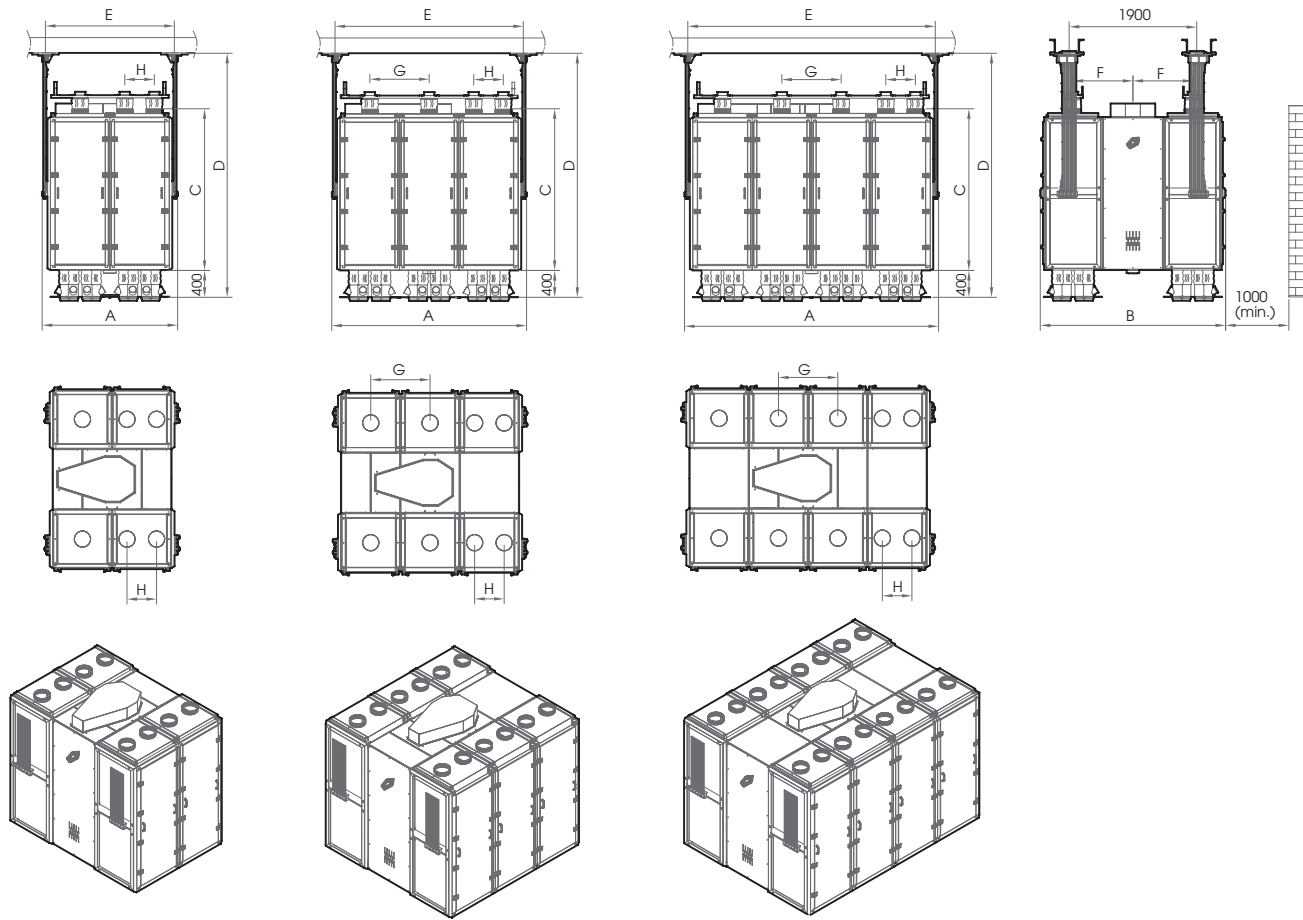
Vertical and horizontal dividing possibility of sifting passages at any required level

Easy cleaning and maintenance possibility

Internally coated insulation panels to avoid condensation, if necessary

A large variety of standard and special sieves enable the arrangement of many sifting in order to meet any flow sheet demand

# QUADRO PLANSIFTER AURORA



## Dimensions [mm]

Model	AURORA 430	AURORA 630	AURORA 830
A	2017	2900	3783
B	2760	2760	2760
C	2400	2400	2400
D <sub>min</sub>	3640	3640	3640
D <sub>max</sub>	5640	5640	5640
E	1920	2804	3686
F	892	892	892
G	884	884	884
H	440	440	440

## Technical Features

		AURORA 430	AURORA 630	AURORA 830
Number of Compartments		4	6	8
Number of Sieves per Compartment		30	30	30
Net Sifting Area In	Timber Typ N (m <sup>2</sup> )	35.6	53.4	71.2
	Frame Typ G (m <sup>2</sup> )	42.3	63.5	84.6
	Aluminium Typ N (m <sup>2</sup> )	40.3	60.4	80.4
	Frame Typ G (m <sup>2</sup> )	49.6	74.5	99.3
Power Motor with 6 - Poles (Kw)		7.5	7.5	11
Weights (Kg)	Net	3550	4578	6343
	Gross Brut	3800	4850	7154
Gross Volume (m <sup>3</sup> )		18.1	25	32.2





## QUADRO PLANSIFTER DPAK

### SCOPE OF USE

The square sifter offers many advantages for sifting processes at high capacities. It provides large sifting area in very limited space. The maximum sifting area can be obtained by using different types of boxes. It is used to sift the broken and floury products and classify different kinds of grains.





## ▶ APPLICATION FIELDS

### At food industry

- Wheat, rye, oats, barley and corn processing plants
- Coffee and similar products processing plants

### And other food products processing plants

## ▶ STRUCTURE

This machine consists of three main parts. Two sieve boxes and a central framework containing the drive unit. These parts are assembled by means of screws and transversal beams. It is possible to separate the machine into three main parts for an easy make handling, shipping and hoisting to the installation floor.

- 2 pieces symmetrically designed sieve boxes
- 1 piece drive housing
- 2 pieces carrier arms
- 1 set of suspension group including suspension rods

The inner framework comprises all the parts dealing with the machine motion, in particular, the electrical motor, shaft and the counterweight mass. The whole shaft - counterweight unit is bedded by double ball bearings. The drive unit is easily accessible by removing the large side panels covering the central framework.

## ▶ WORKING PRINCIPLE

The product comes from above through one or two inlets and is sifted in the sieve nest, this operation being due to rotary motion of the machine and gravity. In this way from 5 (five) to 7 (seven) selections (sorts of product) with different granules can be obtained at the horizontally divided passages and 12 (twelve) selections at the vertically divided passages. A special device fitted at the inlet of channels provides a very precise separation of the product load along the entire width of the upper sieves for a remarkable increasing of the sifting of the single passage. The great numbers of superimposed sieves and their square shape also guarantee an effective sifting action and a precise classification of the products, positively affecting the final grinding yield.

Each machine is completed with its own product inlet and outlet boards, the discharge control spouts and the connection sleeves made of fabric permeable to the air.

The machine is easy in maintenance for it's quite an easy matter to install and dismantle and insert the telero frames into the boxes.

The special and even structures of sifters do not allow insects and moths to shelter.

## ▶ FEATURES & ADVANTAGES

High sifting capacity can be obtained by using different frame heights and intermediate frames (spacers). In this way, below and above sifting paths can be adjusted

Effective sifting possibility at high capacities. It is possible to increase 22 % sifting area by using "G" type sifter boxes

Each sifting cabin can accommodate up to 28 sifters. A special pressure-clamping device provides proper and tight closing of access doors

Two-way product flow

The sieves, square shaped and having an unchange able structure, are made of first quality stable wood and are completely covered with laminated plastic (Formica)

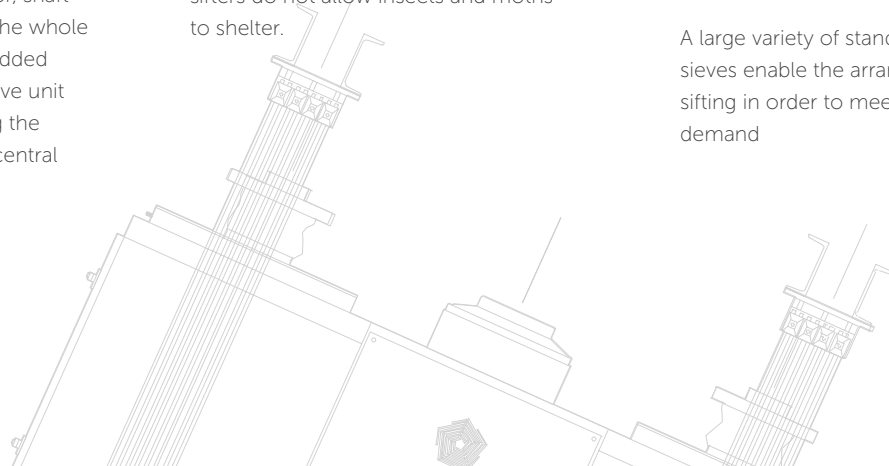
More sifting area is provided by changing the sieve frames position in right angle

Vertical and horizontal dividing possibility of sifting passages at any required level

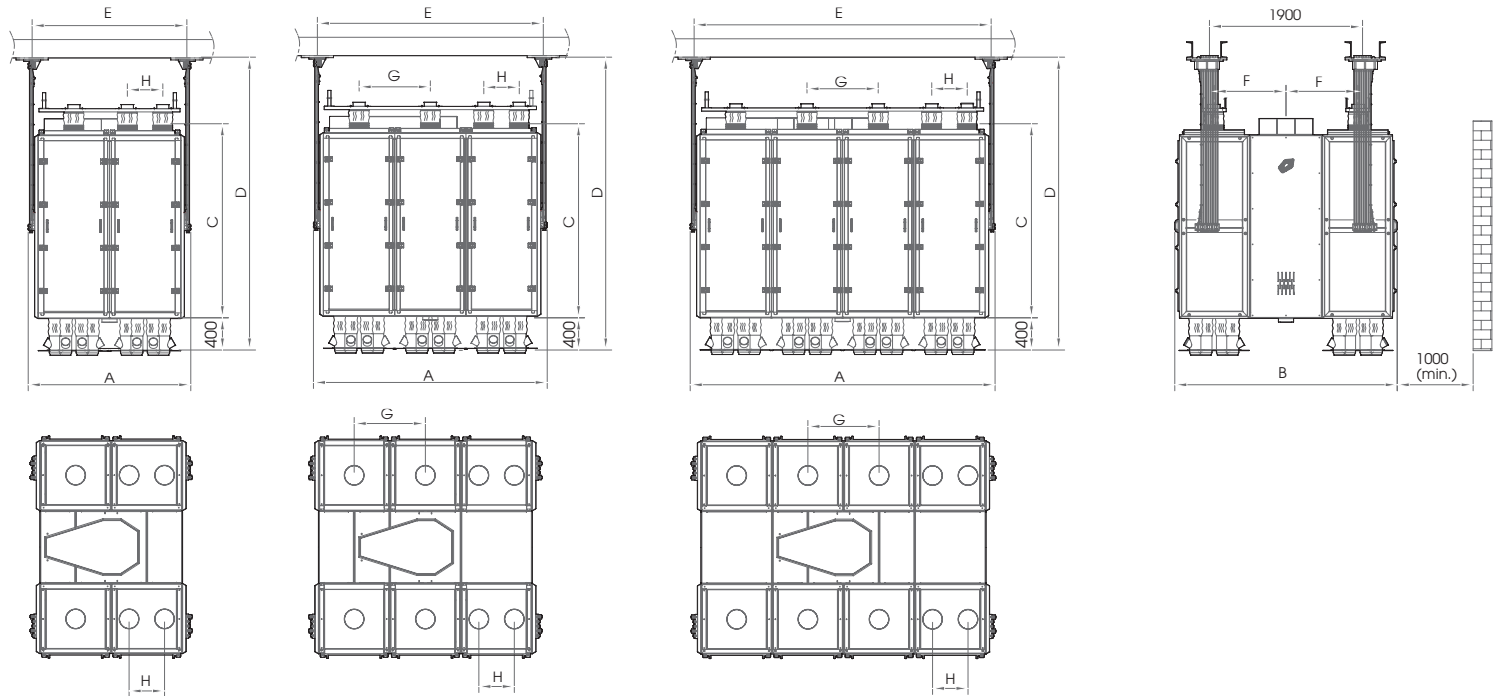
Easy cleaning and maintenance possibility

Internally coated insulation panels to avoid condensation, if necessary

A large variety of standard and special sieves enable the arrangement of many sifting in order to meet any flow sheet demand



# QUADRO PLANSIFTER **DPAK**



## Dimensions [mm]

Model	DPAK 424	DPAK 428	DPAK 624	DPAK 628	DPAK 824	DPAK 828	DPAK-G 430	DPAK-G 630	DPAK-G830	
Dimension	A	1713	1713	2549	2549	3205	3205	2020	2880	3786
	B	2355	2355	2355	2355	2355	2355	2765	2765	2765
	C	1995	2293	1995	2293	1995	2293	2398	2398	2398
	D	3100	3250	3100	3250	3100	3250	3365	3365	3365
	E	1685	1685	2430	2430	3175	3175	1950	2813	3689
	F	735	735	735	735	735	735	892	892	892
	G	745	745	745	745	745	745	866	866	866
	H	373	373	373	373	373	373	440	440	440

## Technical Features

		DPAK 424	DPAK 428	DPAK 624	DPAK 628	DPAK 824	DPAK 828	DPAK-G 430	DPAK-G 630	DPAK-G 830	
Number of Compartments		4	4	6	6	8	8	4	6	8	
Number of Sieves per Compartment		20-24	24-28	20-24	24-28	20-24	24-28	30	30	30	
Net Sifting Area In Maximum	Timber	Typ N (m <sup>2</sup> )	18,4	22	27,6	33,1	36,8	44,1	53,4	71,2	
	Frame	Typ G (m <sup>2</sup> )	23,3	28,3	35	42	46,7	56	63,5	84,6	
	Aluminium	Typ N (m <sup>2</sup> )	23,7	27,6	35,5	41,5	47,4	55,3	60,4	80,6	
	Frame	Typ G (m <sup>2</sup> )	29,2	34,1	43,9	51,2	58,5	68,3	49,6	74,5	99,3
Power Motor	(Kw)	4	4	5,5	5,5	7,5	7,5	5,5	7,5	11	
Weights	(Kg)	Net	2500	2750	3260	3710	4425	4850	2750	3660	6343
	Gross	2933	3008	2770	4435	4660	5085	2933	3008	7154	
Gross Volume	(m <sup>3</sup> )	11,5	13	16,4	18,5	20,2	22,9	18,1	25	32,2	



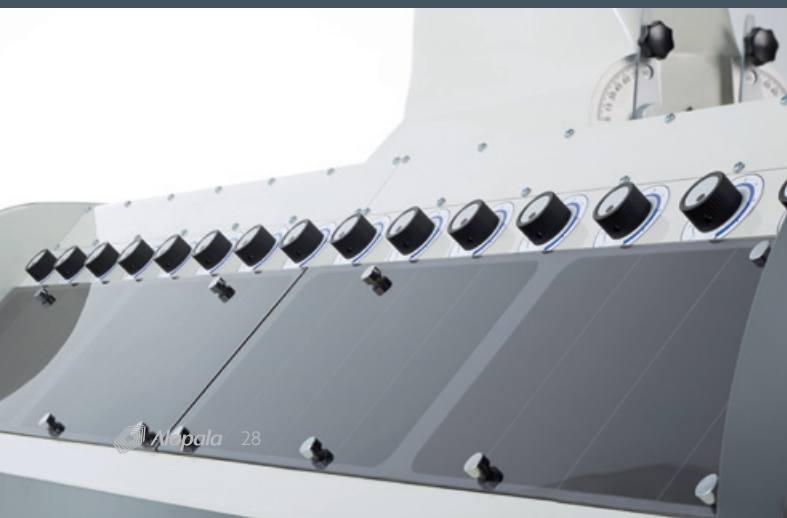


RESEARCH  
AND  
DEVELOPMENT  
OF  
NEW  
PRODUCTS  
BY  
APALPA

## New Generation ARION PURIFIER

### SCOPE OF USE

It is designed to enrich and classify semolina in flour and semolina mills.



## ▶ APPLICATION FIELDS

### At food industry

- Flour mills
- Semolina mills

## ▶ STRUCTURE

The purifier comprises three main parts;

- A fixed main chassis
- An oscillating body which accommodates the sifting sieves
- An aspiration channel

The exhaust chamber comprises two aerodynamically designed channels with a set of specially designed valves fitted above the sieves for the optimum adjustment of airflow passing through the sieves. The two channels converge at the exhaust intake, which is fitted with an adjustable butterfly valve.

## ▶ WORKING PRINCIPLE

The flow rate of product is adjusted by means of a gate, which provides a perfect distribution of product along all entire width of sieves. The optimum vacuum influence is obtained on the entire surface of sifter by means of aerodynamic air channel and air regulating valves. Bran and similar light materials are kept in suspension due to vacuum influence and transported to discharging channel and collecting box fitted below.

The product (semolina) is separated from bran to be classified by means of sieves in accordance with granules.

## ▶ FEATURES & ADVANTAGES

High capacity by using extended sifting surface

Effective cleaning by using brushes  
Adjustable sifting speed

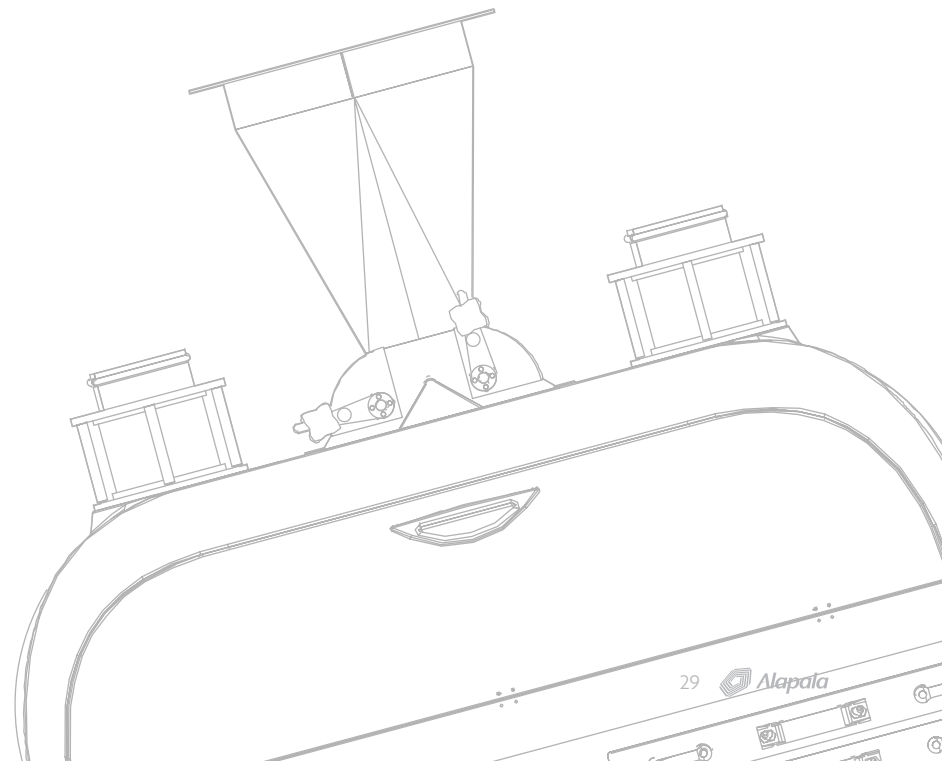
Minimum preventative maintenance and trouble - free operation by means of vibro - motor drive

Noiseless working condition

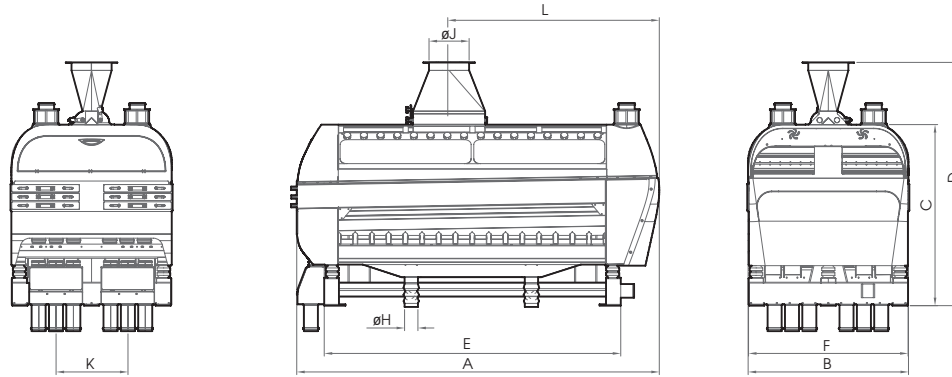
Easy cleaning process and hygienic working conditions

Light metallic sieve frames with adjustable tightening device

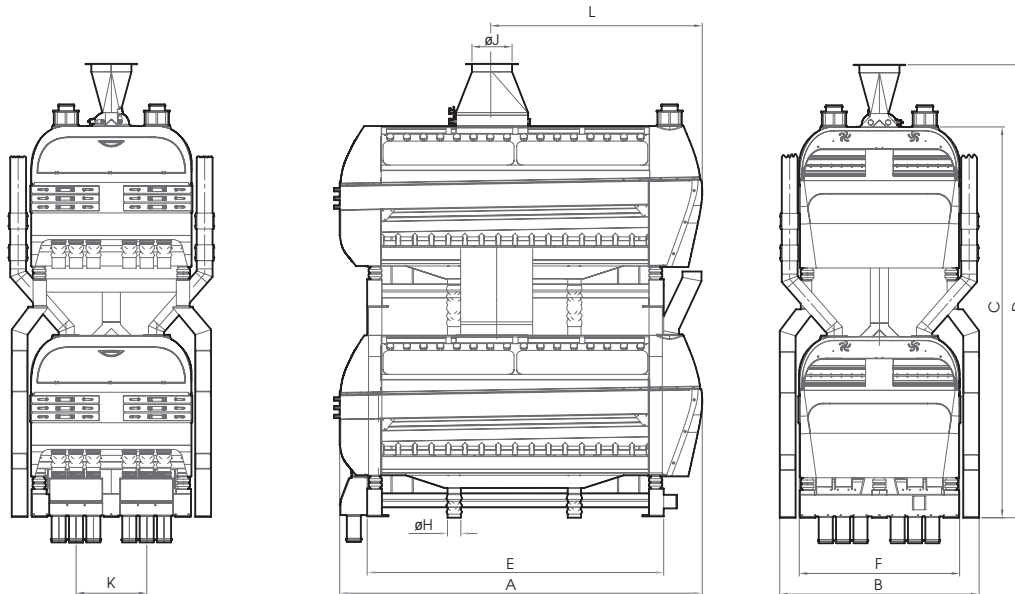
Quick and easy replacement of sieves



ARION 46/200



ARION 46/200C



Dimensions [mm]

Model	A	B	C	D	E	F	øH	øJ	K	L
ARION 46 / 200	2715	1200	1355	1820	2220	1194	100	300	580	1575
ARION 46 / 200C		1485	2925	3390				420		

Technical Features

Motor (Kw)	Net Sieve Width (mm)	Air Volume (m <sup>3</sup> /min)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
2 x 0,40	500	60	1000	1334	8,7
4 x 0,40		120	2500	3010	17,8





# PURIFIER DISA

## SCOPE OF USE

It is designed to enrich and classify semolina in flour and semolina mills.



## ▶ APPLICATION FIELDS

### At food industry

- Flour mills
- Semolina mills

## ▶ STRUCTURE

The purifier comprises three main parts;

- A fixed main chassis
- An oscillating body which accommodates the sifting sieves
- An aspiration channel

The exhaust chamber comprises two aerodynamically designed channels with a set of specially designed valves fitted above the sieves for the optimum adjustment of airflow passing through the sieves. The two channels converge at the exhaust intake, which is fitted with an adjustable butterfly valve.

## ▶ WORKING PRINCIPLE

The flow rate of product is adjusted by means of a gate, which provides a perfect distribution of product along all entire width of sieves. The optimum vacuum influence is obtained on the entire surface of sifter by means of aerodynamic air channel and air regulating valves. Bran and similar light materials are kept in suspension due to vacuum influence and transported to discharging channel and collecting box fitted below.

The product (semolina) is separated from bran to be classified by means of sieves in accordance with granules.

## ▶ FEATURES & ADVANTAGES

High capacity by using extended sifting surface

Effective cleaning by using brushes  
Adjustable sifting speed

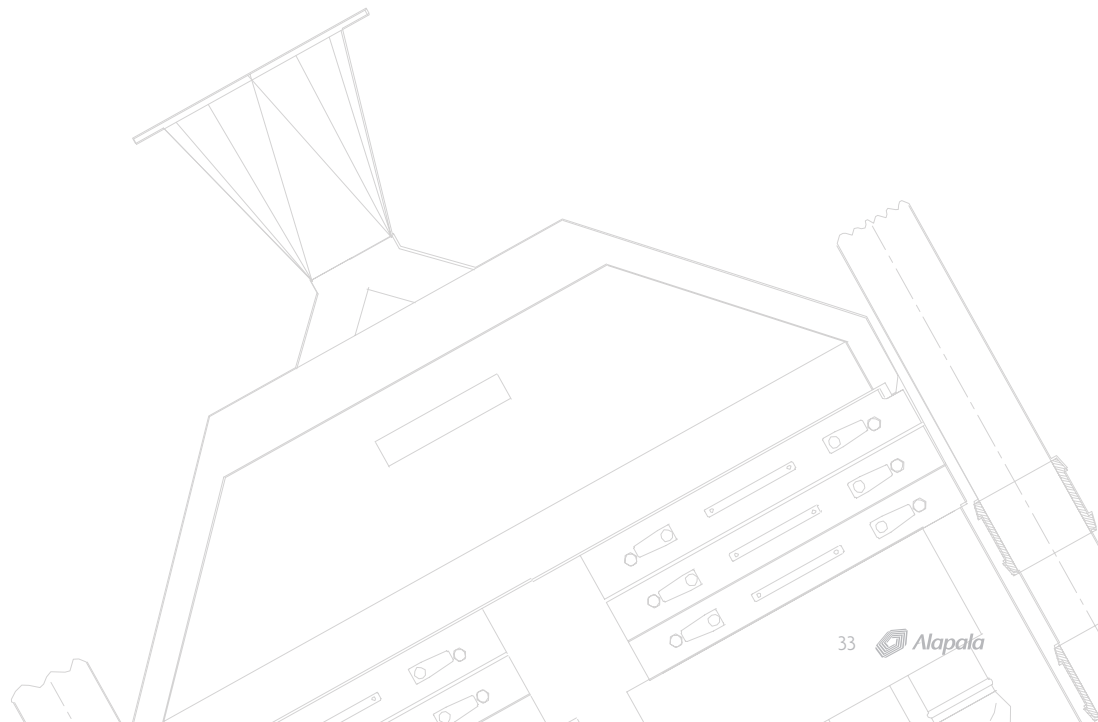
Minimum preventative maintenance and trouble - free operation by means of vibro - motor drive

Noiseless working condition

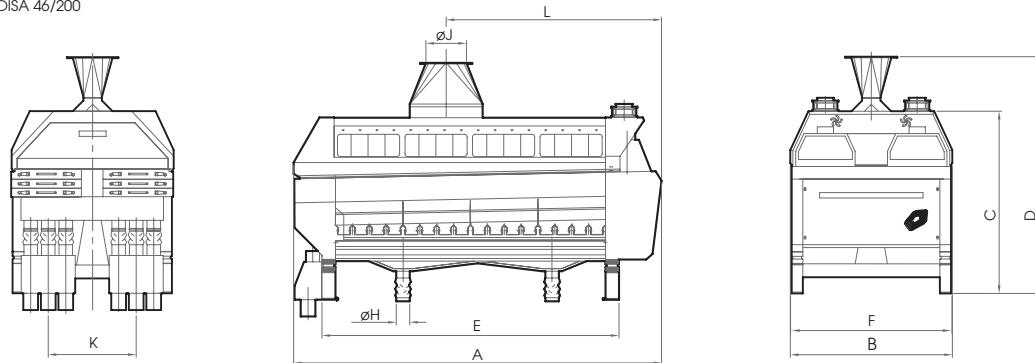
Easy cleaning process and hygienic working conditions

Light metallic sieve frames with adjustable tightening device

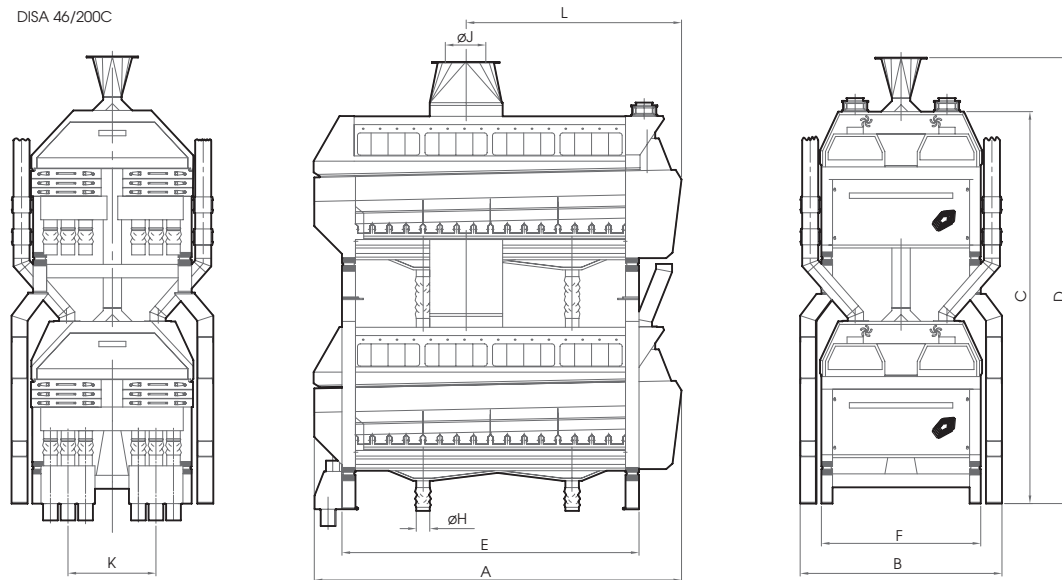
Quick and easy replacement of sieves



DISA 46/200



DISA 46/200C



Dimensions [mm]

Model	A	B	C	D	E	F	øH	øJ	K	L
DISA 46 / 200	2735	1200	1450	1755	2215	1194	100	300	580	1345
DISA 46 / 200C		1485	2783	3187				420		

Technical Features

Motor (Kw)	Net Sieve Width (mm)	Air Volume (m <sup>3</sup> /min)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
2 x 0,40	500	60	1000	1334	8,7
4 x 0,40		120	2500	3010	17,8



## VIBRO SIFTER DVSI

### SCOPE OF USE

It is used to unstuck the humid and greasy flour which come from the filter and the bran finisher.



## ▶ APPLICATION FIELDS

### At food processing industry

- Flour mills
- Semolina mills

## ▶ STRUCTURE

The machine is constituted of:

- Structure of electro-weld sheet rests on support with rubber shock absorber
- Group of unstuck constituted with a rotor supported by two line of bearing and equipped with radial adjustable five beaters
- Coat whit very resistant nylon sleeve, rests on easily dismantle metallic case
- Belt gear motor
- Transparent inlet pipe

## ▶ WORKING PRINCIPLE

The product is thrown towards the nylon screen by means of a wing – fitted rotor, which is rotated vertically; consequently the centrifugal force dry the flour.

The flour passed through the sieve flow out through the wall of the machine.

## ▶ FEATURES & ADVANTAGES

Low energy consumption and high output

Minimum and easy maintenance

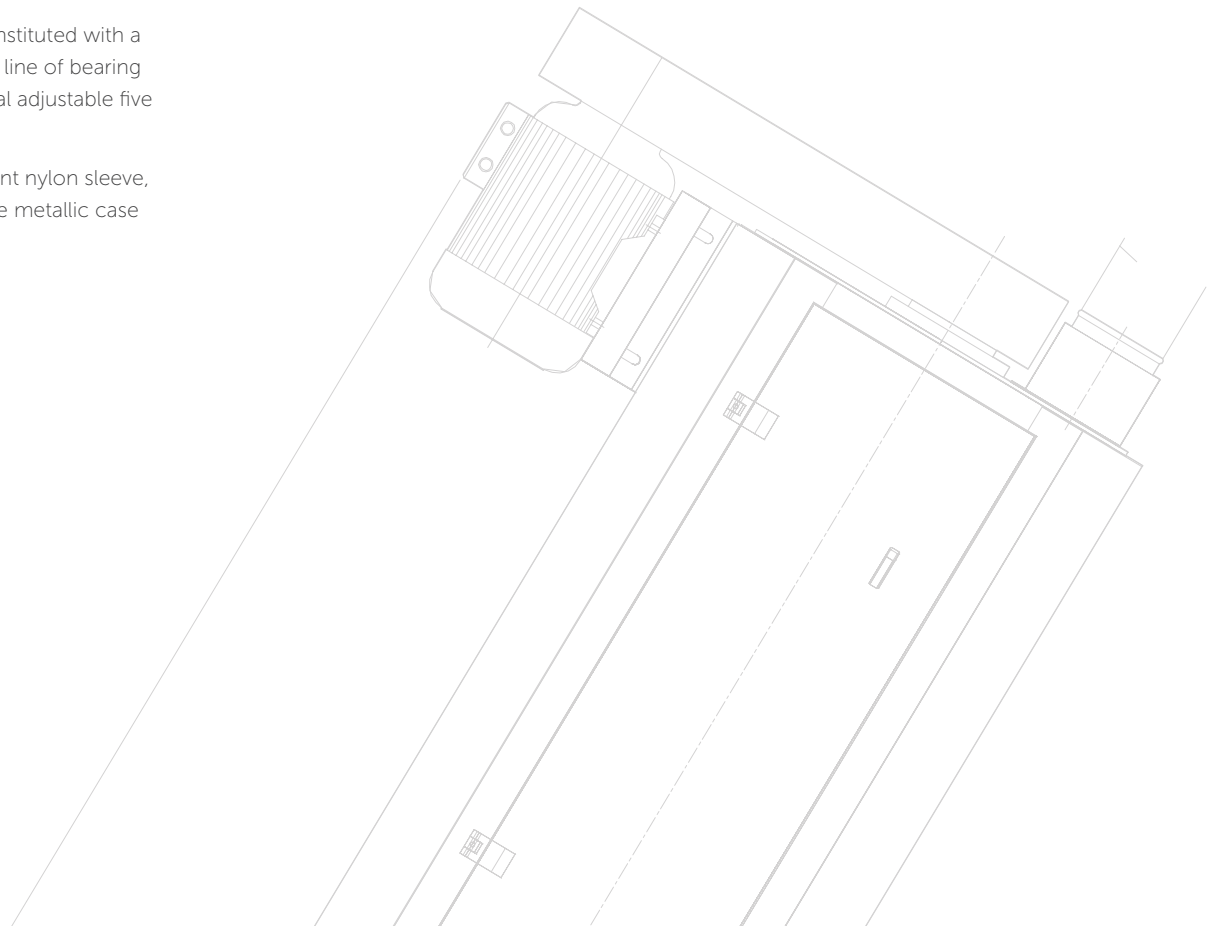
Durability and long lifetime

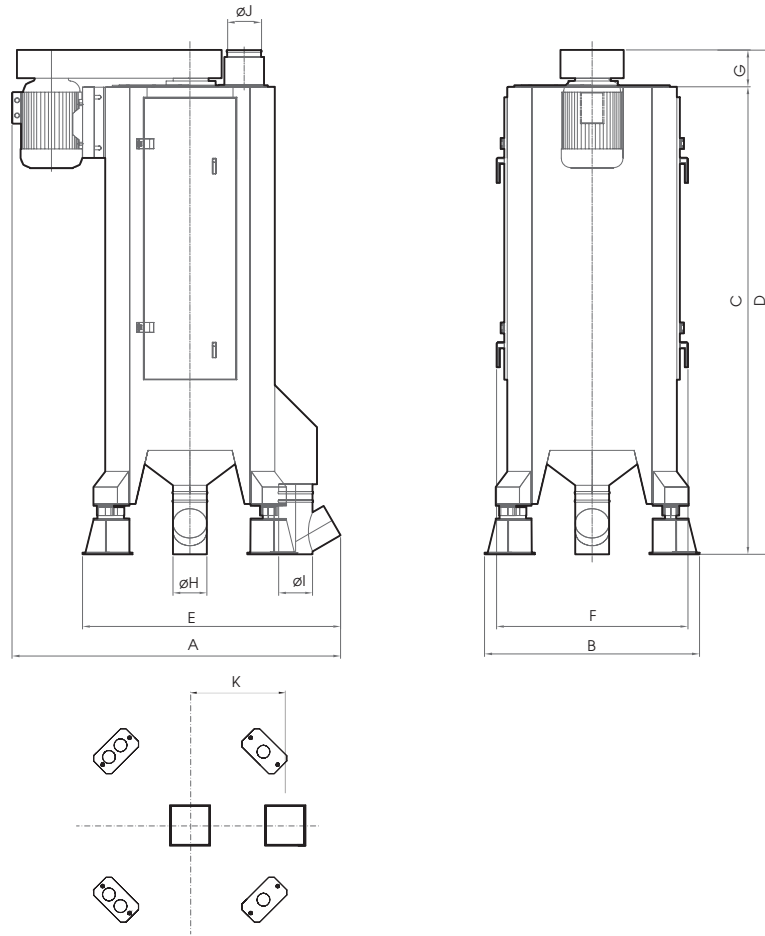
Practical and easy cleaning process

Quick and easy screen replacement

Noiseless working condition

Less space is needed, when double model is used





Dimensions [mm]

Model	A	B	C	D	E	F	G	H	øH	øJ	K
DVSI 45 / 100	1150	760	1665	1775	890	745	130	120	120	120	375

Technical Features

Capacity (t/h)	Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
		Net	Gross	
0,6 - 1,2	4	330	479	2,9

## CONTROL PLANSIFTER RKES

### SCOPE OF USE

It is used to fill in the gap between the big plansifter and the laboratory plansifter. Therefore, it provides great advantages. The capacity of the plansifter is determined by taking into consideration the kind of application and the grade of silk cloth.





## ▶ APPLICATION FIELDS

The unit is strongly advised to be used after product silo before packing of products.

**It is widely used in different industrial fields as well:**

- At flour mills: For wheat, corn and similar grain processing plants
- At feed mills: For final sifting of formulated feed meals, corn, crushed pellet feed, barley, oats and for removing the remained coarse materials after grinding and similar processes
- At various foods processing plants: For sifting process of instant soups, baby food, sugar and tea
- At others industrial plants: For sifting of plastic, salt and granular materials

## ▶ STRUCTURE

The machine is constituted of:

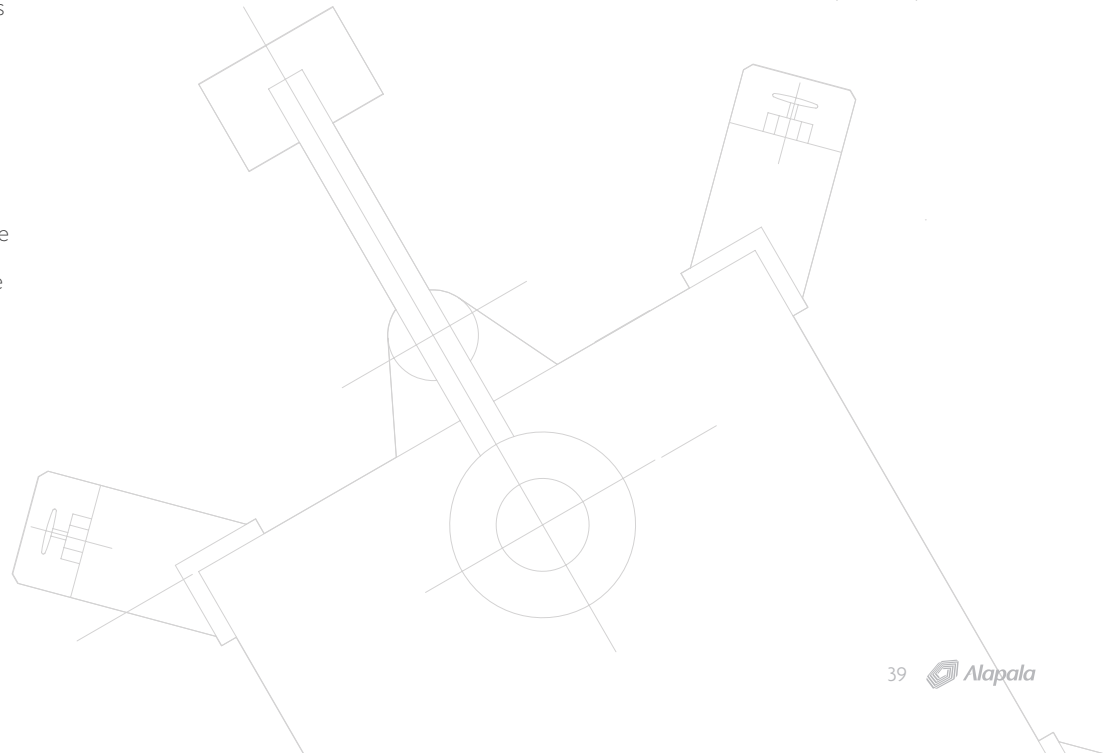
- Metallic support to carry the frame
- Leakage-proof frame, fixed on the metallic support
- Bottom frame with several outlet
- Rotation leg

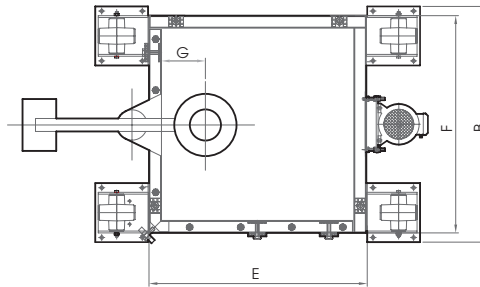
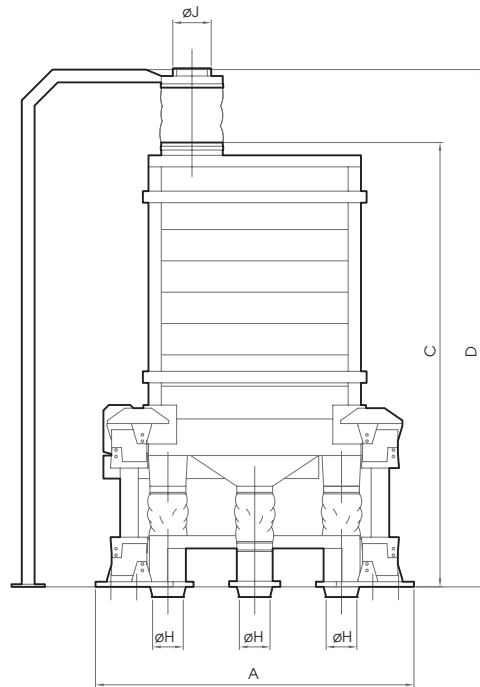
## ▶ WORKING PRINCIPLE

Vibrating process is maintained by means of vibro-motors, which are placed in the center of gravity of the machine. The grain feeding chamber and body which are mounted on the rubber shock absorbers by vibrating together and driven by vibro-motors convey the product into mid-section of inlet. The grain is separated uniformly on the entire surface of the screen by means of an adjustable regulating gate.

## ▶ FEATURES & ADVANTAGES

- Simple design and easy operation possibility
- Easy to install and easy to feed
- Smooth and noiseless operation
- Completely leakage-proof sieve stack
- Easy to change sieve stacks
- The sieve flow schema, numbers of sieves can be adjusted to meet special requirements
- Easy accessibility to sieves and drive systems from all sides
- Minimum time is required for maintenance and cleaning works
- High efficiency, light weight construction, small space requirement





Dimensions [mm]

Model	A	B	C	D	E	F	G	øH	øJ
RKES 85 / 6	1408	1022	1380	1645	942	942	268	120	150
RKES 85 / 8			1560	1825					
RKES 120 / 6	1786	1400	1459	1724	1320	1320	266	150	
RKES 120 / 8			1639	1904					

Technical Features

Approx capacities (for bakery flours, flour grades 450-650 up to 14,5% H2 O)

Model	Motor (Kw)	Econtr. (mm)	Net Area (m <sup>2</sup> )	Opening of Mesh (micron)	Capacity (t/h) Flour	Weights (Kg)		Gross Volume (m <sup>3</sup> )
						Net	Gross	
RKES 85 / 6	1,1	55	1,92	355	3	700	882	3,8
RKES 85 / 8			2,56		4	720	913	4,2
RKES 120 / 6	1,5		5,7		8	950	1223	6,6
RKES 120 / 8			7,6		12	1000	1287	7,3

## BRAN FINISHER DKFS

### SCOPE OF USE

Machine, which uses a centrifugal action to gently separate the floury endosperm, attached to the bran, thus reducing to the minimum the starch content of offal and ensuring high flour yield.



## ▶ APPLICATION FIELDS

### At food processing industry

- Flour mills
- Semolina mills

## ▶ STRUCTURE

- Screw for product introduction with centrifugal disc
- Welded sheet structure
- Statically balanced rotor fitted with four beaters, each with adjustable angle and distance to the cover
- Shaft mounted on a double row of spherical roller bearings and supports
- Cover made of perforated sheet steel specially shaped to avoid internal turbulence
- Adjustable paddles to vary the rate of product flow through the machine
- Two wide doors permit easy access for inspection and screen removal

## ▶ WORKING PRINCIPLE

The product is thrown towards the screen by means of a wing-fitted rotor, which is rotated horizontally; consequently, the flour and bran are separated from each other. Due to centrifugal force, the product is thrown towards the screen whose size is selected beforehand. During the screening process, flour passes through the screen and larger sizes of bran are directed to the discharge outlet.

## ▶ FEATURES & ADVANTAGES

Low energy consumption and high output

Minimum and easy maintenance

Durability and long lifetime

Practical and easy cleaning process

Quick and easy screen replacement

Noiseless working condition

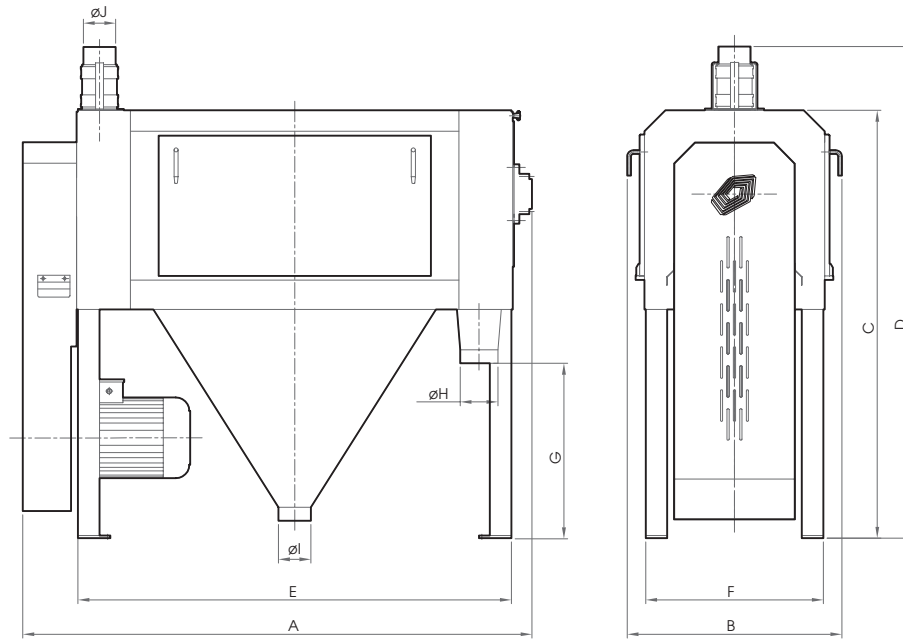
Trouble free operation

Less space is needed, when double model is used

Different air connection possibilities per request







Dimensions [mm]

Model	A	B	C	D	E	F	G	$\varnothing H$	$\varnothing l$	$\varnothing U$
DKFS 4010	1680	730	1590	1890	1410	410	785	120	120	120
DKFS 5012	1890	820			1610	660	650	150		

Technical Features

Capacity(t/h) Bran	Motor (Kw)	Air Volume (m <sup>3</sup> /min)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
1,5 - 1,8	5,5 - 7,5	8	464	657	4
2 - 2,4	7,5 - 11	10	560	780	4,9

## TURBO CONTROL SIFTER TKSF

### SCOPE OF USE

It is used in the flour mills to separate any foreign material may be mixed into final product during milling process or storage. The foreign materials separated from product before packing, product storage or bulk loading silo.



## ▶ APPLICATION FIELDS

### At food industry

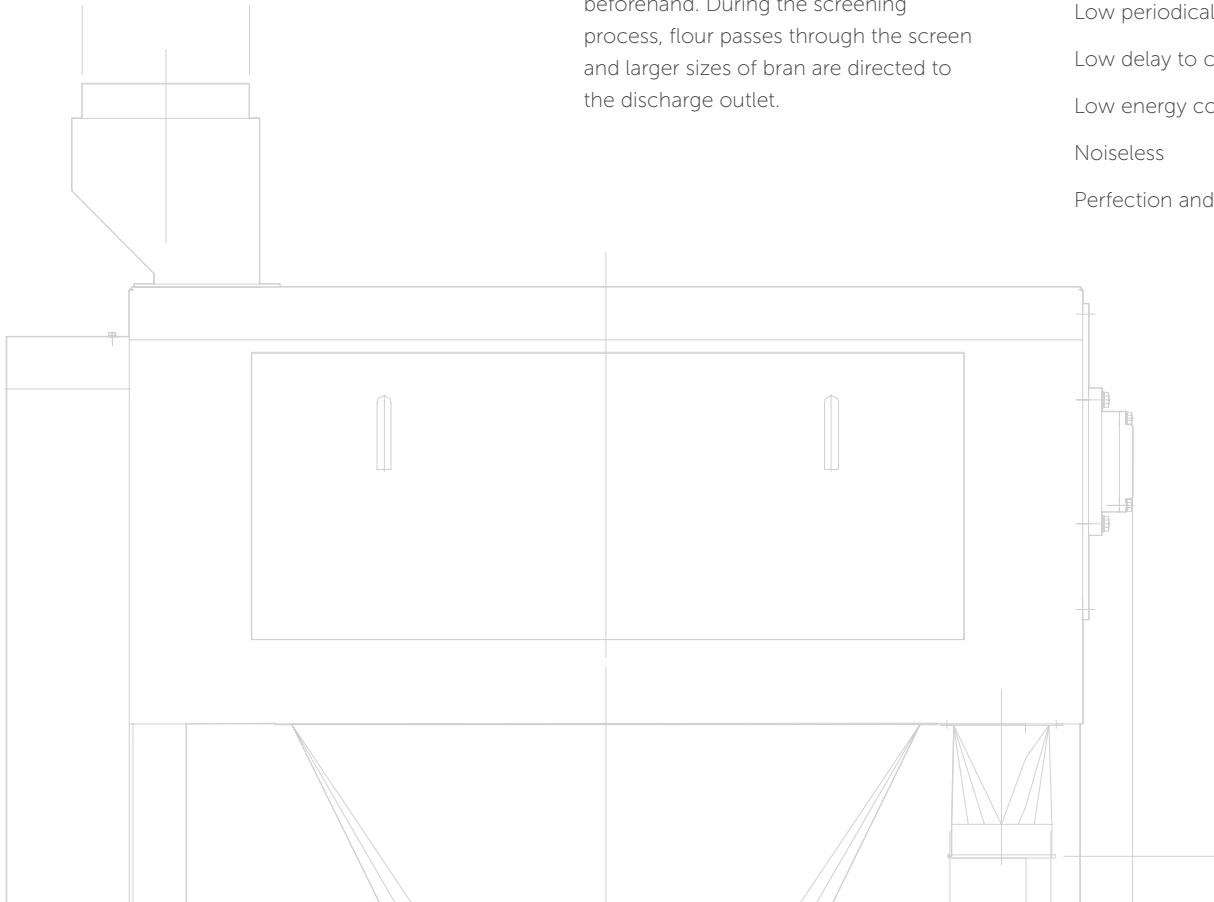
- Flour and semolina mills

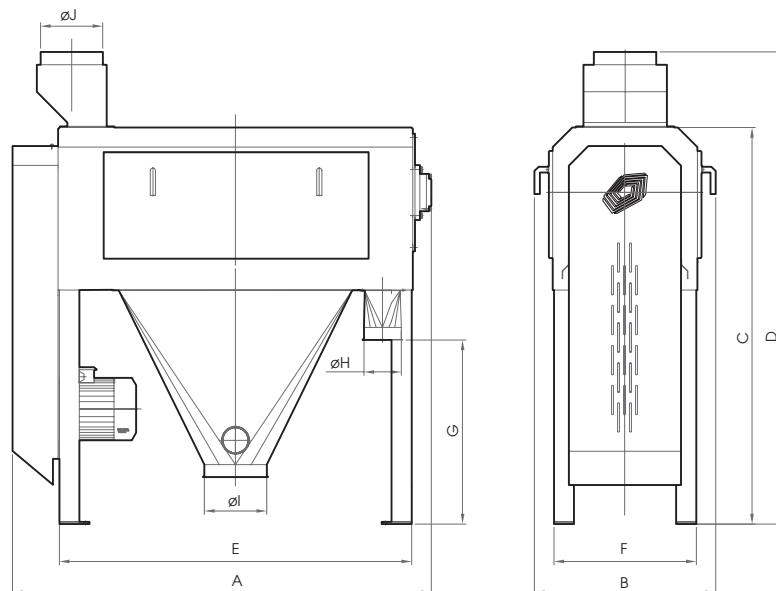
## ▶ WORKING PRINCIPLE

The product is conveyed into a cylindrical formed perforated sieve and than it is thrown on the sieve wall with a high speed by means of angular blades which are installed on the rotor. When the product is thrown on the perforated sieve on the flour passes through the holes and it is conveyed to flour chamber and passes through the bunker than directed to discharge and bigger size of foreign material will be conveyed to discharging outlet through the internal chamber. hose size is selected beforehand. During the screening process, flour passes through the screen and larger sizes of bran are directed to the discharge outlet.

## ▶ FEATURES & ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- High precision
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spare parts
- Low energy consumption
- Noiseless
- Perfection and aesthetic





### Dimensions [mm]

Model	A	B	C	D	E	F	G	øH	øI	øJ
TKSF 40 / 100	1676	726	1590	1890	1410	570	737	150	250	ø250

### Technical Features

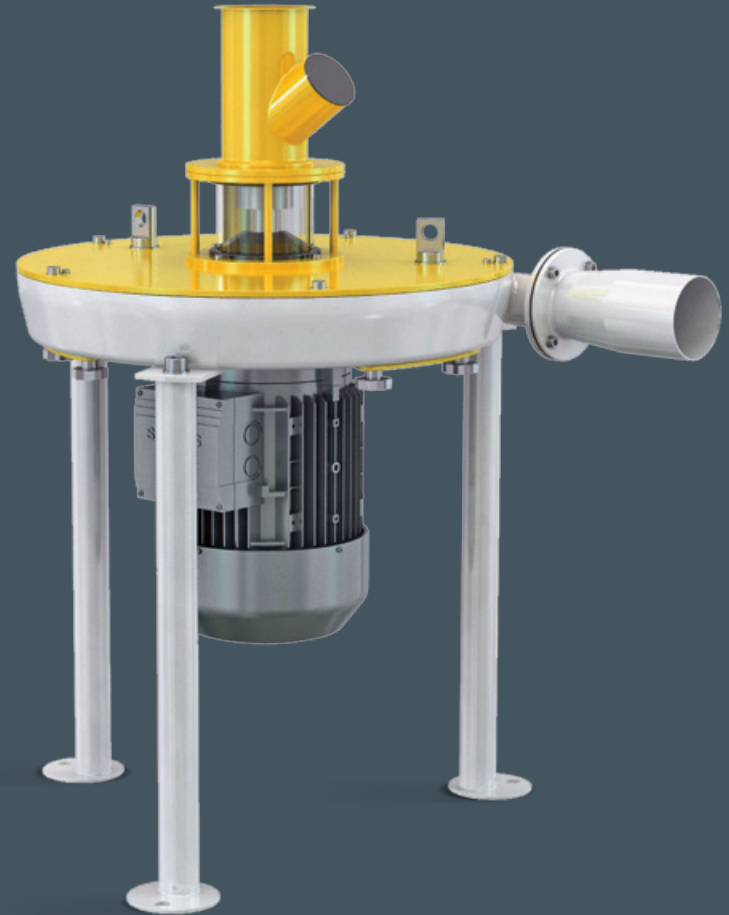
Model	Capacity (t/h) Flour				Air Volume (m³/min)	Motor (Kw)	Weights (Kg)		Gross Volume (m³)
	ø1 (mm)	ø1,5 (mm)	ø2,5 (mm)	ø3 (mm)			Net	Gross	
TKSF 40 / 100	10	15	30	35	15	5,5	450	642	4



## IMPACT DETACHER DIKA

### SCOPE OF USE

It is used to realize separating and grind process at the semolina passages in the flour diagrams, this process increases the yield of flour and consumes less energy comparing to other grinders.



## ▶ APPLICATION FIELDS

### At food industry

- At the coarse and fine semolina passages in the flour and semolina mills
- Just after roller mills or at the peak point of pneumatic tubes to be used as a right-angled elbow

### At other similar industrial plants

## ▶ WORKING PRINCIPLE

The product is fed through the center of the machine.

Uniform and smooth distribution of product is provided by means of radial wings of the rotating disc. High rotation speed creates a gradually increasing centrifugal force, which throws the product towards the fixed disc's pins. The impact force depends on the structure of pins.

The broken but not ground parts, which come from the passages and stuck on fine and medium size semolina are loosened and separated from each other. Because of free grinding the hard and soft semolina grains are affected differently.

Therefore, it causes an automatic grinding between different sized parts. The parts, which are of equal size, are grind by homogeneous breaking quality. So that high flour yield is obtained. The rate of ash almost stays stable or increases slightly which can be neglected. As a result with the high productivity the obtained high flour yield will provide for a shortened flour diagram.

The large particles and foreign materials are prevented from getting into the machine by installing a sieve at the inlet of the detacher.

## ▶ FEATURES & ADVANTAGES

Durability and long lifetime comparing to other impact detachers

Installation possibilities, on the floor or to be suspended from the ceiling

Minimum and easy maintenance

Low energy consumption and high efficiency

Hygienic working conditions

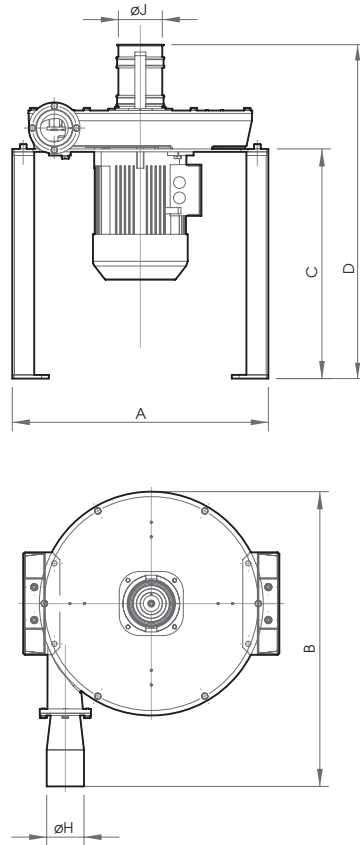
Possibility of shortening of flour diagram

Easy installation and less space need

Low investment and operational costs



# IMPACT DETACTER DIKA



## Dimensions [mm]

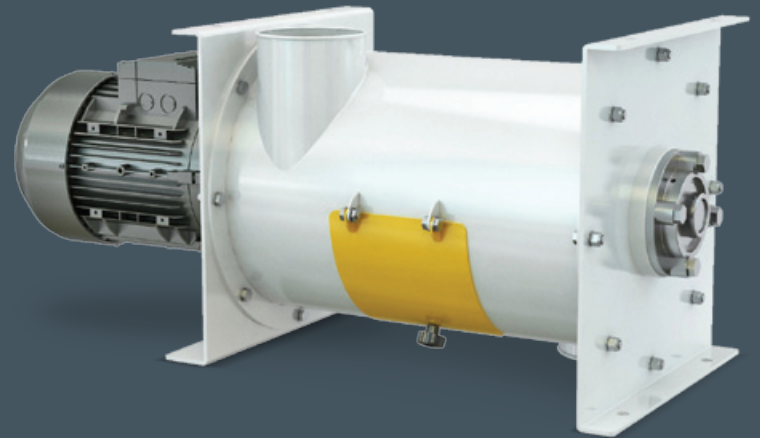
## Technical Features

Model	A	B	C	D	øH	øJ	Capacity (t/h)	Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
									Net	Gross	
DIKA 51 (50Hz) DIKA 45 (60Hz)	700	806	620	913	57	120	1	5,5	147	230	1,2
					64						
					70						
					76						
					83		1,6	7,5	156	239	
					83						
					95						
					102						
108	2,8	11	184	267							
119											
119											
125											
125	4,1	15	193	276							

## DRUM DETACHER DTDA

### SCOPE OF USE

It is used to break endosperm flakes, which are obtained after reduction rolls, so that it helps for the process of the flour production.





## ▶ APPLICATION FIELDS

### At flour mills

- At coarse and fine semolina passages
- After roller mills or before plansifter inlet

## ▶ STRUCTURE

A cylindrical steel body is supported by stands from both sides. The design of supports allows the drum detacher to be installed on the floor or to be suspended from the ceiling. The rotor is outfitted with four beaters. It is bedded at both ends by ball bearings, which are installed outside. The rotor can be driven by direct- coupled or belt-pulley system either from inlet or outlet side.

## ▶ WORKING PRINCIPLE

The material (stock) to be detached is fed through the inlet directly to the rotor and is caught by the inner surface of the jacket, which is installed with six impact bars helps increasing the detaching output. The pitch of beaters directs the material from the feeding point to the discharge point of the machine.

## ▶ FEATURES & ADVANTAGES

Delicate detaching without degradation of stock

It can be installed on the floor or suspended from ceiling

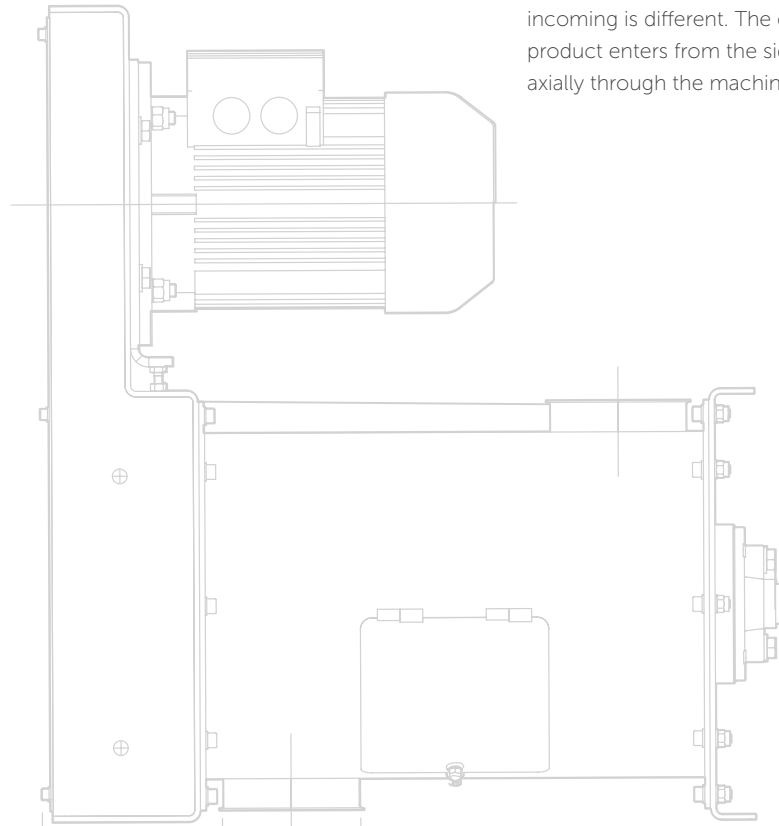
Possibility of right hand or left hand inlet

Low power need

Driven either by belt-pulley system or by direct connection to motor

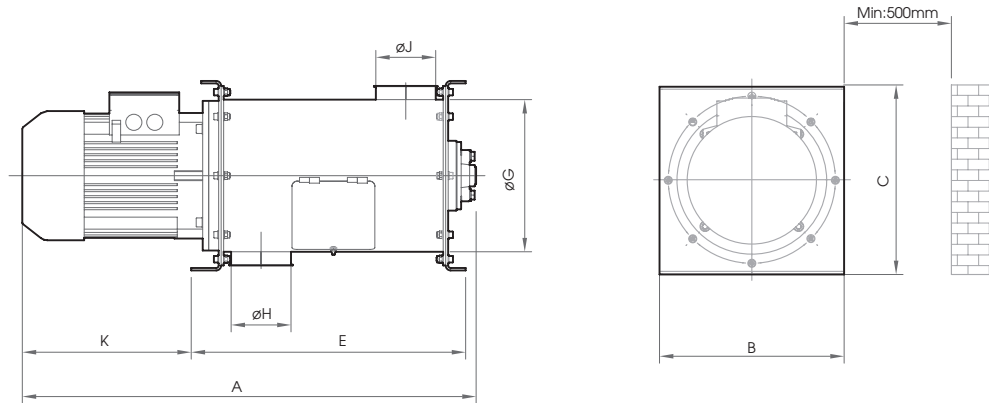
### Model DTDA - 35 / 45G

This model is designed for higher capacities. Application, design and working principles are similar to those of our regular model DTDA 30/45. Material incoming is different. The cumulated product enters from the side and feeds axially through the machine.

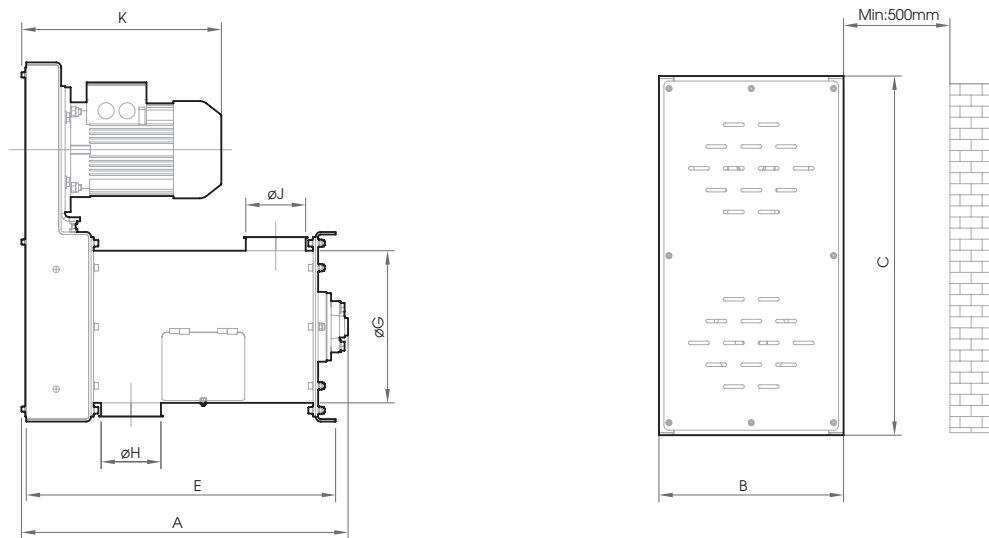


# DRUM DETACTER DTDA

DTDA - 30/45 A



DTDA - 30/45 F



## Dimensions [mm]

Model	A	B	C	E	øG	øH	øJ	K
DTDA 30 / 45-A	870	370	380	550	290	120	120	299
	910							338
DTDA 30 / 45-F	655		720	620				380

## Technical Features

Capacity (t/h)	Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
		Net	Gross	
1	2,2	100	148	0,5
1,2	3	105	152	
1	2,2	100	148	0,5
1,2	3	105	152	

## VIBRO FEEDER DTTA

### SCOPE OF USE

It is used to feed regularly the granular or powdery product into a conveying line or a machine at a suitable rate. For the collection of flours recovered from the filter, to feed respective pneumatic line.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Feed mills

### At other similar industrial plants

## ▶ WORKING PRINCIPLE

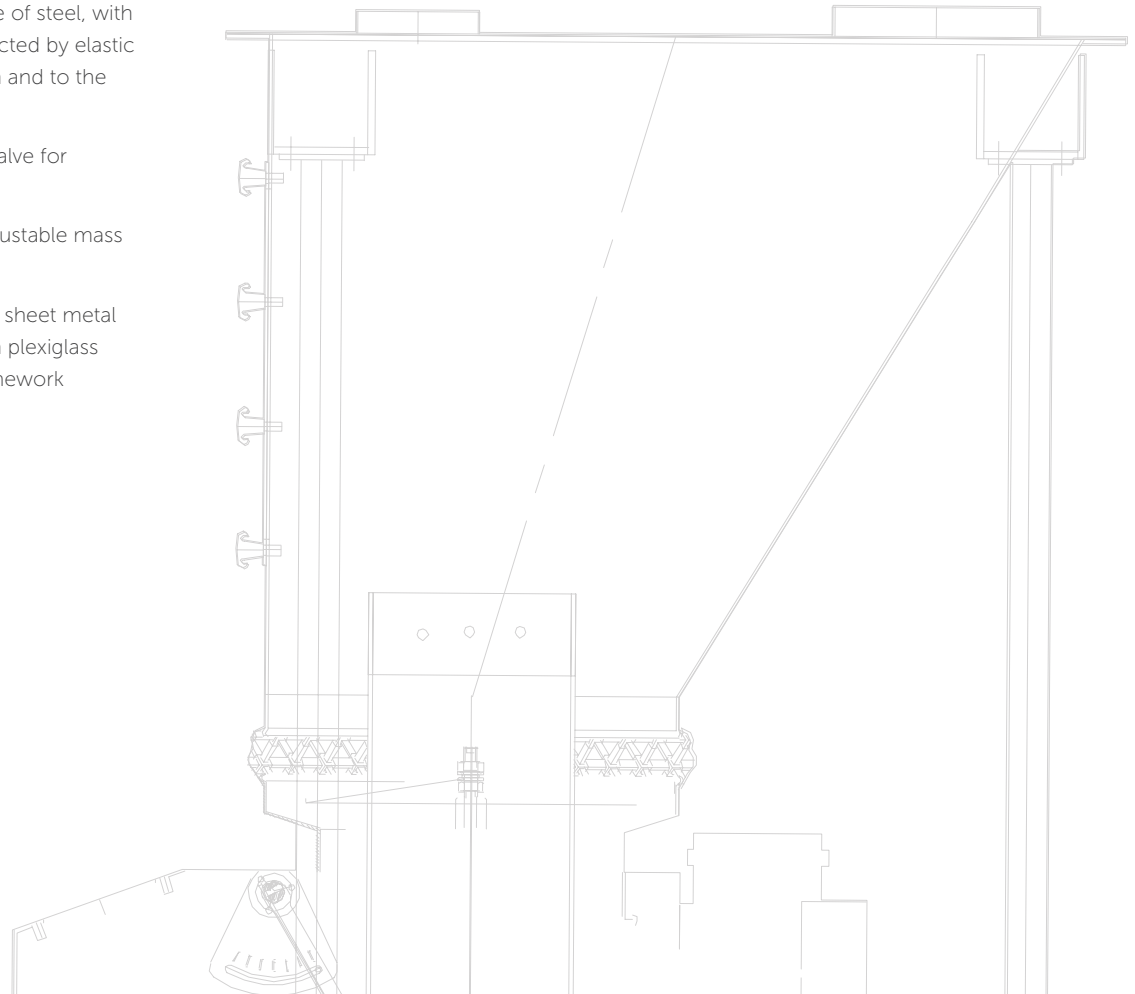
The product, which is transferred from the top hopper to a vibrator feeder, is fed into a conveying element or the machine. The power unit (by a vibrator-motor) is used to obtain the required feeding by vibrating.

## ▶ FEATURES & ADVANTAGES

- Great reliability
- Low power consumption
- Durability and no wear and tear parts
- Vibration free frame by using rubber shock absorbers

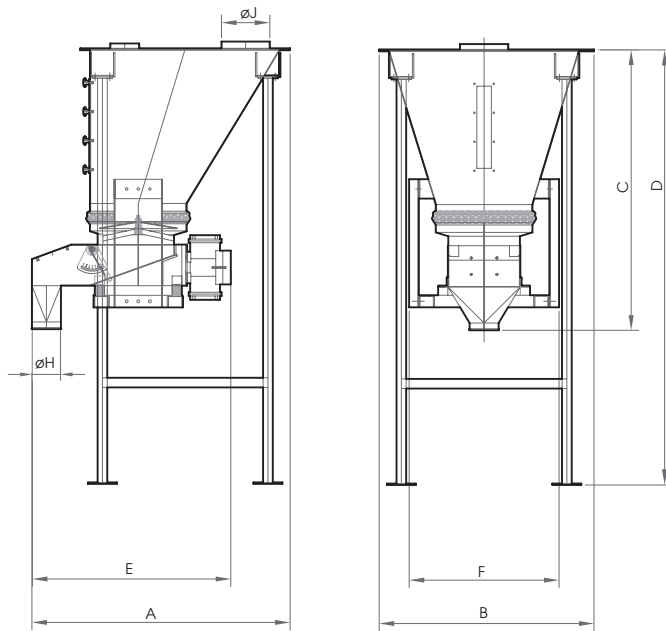
## ▶ STRUCTURE

- Vibrating channel made of steel, with transparent cover, connected by elastic clamps to the storage bin and to the discharge piping
- Adjustable inclination valve for product measuring
- Vibrator motor with adjustable mass to change the oscillation
- Cylindrical bin made of sheet metal complete with inspection plexiglass door and supporting framework

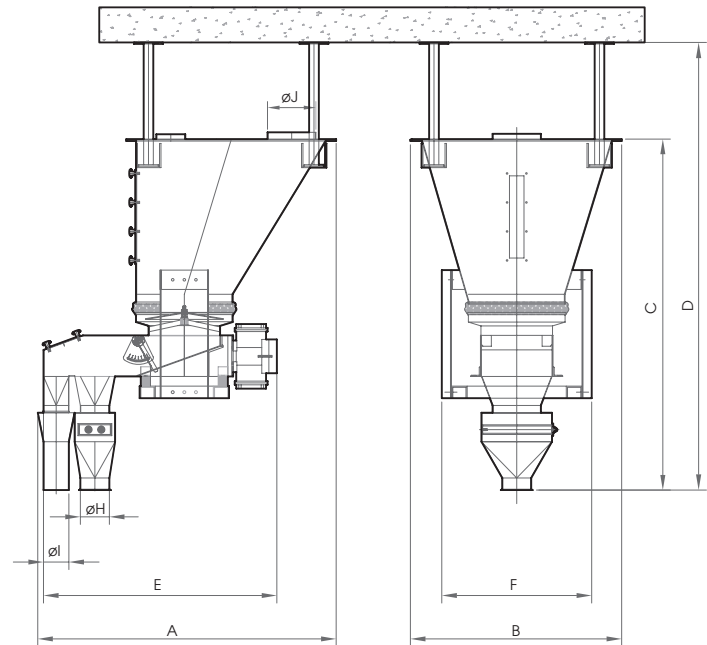




DTTA 200



DTTA V200



Dimensions [mm]

Model	A	B	C	D	E	F	øH	øl	øJ
DTTA 200	1068	913	1160	1160	820	620	120	120	120
DTTA V200	1234		1452	1452	985		150		150

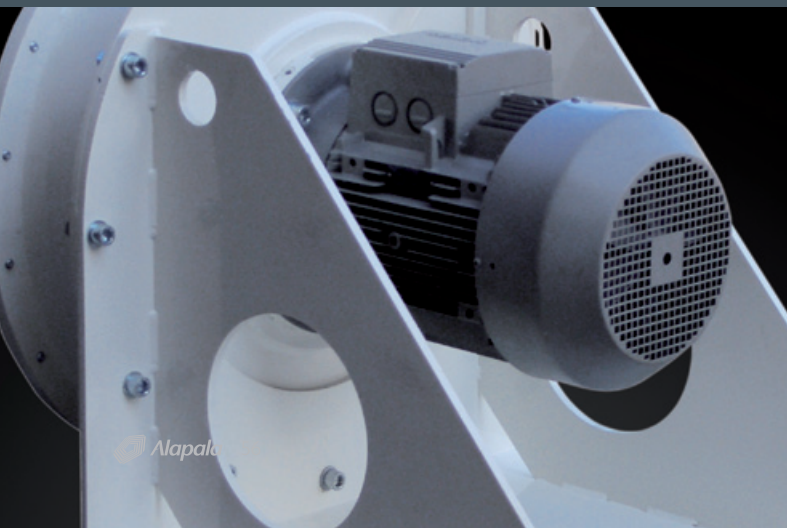
Technical Features

Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
	Net	Gross	
0,18	130	185	3,1
	145	200	3,6

# INFESTATION DESTROYER FOR FLOUR DV/DU

## SCOPE OF USE

It is used in the flour mills to prevent infestation of insects to be grown in the processed product.



## ▶ APPLICATION FIELDS

### At food industry

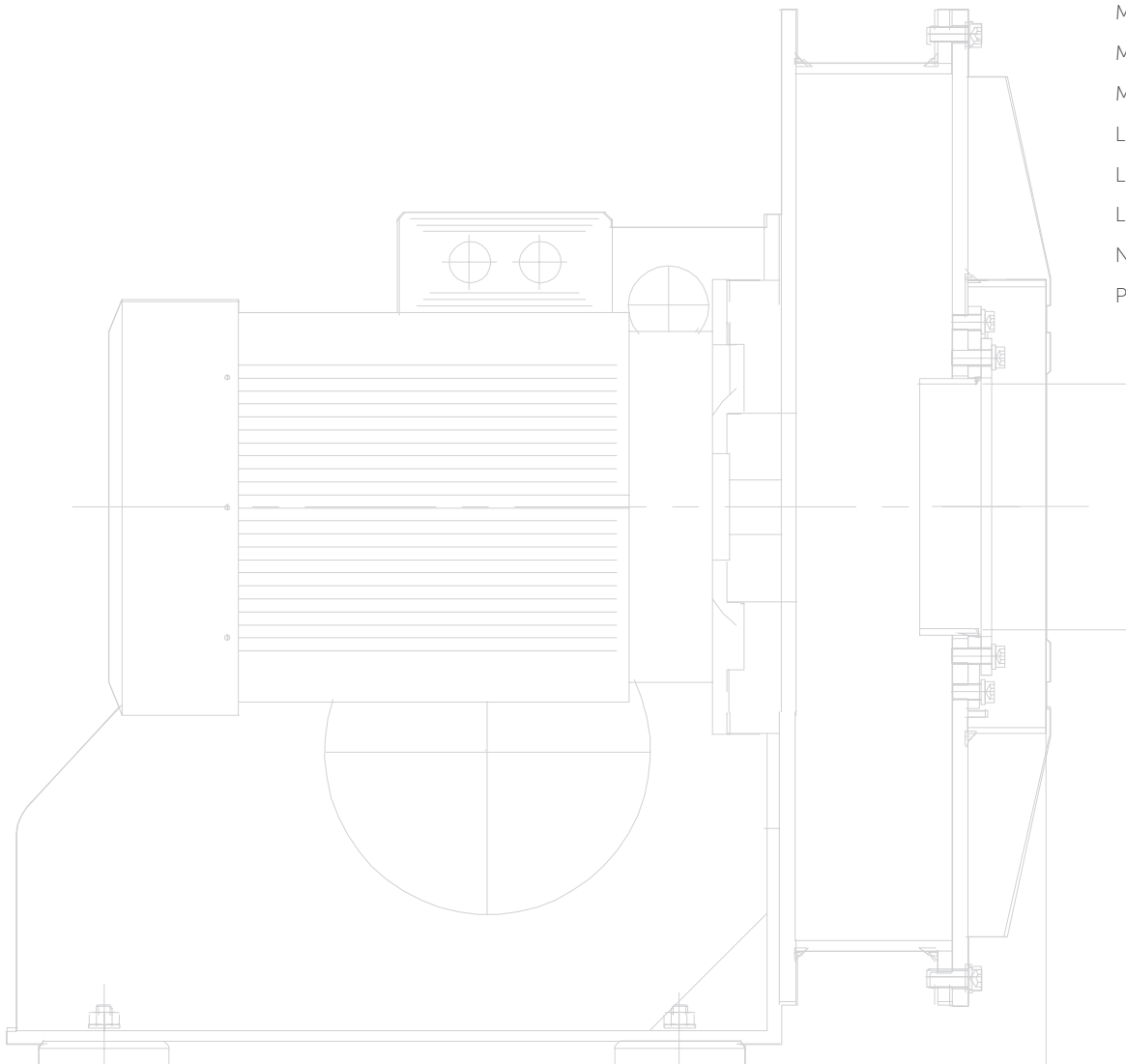
- Flour and semolina mills
- Biscuit and macaroni factories
- Other food industry

## ▶ WORKING PRINCIPLE

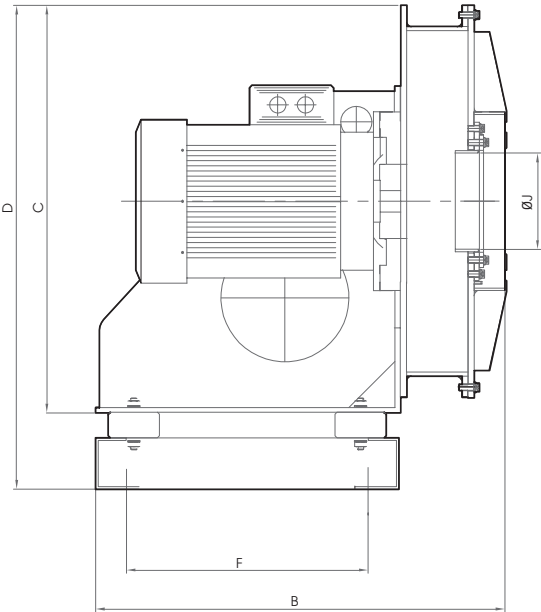
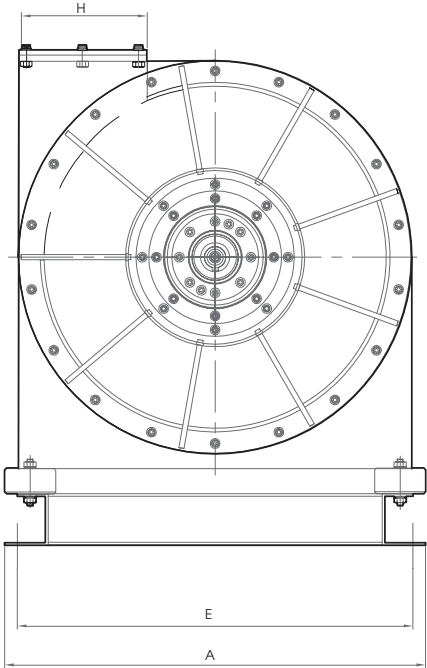
The product is conveyed through center into a blade installed rotor which is at horizontal position. During the rotation movement, the product is thrown to wall of the machine and the grown eggs are destroyed.

## ▶ ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- High precision
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption
- Noiseless
- Perfection and aesthetic



INFESTATION DESTROYER FOR FLOUR **DVDU**



Dimensions [mm]

Technical Features

Model	A	B	C	D	E	F	H	øJ	Capacity (t/h) Flour	Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
											Net	Gross	
DVDU 11	825	802	810	960	775	474	90 x 150	200	7	11	400	486	1,4
DVDU 18,5									10	18,5	450	536	

# SILO DISCHARGER PSUB | PSKB

## SCOPE OF USE

It is used to discharge stored bulk bran and similar product from storage bins, concrete, steel and plastics silos and provides smooth operation.





## ▶ APPLICATION FIELDS

### At food processing industry

- Flour and semolina mills
- Macaroni factories
- Feed mills

### At other similar industrial plants

## ▶ WORKING PRINCIPLE

By using numbers of articulated brackets freely suspended a pan-like bottom section is oscillated by means of a vibrator. The product flow is regulated by suitable inserts, which are fixed on discharger for an ideal downward flow of the bulk bran, which is stored in the bin.

## ▶ FEATURES & ADVANTAGES

Cheap and simple silo design

Durability and long lifetime

Regular and trouble free discharging

Easy accessibility to mechanical parts from outside when the silo is filled

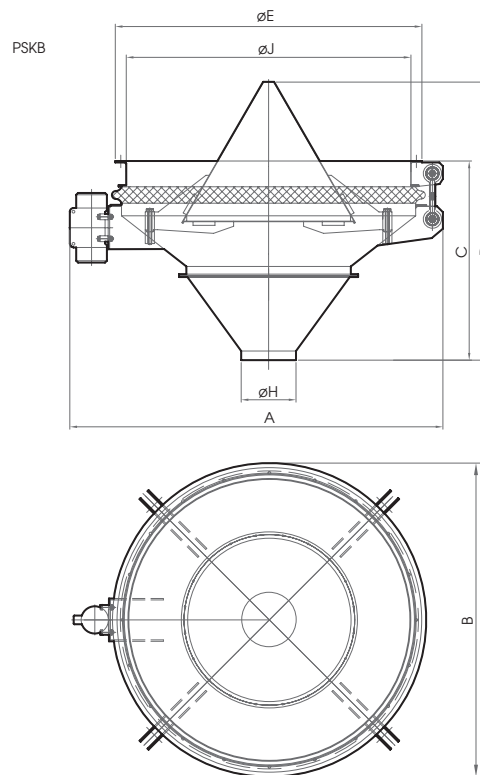
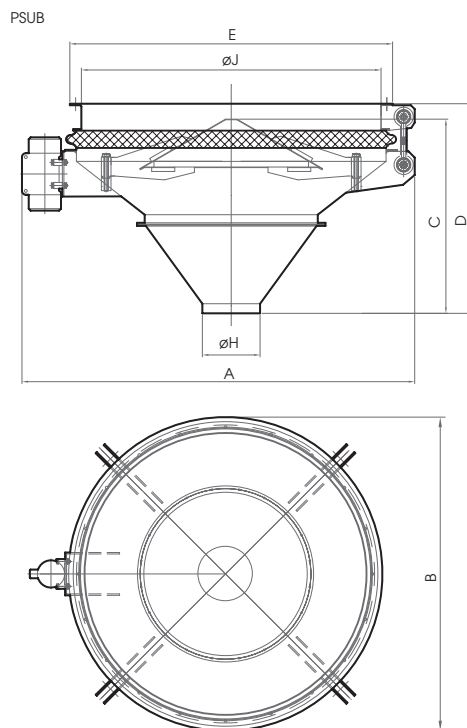
Minimum height

Silent working condition

Low energy consumption



# SILO DISCHARGER **PSUB PSKB**



## Dimensions [mm]

Model	A	B	C	D	E	øH	øJ
PSUB 100/20	1400	1100	783	783	1058	200	958
PSUB 100/30			714	714		300	
PSUB 130/30	1765	1430	913	913	1378	300	1258
PSUB 130/50			776	776		500	
PSUB 160/30	2060	1730	1090	1090	1678	300	1558
PSUB 160/50			953	953		500	
PSUB 200/30	2470	2130	1246	1246	2090	300	1958
PSUB 200/50			1108	1108		500	

## Dimensions [mm]

Model	A	B	C	D	E	øH	øJ
PSKB 100/20	1400	1100	783	851	1058	200	958
PSKB 100/30			714	783		300	
PSKB 130/30	1765	1430	913	1173	1378	300	1258
PSKB 130/50			776	1035		500	
PSKB 160/30	2060	1730	1090	1524	1678	300	1558
PSKB 160/50			953	1386		500	
PSKB 200/30	2470	2130	1246	1524	2090	300	1958
PSKB 200/50			1108	1386		500	

## Technical Features

Model	Motor (Kw)	Weights (Kg)		Gross Volume (m³)
		Net	Gross	
PSUB 100/20	0,43	225	367	2,3
PSUB 100/30			363	2,1
PSUB 130/30	0,55	362	570	3,9
PSUB 130/50			560	3,5
PSUB 160/30	0,55	430	710	6,1
PSUB 160/50			698	5,5
PSUB 200/30	0,80	790	1176	9,7
PSUB 200/50			1162	8,8

## Technical Features

Model	Motor (Kw)	Weights (Kg)		Gross Volume (m³)
		Net	Gross	
PSKB 100/20	0,43	244	390	2,5
PSKB 100/30			386	2,3
PSKB 130/30	0,55	412	639	4,8
PSKB 130/50			629	4,3
PSKB 160/30	0,55	525	842	8,1
PSKB 160/50			830	7,5
PSKB 200/30	0,80	610	1024	11,5
PSKB 200/50			1010	10,6

# cleaning section

- GRAIN SEPARATOR
- INTENSIVE WHEAT SCOURER
- AIR RECYCLING TARAR
- AIR CANAL
- DRY STONER
- DESTONER CLASSIFIER
- MAGNET "TUBULAR TYPE"
- HAMMER MILL
- INTENSIVE DAMPENING MACHINE
- TRIEUR MACHINE





## GRAIN SEPARATOR TCSI

### SCOPE OF USE

Machine designed for the removal of fine and coarse impurities from cereal caryopses by sifting action.

Due to its adjustable speed and inclinable screen, it can be used as a multilateral grain-cleaning machine.

*\*The capacity is available for features of 0.78-0.80 kg/dm<sup>3</sup> wheat capacity for the other cereals should be calculated based on the humidity and dirtiness of the wheat.*





## ► APPLICATION FIELDS

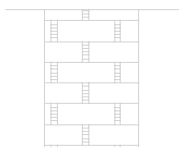
### At food processing industries

- Flour and semolina mills
- Seed cleaning plants
- Cereals cleaning and calibration centers
- Malt factories
- Feed mills
- Cereal storage silos

### At other similar industrial plants

## ► STRUCTURE

- Vibrating structure supported by elastic shock-absorbing elements, containing the sifting body with two rows of sieves pairs
- Self adjusting grain feed
- Self cleaning of the sieve covers by means of rubber balls
- Transparent plexiglass panels for checking the cereal strata
- Steel or wooden made sieve frames equipped with easily replaceable perforated plates
- The vibrator motors, which provides the oscillation for the separator



## ► WORKING PRINCIPLE

Vibrating process is maintained by means of vibro-motors, which are placed in the center of gravity of the machine. The grain feeding chamber and body which are mounted on the rubber shock absorbers by vibrating together and driven by vibro-motors convey the product into mid-section of inlet. The grain is separated uniformly on the entire surface of the screen by means of an adjustable regulating gate. If it is necessary, for better product flow another adjustable regulating gate can be fixed to the inlet of the screen.

When the grain passes through from the first screen to the second one, larger size impurities or foreign particles are kept by the first screen and directed to coarse offal discharge line. The remained smaller size impurities or foreign particles, which pass through the second screen, are transferred to fine offal discharge line. Then, the cleaned product is transported to an air canal or tarar.



## ► FEATURES & ADVANTAGES

Low energy consumption, high capacity and efficiency

Easy and minimum maintenance, trouble free operation by using vibro-motors

Adjustable inclination (angle) of screen - grades range 2 - 12. Due to such feature it can be used for any kind of cereals at maximum efficiency

Durability and long lifetime

Quick and easy replacement of screens and practical cleaning possibility

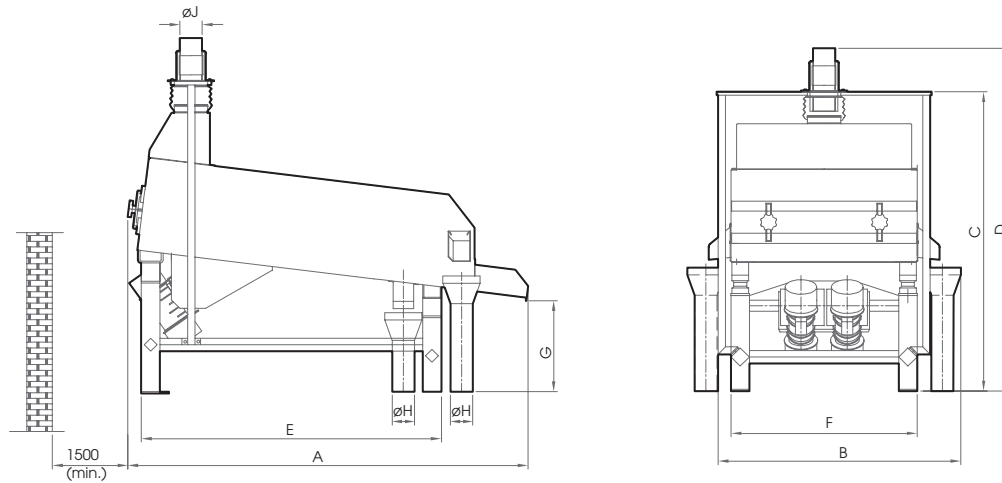
Noiseless working condition

**Note:** All figures given on table are max.

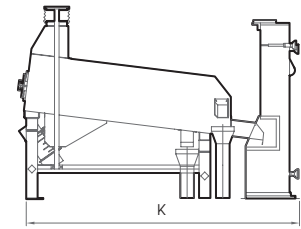
Values to be considered for wheat and rye, which contain 15% humidity. For higher humidity containing grains below mentioned values should be considered.

Grain humidity %	Capacity %
15 -18	65 - 70
18 -22	55 - 60
22 and over	Max. 50
For corn	90
For barley	80

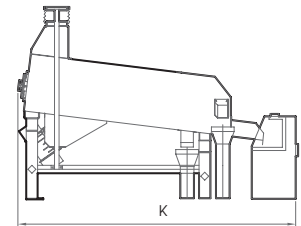
# GRAIN SEPARATOR TCSI



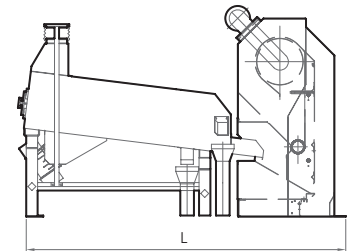
TCSI - A



TCSI - B



TCSI - C



- The capacity is available for features of 0,78 - 0,80 kg/dm<sup>3</sup> wheat.
- The capacity for the other cereals should be calculated based on the humidity and dirtiness of the wheat. Please contact us for detailed information.

## Dimensions [mm]

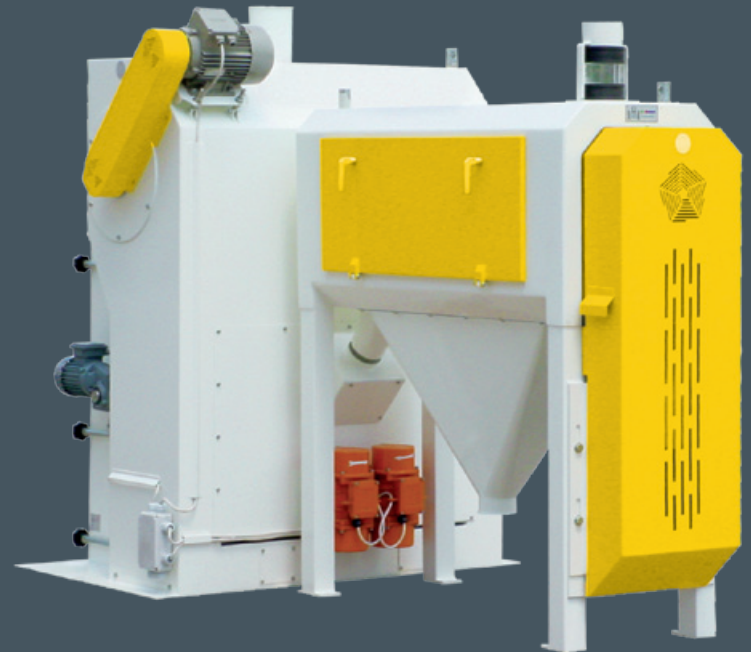
## Technical Features

Model	A	B	C	D	E	F	G	øH	øJ	K	L	Capacity (t/h) Wheat		Sifter (mm)		Motor (Kw)	Weights (kg)		Gross Volume (m <sup>3</sup> )	
												Silo	Cleaning	Width	Lenght		Net	Gross		
TCSI 60/100	1660	937	1622	1857	1132	606	485	120	120	2005	2333	14	3	600	1000	2 x 0,28	500	712	4,8	
TCSI 60/150	2157		1790	2030	1632					2502	2830	22	5		2 x 750		550	817	6,5	
TCSI 100/150	2633	1337	1622	2120	1006	1506	150	180	150	3002	3330	50	12	1000	2 x 1000	2 x 0,4	910	1279	10,4	
TCSI 100/200										2157	1850	2416	1632		2502		2830	60	15	2 x 750
TCSI 150/150	2633	1838	2000	2600	2120	1506	200	250	200	250	3002	3330	75	20	1500	2 x 1000	2 x 0,75	1010	1492	16
TCSI 150/200													2157	1850		2416		1632	2502	2830
TCSI 150/200G	2633	1838	2000	2600	2120	1506	200	250	200	250	3002	3330	100	25	1500	2 x 0,75	1310	1792	17,5	

## INTENSIVE WHEAT SCOURER KCSI

### SCOPE OF USE

It eliminates the dust, the arista and beards from the kernels furthermore, it crumbles insects and detaches empty kernels and lumps of mud. An intensive friction and rubbing action between the kernels, the cover and the paddle type beaters will reduce the bacterial potential in the flour.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Wheat, oats, rye, corn-cleaning plants
- Grain storage silos

## ▶ STRUCTURE

- Electrically welded steel sheet structure
- Statically balanced rotor with 8 rods duly screwed and provided with a set of paddle type beaters arranged in diagonal
- Shaft fitted onto double row barrel roller bearings and supporting elements with internal labyrinth seals
- Special sheet steel cover with triangular pocket shaped perforations
- Large doors for easy maintenance operations of cover

## ▶ WORKING PRINCIPLE

The grain is intensively rubbed and pressed between the screen and itself by using a horizontal rotor. In the meantime the following processes occur because of intensive friction is generated:

- The grain is pressed and rubbed against each other
- The grain is pressed and rubbed by rotor- fitted wings
- The grain is rubbed by an abrasive screen

The machine is driven by a belt-pulley combination and it can be used with any type of air canal and tarar.

## ▶ FEATURES & ADVANTAGES

Low energy consumption and high efficiency

Possibility of working in a combination either with air canal or tarar at the same level (floor)

Easy and quick replacement of the screen

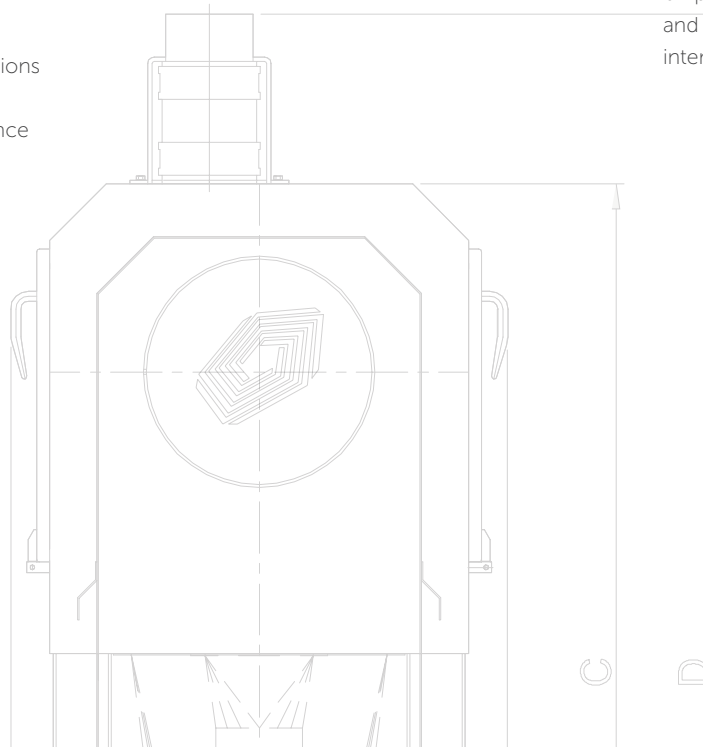
Minimum maintenance and easy cleaning

Noiseless working condition

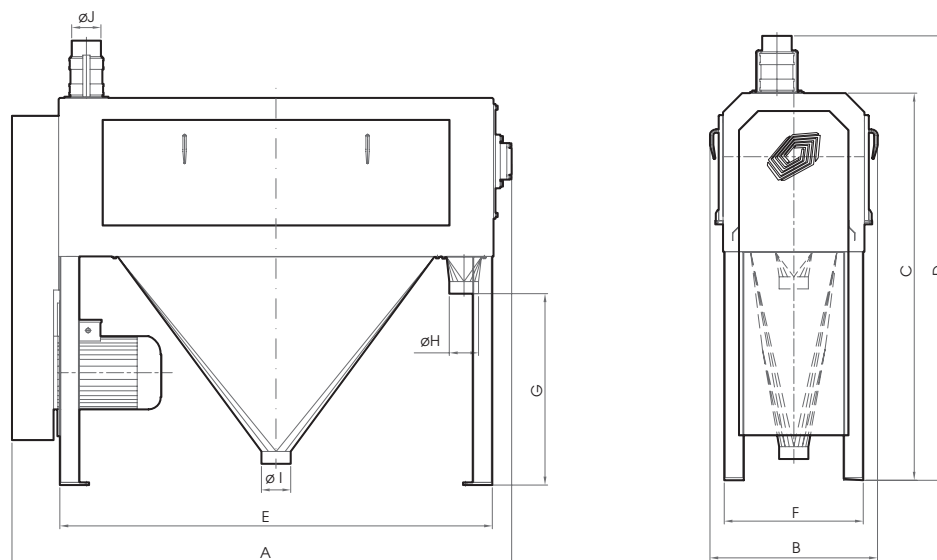
Efficient cleaning process

Eliminates dust, beard of ears and peel of the grain

Crumbles the insects, disintegrates the empties caryopses and the truss of earth and reduces the bacterial masse due the intensive rubbing



# INTENSIVE WHEAT SCOURER **KKSI**



## Dimensions [mm]

Model	A	B	C	D	E	F	G	øH	øI	øJ
KKSI 3010	1680	730	1590	1825	1410	570	785	120	120	120
KKSI 3013	2050				1775			150	120	150
KKSI 4013										

## Technical Features

Model	Capacity (t/h)				Motor (Kw)	Air Volume (m <sup>3</sup> /min)	Weights (kg)		Gross Volume (m <sup>3</sup> )
	Soft wheat		Hard wheat				Net	Gross	
	1st Cleaning	2nd Cleaning	1st Cleaning	2nd Cleaning					
KKSI 3010	6	5	5	4	7,5	6	543	689	3,9
	10	8	8	7	11				
KKSI 3013	14	10	10	9	15	8	600	817	
	16	14	14	12					
KKSI 4013	20	16	16	14	18,5	10	625	842	



# AIR RECYLING TARAR KTHI

## SCOPE OF USE

It is used to eliminate light particles, foreign materials and dust from cereals and vegetable with efficacy and un minimum of air consumption.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Corn, barley, rye, oats and similar grain processing plants
- Cereals cleaning plants
- Vegetable oil factories
- Seed plants
- Grain storage silos

### At other similar industrial plants

## ▶ STRUCTURE

The machine consists of the following main units:

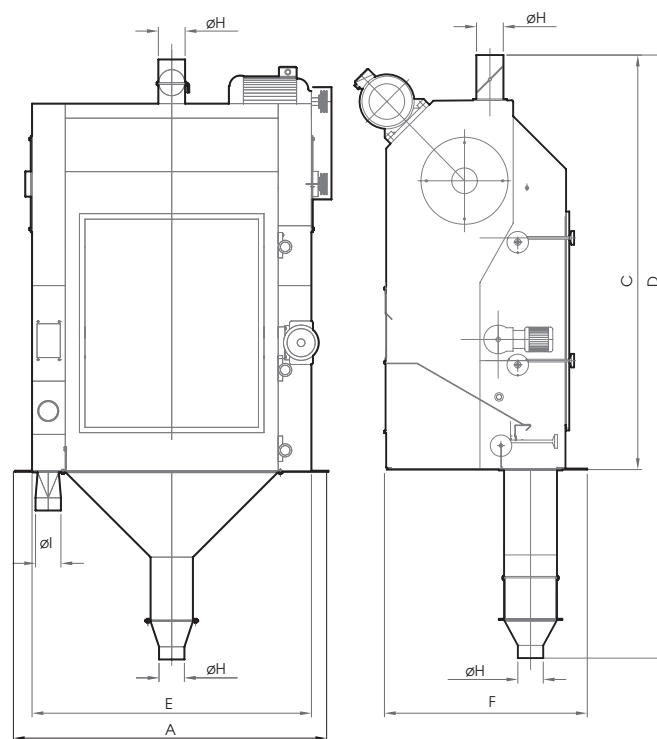
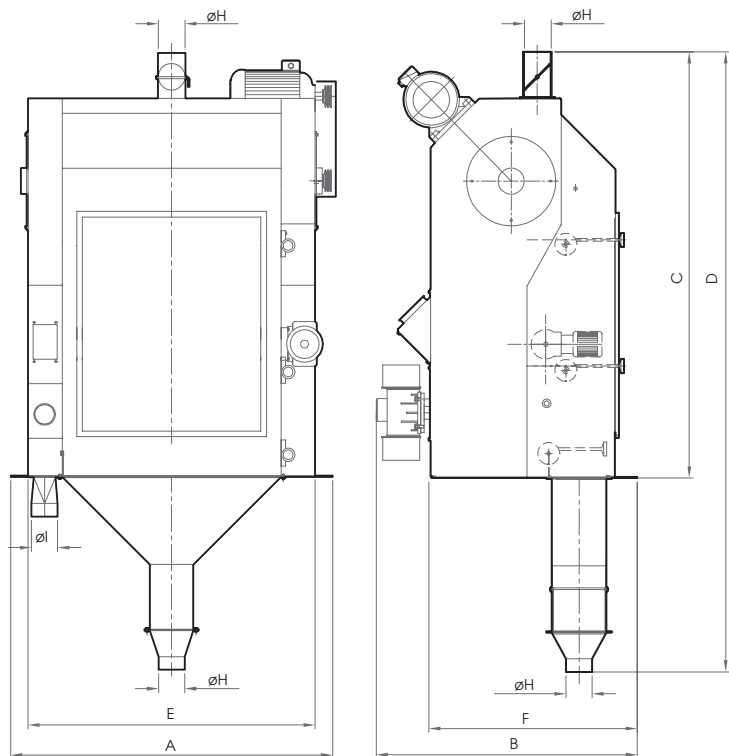
- Butterfly valve with micrometric adjustment of exhausted air flow
- Vertical exhaust chamber with wide transparent polycarbonate inspection panel
- Transversal section with varying inclination for air speed adjustment and for separation of light particles
- Discharge hopper
- Inside fans with motor drive units
- Inside pre-decantation unit with impurity discharge screw conveyor
- Air re-cycling channels

## ▶ WORKING PRINCIPLES

The uniformly separated product is fed to the aspiration duct by using a vibrating feeder. The product and impurities are separated from each other by means of air in the aspiration duct. The foreign particles and light impurities are carried away to the offal discharge line by air while the cleaned product is directly discharged out. Incorporated fan permits a better separation of the particles, the discharge of the particles due a screw.

## ▶ FEATURES & ADVANTAGES

- Low energy consumption and high efficiency
- Regular and uniform grain spreading by means of vibrating feeder
- Easy and practical cleaning possibility
- Minimum and easy periodic maintenance
- Connection possibility to the central ventilation system
- Perfect cleaning and separation process due to precise adjustment
- Pre-decantation allow a better separation
- Air flow with increasing and adjustable speed



AIR RECYCLING TARAR - KTHI ( for horizontal scourer )

AIR RECYCLING TARAR - KTHI ( for vibrating separator )

Dimensions [mm]

Model	A	B	C	D	E	F	øH	øI
KTHI 600	1080			2535	920		120	
KTHI 1000	1480	1177	1945	2829	1320	947	120	120
KTHI 1500	1980			3043	1820		150	

Technical Features

Capacity (t/h) Wheat		Air Volume (m <sup>3</sup> /min)		Weights (kg)		Gross Volume (m <sup>3</sup> )
Cleaning	Silo	Cleaning	Silo	Net	Gross	
4-8	40	6	10	495	717	5,3
8-14	50	8	12	650	933	7,6
14-24	100	10	16	711	1066	10,5

## NORMAL AIR CANAL KHKA

### SCOPE OF USE

It is designed to remove and clean all kinds of light impurities and foreign materials from cereals, coffee seeds, soybeans and corn and so on by means of air circulation.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Corn, barley, rye, oats and similar grain processing plants
- Cereal cleaning plants
- Vegetable oil factories
- Seed cleaning plants
- Grain storage silos

## ▶ WORKING PRINCIPLE

After the grain is fed through the vibrating feeder it will be transferred to an air canal. The grain is separated uniformly on the surface of the air canal by means of the vibrating feeder. The light impurities are separated from grain by using air and eventually the impurities are discharged to offal conveying line.

The air velocity can be adjusted by means of a gate, which is situated at the air the duct outlet. The subjected adjustment can be carried out in accordance with crop quality to be cleaned and the kind of impurities in the crop.

By installing air canal (without vibromotor) directly to the outlet of the TCSI separator the product and foreign materials are separated from each other.

## ▶ FEATURES & ADVANTAGES

Low energy consumption and high efficiency

Regular grain spreading by using vibrating feeder

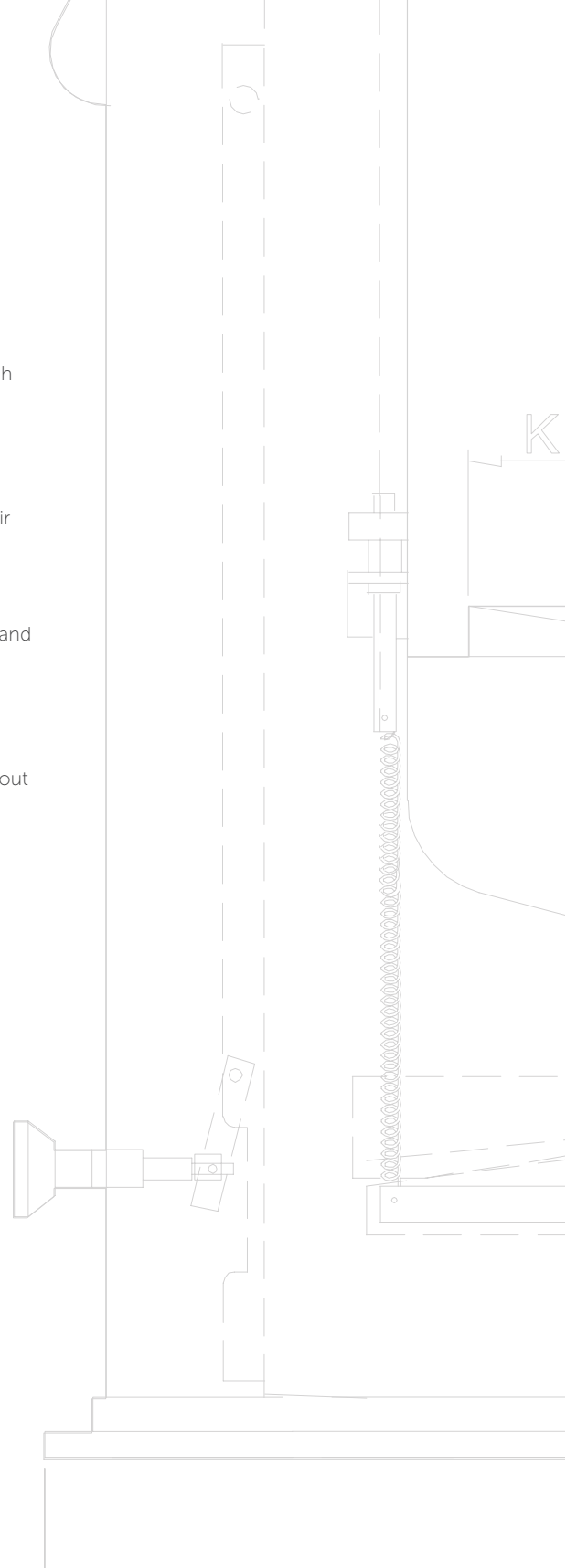
Adjustment possibility of regular air supply due to wide duct opening

Durability and long lifetime

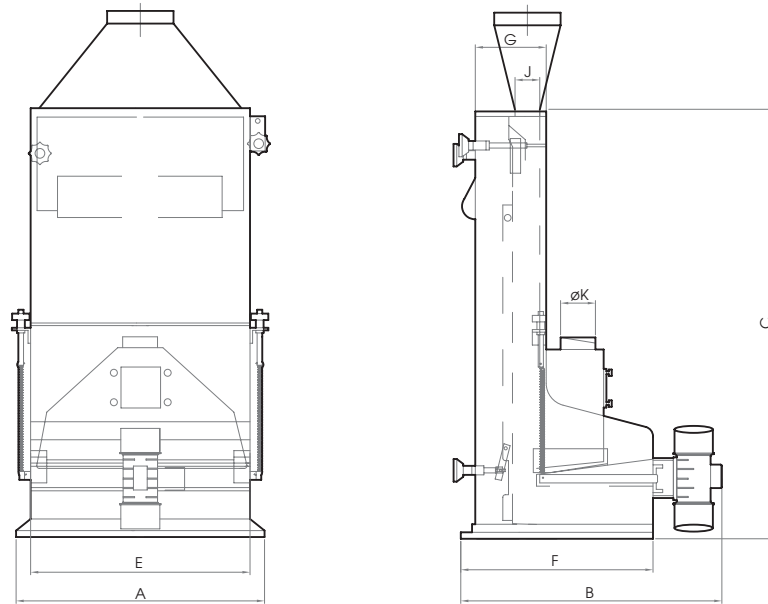
Minimum maintenance, practical and easy cleaning possibility

Connection possibility to central ventilation system

Installation possibility with or without separator







### Dimensions [mm]

Model	A	B	C	E	F	G	J	øK
KHKA 60G	800	847	1455	600	770	324	170 x 548	120 150
KHKA 60AG	810	632			632		150 x 596	
KHKA 75G	950	847		750	770		170 x 698	
KHKA 75AG	960	632			632		150 x 746	
KHKA 100G	1200	847		1000	770		170 x 948	
KHKA 100AG	1210	632			632		150 x 996	
KHKA 150G	1700	847		1500	770		170 x 1448	
KHKA 150AG	1710	632			632		150 x 1496	

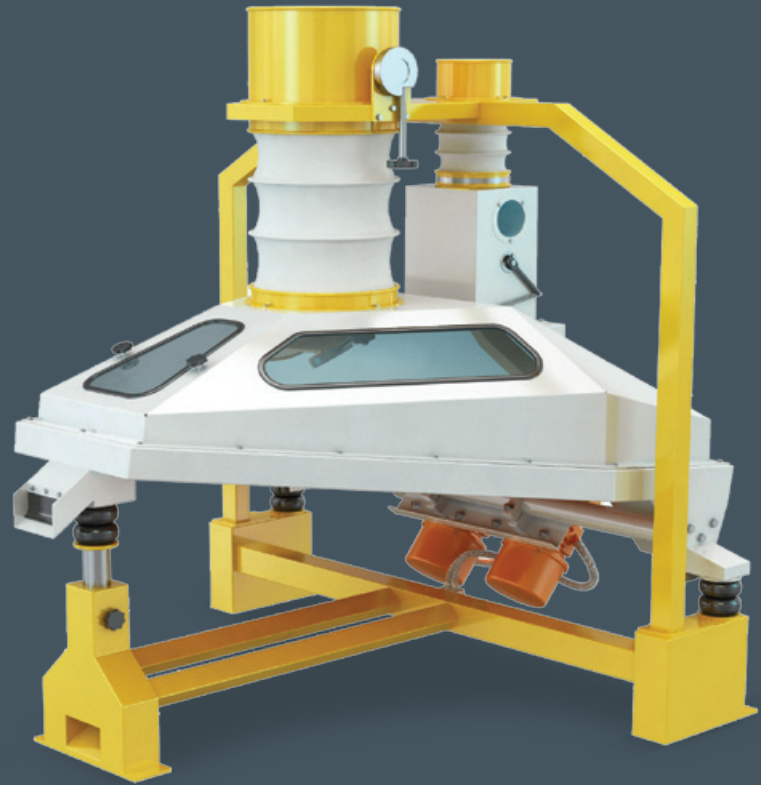
### Technical Features

Model	Corn-Mais		Dusty,Husk	Wheat		Motor (Kw)	Air Volume (m <sup>3</sup> /min)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
	Mixture	Particules		Separation of Kernies Shrivelled	Separation Dusty,Husk			Net	Gross	
KHKA 60G	1,3	1,7	3,3	1,8	3,6	0,17	55	135	250	2
KHKA 60AG	2,4	3,1	5,9	3,3	6,3			105	205	1,6
KHKA 75G	1,3-2	1,7 - 2,6	3,3 - 4,9	1,7 - 2,6	3,3 - 4,9	0,17	75	170	296	2,2
KHKA 75AG	2,4 - 3,6	3,1 - 4,7	5,9 - 8,9	3,1 - 4,7	5,9 - 8,9			130	240	1,8
KHKA 100G	2 - 2,7	2,6 - 3,5	4,9 - 6,6	3	6	0,17	90	180	355	3,6
KHKA 100AG	3,6 - 4	4,7 - 6,2	8,9 - 11,8	5,6	10,6			130	256	2,2
KHKA 150G	3-4	3,9 - 5,9	7,3 - 9,9	4,5	9	0,17	135	225	406	3,6
KHKA 150AG	5,4 - 7,2	7 - 9,3	13,3 - 17,7	8,4	16			195	354	2,9

## DRY STONER TKTA

### SCOPE OF USE

It is used to remove stones, mud balls, glass or metal pieces from cereals, leguminous seeds, shelled seeds and similar products.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Cereal cleaning plants
- Corn factories
- Oil factories
- Malt factories
- Cacao and coffee plants

## ▶ WORKING PRINCIPLE

The product flows through the feeding chamber onto a vibrating separating deck and is acted upon by vibration and air flow which causes the stones to travel up to deck to be discharged to the stone container whilst the cereals travel down to the deck to be discharged into the spout.

This operation is achieved easily due to oscillation difference; consequently the heavy particles and product are easily separated from each other.

An optimum operation is the result of several factors, such as:

- Frequency and amplitude of vibrations
- Suspension effect of the cereals caused by the airflow
- Inclination of the processing deck

## ▶ FEATURES & ADVANTAGES

Low energy consumption, high capacity and efficiency

Minimum and easy periodic maintenance

Durability, long lifetime, easy and quick replacement of screen

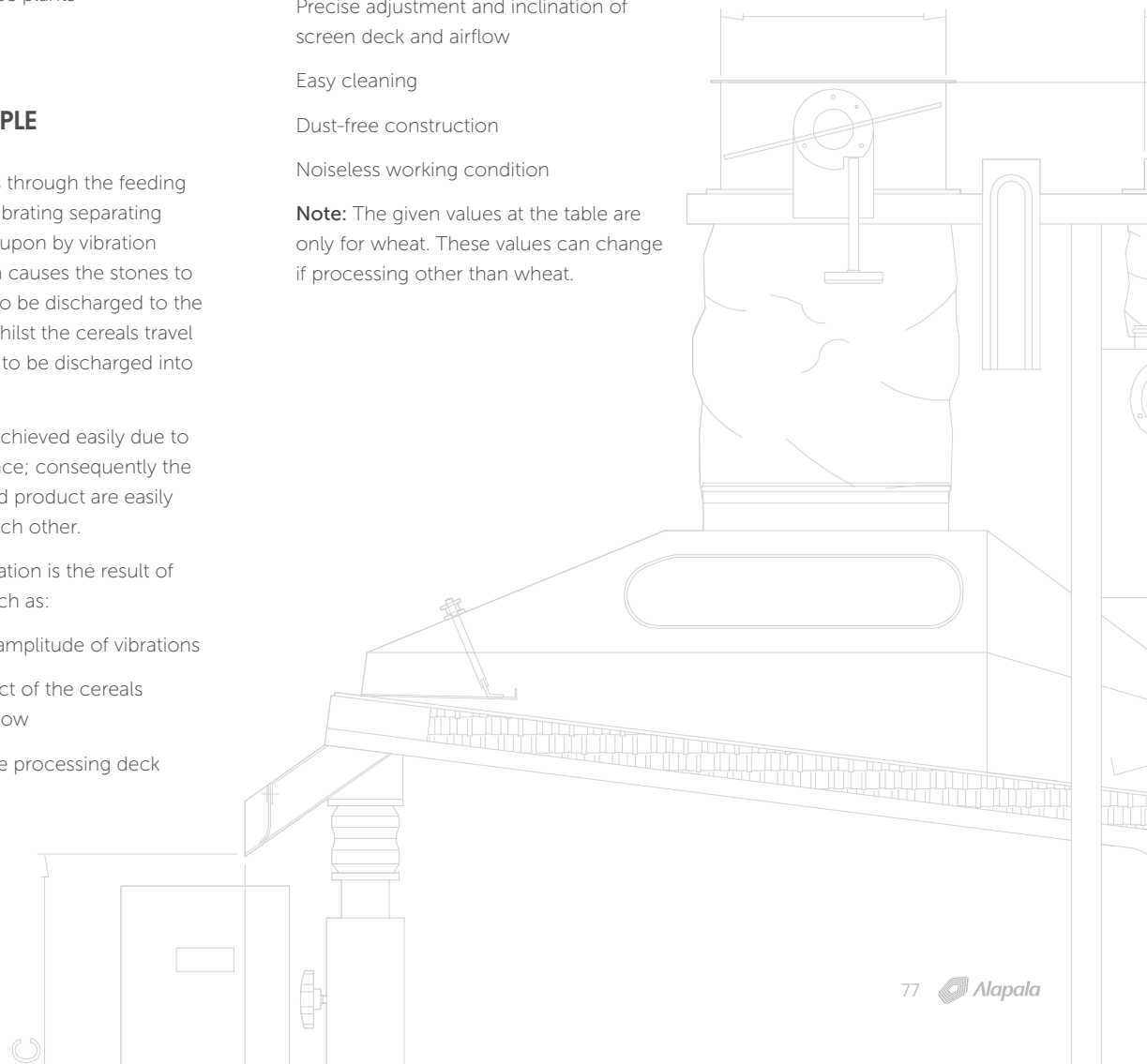
Precise adjustment and inclination of screen deck and airflow

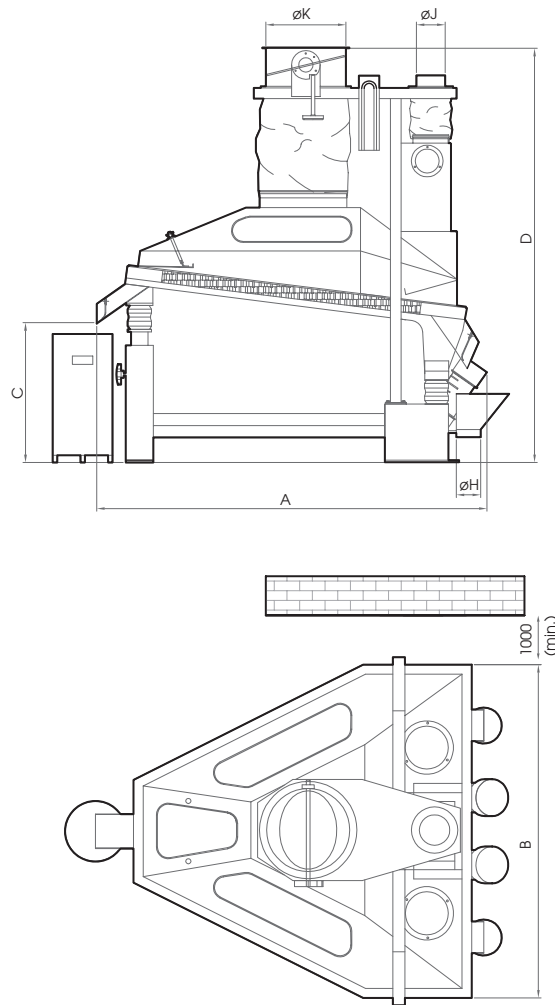
Easy cleaning

Dust-free construction

Noiseless working condition

**Note:** The given values at the table are only for wheat. These values can change if processing other than wheat.





Dimensions [mm]

Model	A	B	C	D	E	F	G
TKTA 50		760				120	250
TKTA 100	1760	1420	580	1730	120	120	350
TKTA 150		2020				150	450

Technical Features

Capacity (t/h) Wheat	Motor (Kw)	Air Volume (m <sup>3</sup> /min)	Weights (kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
4,5	2 x 0,25	40	370	493	4,0
9	2 x 0,40	80	420	602	6,6
14	2 x 0,55	120	530	765	9,0

## DESTONER CLASSIFIER TKTD

### SCOPE OF USE

Combined machine for selecting of cereals into light and heavy fraction and for separating the heavy fraction from stones and other particles with high specific weight.





## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Cereal cleaning plants
- Corn factories
- Oil factories
- Malt factories
- Cacao and coffee plants

## ▶ STRUCTURE

- Alloy steel support structure suspended an elastic shock absorbing elements with adjustable inclination
- Aluminium tubular frames clothed with spring-steel wire
- Vacuum operation by means of micrometric aspiration adjustment
- Inlet and outlet sleeve
- Support plank for aspiration butterfly valve

## ▶ WORKING PRINCIPLE

The product, flows through the superior part of the machine and with the effect of the vibration and a particular distribution system, spread on superior frame divided in three parts with different sizes and perforations.

During the deviation on the superior frame, on the effect of the combination airflow and frame vibration, the product becomes intense uniformly on all length of the frame.

Stones and high specific weight product fraction are concentrated on the inferior part of the product layer; however, the suspended light fractions are evacuated beginning from the second part of the frame.

The destoner treatment is done on the inferior frame, the effect of the vibration and the aspiration regularize the flow of the product until the stone were evacuated on the backside. The heavy cereal fraction, cleaned from the stones, is oriented on the opposite side.

## ▶ FEATURES & ADVANTAGES

Low energy consumption, high capacity and efficiency

Minimum and easy periodic maintenance

Durability, long lifetime, easy and quick replacement of screen

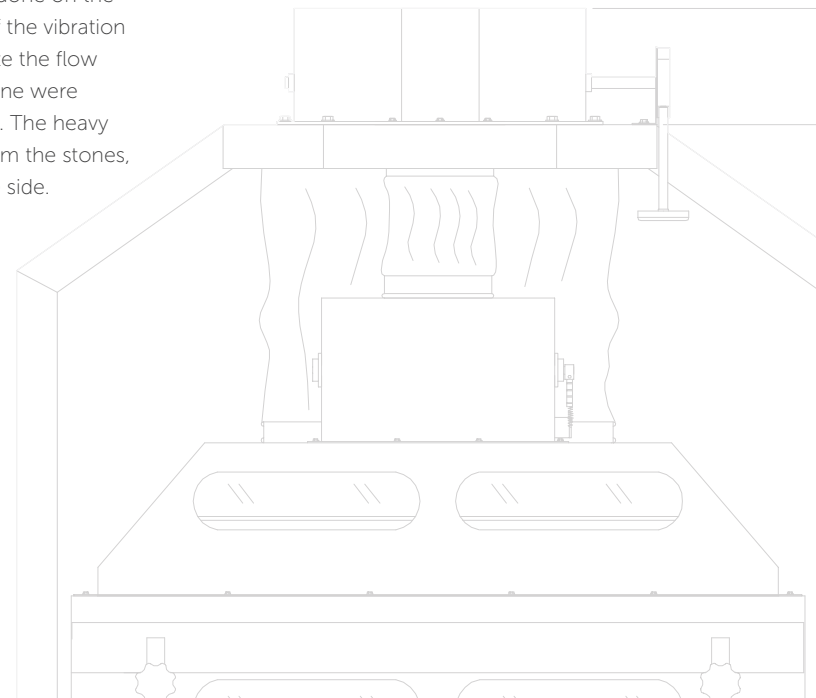
Precise adjustment and inclination of screen deck and airflow

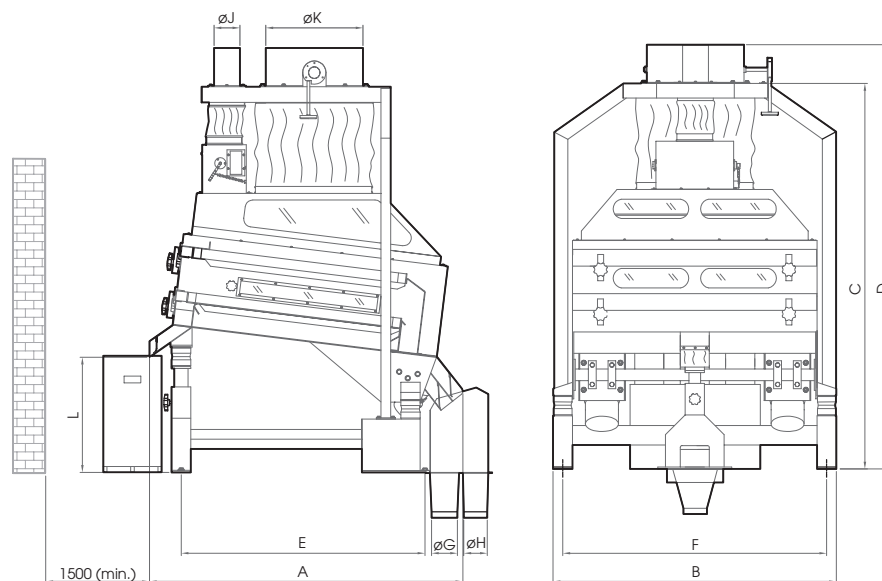
Easy cleaning

Dust-free construction

Noiseless working condition

**Note:** The given values at the table are only for wheat. These values can change if processing other than wheat.





### Dimensions [mm]

Model	A	B	C	D	E	F	G	øH	øJ	øK	L
TKTD 80		1050				960	120		120	400	
TKTD 120	1610	1450	2000	2200	1257	1356	150	120	150	500	500
TKTD 180		2000				1900	200	150	200	600	

### Technical Features

Model	Capacity (t/h) Wheat	Motor (Kw)	Air Volume (m <sup>3</sup> /min)	Weights (kg)		Gross Volume (m <sup>3</sup> )
				Net	Gross	
TKTD 80	8	2 x 0,35	80	570	633	5,9
TKTD 120	16	2 x 0,68	120	650	732	7,7
TKTD 180	20	2 x 1,1	230	790	899	10,3

# MAGNET "TUBULAR TYPE" KDMB

## SCOPE OF USE

It is used to separate metallic particles from the product.



## ▶ APPLICATION FIELDS

### At food industry

- Flour & semolina mills
- Feed mills
- All grain cleaning plants
- Corn processing plants
- Oil factories
- At plywood factories

## ▶ WORKING PRINCIPLES

The product enters into a tubular shaped chamber from the inlet, and passes over a magnet. The magnet is opened periodically and metallic particles can be automatically discharged.

## ▶ FEATURES & ADVANTAGES

High efficiency, perfect cleaning and separation

No extra space requirement

Strong magnetic field

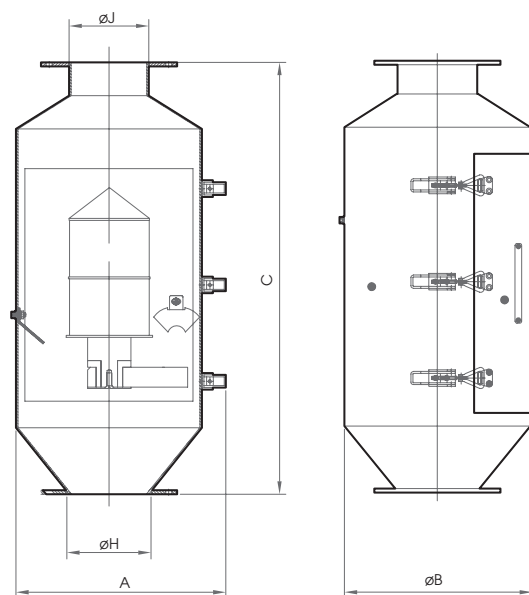
Easy and minimum periodic maintenance

Trouble free operation

Durable



# MAGNET "TUBULAR TYPE" **KDMB**



## Dimensions [mm]

Model	A	B	C	øH	øJ
KDMB 120/600	315	280	650	120	120
KDMB 150/640	335	300	650	150	150
KDMB 170/680	355	320	680	170	170
KDMB 200/720	415	380	720	200	200
KDMB 250/720	445	410	900	250	250

## Technical Features

Capacity(t/h) Wheat	Weights (kg)		Gross Volume (m <sup>3</sup> )
	Net	Gross	
9	65	95	0,2
18	75	107	0,3
25	90	124	
50	100	140	0,4
75	122	170	0,5



# HAMMER MILL TCDA

## SCOPE OF USE

It is designed to grind the grains.



## ▶ APPLICATION FIELDS

### At food industry

- At flour mills for offal grinding
- At feed mills for feed grinding and expeller cakes
- At oil mills for extraction of meal, expeller cakes
- At dehauling (peeling) plants for oat hulls and damaged (broken) rice

## ▶ WORKING PRINCIPLE

The product is fed regularly into the hammer mill by means of a suitable feeder. The size of particles is reduced by means of a rotor with beaters, which catches the product. The beating process will go on until the particles are flung through the perforated sieve, which surrounds the rotor. Then the product is collected in a hopper.

The hammer mill can be directly installed above a silo so that the product can be directly discharged into the silo. In such case, the silo must be equipped with an aspiration system, at a minimum capacity of 10 cubic meters per minute. To protect the rotor and perforated sieve a powerful magnet ought to be erected before the hammer mill.

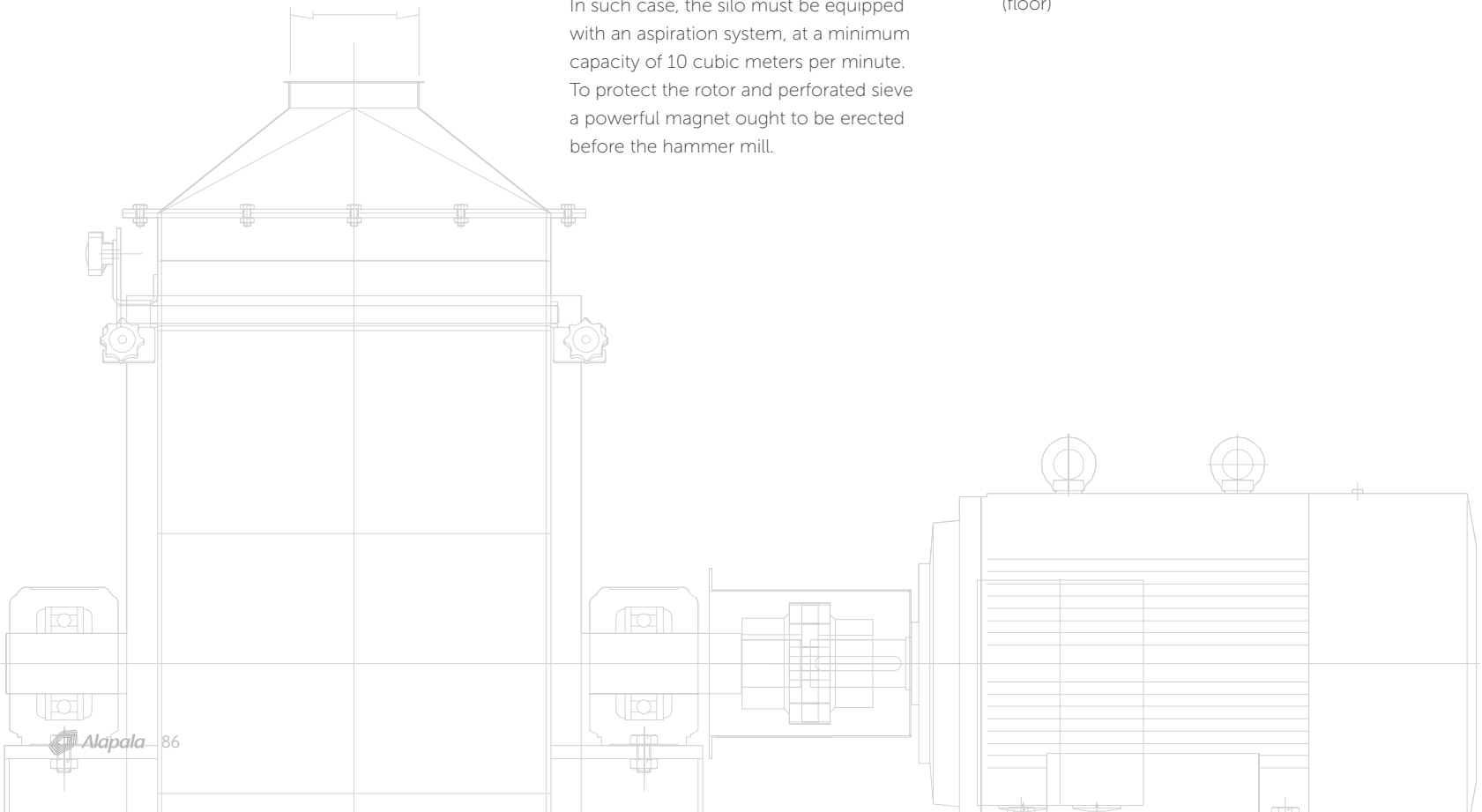
## ▶ FEATURES & ADVANTAGES

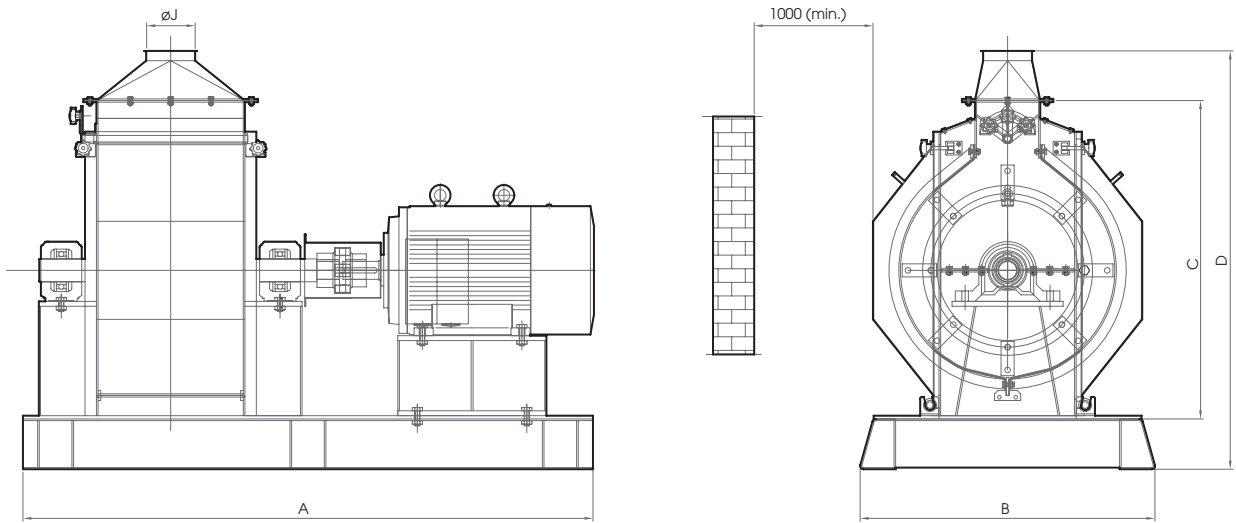
By using a diverter gate both sides of the beaters can be used

Simple design by a direct connection of the motor shaft to the rotor

The inlet, which is installed at the front face of the hammer mill, will provide easy access to replace the beater and the perforated sieve

The hammer mill is installed on the rubber shock absorbers top prevent the vibration transmission to the foundation (floor)





- The capacity should be revised for the other raw materials
- Please contact us for detailed information.

### Dimensions [mm]

Model	A	B	C	D	øJ
TCDA 10	1381	824	965	1280	120x150
TCDA 25	1745	900			
TCDA 50	1745	954	1120	1412	

### Technical Features

Capacity (t/h)	Motor (Kw)	Air Volume (m <sup>3</sup> /min)	Weights (kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
1	15	10	615	744	2,5
2,5	30		748	907	3,5
5	45	25	1000	1193	4,0

INTENSIVE  
DAMPENING MACHINE  
TCTS | TOCA

SCOPE OF USE

It is used in the grain processing plants to moisten the grain at a desired rate.



## ► APPLICATION FIELDS

### At food industry

- At the dry cleaning units of the flour and semolina mills
- At the grain processing plants where moistening process is required

## ► STRUCTURE

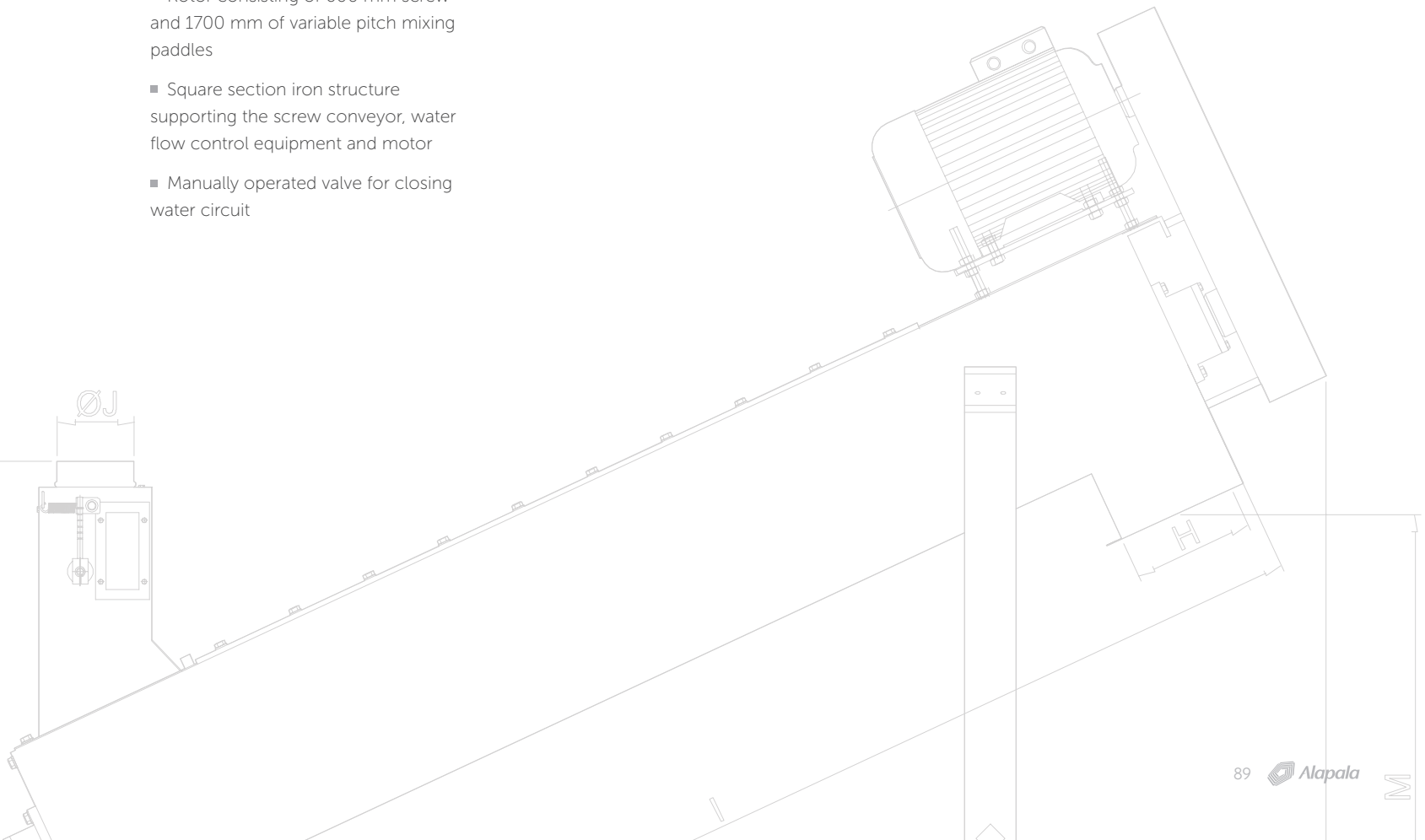
- The machine is constructed of stainless steel, consisting of semi circular 25° inclined worm with Plexiglas cover
- Rotor consisting of 600 mm screw and 1700 mm of variable pitch mixing paddles
- Square section iron structure supporting the screw conveyor, water flow control equipment and motor
- Manually operated valve for closing water circuit

## ► WORKING PRINCIPLE

The grain flow entering the casing agitates the water flow sensor; the water is sprayed into the grain and mixes with it. The blades push the grain mixed with water to the grain outlet. Capable of adding up to 5% water to cleaned wheat with even distribution of moisture. Avoids grains breakage, minimize the wear of rotor and prevents its unbalance thanks to limited operational speed. The water distribution to kernel is fast and uniform with thorough penetration and absorption.

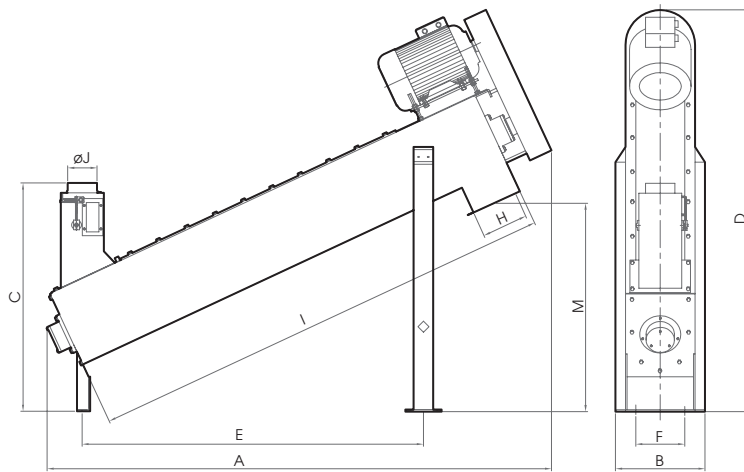
## ► FEATURES & ADVANTAGES

- High moistening ratio
- Low energy consumption
- Durability and long lifetime
- Minimum and easy maintenance
- Easy and quick installation
- Low investment, maintenance and operational cost
- Automatic flow rate control and adjustable moisture rate
- Stainless steel construction

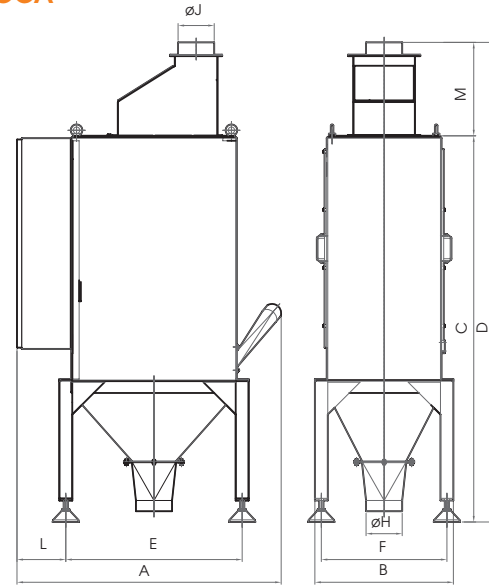




**TCTS**



**TOCA**



Dimensions [mm]

Model	A	B	C	D	E	F	H	I	M	øJ
TCTS 350	2585	550	1170	2055	1170	250	195x280	2395	1066	120x150
TCTS 500	2585	700	1190	2215	1190	400	195x430	2395	1120	
TCTS 600	3693	800	1550	2865	1550	610	365x510	3500	1657	

Dimensions [mm]

Model	A	B	C	D	E	F	øH	L	M	øJ
TOCA 30	1224	644	1696	2131	720	600	120x150	250	435	120x150
TOCA 45		744				700	200			200

Technical Features

Model	Capacity (t/h) Wheat	Motor (Kw)	Weights (kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
TCTS 350	5-16	7,5	450	699	5,2
TCTS 500	16-30	11	745	1029	6,6
TCTS 600	30-45		1100	1560	12,9

Technical Features

Model	Capacity (t/h) Wheat	Weights (kg)		Gross Volume (m <sup>3</sup> )
		Net	Gross	
TOCA 30	30	340	500	3,1
TOCA 45	45	400	570	3,5

# TRIEUR MACHINE TTRA

## SCOPE OF USE

The machine is used to separate the round particles which are smaller than wheat kernels, broken wheat kernels, longer particles more than wheat kernels from wheat in grain cleaning, packing plants and flour mills.



## ▶ WORKING PRINCIPLE

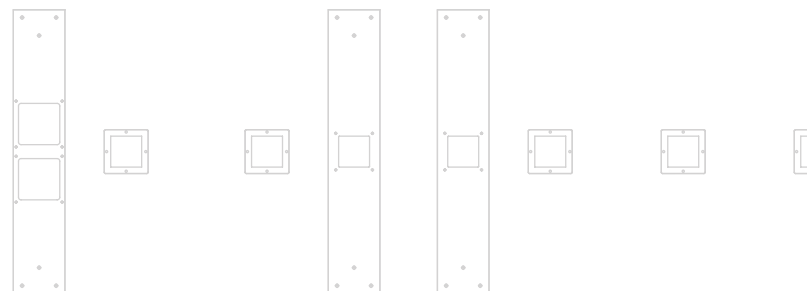
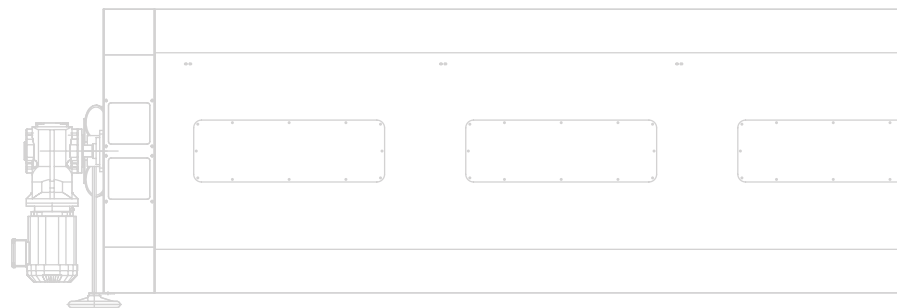
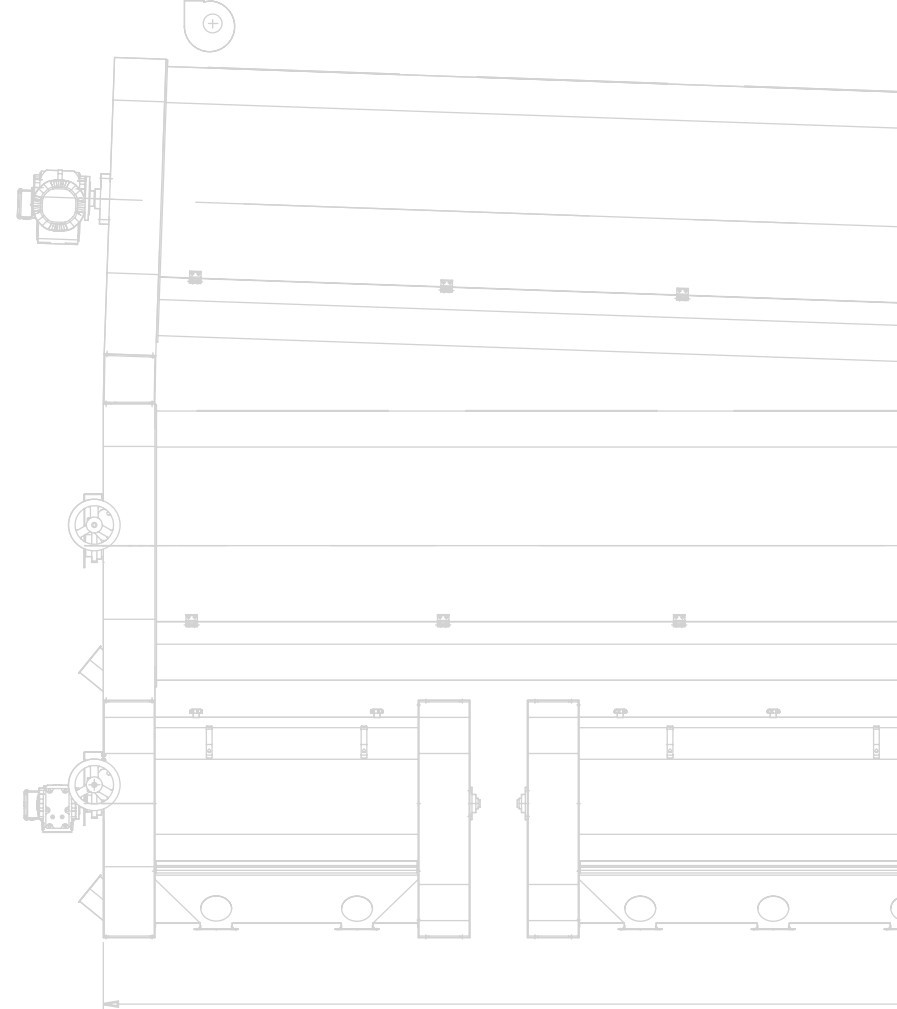
The cylinder ports size are selected in accordance with scope of the process. The grain is regularly spreader on cylinder and during process the foreign particles and broken wheat are accommodated in the cylinder ports. The separation process is carried out by moving the trapped particles in cylinder ports from circumference to upward and drain into conveying screw conveyor.

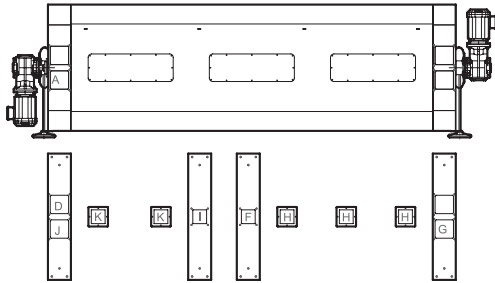
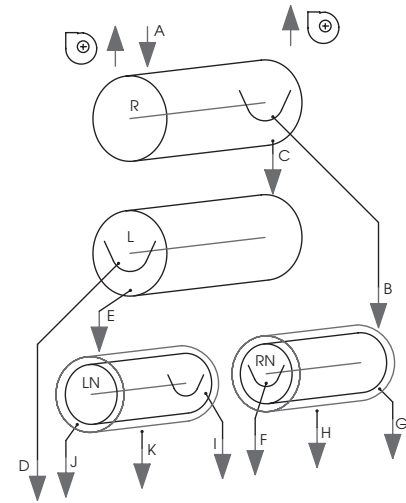
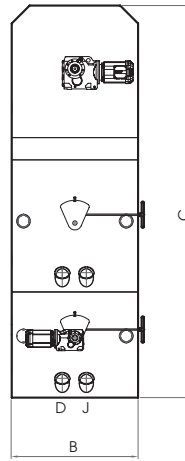
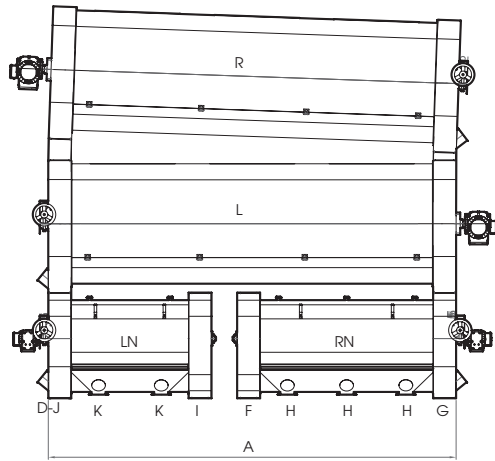
In case of necessary the separated foreign particles are conveyed to the control cylinders to separate the escaped wheat kernels during main process.

The machine consists of the main structures. The sturdy body erected with cylinders and drive motors and the cylinders which carry out the separation process.

The main and control cylinders are selected per need as one or two pieces.

The cylinders can be combined as multiplicity by taking into consideration separation process and capacity.





K	Sieve throughs LN
J	Sieve overs LN
I	Shell product LN
H	Sieve throughs RN
G	Sieve overs RN
F	Trough product RN
E	Shell product L
D	Trough product L
C	Shell product R
B	Trough product R
A	Inlet

R	round grain cylinder
L	long grain cylinder
RN	round grain re-separation cylinder
LN	long grain re-separation cylinder

### Dimensions [mm]

Model	Dimensions		
	A	B	C
TTRA 1020 R-L-RN-LN	2024	600	2343
TTRA 2020 R-L-RN-LN	3024	600	2377
TTRA 3020 R-L-RN-LN	2517	800	2760
TTRA 4020 R-L-RN-LN	3017	800	2777
TTRA 5020 R-L-RN-LN	3416	800	2794
TTRA 6020 R-L-RN-LN	4016	1100	2812
TTRA 8020 R-L-RN-LN	3240	1100	3378
TTRA 10020 R-L-RN-LN	3738	1100	3395
TTRA 12020 R-L-RN-LN	4238	1100	3413
TTRA 16020 R-L-RN-LN	5088	1100	3443

### Technical Features

Capacity(t/h) Wheat	Indent Cylinder Dimensions (mm)					Power Requirements (Kw)		Dust Aspiration		
	RL		RN		LN	R - L	RN - LN	(m³/min)	Pa	
	ø	Length	ø	Length	ø					
1	400	1000	400	350	400	250	0,37	0,37		
		2000		480		350	0,55	0,37	14	200
		1500		570		430	0,75	0,55	18	250
4	600	2000	400	650	400	480	0,75	0,55	18	250
		2500		750		550	1,1	0,55		
		3000		850		650	1,5	0,55	18	250
8	900	2000	400	950	400	590	2,2	1,1	24	300
		2500		1150		850	3	1,1	24	300
		3000		1430		945	3	1,1	24	300
16		4000		1800		1430	4	1,1	24	300



# handling

- HIGH PRESSURE FAN
- LOW PRESSURE FAN
- AIR JET PLUS FILTER
- CYCLONE
- AIRLOCK-S
- ECLUSE
- BUCKET ELEVATOR
- CHAIN CONVEYOR
- TUBULAR SCREW CONVEYOR
- SCREW CONVEYOR
- SLIDING GATE
- PNEUMATIC LINE DIVERTING GATE



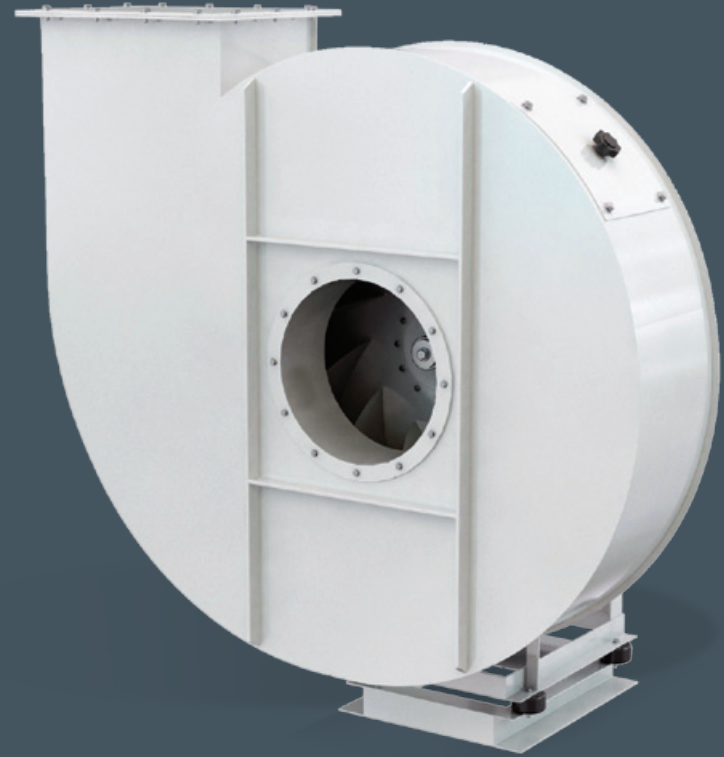




# HIGH PRESSURE FAN DPMA

## SCOPE OF USE

It is used to convey granular or ground products in the system where at high pressure and low or medium flow rates are required.



## ▶ APPLICATION FIELDS

### At food industry

- At flour and semolina mills in the cleaning, milling and packing sections
- At feed mills
- At nut processing plants
- Brewery plants

### At chemical industry

- Paint factories
- Plastic plants
- Gas conveying systems

### At wooden industry

### At stone and soil quarries

### At cement factories

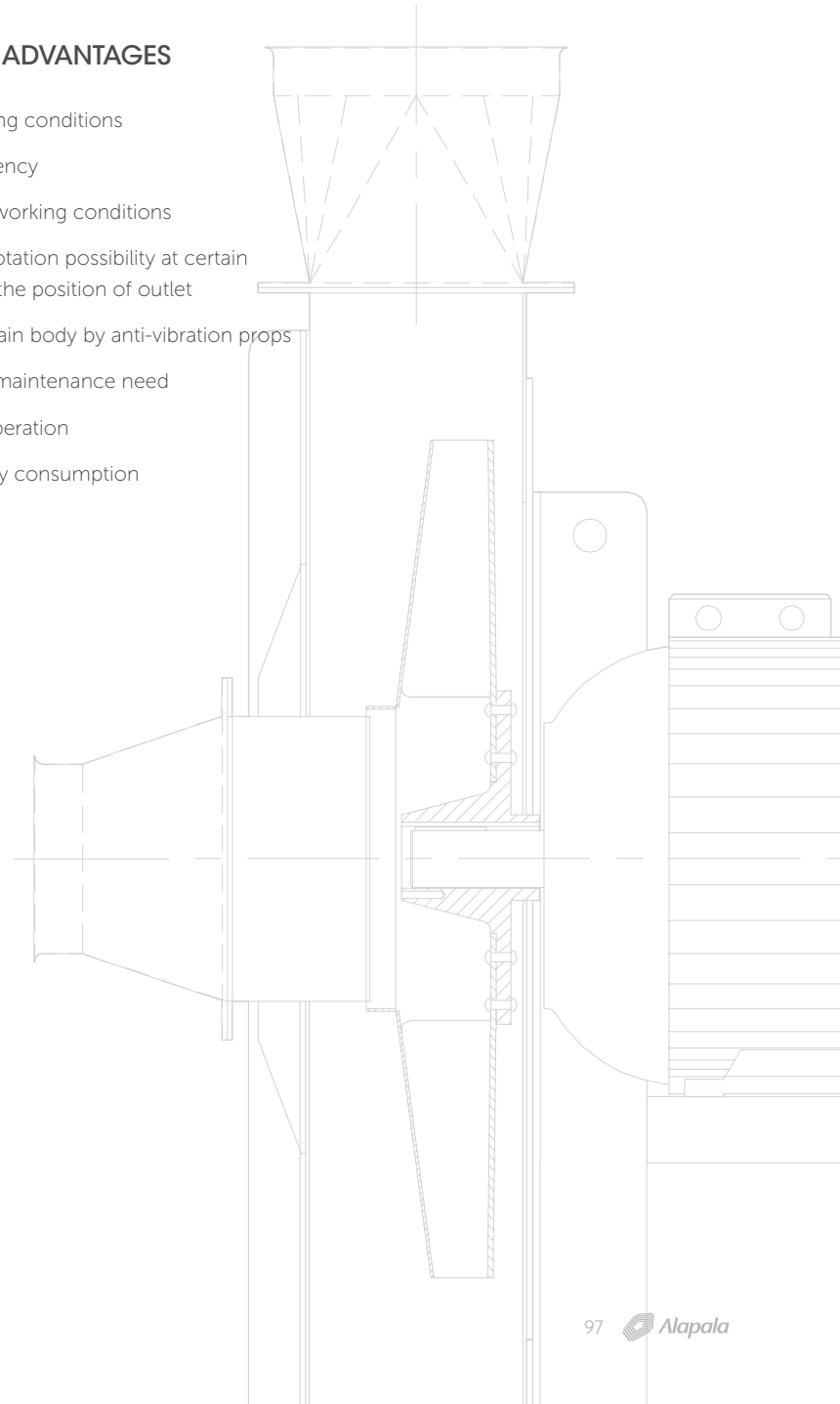
## ▶ STRUCTURE

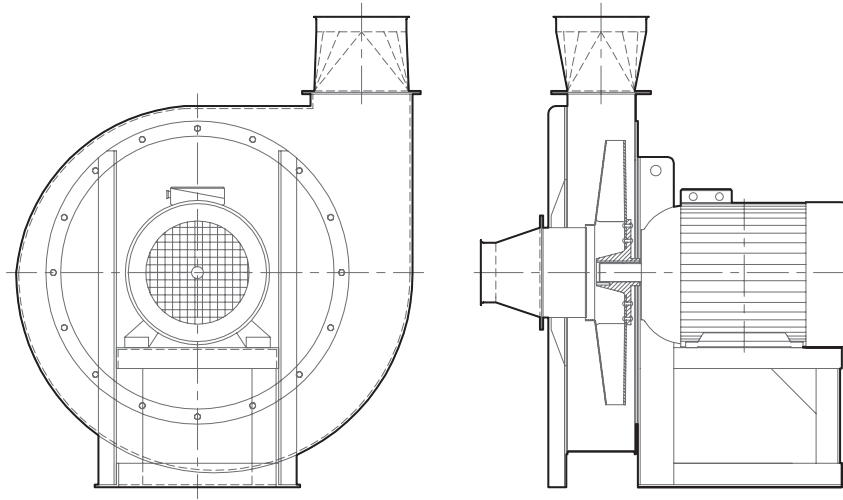
The fan body and the impeller are precisely manufactured and fitted on a steel foundation. The unit is designed and outfitted with special blades and can be easily dismantled and reinstalled, if high rpm is required.

In case of requirement, it can be supplied by installing soundproof isolation.

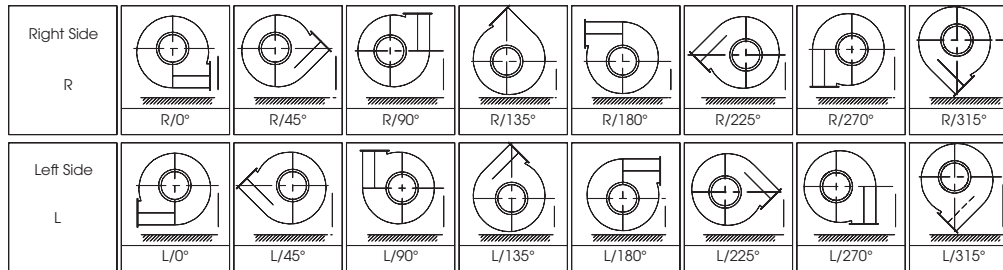
## ▶ FEATURES & ADVANTAGES

- Safe working conditions
- High efficiency
- Noiseless working conditions
- Standard rotation possibility at certain angles for the position of outlet
- Fixed to main body by anti-vibration props
- Minimum maintenance need
- Smooth operation
- Low energy consumption

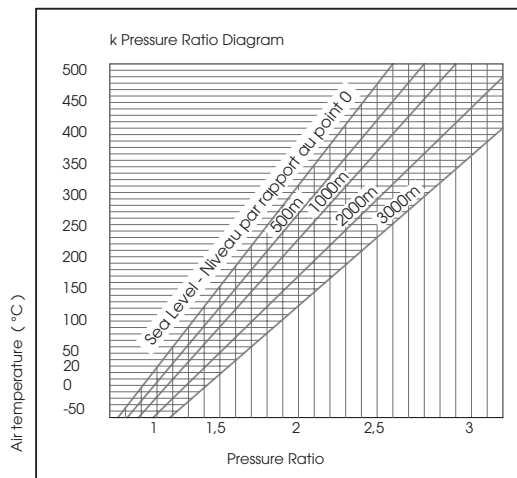




CENTRIFUGAL VENTILATORS POSITION DIAGRAMME



NOTE: The above diagramme is prepared by facing centrifugal ventilators suction inlet.



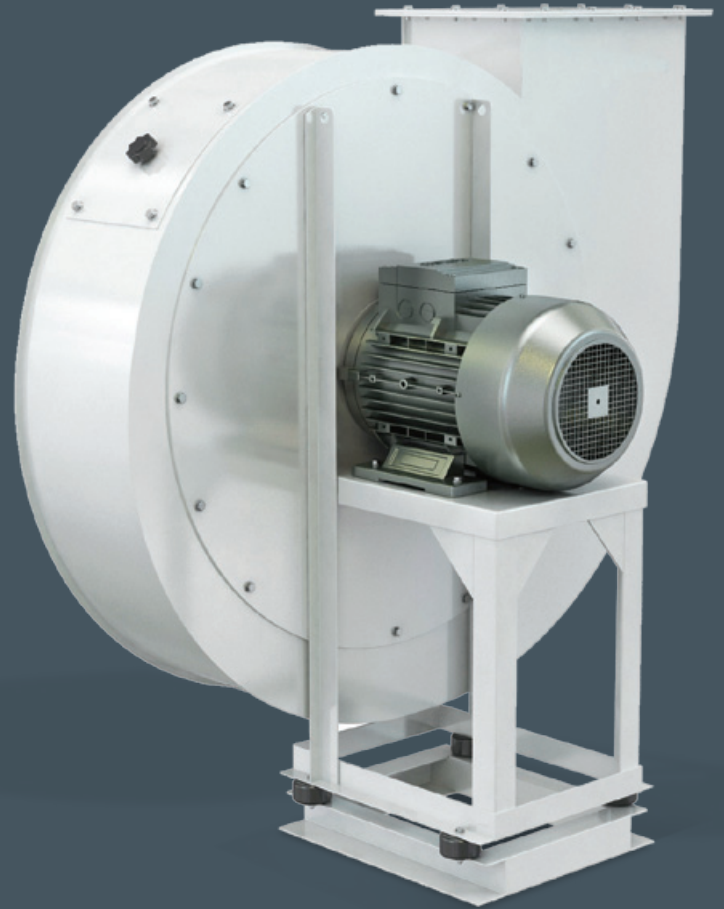
### Technical Features

Model	Motor (Kw / rpm)
DPMA 300 / 10	7,5 - 3000
DPMA 300 / 120	11 - 3000
DPMA 300 / 75	22 - 3000
DPMA 300 / 42	22 - 3000
DPMA 300 / 42	22 - 3000
DPMA 300 / 72	37 - 3000
DPMA 300 / 96	45 - 3000
DPMA 300 / 103	55 - 3000
DPMA 300 / 72	55 - 3000
DPMA 300 / 120	75 - 3000
DPMA 300 / 67	75 - 3000
DPMA 300 / 150	75 - 3000
DPMA 300 / 150	90 - 3000
DPMA 300 / 180	110 - 3000

## LOW PRESSURE FAN KTMA

### SCOPE OF USE

A low pressure and high flow rate radial type fan is used in different industrial sector where the ventilation systems need.





## ▶ APPLICATION FIELDS

### Food industry

- Flour and semolina mills
- Feed mills
- Biscuit and macaroni factories
- Dry fruit plants
- Barley plants
- Tea plants
- Tobacco plants

### Other food industry

### Chemical industry

- Painting made plants
- Plastic made plants
- Deterging made plants

### Wooden industry

- Nonferrous product industry

### Stone and soil industry

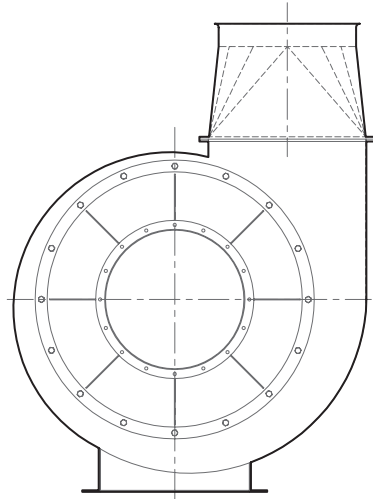
### Cement industry

## ▶ WORKING PRINCIPLE

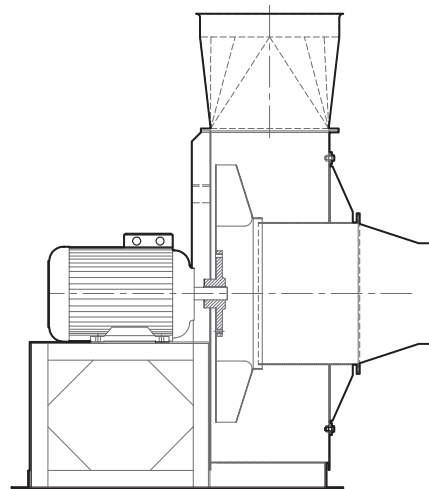
The low pressure fans provides low pressure in conveying systems and cereal cleaning machines in the cereal processing plants to prevent dust leaking.

## ▶ FEATURES & ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Maximum efficiency with low energy consumption
- Noiseless
- Vibration free running
- Aerodynamic and sturdy structure



NOTE: ABOVE TABLE CONSIST OUR STANDARD PRODUCTION

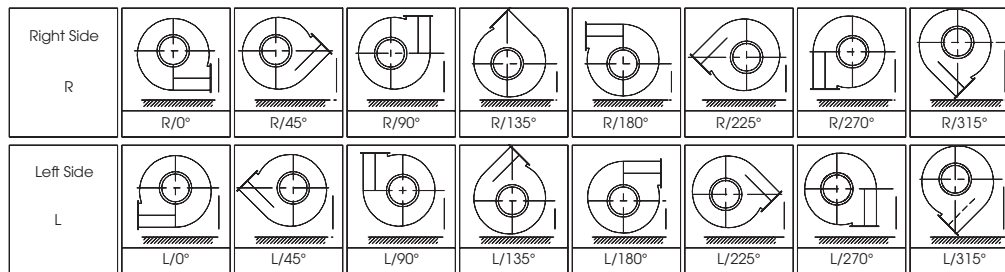


Aspiratos which have higher values more than above given table are produced upon special request.

### Technical Features

Model	Motor (Kw / rpm)
KTMA-200/30	4 - 1500
KTMA-200/45	5,5 - 1500
KTMA-200/66	7,5 - 1500
KTMA-200/132	11 - 1500
KTMA-200/225	11 - 1500
KTMA-200/102	11 - 1500
KTMA-200/108	11 - 1500
KTMA-200/72	11 - 1500
KTMA-200/123	11 - 1500
KTMA-200/20	15 - 1500
KTMA-200/44	15 - 1500
KTMA-200/150	15 - 1500
KTMA-200/156	18,5 - 1500
KTMA-200/168	22 - 1500
KTMA-200/180	30 - 1500
KTMA-200/247	30 - 1500
KTMA-200/270	30 - 1500

### CENTRIFUGAL VENTILATORS POSITION DIAGRAMME



NOTE: The above diagramme is prepared by facing centrifugal ventilators suction inlet.

## AIR JET PLUS FILTER KFSI

### SCOPE OF USE

Suitable to separate dust and other particles suspended in air of cleaning department aspirator system before being discharged to the outside with a bottom scraper.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Feed mills
- Biscuit and macaroni factories
- Nut processing plants
- Brewery factories
- Other food processing plants

### At chemical industry

- Paint factories
- Plastic factories
- Detergent factories

### At wooden industry

- At non-metallic industries
- At stone and soil quarries
- At cement factories

### For general use

## ▶ STRUCTURE

- Fabricated cylindrical sheet-metal structure with tangential inlet and wide inspection doors
- Filtering sleeves supported by metallic circular cages with quick release clamps
- Pneumatic low pressure sleeve cleaning system utilizes compressed air at 0,6 bar
- Distribution group with solenoid valve to control rinsing valves
- Electronic equipment to position rotary manifold and program operation setting (rinsing time, pause, etc)
- Flat bottom with scraper

## ▶ WORKING PRINCIPLE

### N1

Filtration phases in the N1 bag: The dusty air is purified (filtrated) in the outer surface of the hose type filter bag.

### N2

Final cleaning phase in the N2 bag: Dust loaded outer surface of the filter bags is cleaned respectively by blowing air from inside of bags. The accumulated dust is discharged out of the air lock due a scraper.

## ▶ EFFECTIVE FACTORS

- The size of particles, paint pigments, pneumatic system of the mill, cleaning, aspiration
- Physical composition of dust
- Dust concentration in the untreated air (aspiration)
- Electrostatic charge:

The given filter dimensions are taken into consideration in accordance with a 2.4 meter long bag.

The rate of flow changes depending on the rate of filtration area for other length of filter bags.

- The air needed for cleaning and pneumatic control purposes of the Jet Plus Filter is supplied by a blower, which produces dry air

- The air needed for cleaning and pneumatic control is obtained directly through a connection between the filter and the blower without using an air tank

- The Jet Plus Filter is combined with a pneumatic control unit, which is actuated by an electronic control unit, quick ventilation valves (nozzles) and venture pipes

## ▶ FEATURES & ADVANTAGES

The filter can be used in the pressurized and vacuum systems. The cleaning of hose type filter bags is carried out by air at 0.5 bars, which is free of oil and water

The consumption of the cleaning air is found by this formula: 30 - 40 NLt (Newton liter) x bag x blow

The optimal flow geometry of the cleaning air route shows as mentioned below:

The loading capacity of filter for each product

The max cleaning capacity for each filter bag

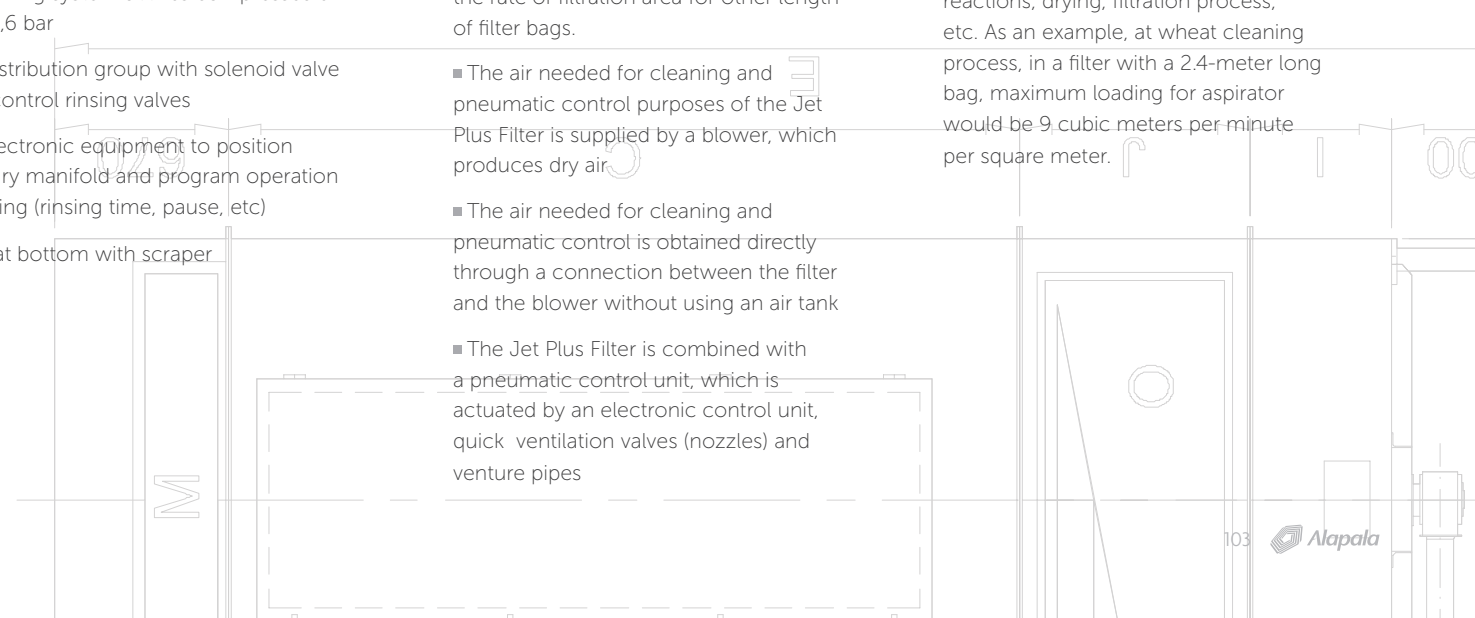
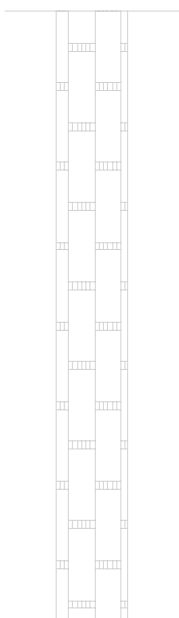
The highest cleaning ratio of cleaned air

The filter body is combined with cleaning air tank

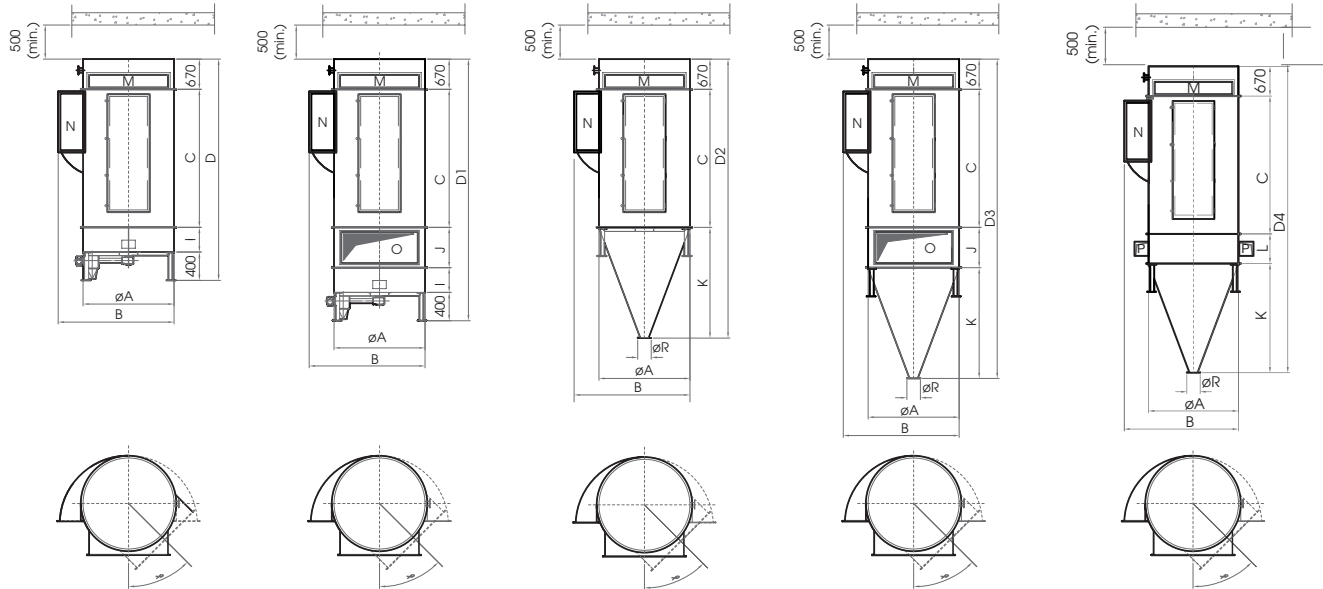
Therefore, there is no need for an additional air tank

### The important criterions of filter loads

In addition to the given effective values at right, the loading of filter depends on some other factors such as, chemical reactions, drying, filtration process, etc. As an example, at wheat cleaning process, in a filter with a 2.4-meter long bag, maximum loading for aspirator would be 9 cubic meters per minute per square meter.



# AIR JET PLUS FILTER **KFSI**



Dimensions [mm]

MODEL	KFSI-4				KFSI-10				KFSI-18				KFSI-26				KFSI-39				
	12	18	24	30	12	18	24	30	12	18	24	30	12	18	24	30	12	18	24	30	
Filtration area (m <sup>2</sup> )	1,7	2,6	3,4	4	3,2	6,4	8,6	10	7,7	11,5	15,5	18	11,2	16,6	22,4	26	16,8	25	33,5	39	
øA	500				750				100				1140				1340				
B	645				945				1260				1445				1685				
Hose lenght	C	1200	1800	2400	3000	1200	1800	2400	3000	1200	1800	2400	3000	1200	1800	2400	3000	1200	1800	2400	3000
	D	2670	3270	3870	4470	2670	3270	3870	4470	2670	3270	3870	4470	2670	3270	3870	4470	2670	3270	3870	4470
	D1	3270	3870	4470	5070	3270	3870	4470	5070	3270	3870	4470	5070	3270	3870	4470	5070	3270	3870	4470	5070
	D2	2370	2970	3570	4170	2570	3170	3770	4370	3060	3660	4260	4860	3250	3850	4450	5050	5528	6128	6728	7328
	D3	2970	3570	4170	4770	3170	3770	4370	4970	3660	4260	4860	5460	3850	4450	5050	5650	6128	6728	7328	7928
	D4	2610	3210	3810	4410	2845	3445	4045	4645	3380	3980	4580	5180	3600	4200	4800	5400	3918	4518	5118	5718
	I	400				400				400				400				400			
	J	600				600				600				600				600			
	K	500				700				1190				1380				1658			
	L	240				275				320				350				390			
Exhaust normal/large	M	280 x 150				280 x 360				280 x 520				280 x 520				280 x 800			
Inlet normal/large	N	100 x 200				150 x 300				215 x 400				270 x 500				300 x 650			
	O	380 x 480				380 x 480				380 x 640				380 x 640				380 x 810			
	P	80 x 80				115 x 115				160 x 160				190 x 190				230 x 230			
øR		160				160				160				160				160			
Revolving gap casket		30°				30°				15°				15°				12°			
Sleeves		4				9				10				11				12			
Weight (Kg)	Net	187	211	234	257	388	442	495	549	639	728	817	907	749	854	958	1063	1138	1295	1453	1610
	Gross	356	412	469	524	625	723	820	917	948	1090	1232	1375	1109	1273	1473	1601	1563	1788	2013	2237
Gross volume (m <sup>3</sup> )		2,7	3,3	3,9	4,5	4,6	5,6	6,8	7,8	7	8,5	10,2	11,8	8,8	10,7	12,7	15,2	11,1	13,8	16,4	18,9

Technical Features





MODEL	KFSI-52				KFSI-80				KFSI-104				KFSI-112				
	12	18	24	30	12	18	24	30	12	18	24	30	12	18	24	30	
Filtration area (m <sup>2</sup> )	22,4	33,3	44,7	52	34,6	51,2	69,2	87,4	44,7	66	89	104	48,5	71,7	97	122,4	
øA	1500				1950				2020				2200				
B	1905				2495				2520				2745				
Hose lenght	C	1200	1800	2400	3000	1200	1800	2400	3000	1200	1800	2400	3000	1200	1800	2400	3000
	D	2670	3270	3870	4470	3270	3870	4470	5070	2670	3270	3870	4470	2670	3270	3870	4470
	D1	3270	3870	4470	5070	2370	2970	3570	4170	3270	3870	4470	5070	3270	3870	4470	5070
	D2	3748	4348	4948	5548	2970	3570	4170	4770	2370	2970	3570	4170	2370	2970	3570	4170
	D3	4598	5198	5798	6396	5254	5854	6454	7054	2970	3570	4170	4770	2970	3570	4170	4770
	D4	4178	4778	5378	5978	4780	5380	5980	6580	4934	5534	6134	6734	4934	5534	6134	6734
	I	400								400				400			
	J	850				850				850				1050			
	K	1878								2534				2600			
	L	430				480				530				580			
Exhaust normal/large	M	280 x 1150								280 x 1750				280 x 2050			
Inlet normal/large	N	360 x 750				500 x 850				500 x 1250				500 x 1250			
	O	840 x 1150								640 x 1490				640 x 1660			
	P	270 x 270				300 x 300				350 x 350				380 x 400			
	øR	160								160				160			
Revolving gap casket		12°				9°				9°				9°			
Sleeves		13				14				15				15			
Weight (Kg)	Nef	1377	1561	1747	1958	2037	2307	2575	2845	2625	3002	3379	4686	2808	3212	3615	5014
	Gross	1871	2131	2393	2679	2674	3035	3394	3754	3321	3795	4268	5671	3553	4060	4566	6068
Gross volume (m <sup>3</sup> )		13,8	16,9	20,2	23,2	19,5	24	28,4	32,9	22,5	27,6	32,8	38	24	29,5	35	40

Dimensions [mm]

Technical Features

# CYCLONE KTSA

## SCOPE OF USE

It is used to centrifugally separate  
dust-air mixture.



## ▶ APPLICATION FIELDS

### Food industry

- Flour and semolina mills
- Feed mills
- Biscuit and macaroni factories
- Dry fruit plants
- Barley plants
- Tea plants
- Tobacco plants

### Other food industry

### Chemical industry

- Painting made plants
- Plastic made plants
- Deterging made plants

### Wooden industry

### Nonferrous product industry

### Stone and soil industry

### Cement industry

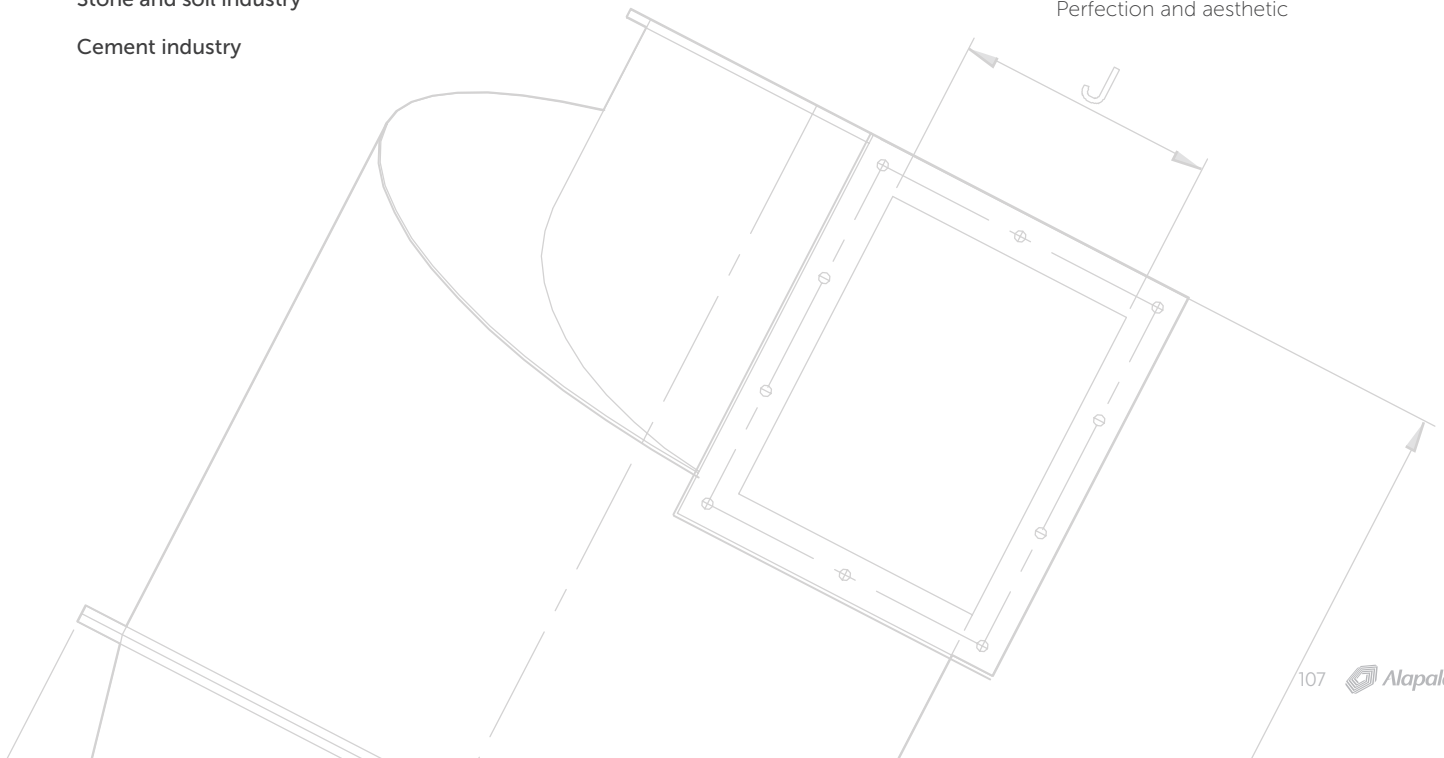
## ▶ WORKING PRINCIPLE

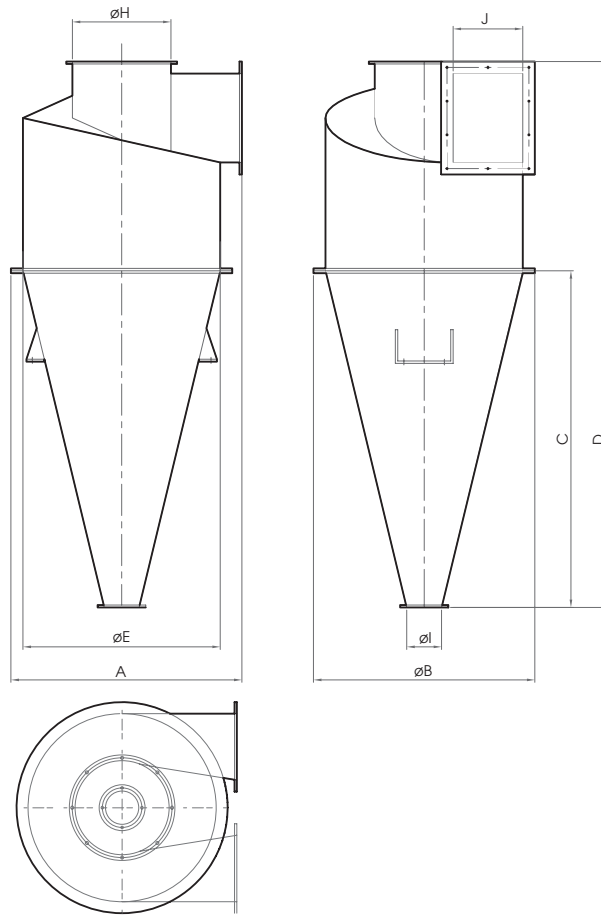
The dust-mixed conveying gas is started turning by transferring it into a separator by means of a spiral construction. Gas is forced in to rotate in the cyclone. Due to the centrifugal forces, dust particles are carried to the surroundings.

Pushing the gas to inward from the backward creates a vortex. The air is separated from the dust particle, which are forced downwards along a spiral way because of friction of the air against the wall.

## ▶ FEATURES & ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption
- Noiseless
- Perfection and aesthetic





Dimensions [mm]

Technical Features

Model	A	B	C	D	E	$\phi H$	$\phi I$	J	Air Volume (m <sup>3</sup> /min)	Weights (kg)		Gross Volume (m <sup>3</sup> )
										Net	Gross	
KTSA 700	788	775	1240	2190	700	330	160	315 x 315	60	162	301	2,6
KTSA 820	925	920	1400	2270	820	410		290 x 370	77,5	242	410	3,5
KTSA 1000	1110	1100	1700	2750	1000	500		350 x 460	115	326	555	5,5
KTSA 1150	1250	1250	1950	3150	1150	575		360 x 500	130	416	701	7,7
KTSA 1350	1450	1450	2250	3850	1350	675		400 x 600	172,5	680	1049	11,3
KTSA 1500	1650	1600	2500	4050	1500	700		500 x 700	252,5	860	1309	15,1
KTSA 1650	1810	1750	2720	4420	1650	770		550 x 770	324	1270	1798	19,2
KTSA 1800	1940	1880	2450	4360	1800	840		600 x 840	354	1470	2036	21,5

# AIRLOCK-S KHKM

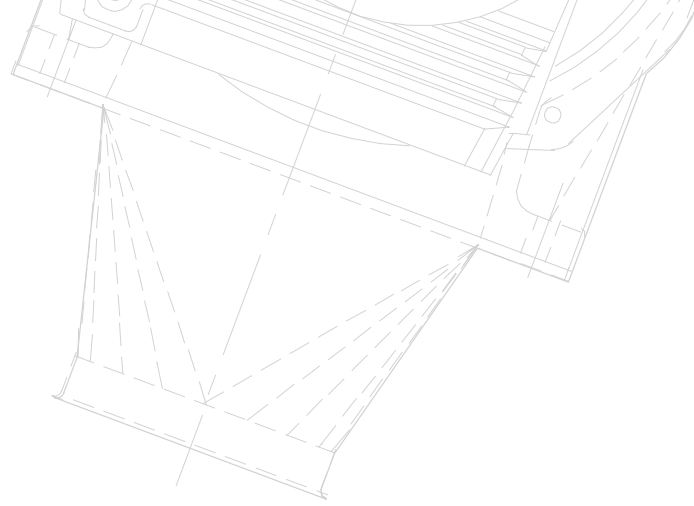
## SCOPE OF USE

It is used to separate air from the product, which is discharged from a cyclone separator into pneumatic systems. It is installed underneath the cyclone separators and air filters.

It works with the negative pressure as well as an air seal against leakage.







### ▶ APPLICATION FIELDS

#### At food industry

- Flour and semolina mills
- Biscuit and macaroni plants

#### Chemical industry

#### Paint, plastic, and detergent industry

#### Wooden industry

#### Soil industry

#### Cement industry

#### At other similar industrial plants

### ▶ WORKING PRINCIPLE

From the air lock inlet the air-product mixture enters the chambers, which are created by fixing blades (wings) on the rotor shaft. Due to the precise and standard tolerance between the body housing and the rotor, the product is separated from air and discharged regularly without any leakage.

Due to the air leakage-proof feature of the air lock, the escape of product is prevented together with air, which is sucked by an existing collector.

### ▶ FEATURES & ADVANTAGES

Provides perfect separation of air and dust particles in the cyclone due to its very precise fabrication

Provides various drive possibilities, such as:

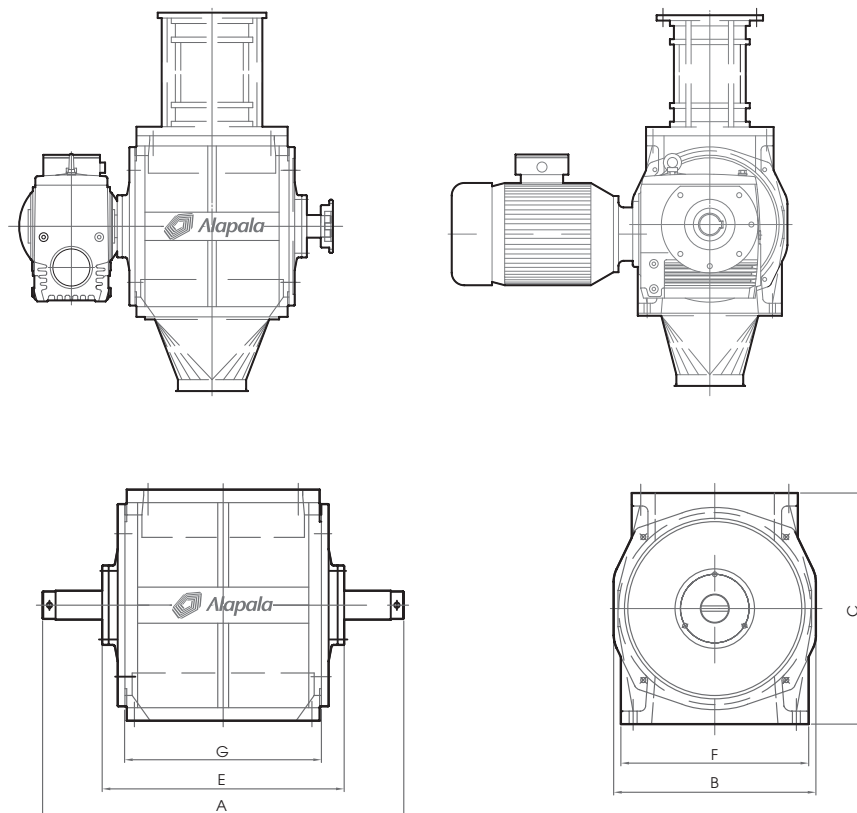
- By geared motor, direct flanged
- By geared motor, with coupling

Several air locks can be coupled together

Minimum maintenance

High efficiency





Dimensions [mm]

Model	A	B	C	E	F	G
KHKM - 25 / 21	368			275		210
KHKM - 25 / 27	430	280	320	337	260	272
KHKM - 25 / 33	490			398		333

Technical Features

Capacity (t/h)			Weights (kg)		Gross Volume (m <sup>3</sup> )
Wheat	Flour	Bran	Net	Gross	
8,2	5,8	3,2	56,5	81	0,1
10,5	7,5	4,1	61	88	
13,2	9,4	5,2	75,5	104	

# ECLUSE KEKM

## SCOPE OF USE

It is used to feed the product regularly and without leaking out into pneumatic conveying pipes at the pneumatic conveying systems.



### ▶ APPLICATION FIELDS

#### At food processing industry

- Flour and semolina mills
- Feed mills
- Biscuit and macaroni plants

#### At chemical industry

- Paint, plastic and detergent plants

#### At wooden industry

#### At soil & quarries industry

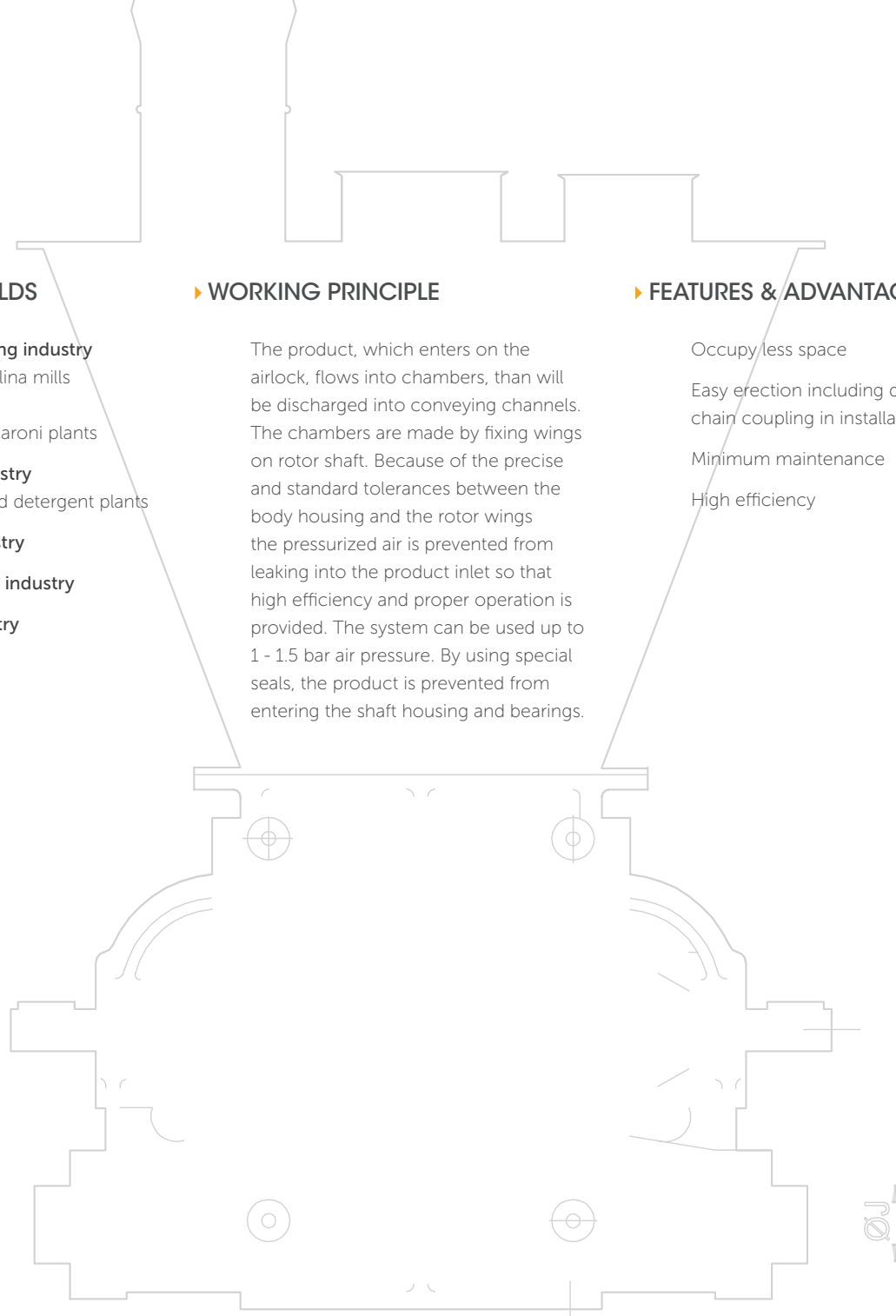
#### At cement industry

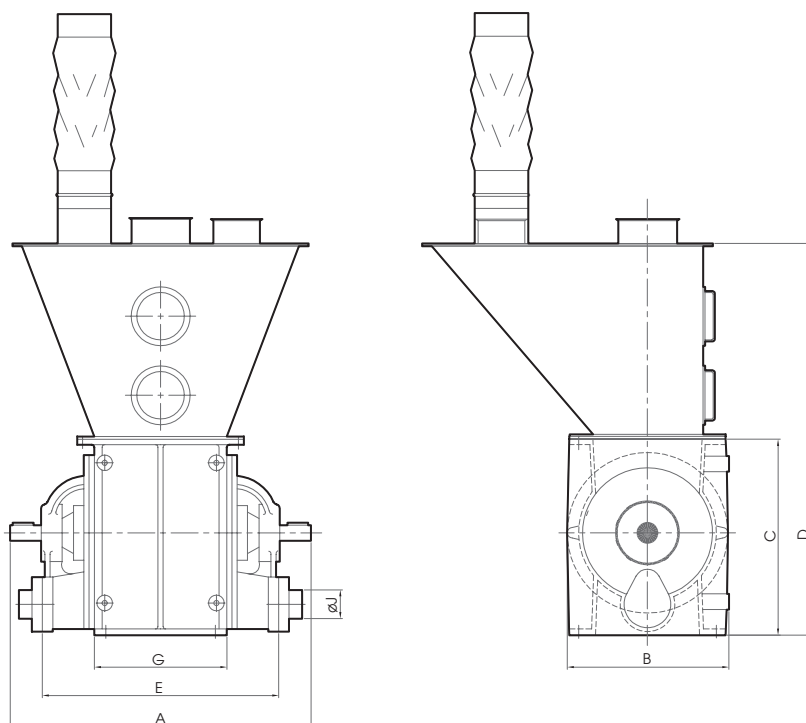
### ▶ WORKING PRINCIPLE

The product, which enters on the airlock, flows into chambers, than will be discharged into conveying channels. The chambers are made by fixing wings on rotor shaft. Because of the precise and standard tolerances between the body housing and the rotor wings the pressurized air is prevented from leaking into the product inlet so that high efficiency and proper operation is provided. The system can be used up to 1 - 1.5 bar air pressure. By using special seals, the product is prevented from entering the shaft housing and bearings.

### ▶ FEATURES & ADVANTAGES

- Occupy less space
- Easy erection including drive unit and chain coupling in installation group
- Minimum maintenance
- High efficiency





Dimensions [mm]

Model	A	B	C	D	E	G	øJ
KEKM 22 / 22	555	300	340	1620	440	440	65
KEKM 28 / 30	660	355	420	1700	538	310	80
KEKM 36 / 38	787	440	490	1970	645	405	105
KEKM 45 / 45	844	561	574	2054	703	436	120
KEKM 60 / 60	1034	720	794	2138	888	600	180

Technical Features

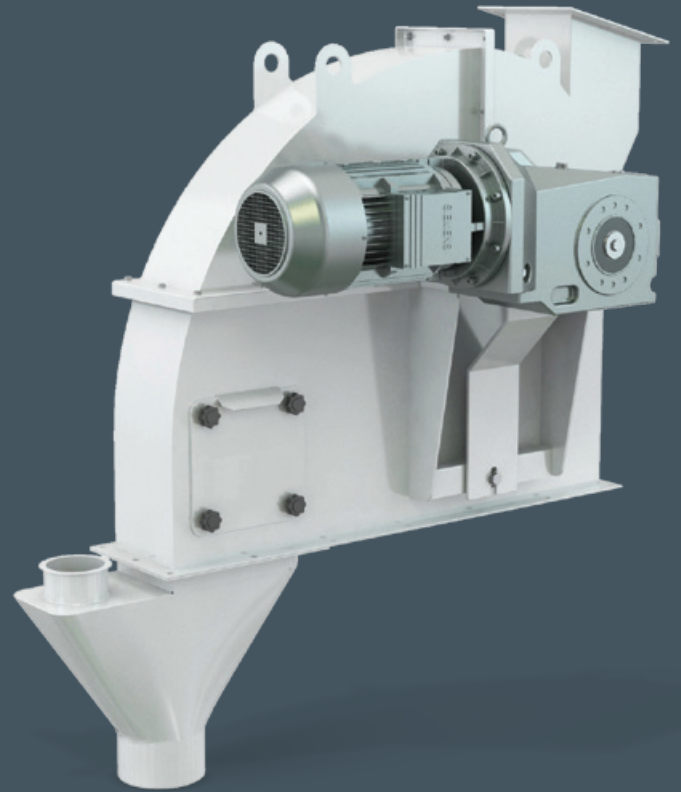
Capacity (t/h)			Weights (Kg)		Gross Volume (m³)
Wheat	Flour	Bran	Net	Gross	
6,6	4,7	2,6	167	199	0,6
13,2	9	5	211	320	0,9
21,2	15,1	8,4	280	331	1,3
30,2	24,2	12,1	410	473	1,8
56,4	40,1	22,3	575	667	2,8



## BUCKET ELEVATOR KBEA

### SCOPE OF USE

Belted bucket elevator is very ideal for vertical conveying of bulk materials or products, which have particle size up to 50 mm.



## ▶ APPLICATION FIELDS

It is designed to be used for both food and non-food industrial applications.

### At food processing industry

- Flour, semolina and feed mills
- Brewery plants
- Food processing systems
- Coffee and cocoa processing plants

### At chemical and similar plants

### At cement factories

### At fertilizer plants

### At stone and lime plants

### At other similar industrial plants

## ▶ STRUCTURE

The whole body is fabricated from steel sheet. Because of international safety regulations, inspection and installation covers should only be opened by suitable tools. The driven system is designed to move only in one direction. Reverse movement isn't permitted. For special applications, mostly worn surfaces are supported (covered) with replaceable plates.

Drive selection;

- With direct-coupled reducer motor
- With chain or belt-pulley driven reducer system

## ▶ FEATURES & ADVANTAGES

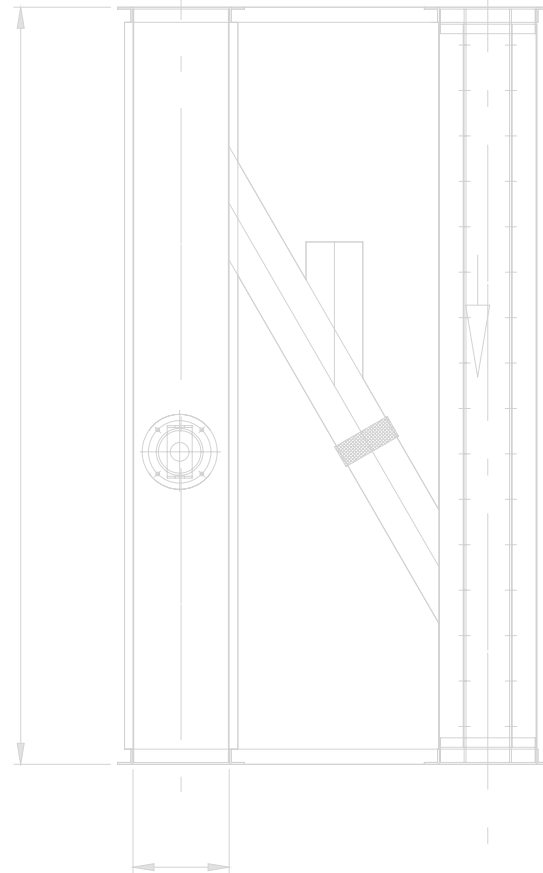
High efficiency with less power consumption

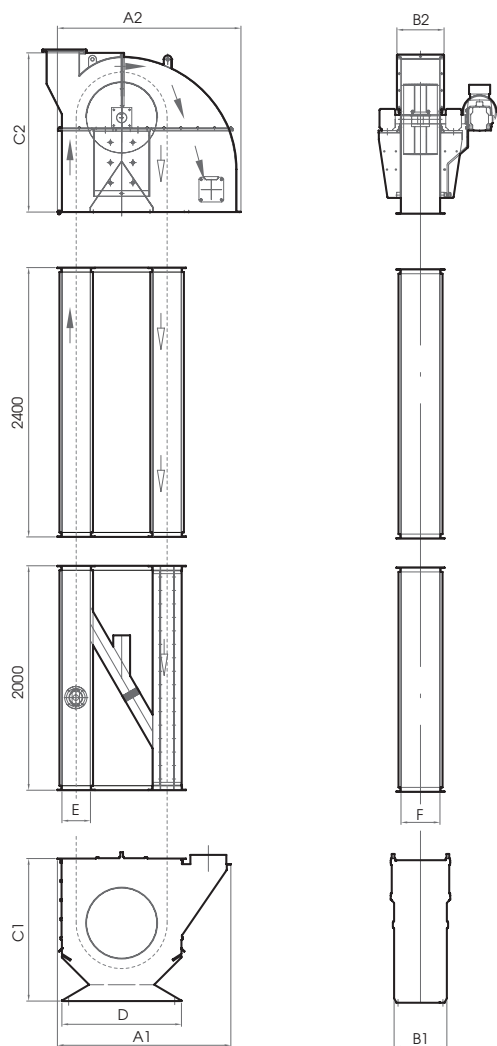
Easy and minimum maintenance

Durability and long lifetime

Smooth operation

Movement direction control switch for safety precaution





### Dimensions [mm]

Model	Product inlet			Product outlet			D	E	F
	A1	B1	C1	A2	B2	C2			
KBEA 315 / 140	920	290	890	990	240	835	605	175	165
KBEA 400 / 180	1130	350	1035	1195	300	1030	750	205	220
KBEA 630 / 300	1545	470	1270	1635	420	1420	1065	250	345
KBEA 800 / 340	1800	550	1670	1930	480	1708	1260	275	395
KBEA 800 / 420	1920	595	1570	2545	523	2067	1440	370	465

### Technical Features

Model	Bucket	Capacity (t/h)		
		Wheat	Flour	Bran
KBEA 315 / 140	100	13	9	4
	120	18	12	5
KBEA 400 / 200	140	27	18	8
	160	35	24	13
	180	39	27	11
KBEA 630 / 300	200	62	43	18
	220	82	56	24
	240	97	67	29
	260	134	93	39
KBEA 800 / 340	280	152	104	44
	300	180	124	53
KBEA 800 / 420	320	204	141	65
	340	210	145	67





## CHAIN CONVEYOR KZKI

### SCOPE OF USE

It is used mainly to convey all types of bulk material in the food industry.





## ► APPLICATION FIELDS

### At food industries

- Flour, semolina and feed mills
- Shelled peanuts factories
- Sugar and salt plants
- Cocoa factories
- Soybean and rice plants
- Raw material, grain, cereal storage silos and stores
- Other similar food processing plants

## ► STRUCTURE

An enclosed, rectangular cross - section, made of steel casing is furnished with an endless chain equipped with flights.

## ► FEATURES & ADVANTAGES

Provide dust -free and hygienic working conditions

Protective precautions are taken against dust explosions

High capacity, less area occupied

Enclosed construction, dust – tight and air - proof design

Reliable (dependable)

Long life and durability

Adjustable capacity by using ZT series of chain installation

### The chain

The most important and working part of a chain conveying system is "chain". In order to obtain the necessary high tensile strength and wear resistance of the chain, it is manufactured in a special forging and hardening process.

For special application at food processing and handling, the stainless steel chain can be supplied.

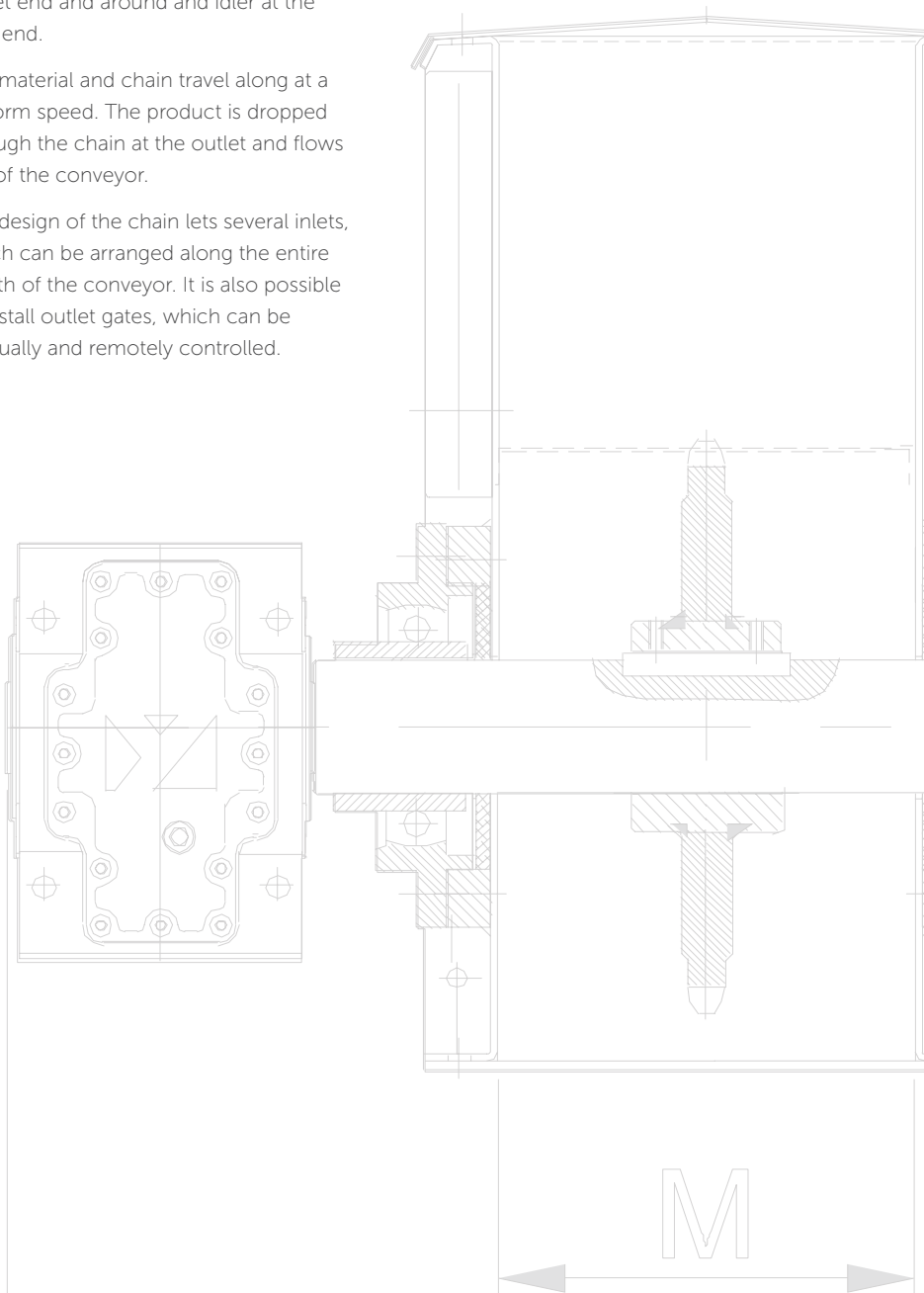
## ► WORKING PRINCIPLE

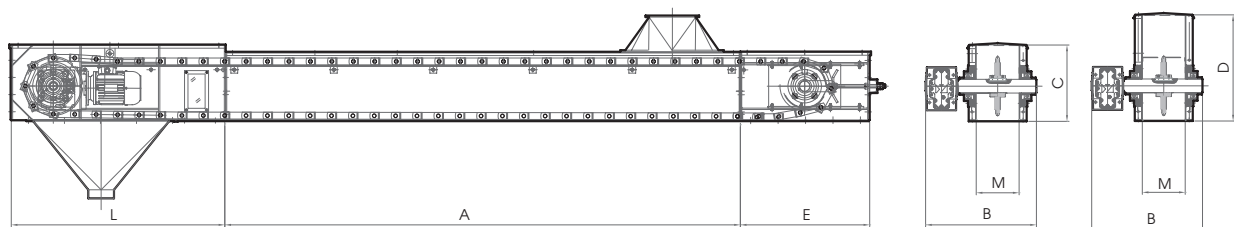
The lower chain section moves along the bottom of the steel casing and conveys the materials. The return part of the chain is guided along the central rail.

The chain runs around a sprocket at the outlet end and around an idler at the inlet end.

The material and chain travel along at a uniform speed. The product is dropped through the chain at the outlet and flows out of the conveyor.

The design of the chain lets several inlets, which can be arranged along the entire length of the conveyor. It is also possible to install outlet gates, which can be manually and remotely controlled.



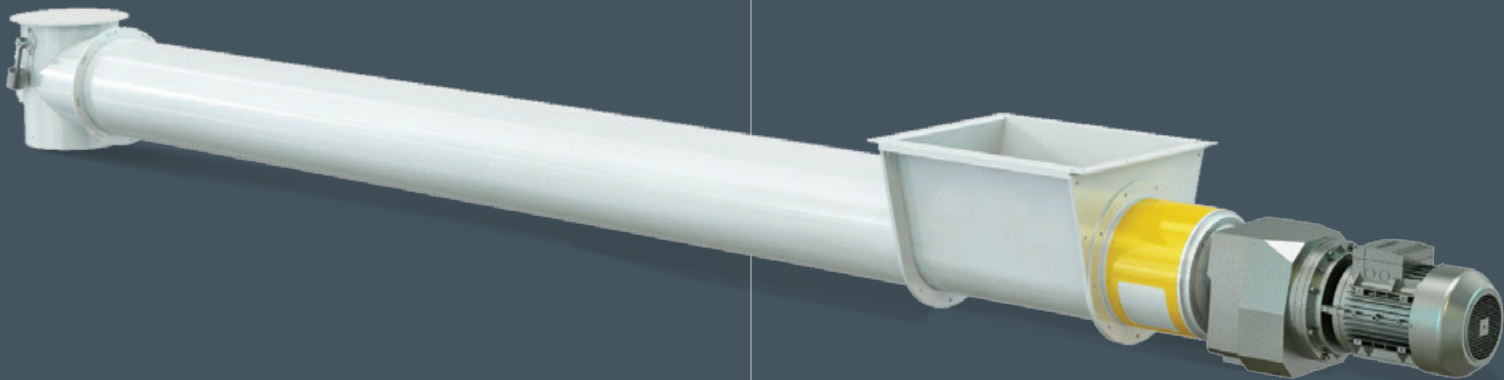


### Dimensions [mm]

Model	Module length (mm) A	B	C	D	E	L	M	Capacity (t/h)		
								Wheat	Flour	Bran
KZKI - 16 / 16	1200,1500,3000	481	350	500	1000	1000	160	36	15	10
KZKI - 20 / 20		521					200	57	23	15
KZKI - 25 / 25		571	450	700	760	1254	250	81	35	21
KZKI - 30 / 30		621					300	116	51	31
KZKI - 35 / 35		671	500	800	350	133	69	35		
KZKI - 40 / 40		721	510	850	400	173	91	46		
KZKI - 45 / 45		771	525	900	450	222	116	57		
KZKI - 50 / 50					500	270	142	72		

### Technical Features

## TUBULAR SCREW CONVEYOR KTVA



### SCOPE OF USE

It is designed to convey all powdered and granulated raw material and finished products of less adhesive at horizontal/limited angular position to meet all industrial sectors need. It is generally used underneath of the product silos for conveying product and makes dosing. The dosing process speed is adjusted by using inverter.



## ▶ APPLICATION FIELDS

### **Food industry**

- Flour and semolina mills
- Feed mills
- Biscuit and macaroni factories
- Dry fruit plants
- Barley plants
- Tea plants
- Tobacco plants

### **Other food industry**

### **Chemical industry**

- Painting made plants
- Plastic made plants
- Deterging made plants

### **Wooden industry**

### **Nonferrous product industry**

### **Stone and soil industry**

### **Cement industry**

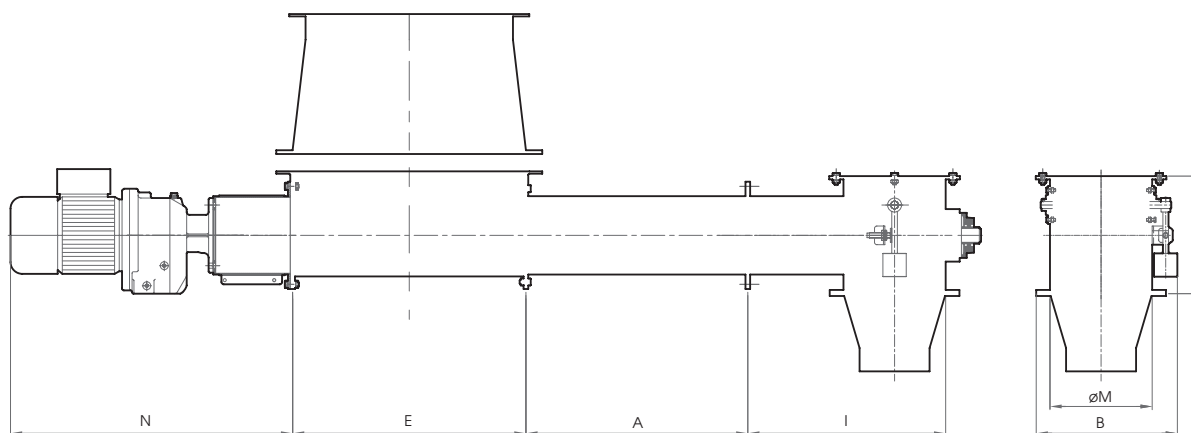
## ▶ WORKING PRINCIPLE

Due to its cylindrical form, it provides possibility of conveying of product at higher speed and at severe (perpendicular) angles.

## ▶ FEATURES & ADVANTAGES

- High quality
- High efficiency
- High capacity
- Long life
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption
- Noiseless





### Dimensions [mm]

Model	Module length (mm) A	B	C	N	E	ØM	I
KTVA - 200	304	305	220	320			
KTVA - 250	364	355	270	370			
KTVA - 300	414	405	320	420			
KTVA - 350	468	455	370	470			
KTVA - 400	525	505	420	520			
KTVA - 450	582	555	470	570			
KTVA - 500	639	605	520	620			

### Technical Features

Capacity (t/h)		
Wheat	Flour	Bran
19	14	8
35	25	14
54	38	21
77	55	31
106	76	42
138	98	55
176	125	70
218	155	86



# SCREW CONVEYOR KHVA

## SCOPE OF USE

It is used to convey the granular and grinded products horizontally for collecting, distributing, mixing and tempering processes.



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Feed mills

### At cement industry

### At chemical industry

### At wood processing industry

### At lime processing industry

### At salt processing industry

### For other similar industries

## ▶ FEATURES & ADVANTAGES

Standardised dimensions and modular sections

Standardised spare parts

Supply and manufacturing possibility for special requests and applications

## ▶ STRUCTURE

### Mechanical

- Semi-cylindrical troughs and out-wall installed ball bearings

- Plastic bushing installed intermediate bearings allows free maintenance

### Spiral

The screws or spirals are welded on a pivot in a regular pitch

### Types of drive

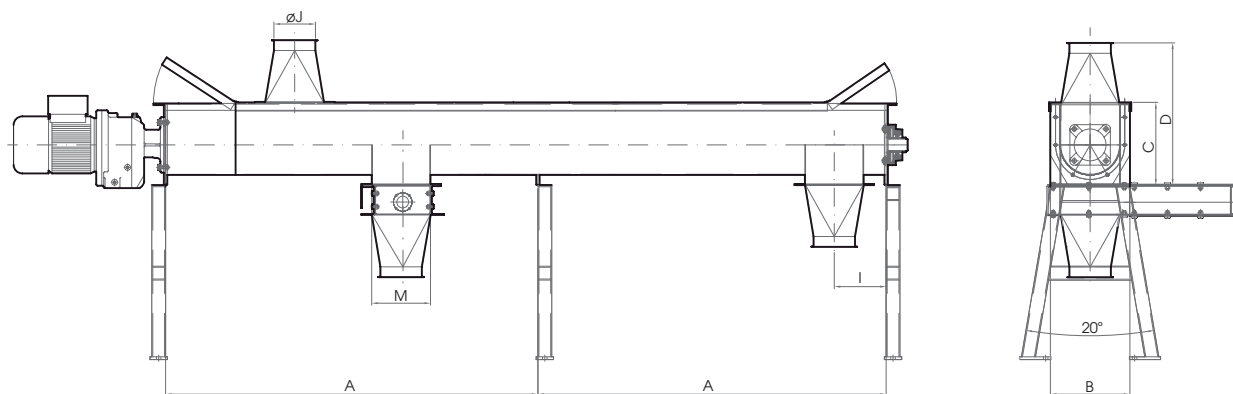
- Motor with coupling
- Flanged motor with coupling
- Chain driven type motor

### Special designs (at request)

- Stainless steel construction
- Variable screw pitches
- Special painting applications
- With feeding box

The modular system allows it to be used for many and variable applications.





Dimensions [mm]

Model	Module Length (mm) A	B	C	D	M	I	ØJ
KHVA 150	1500,1700 1900,2100 2300,2500	230	240	390	170 x 170	170	150
KHVA 200		300	300	500	220 x 220	220	150
KHVA 250		350	365	465	270 x 270	270	150
KHVA 300		400	430	730	320 x 320	320	200
KHVA 350		450	510	810	380 x 380	370	
KHVA 400		500	550	850	430 x 430	420	
KHVA 450		550	600	900	470 x 470	470	
KHVA 500		600	650	950	530 x 530	520	

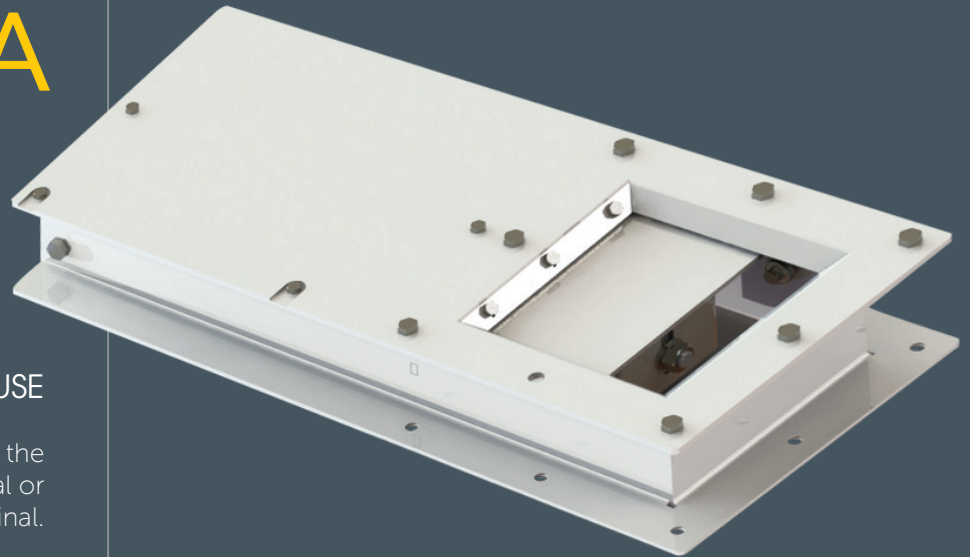
Technical Features

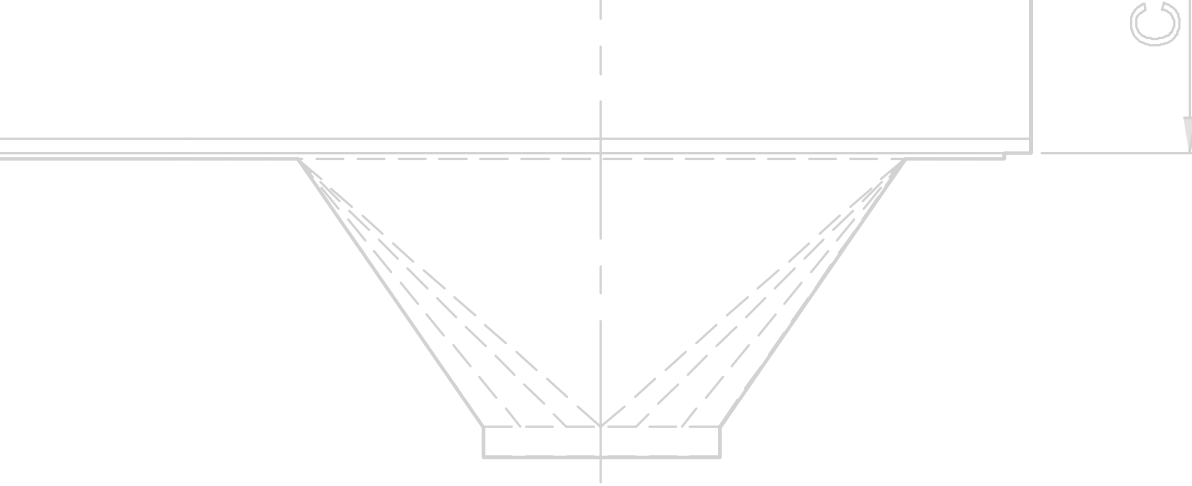
Capacity (t/h)		
Wheat	Flour	Bran
10	7	4
17	12	7
27	19	11
39	28	15
53	38	21
70	49	27
88	63	35
109	77	43

# SLIDING GATE MPKA

## SCOPE OF USE

It is used to discharge or interrupt the flow of free flowing raw material or products to any desired terminal.





### ▶ APPLICATION FIELDS

#### At food industry

- Flour and semolina mills
- Feed mills
- Biscuit and pastry plants
- Nut processing plants
- Malt factories

#### At chemical industry

- Paint factories
- Plastic factories
- Detergent factories

#### At wooden industry

#### At soil & quarries industry

#### Cement industry

### ▶ WORKING PRINCIPLE

The product flow is allowed or stopped by opening and closing the sliding gate, which has a leakage-proof feature. The pneumatic and manual types can be manufactured. The pneumatic type gate can be automatically operated and connected to the automation system. The flow rate of a manual type-sliding gate is adjusted by means of an adjusting screw.

### ▶ FEATURES & ADVANTAGES

Can be used with screw and chain conveyors and at silo and bin outlets two different models, pneumatic and manual (screw) type

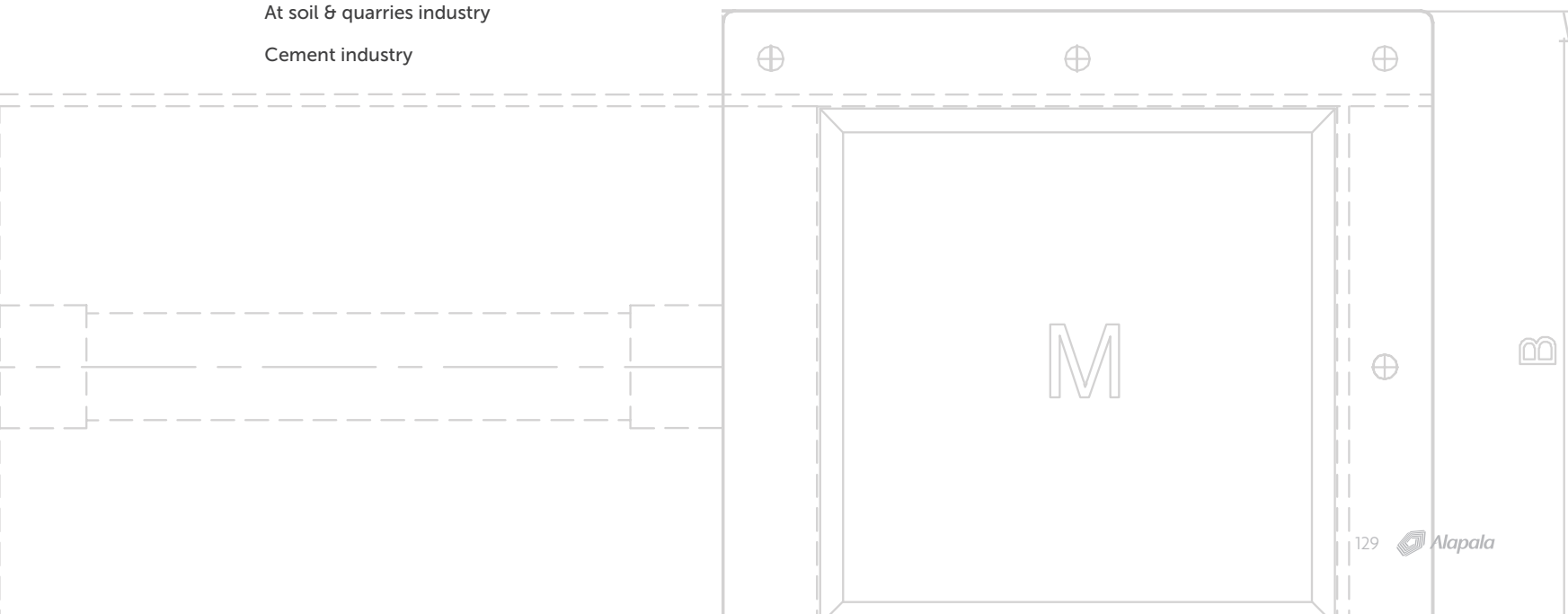
Can be use with PLC system

Easy to dismantle steel construction

Leakage proof

Easy to install

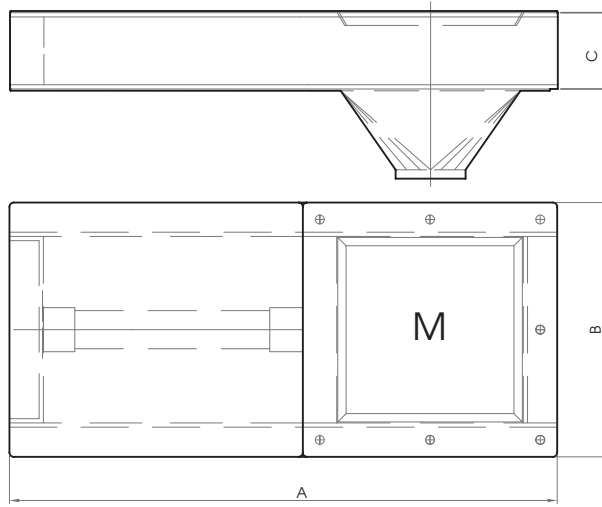
No maintenance



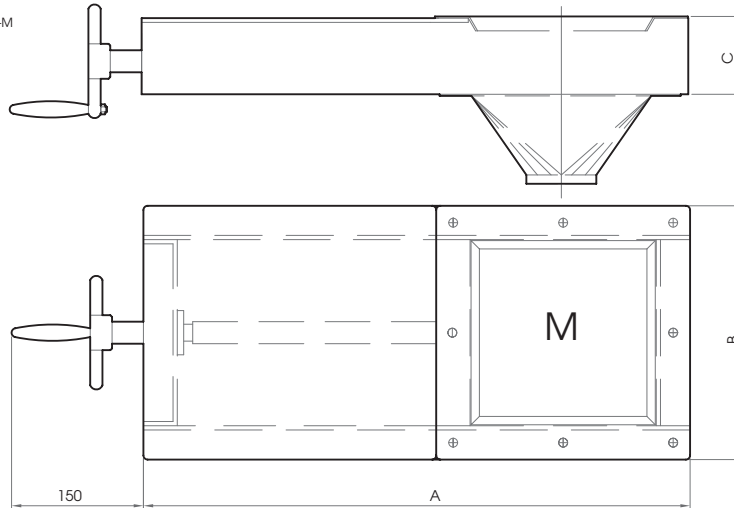


# SLIDING GATE MPKA

MPKA-P



MPKA-M



## Dimensions [mm]

Model	A	B	C	M
MPKA 170	515	250	90	170 x 170
MPKA 200	615	280		200 x 200
MPKA 220	645	300		220 x 220
MPKA 270	745	350		270 x 270
MPKA 320	845	400		320 x 320
MPKA 350	945	450	100	350 x 350
MPKA 400	995	480		400 x 400

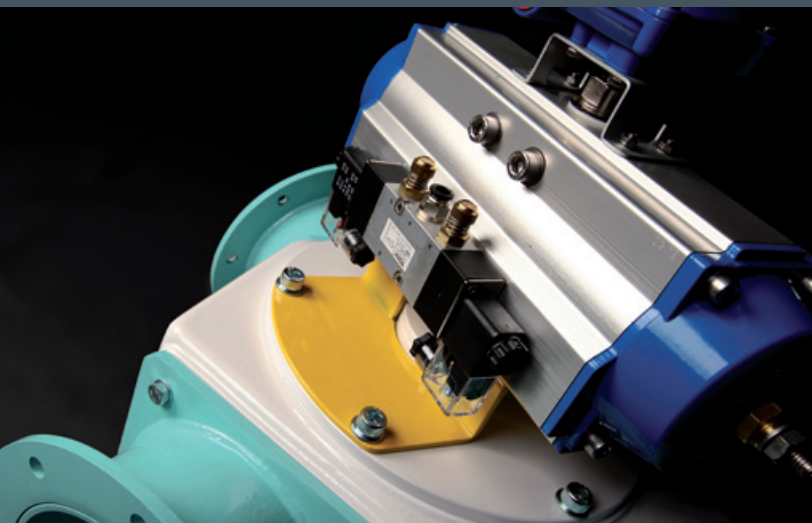
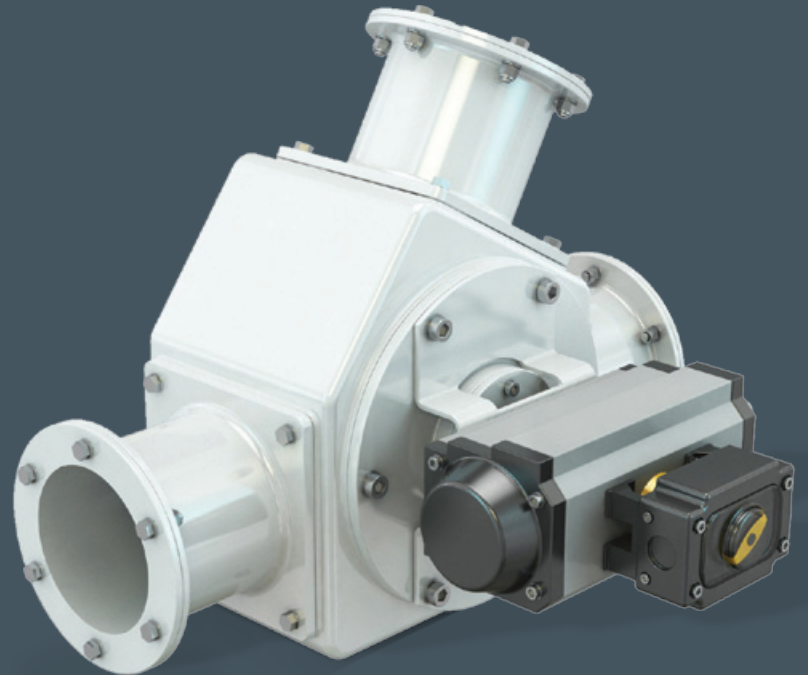
## Technical Features

	Weights (Kg)		Gross Volume (m <sup>3</sup> )
	Net	Gross	
MPKA 170	23	40	0,2
MPKA 200	27	48	
MPKA 220	30	53	
MPKA 270	33	60	
MPKA 320	36	58	
MPKA 350	54	92	0,3
MPKA 400	68	110	

## PNEUMATIC LINE DIVERTING GATE KPKA

### SCOPE OF USE

It is used to divert the product both for pressurized conveying and for aspirated pneumatic conveying systems.



## ▶ APPLICATION FIELDS

### At food industry

- Flour, semolina and feed mills
- Biscuit and pastry plants
- Nut processing plants
- Malt factories

### At chemical industry

- Paint factories
- Plastic plants
- Detergent plants

### Wooden industry

- Soil plants & quarries
- Cement factories
- At other similar industrial plants

## ▶ WORKING PRINCIPLE

The product, which enters the gate from its inlet, is diverted to any desired direction according to the process by using a piston driven gate.

## ▶ FEATURES & ADVANTAGES

The leakage is prevented

Body and gate are casted

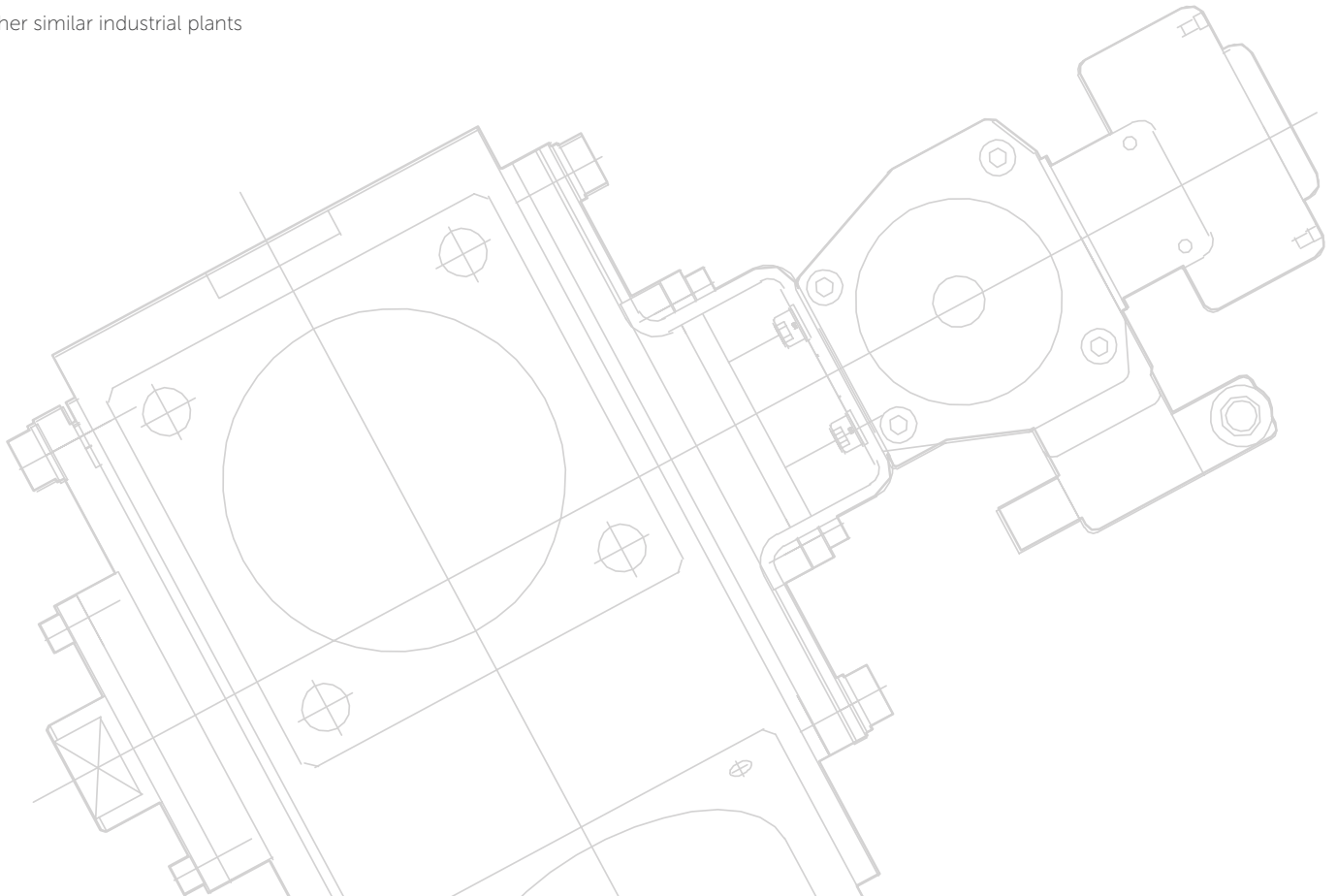
For emergency cases a manual control system is installed

Easy to install

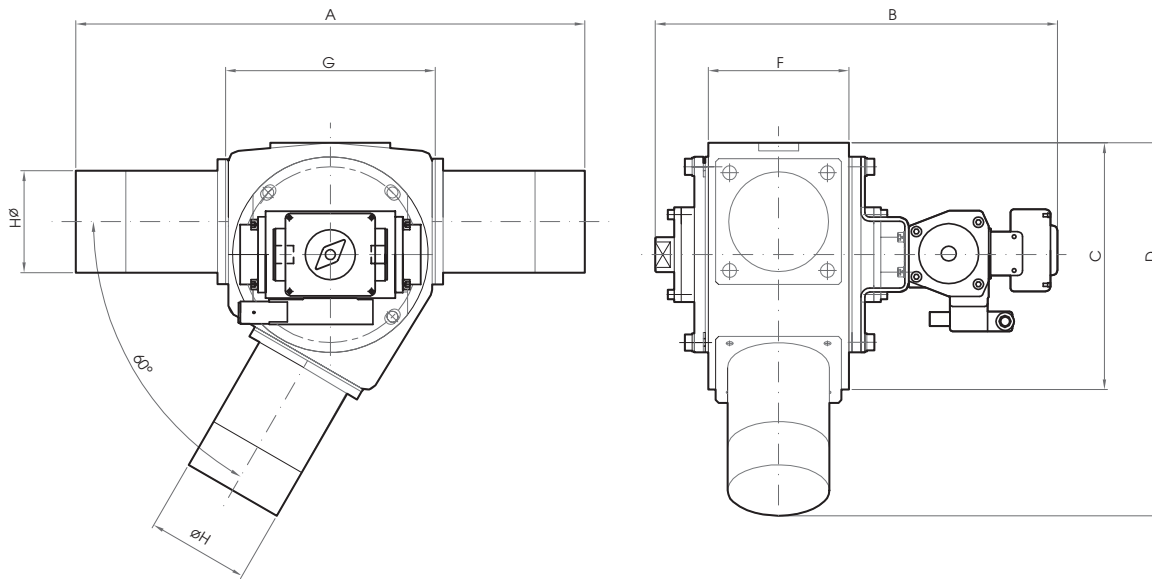
Minimum maintenance

High efficiency

Connection possibility to automation system



# PNEUMATIC LINE DIVERTING GATE **KPKA**



## Dimensions [mm]

Model	A	B	C	D	F	G	ØH
KPKA - B - 83	484	384	210	327	125	184	42
							46
							51
							57
							63
							70
							76
83							
KPKA - B - 102	516	414	247	371	148	216	95
							102
KPKA - B - 120	548	446	287	406	174	248	108
							119
							125
KPKA - B - 150	598	488	345	467	210	298	133
							150
KPKA - B - 180	636	540	378	500	243	336	170
							190

## Technical Features

Model	Weights (Kg)		Gross Volume (m³)
	Net	Gross-Brut	
KPKA - B - 83	37	70	0,1
KPKA - B - 102	56	92	0,12
KPKA - B - 120	92	132	0,14
KPKA - B - 150	127	172	0,18
KPKA - B - 180	162	212	0,22



# scale & packaging

- FLOW BALANCER
- SCALE
- EXTRACTION RATE SCALE
- CARROUSEL PACKING MACHINE
- 1 MOUTH PACKING MACHINE







## FLOW BALANCER TFBI

### SCOPE OF USE

It is used to measure precisely the weight of cereals during flow.



## ▶ APPLICATION FIELDS

### Food industry

- Flour and semolina mills
- Feed mills
- Barley plants

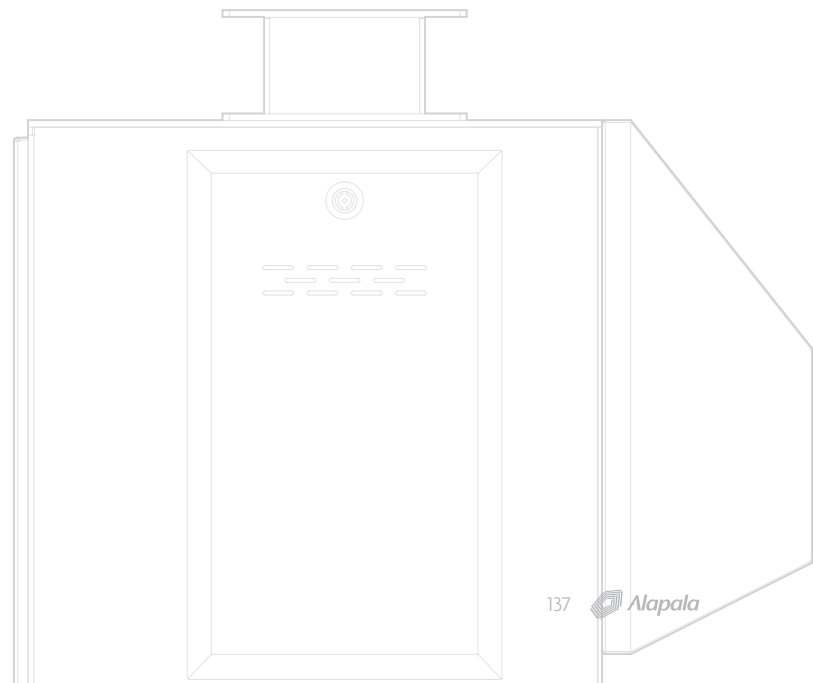
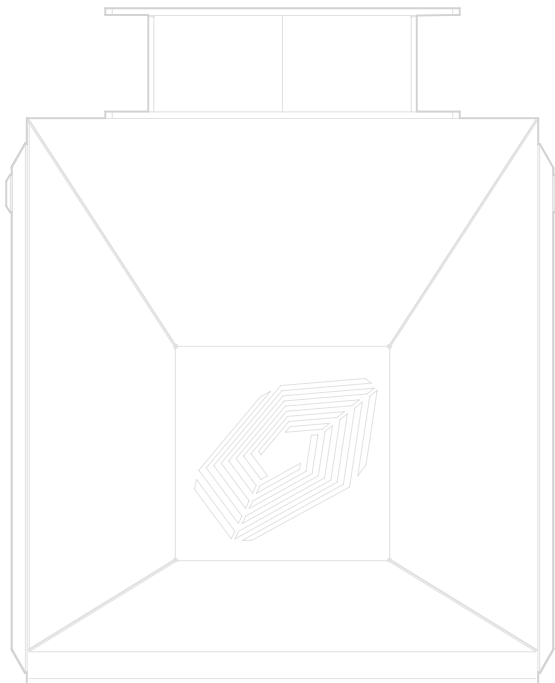
### Other food industry

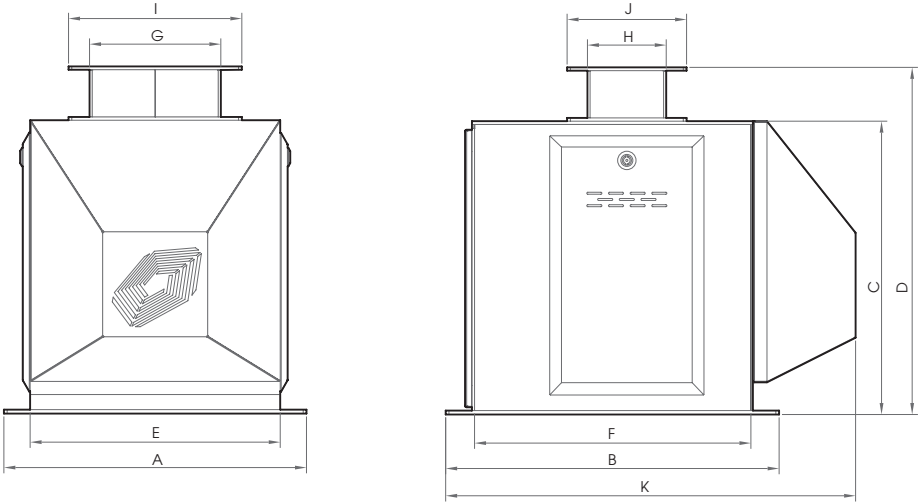
## ▶ WORKING PRINCIPLE

The measuring process is carried out by a PLC programme. The programme provides data for product flow, communication between pneumatic controlled caplet and load cell, special inlet spout which can give quick adjusting possibility of very high and very low flow rate. If the automatic dosing machine will run individually, each machine should have its own PLC, in case, they will work as a group, for each group one PLC unit shall be installed. All data are registered in central control room system.

## ▶ ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption





Dimensions [mm]

Model	A	B	C	D	H	G	ØJ
TFBI 25	350	700	594	650	240	295	150
TFBI 50	600		600			545	200

Technical Features

Capacity(t/h) Wheat	Weights (Kg)		Gross Volume (m³)
	Net	Gross	
30	150	198	0,3
50	200	260	0,5

# SCALE KBTA-C

## SCOPE OF USE

The weighing unit is designed and manufactured to weigh granule and powdered product during the continuous flow by batch at high capacity. It is used in flour milling sector, cereal processing and storage plants, cereal trading and cleaning complexes, raw material storage silos, in harbour cereal storage facilities.





## ▶ APPLICATION FIELDS

### **Food industry**

- Flour and semolina mills
- Feed mills
- Biscuit and macaroni factories
- Dry fruit plants
- Barley plants
- Tea plants
- Tobacco plants

### **Other food industry**

### **Chemical industry**

- Painting made plants
- Plastic made plants
- Deterging made plants

### **Wooden industry**

### **Nonferrous product industry**

### **Stone and soil industry**

### **Cement industry**

## ▶ WORKING PRINCIPLE

Pans and covers have a perfect hygienic and hermetic feature and both hold Alapala's patent.

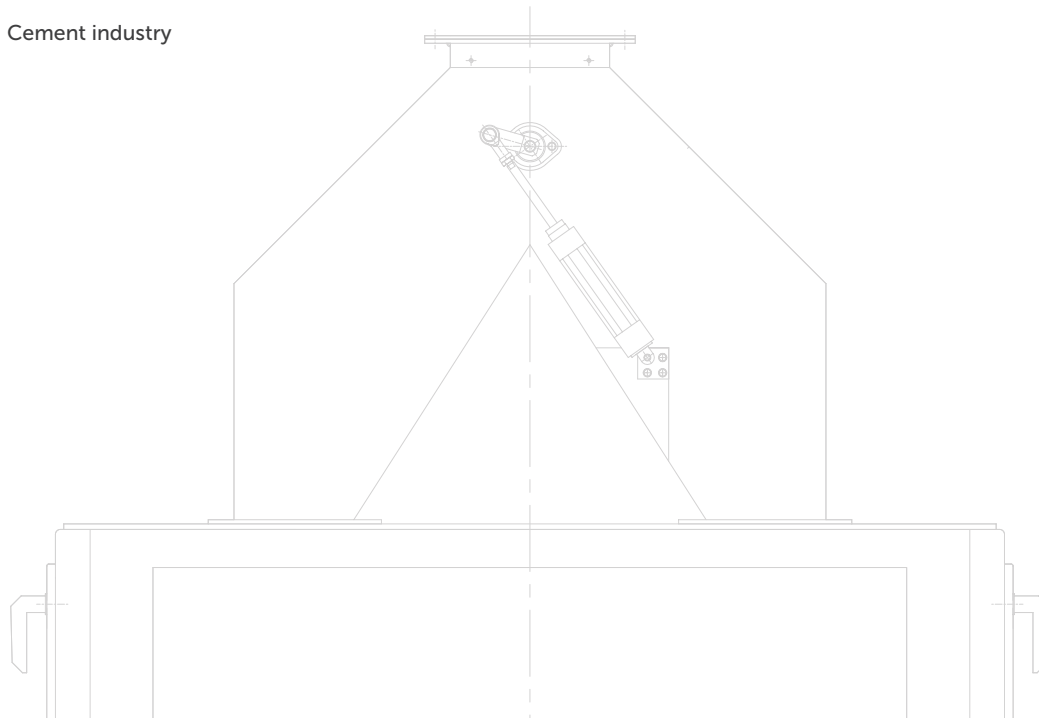
For higher capacities a two pan model scale is available.

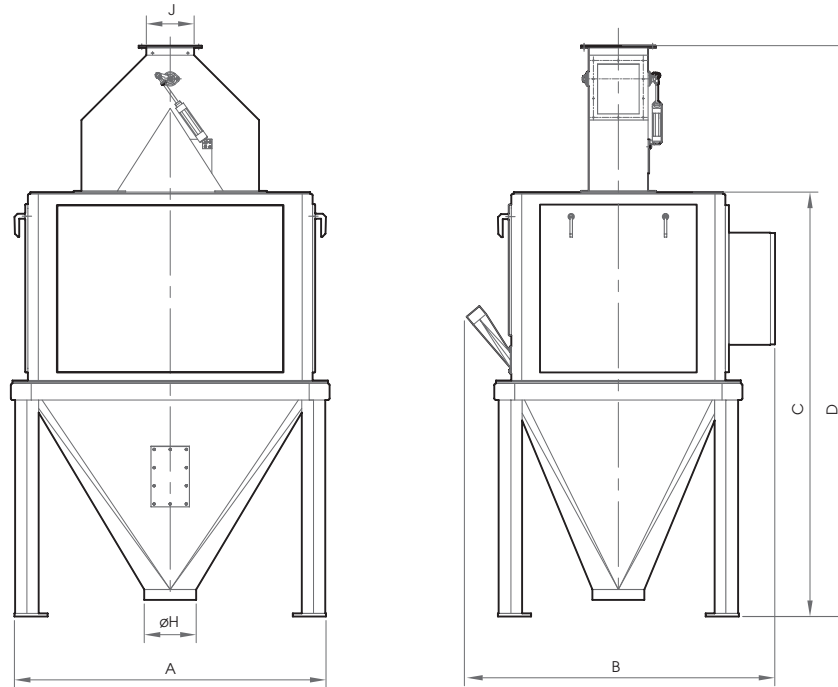
The weighing process is made by two Load Cells "OFF CENTER" type. All operations and controls are carried on by appropriate PLC programme.

Each scale can be connected to the Communication Centre and Extraction Control System both one by one and as a group of scale. Data interchange possibility between Scale, System and Operator. Measuring possibility of flow rate at continuous flow.

## ▶ ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption
- Noiseless
- Perfection and aesthetic





Dimensions [mm]

Model	A	B	C	D	E	J
KBTA C100	1080	1414	1570	2032	250	280 x 280
KBTA C200	1329	1595	1925	2509	300	304 x 360
KBTA C300	1560	1788	1020	1537	350	354 x 380
KBTA C500	1820	2060	1208	1813	400	400 x 400
KBTA C900	2075	2313	1370	2062	450	465 x 458

Technical Features

Capacity (t/h)	Weights (Kg)		Gross Volume (m <sup>3</sup> )	
	Wheat	Flour		Net
33	24	506	722	5,1
55	49	450	744	8,0
101	74	840	1110	6,6
160	123	1080	1061	9,9
253	195	1400	1841	13,8

## EXTRACTION RATE SCALE

# DURA DKRA KBTA

### SCOPE OF USE

It is designed to measure continuously material throughput rate and weight for monitoring of granular materials.

The accurate information is obtained regarding mill yield by installing a group of scales on different product lines.



## ▶ APPLICATION FIELD

### At food industry

- Flour and semolina mills
- Milk powder plants

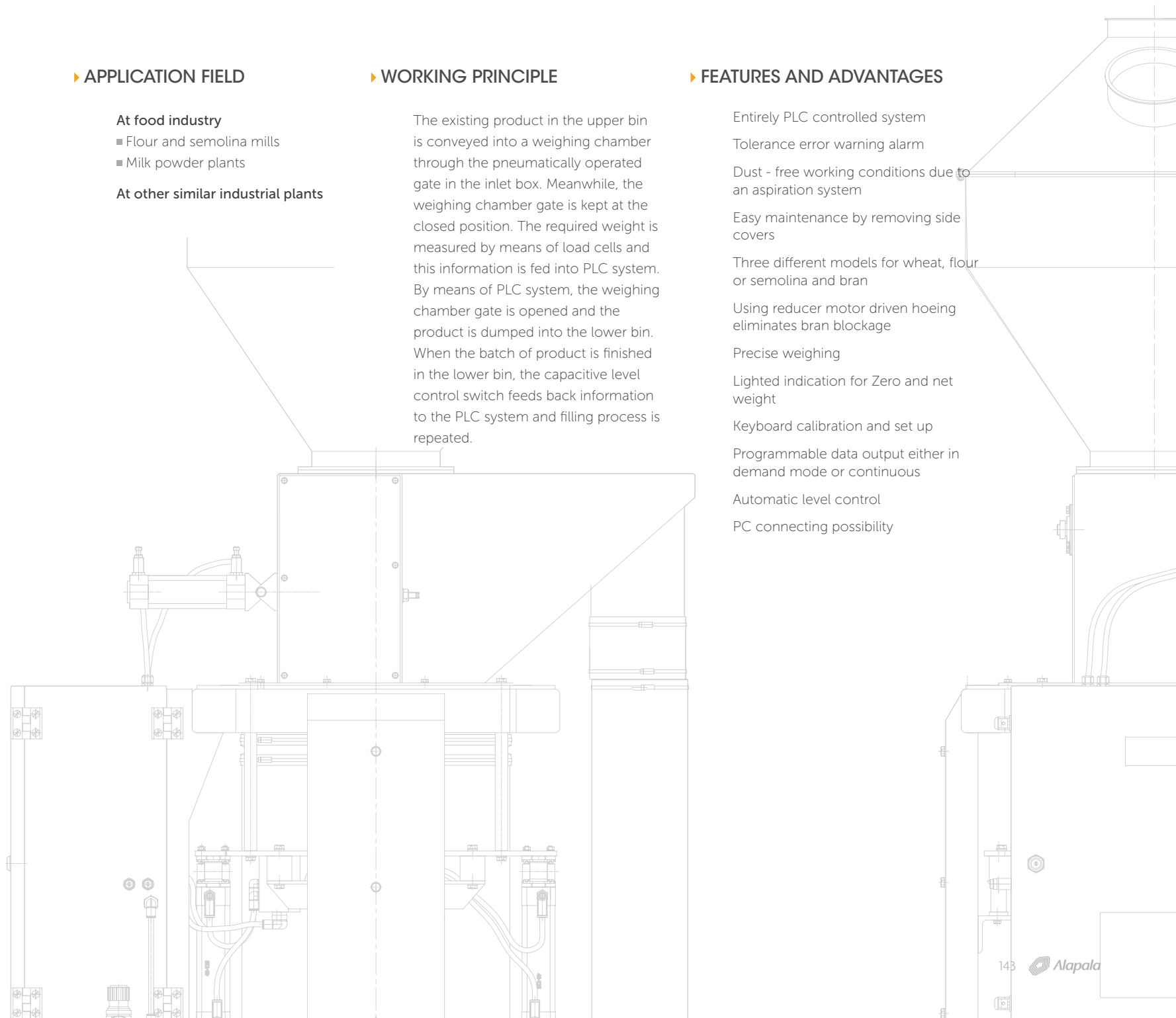
### At other similar industrial plants

## ▶ WORKING PRINCIPLE

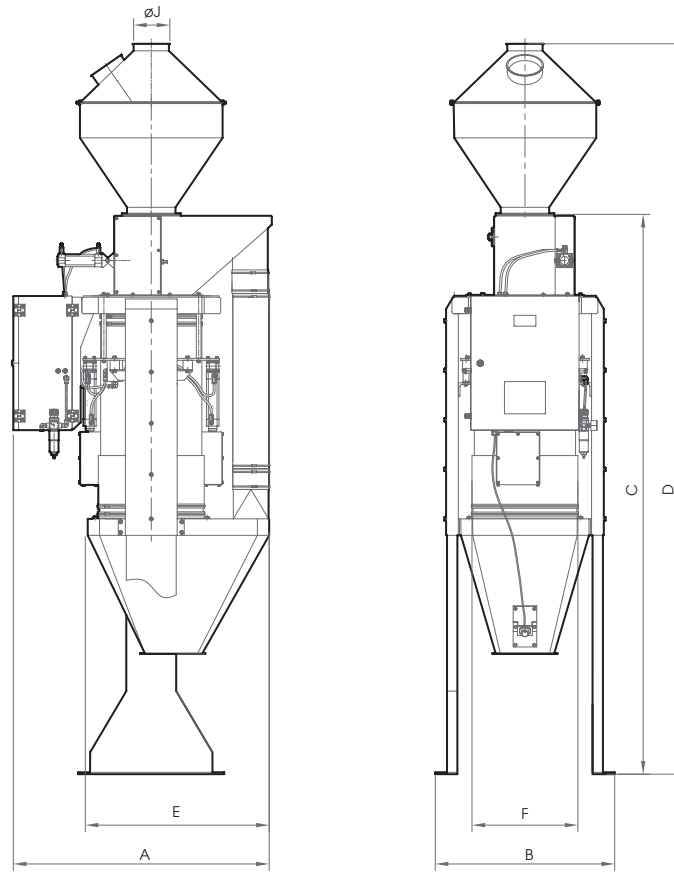
The existing product in the upper bin is conveyed into a weighing chamber through the pneumatically operated gate in the inlet box. Meanwhile, the weighing chamber gate is kept at the closed position. The required weight is measured by means of load cells and this information is fed into PLC system. By means of PLC system, the weighing chamber gate is opened and the product is dumped into the lower bin. When the batch of product is finished in the lower bin, the capacitive level control switch feeds back information to the PLC system and filling process is repeated.

## ▶ FEATURES AND ADVANTAGES

- Entirely PLC controlled system
- Tolerance error warning alarm
- Dust - free working conditions due to an aspiration system
- Easy maintenance by removing side covers
- Three different models for wheat, flour or semolina and bran
- Using reducer motor driven hoeing eliminates bran blockage
- Precise weighing
- Lighted indication for Zero and net weight
- Keyboard calibration and set up
- Programmable data output either in demand mode or continuous
- Automatic level control
- PC connecting possibility



EXTRACTION RATE SCALE **KBTA** (WHEAT) **DURA** (FLOUR) **DKRA** (BRAN)



Dimensions [mm]

Model	A	B	C	D	E	F	ØJ		
KBTA 24	900	615	1880	2430	580	330	120		
DURA 24									
DKRA 24									
KBTA 60	1087	762	2380	3105	770	450		150	
DURA 60									
DKRA 60									
KBTA 120	1351	942	2870	3721	1005	560			150
DURA 120									
DKRA 120									

Technical Features

Hopper Volume (dm <sup>3</sup> )	Capacity (t/h)			Weights (Kg)		Gross Volume (m <sup>3</sup> )
	Wheat	Flour	Bran	Net	Gross	
33,4	7,2	5	2,8	227	371	2,7
	2,8		18			
	18	12,7				
82,4	33,5	23,6	12,9	610	890	7,6
	23,6		12,9			
	23,6	12,9				



# CARROUSEL PACKING MACHINE CTMA

## SCOPE OF USE

It is used to bag the granular and processed products in 10 kg, 25 kg, and 50 kg PP bags at high capacities.



## ▶ APPLICATION FIELDS

### Food industry

- Flour and semolina mills
- Feed mills
- Dry fruit plants

### Other food industry

### Chemical industry

- Painting made plants
- Plastic made plants
- Deterging made plants

### Wooden industry

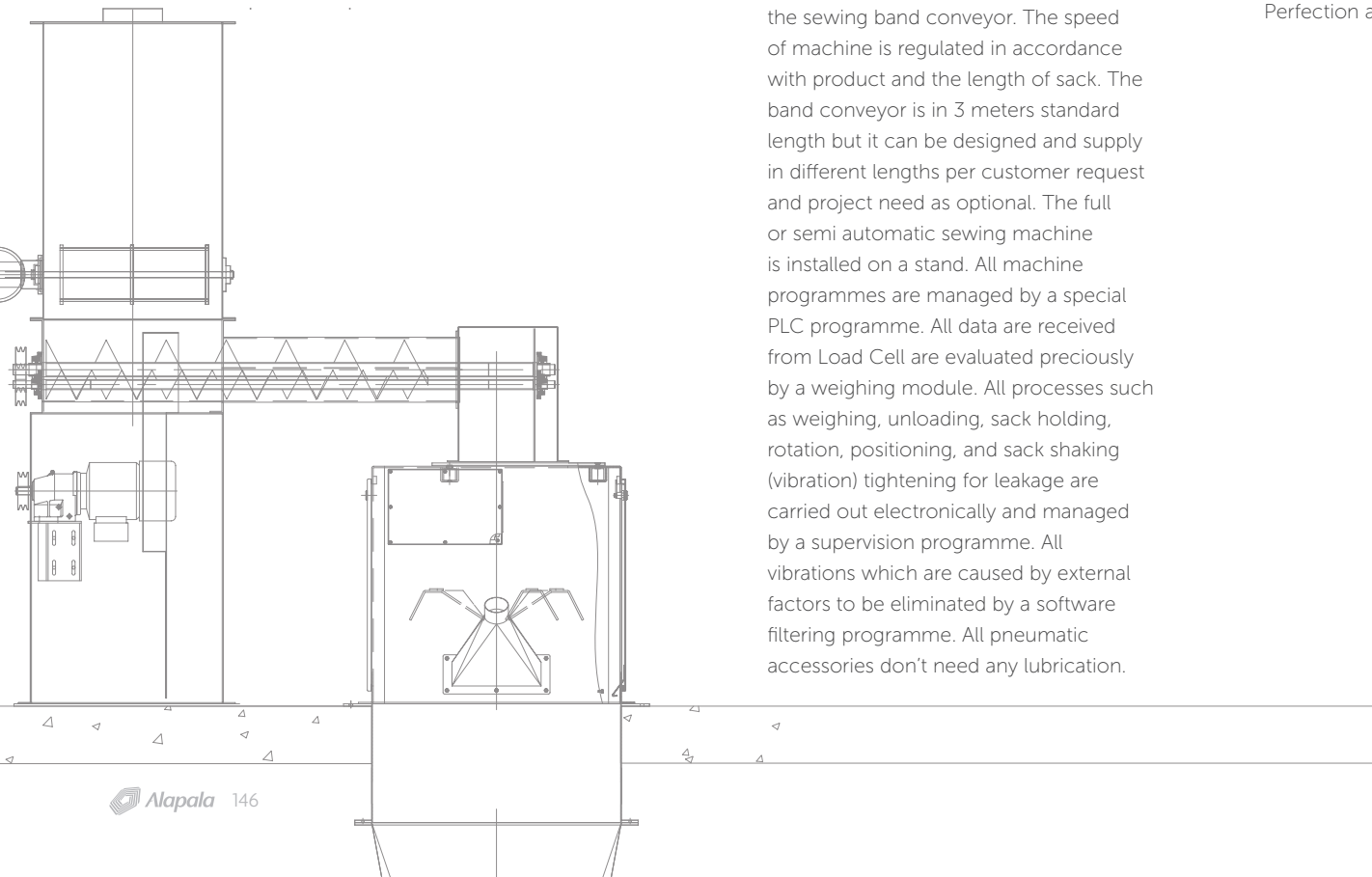
### Nonferrous product industry

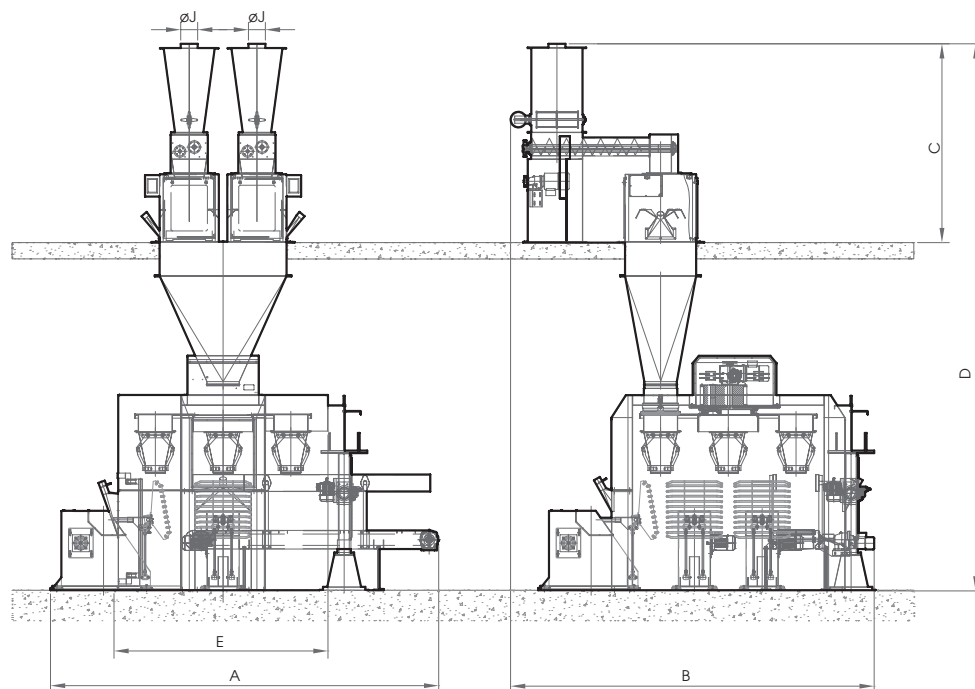
## ▶ WORKING PRINCIPLE

The weighing process is made by one or two weighing units, which are installed on weighing machine. The machine would have 4 (four) or 6 (six) spouts per capacity. During weighing process, the weighing unit holds the sack and waits till a warning comes from "hold switch" and do not open the covers. When a warning arrives the product is allowed to run and filling process is carried out. When the spout platform turns the new free spout arrives at weighing station while the filled bags arriving shaking station for proper handling, meanwhile the operator places an empty sack on the free spout and the filled sack is sewn consequently on the sewing band conveyor. The speed of machine is regulated in accordance with product and the length of sack. The band conveyor is in 3 meters standard length but it can be designed and supply in different lengths per customer request and project need as optional. The full or semi automatic sewing machine is installed on a stand. All machine programmes are managed by a special PLC programme. All data are received from Load Cell are evaluated precisely by a weighing module. All processes such as weighing, unloading, sack holding, rotation, positioning, and sack shaking (vibration) tightening for leakage are carried out electronically and managed by a supervision programme. All vibrations which are caused by external factors to be eliminated by a software filtering programme. All pneumatic accessories don't need any lubrication.

## ▶ ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- High precision
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption
- Noiseless
- Perfection and aesthetic





Dimensions [mm]

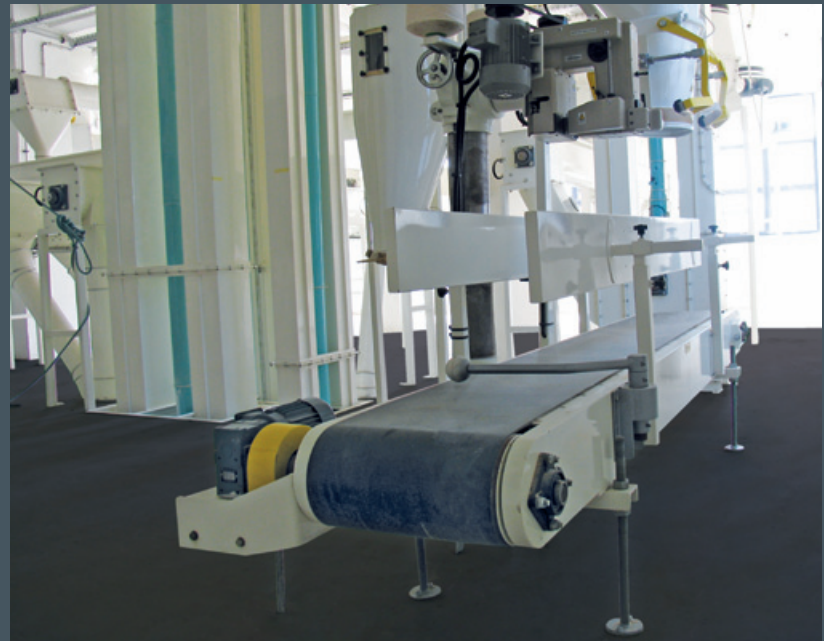
Technical Features

Model	A	B	C	D	E	ØJ	Capacity Bag Spout Number (h)	Motor (Kw)	Bag Spout	Weights (Kg)		Gross Volume (m <sup>3</sup> )
										Net	Gross	
CTMA 4	4615	4295	2350	6470	3000	200	600	4 x 0,55	4	3300	3741	58,5
								2 x 0,75				
								2 x 1,5				
								2 x 2,2				
CTMA 6	4615	4295	2350	6470	3000	200	4 x 0,55	6	3500	3941	67,5	
							3 x 0,75					
							2 x 1,5					
							2 x 2,2					

# 1 MOUTH PACKING MACHINE PTMA

## SCOPE OF USE

It is used to bag the granular and processed products in 10 kg, 25 kg, and 50 kg PP bags at high capacities.



## ▶ APPLICATION FIELDS

### Food industry

- Flour and semolina mills
- Feed mills
- Dry fruit plants

### Other food industry

### Chemical industry

- Painting made plants
- Plastic made plants
- Deterging made plants

### Wooden industry

### Nonferrous product industry

## ▶ WORKING PRINCIPLE

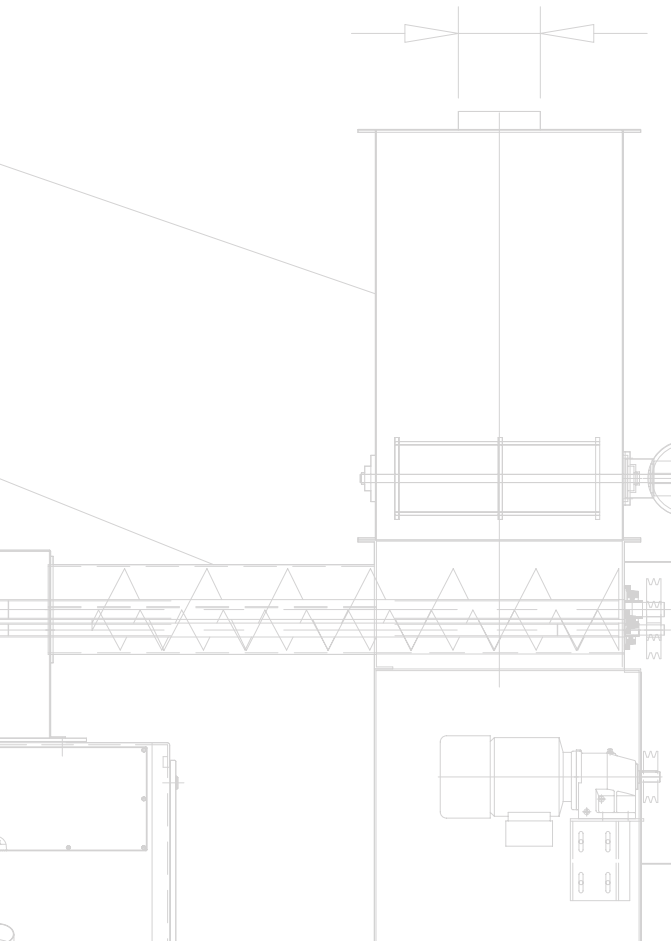
The weighing process is made by one or two weighing units which are installed with. After the weighing process is carried out the weighing unit will not open the covers and wait till a warning received from bag holding switch. Once communication received the covers will be opened and the weighed flour will be discharged into the sack. Once the filling is carried out, the sack is conveyed onto band conveyor and its mouth automatically is sewn. The machine speed is adjusted in accordance with sort of the product and size of the sack.

The band conveyor is 3 meter long as standard. The extra length can be supplied per client requirement or project need. The automatic or semi automatic thread cutting sewing machine is installed on a column integrated with the band conveyor. All operations of the machine are controlled by PLC programme. The values are received trough load cells are evaluated by an advanced weighing module. Weighing, discharge, sack holding – release, and so on processes are completely electronic and managed a supervision program.

All vibrations are caused by external tractors and filtrated and amortized by a software program. All pneumatic equipment does not need any lubrication.

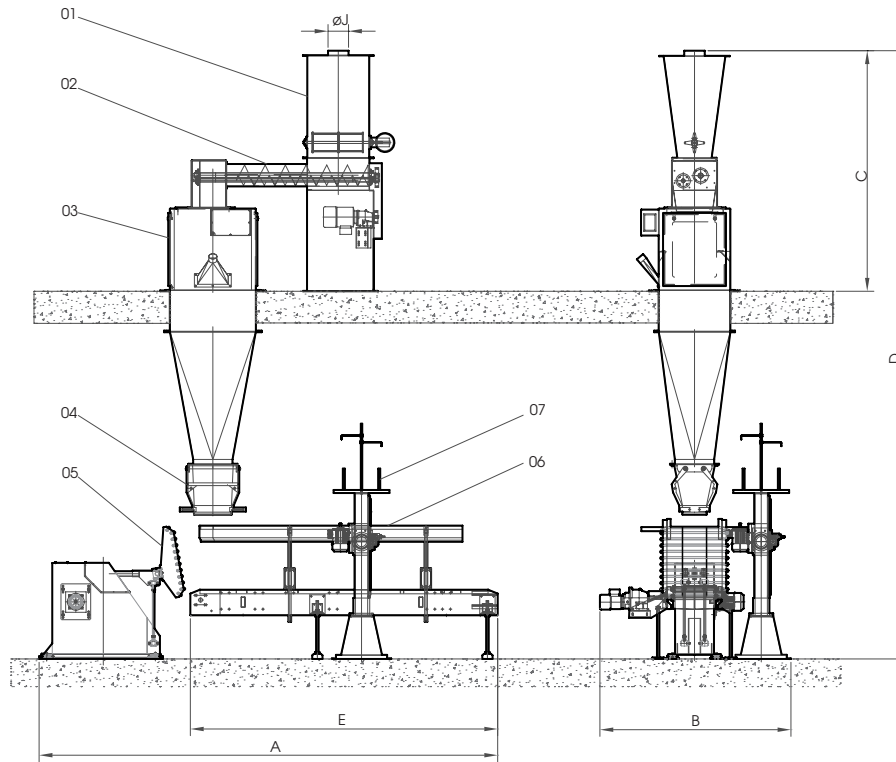
## ▶ ADVANTAGES

- High quality
- High efficiency
- High extraction
- High capacity
- Long life
- High precision
- Maximum hygiene
- Maximum security
- Maximum simplified using
- Low periodical maintenance
- Low delay to change the spares parts
- Low energy consumption
- Noiseless
- Perfection and aesthetic





# FLOUR PACKING SYSTEM PTMA



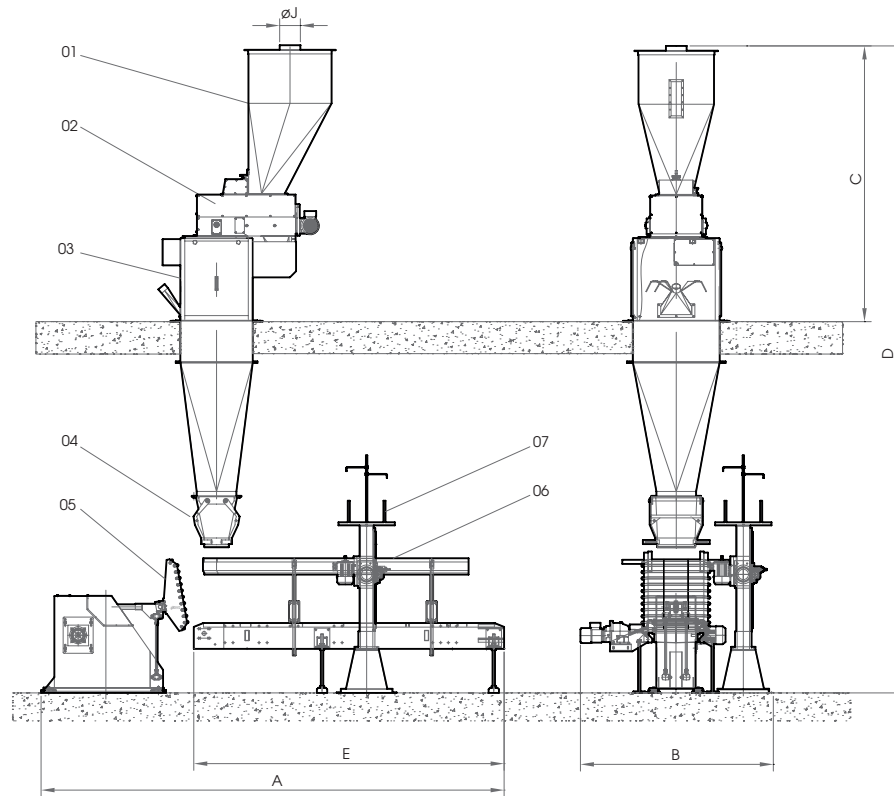
- 1- Upper regulation bin
- 2- Screw conveyors and c. Gate
- 3- Weighing hopper
- 4- Sac holder
- 5- Vibrator
- 6- Take-away belt conveyor
- 7- Sewing machine (option)

## Dimensions [mm]

## Technical Features

Model	A	B	C	D	E	ØJ	Capacity Bag Spout Number (h)	Motor (Kw)	Weights (Kg)		Gross Volume (m³)
									Net	Gross	
PTMA 10 / 25	4480	1870	2070	5640	3000	150	300	3 x 0,55 1 x 0,75 1 x 1,5 1 x 2,2	1700	2600	30,5
PTMA 25 / 50			2350	5940					1800	2700	

# BRAN PACKING SYSTEM PTMA



- 1- Upper regulation bin
- 2- Belt conveyor four feeding
- 3- Weighing hopper
- 4- Sac holder
- 5- Vibrator
- 6- Take-away belt conveyor
- 7- Sewing machine (option)

## Dimensions [mm]

## Technical Features

Model	A	B	C	D	E	ØJ	Capacity Bag Spout Number (h)	Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
									Net	Gross	
PTMA-200/40	4480	1870	2675	6265	3000	200	300	2 x 0,75	1500	2427	40,2
								2 x 0,55			

# feed mill section

- PELLET PRESS
- HAMMER MILL
- MIXER
- PELLET COOLER
- MOLASSES MIXER
- ENZYME MIXER
- DISTRIBUTOR
- DOSAGE SYSTEM





# PELLET PRESS KPPM

## SCOPE OF USE

It is designed to obtain the pressed feed by mixing by - products in the flour mills and product in the feed mills with water, steam or molasses.



*\*The capacity should be revised for the other raw material. (Hammer Mill)*



## ▶ APPLICATION FIELDS

### At food industry

- Flour and semolina mills
- Feed mills
- Corn, oats, rye, barley and similar grain processing plants

## ▶ WORKING PRINCIPLE

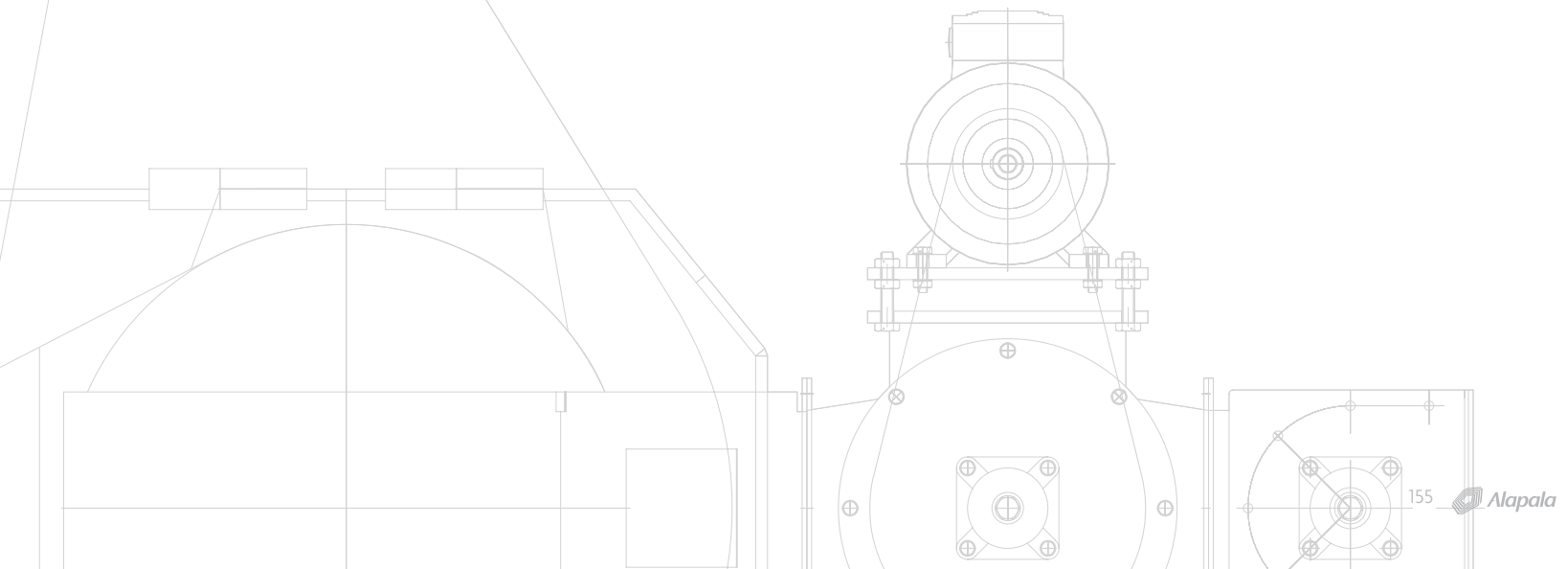
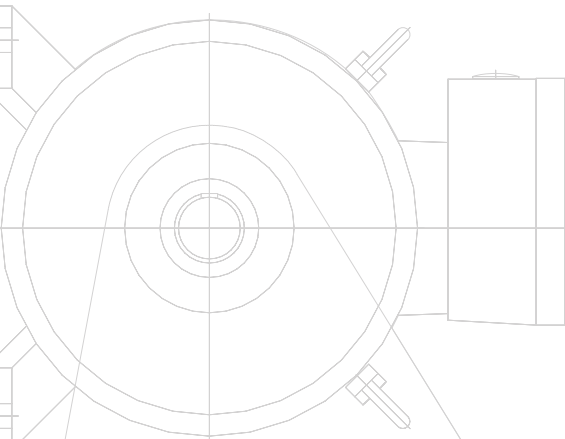
The sub-product enters variable pitch stainless steel feeder screw's inlet then it is forwarded into the mixer, which is on the top section of the pellet press. When the product reaches in the rotor section water, steam or molasses are sprayed on it. The softened product is conveyed to a pelleting section. The rollers direct feed across the full width of the die to optimize production. The pressed feed is cut by means of adjustable knives and consequently pelleted feed is obtained at desired dimensions. Steam or molasses feeding can be done both automatically and manually.

## ▶ FEATURES & ADVANTAGES

- High efficiency
- Suitable design for ideal working conditions
- If required, the inner surface of the mixer can be chromium - plated
- Disc system is well protected against strokes
- Smooth operation
- Easily and quickly dies replacement
- Easy maintenance

### Technical Features

Model	Capacity (t/h)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
		Net	Gross	
KPPM 420	5	3655	4039	15
KPPM 520	10	4100	4514	18
KPPM 620	20	4520	4945	20



HAMMER MILL  
TCDA

MIXER  
YYKA

PELLET COOLER  
YKPS

*\*The capacity should be revised for the other raw material. (Hammer Mill)*

▶ HAMMER MILL



Technical Features

Model	Capacity (t/h)	Motor (Kw)	Weights (Kg)		Gross Volume (m <sup>3</sup> )
			Net	Gross	
TCDA 10	1	15	615	744	2,5
TCDA 25	2,5	30	748	907	3,5
TCDA 50	5	45	1000	1193	4,0
TCDA 100	10	110	1500	1700	6
TCDA 200	20	200	2000	2200	8

▶ MIXER



Technical Features

Model	Volume (Lt)
YYKA 5	500
YYKA 10	1000
YYKA 15	1500
YYKA 20	2000
YYKA 30	3000
YYKA 40	4000
YYKA 50	5000

▶ PELLET COOLER



Technical Features

Model	Capacity (t/h)
YKPS 1500	5
YKPS 2500	10
YKPS 3500	20

MOLASSES MIXER  
YKMM

ENZYME MIXER  
YKEK

DISTRIBUTOR  
YKDI

DOSAGE SYSTEM

► MOLASSES MIXER



Technical Features

Model	Capacity (t/h)	Weights (Kg)		Gross Volume (m³)
		Net	Gross	
YKMM-500	12	800	1035	4,9

► ENZYME MIXER



Technical Features

Model	Capacity (t/h)
YKEK 350	12

► DISTRIBUTOR



Technical Features

Model	Outlet
YKDI 4	4
YKDI 6	6
YKDI 12	12

► DOSAGE SYSTEM











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