

SOLID MIXERS

for powder - granules - paste like products



35 years of experience...

The mixing process, one of the most important basic operations, is used in almost all fields of the food, of the chemical and of the building material industry.

Isimsan is developing mixers for more than 35 years now. The process engineering for mixing is one of our main activities. Given a large number of relevant criteria, it is necessary to have a serious experience in selecting the optimum mixing system. For this reason, the planning of mixing systems, even if based on standard solutions, almost always requires a special solution approach.

Our specialists have technical knowledge on different process technologies. Against this background, simple and complex requirements for mixing systems are always solved by taking into account previous and subsequent processes.

With a constantly growing knowledge, and with high material, production and service standards, Isimsan is providing top quality mixers at attractive prices.

Well named, long termed customers, sales and service representatives all over the world stands for our high reliability and client proximity. It is a pleasure for us to be there for you.

In this edition Isimsan present you its leading mixer solutions for powder, granules and paste like products.

Your sincerely,
Zeki Güner





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PROCESS EFFICIENCIES

SPECIFICATIONS	HORIZONTAL PLOUGH AND PADDLE MIXER	HORIZONTAL RIBBON MIXER	VERTICAL HELIX MIXER
Mixes:	powder, granulates, paste like products	powder, granulates	powder, granulates, paste like products
Batch sizes:	500 - 20.000 liter	500 - 20.000 liter	300 - 40.000 liter
Useful filling degree:	30 - 70%	40 - 70%	10 - 80%
Mixing time:	15 - 20 min.	20 - 30 min.	~ 5 min.
Cleaning time (including drying):	~ 30 min.	>45min.	~ 15 min.
Cleanliness level in %:	80-90%	70 - 80%	~ 98%
Compatible for choppers:	yes	no	yes

HORIZONTAL PLOUGH AND PADDLE MIXER



THE STRONG AND GENTLE ONE

HORIZONTAL PLOUGH AND PADDLE MIXER

PROCESS EFFICIENCY

Mixes: powder, granulates,
paste like products
Batch sizes: 500 - 20.000 liter
Useful filling degree: 30 - 70%

Mixing time: 15 - 20 min.
Cleaning time (including drying): ~30 min.
Cleanliness level in %: 80 - 90%
Compatible for choppers: yes

The Horizontal Plough and Paddle Mixer is suitable for the production of granular, dust and paste like materials. It stands out with its protective and precise mixing processes. A very good circulation of materials ensures exact process repetitions also for large batches.

The mixer performs both, simple and complex mixing processes. Connected with the shaft of the agitator, the blades rotate in a horizontal drum. As a result a turbulence is obtained, which continuously incorporates

all the product particles into the mixing process. Dead spots or slow motion areas, does not occur.

The mixer normally contains plough or paddle type blades. Other blending units may also be used. The designs are tailored on the needs of the respective blend materials.

Applications: Food industry · Animal feed industry · Chemical industry · Building material industry

SMALL BATCH SIZES: TESTS FOR FREE!



ISIMSAN®

HORIZONTAL PLOUGH AND PADDLE MIXER

FEATURES

Body size: 0,5 to 20 m³

Body shape: cylindrical

Shaft: single

Blades: ploughs, paddles, etc.

Material: carbon steel, stainless steel, wear-resistant steel, duplex steel

Surface: 2B, painted, brushed, polished (Ra~0,2)

Safety lock

Gearbox: Yilmaz, Nord, Flanders, Bonfiglioli, Sew Eurodrive, etc.

Engines: ABB, Sew Eurodrive, Gamak, Siemens, Nord, Weg, etc.



OPTIONS

- Sample sampling valves
- Eyeglasses with lightings
- Second inspection doors
- Heating & cooling jackets
- High speed cutting rotors
- Liquid dosing nozzles
- Mixing container in single or double-walled designs (depending on process)
- Various automation sensors
- Constructions for vacuum and pressure processes
- Frames and platforms
- Frequency controls
- Remote controls
- Cleaning equipment
- Electrical panels
- CE, ATEX, EAC, etc.

HORIZONTAL PLOUGH AND PADDLE MIXER

The table below refers to the standard performance of Horizontal Plough and Paddle Mixer.

The standard performance include following components:

Body shape: cylindrical

Shaft: single

Blades: ploughs or paddles

Material: EN 1.4301 or AISI 304

Surface: 2B (untreated)

Safety lock

Gear box

Engine

Body Volume	Batch Volume	Weight	Drive
liter	liter	kg	kW
500	150 - 350	600	11
1.000	300 - 700	1.100	22
2.000	600 - 1.400	3.000	45
3.000	900 - 2.100	3.500	45
5.000	1.500 - 3.500	5.000	55



HORIZONTAL RIBBON MIXER



THE CLASSIC ONE

HORIZONTAL RIBBON MIXER

PROCESS EFFICIENCY

Mixes: powder, granulates

Batch sizes: 500 - 20.000 liter

Useful filling degree: 40 - 70%

Mixing time: 20 - 30 min.

Cleaning time (including drying): > 45 min.

Cleanliness level in %: 70 - 80%

Compatible for choppers: no

Isimsan's Ribbon Mixer provides homogeneous and economically efficient mixing processes. They are suitable for damp and dry bulk goods. Animal oils, water and vegetable oils can be mixed without problems, but we recommend to avoid the use of molasses here.

The mixer consists of a Omega formed mixer body and a single shaft with double helix

blades. The blades move the mix in opposite directions. Thanks to the geometric design of the blender, a intensive and at the same time protective mixing process at low revolutions is achieved.

Applications: Food industry · Animal feed industry · Chemical industry



HORIZONTAL RIBBON MIXER

FEATURES

Body size: 0.5 - 20 m³

Body shape: Omega form

Shaft: single

Blades: double helix

Material: carbon steel, stainless steel, wear-resistant steel, duplex steel

Surface: 2B, painted, brushed, polished (Ra~0,2)

Safety lock

Gearbox: Yilmaz, Nord, Flanders, Bonfiglioli, Sew Eurodrive, etc.

Engines: ABB, Sew Eurodrive, Gamak, Siemens, Nord, Weg, etc.

OPTIONS

- Sampling valves
- Mechanical seals
- Heating and cooling jackets
- Liquid dosing systems
- Various automation sensors
- Support frames and platforms
- Speed controls
- Remote controls
- Weighing systems
- Filling systems
- Cleaning equipment
- Electrical panels
- CE, ATEX, EAC, etc.



HORIZONTAL RIBBON MIXER

The table below refers to the standard performance of Horizontal Ribbon Mixer. The standard performance include following components:

- Body shape:** U form
Shaft: single
Blades: double helix
- Material:** EN 1.4301 or AISI304
Surface: 2B (untreated)
- Safety lock**
Gear box
Engine

Body Volume	Batch Volume	Weight	Rotation	Drive
liter	liter	kg	Rpm	kW
500	200 - 350	600	41	4
1.000	400 - 700	1.050	43	7,5
2.000	800 - 1.400	2.950	35	22
3.000	1.200 - 2.100	3.300	35	22
5.000	2.000 - 3.500	4.800	29	30



VERTICAL HELIX MIXER



THE PHENOMENAL ONE

VERTICAL HELIX MIXER

PROCESS EFFICIENCY

Mixes: powder, granulates,

paste like products

Batch sizes: 300 - 40.000 liter

Useful filling degree: 10 - 80%

Mixing time: ~ 5 min.

Cleaning time (including drying): ~ 15 min.

Cleanliness level in %: ~98%

Compatible for choppers: yes

The vertical helix mixer meets highest requirements. The mixer is suitable for the processing of powder products, wet goods and pastes in various designs and dimensions. Considering very high hygiene standards the mixer provides excellent mixes, short mixing times and large batches.

The vertical mixing tool runs at a variable speed. The mix is at the outer end of the mixing chamber conveyed upwardly and from there in the center of the container again into a downward flow. The material to be mixed are thereby three-dimensionally reshaped.

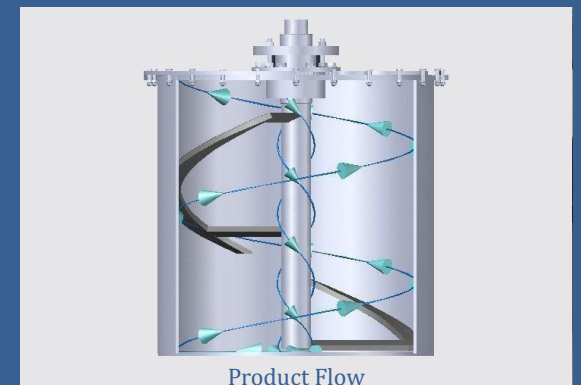
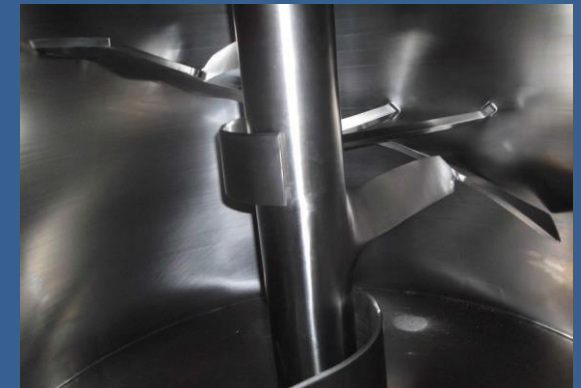
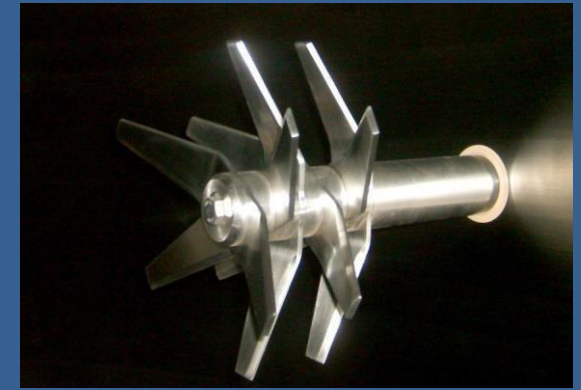
The mixing chamber is made of stainless steel. A laterally inserted door allows inspection and cleaning. Pneumatically opening outlets are located on the bottom. The mixing shaft is only supported on the top. There are no sealing elements in the mixing area.

The criteria for selecting the right design are far beyond purely functional. Vertical mixers are designed according to customer requirements in order to provide highest hygiene standards, easy cleanability and to apply manufacturing options in different specifications.

Applications: Food industry · Animal feed industry · Chemical industry · Building material industry

· Pharmaceutical industry

SMALL BATCH SIZES: TESTS FOR FREE!



VERTICAL HELIX MIXER

FEATURES

Body size: 0.3 - 40m³

Body shape: cylindrical

Shaft: single

Blades: single helix

Material: stainless

steel, nickel alloy

Surface: 2B, brushed, polished (Ra~0,2)

Safety lock

Gearbox: Yilmaz, Nord, Flanders, Bonfiglioli, Sew Eurodrive, etc.

Engines: ABB, Sew Eurodrive, Gamak, Siemens, Nord, Weg, etc.

Mechanic seals: Eagle

Burgmann, Chesterton, etc.

OPTIONS

- Sample sampling valves
- Eyeglasses with lightings
- Second inspection doors
- Heating & cooling jackets
- High speed cutting rotors
- Liquid dosing nozzles
- Mixing container in single or double-walled designs (depending on process)
- Various automation sensors
- Constructions for vacuum and pressure processes
- Frames and platforms
- Frequency controls
- Remote controls
- Cleaning equipments
- Electrical panels
- CE, ATEX, EAC, etc.



VERTICAL HELIX MIXER

The table below refers to the standard performance of Vertical Helix Mixers. The standard performance include following components:

Bodyshape: cylindrical

Shaft: single

Blades: single helix

Material: EN 1.4301 or AISI 304

Surface: 2B (untreated)

Safety lock

Pneumatic discharge covers

Gear box

Engine

Body Volume	Batch Volume	Weight	Rotation	Drive
liter	liter	kg	Rpm	kW
300	30 - 240	720	19-75	5-15
500	50 - 400	1.200	15-60	7-30
1.000	100 - 800	2.000	13-50	15-50
2.000	200 - 1.600	4.000	10-40	20-80
5.000	500 - 4.000	5.840	8-30	35-140
8.000	800 - 6.400	7.600	6-25	50-180
10.000	1.000 - 8.000	8.800	6-23	55-210
15.000	1.500 - 12.000	12.000	5-20	70-260
20.000	2.000 - 16.000	16.000	5-18	80-300
30.000	3.000 - 24.000	25.000	4-15	100-380
40.000	4.000 - 32.000	33.600	4-14	120-440



Quality assurance for absolute reliability

Safety and quality is our utmost priority. At Isimsan, you rely on continuous quality controls and on extensive external certifications, that often go beyond legal requirements.

Both, during the production process and after its completion, all the machines we realize are extensively examined

for the long life and absolute safety of your production technology.

Isimsan's engineering solutions meet the highest requirements, and they are certified according the guidelines and regulations of leading international standards.



Quality
Management



Environmental
Standards



Welding Technology
and Supervision
(ISO 3834 & 14731)



Hygiene Guidelines



CE 2006/42/EC
CE 2014/29/EU
CE 2014/68/EU



ATEX Product Line
2014/34/EU



U.S. Food and Drug
Administration



Gulf Cooperation
Council



EuroAsia
Conformity

Service

Your facilities must always be running. Otherwise, the damage occurred due to their downtime might cost a lot more than their purchasing prices. Aside from providing first class products to prevent this financial damage from happening, our authorized technical service is also well-disposed at your needs at all times.

We operate throughout the globe during the processes of assembling our facilities and their commissioning. We are training our clients in all the required fields, including operational inflows, how to execute correct

maintenances, and the safe utilization of controller technology. We provide original spare parts, trouble shooting supervisions, and maintenance services, and we arrange the transport for products by our well named international carrier partner "DB SCHENKER". Our global sales representatives and service partners enable us to react quickly and flexibly to your needs.

We are there for you.



CONSULTANCIES & PILOTING

TRAINING



TESTINGS

MAINTENANCES, INSPECTIONS & REPAIRS



TRANSPORTS

ORIGINAL WEAR & SPARE PARTS



ASSEMBLIES, COMMISSIONINGS

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