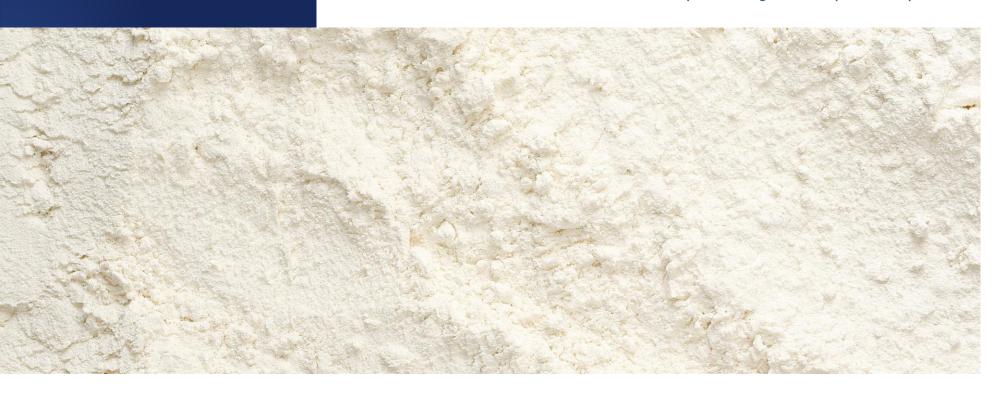
# **SOLID MIXERS**

for powder - granules - paste like products



MESSER & PLANT ENGINESSING

# 35 years 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





# **C**ontent

Process Efficiencies

Horizontal Plough and Paddle Mixer	5-8	
Horizontal Ribbon Mixer	9-12	
Vertical Helix Mixer	13-16	
Company Certificates		1
Services		18
Contacts		19

# 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.	>45 min.	~ 15 min.
Cleanliness level in %:	80-90%	70-80%	~98%
Compatible for choppers:	yes	no	yes



THE STRONG AND GENTLE ONE

### PROCESS EFFICIENCY

Mixes: powder, granulates,

paste like products

**Batch sizes:** 500 - 20.000 liter **Useful filling degree:** 30 - 70%

Mixingtime: 15-20 min.

Cleaning time (including drying):  $\sim 30 \text{ min.}$ 

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.







 $\textbf{Applications:} \ Food\ industry \cdot Animal\ feed\ industry \cdot Chemical\ industry \cdot Building\ material\ industry$ 

### **FEATURES**

**Body size:**  $0.5 \text{ to } 20 \text{ m}^3$ Body shape: cylindrical

**Shaft:** single

**Blades:** ploughs, paddles, etc.

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

duplexsteel

Surface: 2B, painted,

brushed, polished (Ra~0,2)

Safety lock

Gear box: Yılmaz, 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.









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

The standard performance include following components:

Body shape: cylindrical

**Blades:** ploughs or paddles

Material: EN 1.4301 or AISI 304

**Shaft:** single

**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	





THE CLASSIC ONE

#### 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

Isimsans 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 recommended to avoid the use of molasses here.

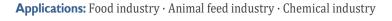
The mixer consists of a Omega formed mixer body and a single shaft with double helix

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.











### **FEATURES**

**Body size:** 0.5 to 20 m<sup>3</sup> **Body shape:** Omega form

**Shaft:** single

Blades: double helix

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

duplexsteel

Surface: 2B, painted,

brushed, polished (Ra~0,2)

Safety lock

Gear box: Yılmaz, 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
- Fillingsystems

- Cleaning equipment
- Electrical panels
- CE, ATEX, EAC, etc.

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

**Body shape:** U form

Material: EN 1.4301 or AISI 304

**Shaft:** single

**Surface:** 2B (untreated)

Safety lock Gear box Engine

**Blades:** double helix

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





THE PHENOMENAL ONE

### PROCESS EFFICIENCY

Mixes: powder, granulates,

paste like products

**Batch sizes:** 300 - 40.000 liter Useful filling degree: 10 - 80% **Mixing time:**  $\sim 5$  min.

Cleaning time (including drying):  $\sim 15 \text{ min.}$ 

Cleanliness level in %:  $\sim 98\%$ 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.

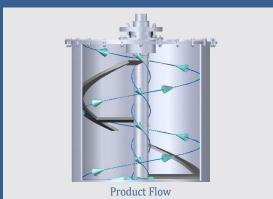
The criteria for selecting the right design are far beyond purely functional. Vertical mixers are designed according to customer requirements in order to provide highest hygiene standards, easy cleanability and to apply manufacturing options in different specifi

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

· Pharmaceutical industry









### **FEATURES**

**Body size:**  $0.3 \text{ to } 40 \text{ m}^3$ **Body shape:** cylindrical

**Shaft:** single

Blades: single helix

**Material:** stainless steel, nickel alloy Surface: 2B, brushed, pol-

ished ( $Ra \sim 0.2$ )

Safety lock

Gear box: Yılmaz, 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.

The table below refers to the standard performance of Vertical Helix Mixers.

The standard performance include following components:

Body shape: cylindrical

**Shaft:** single

**Blades:** single helix

Material: EN 1.4301 or AISI 304

**Surface:** 2B (untreated)

Pneumatic discharge covers Gear box **Engine** 

Safety lock

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 Comformity

## **Service**

Your facilities must always be running. Otherwise, the damage occured 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 need 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** 





**MAINTENANCES, INSPECTIONS & REPAIRS** 





**TRANSPORTS** 

ORIGINAL WEAR & SPARE PARTS





**ASSEMBLIES, COMMISSIONINGS** 

**SERVICE PACKAGES** 



#### **GLOBAL SALES REPRESENTATIVES**

#### **HEADQUARTER/TURKEY:**

GLOBAL ·HEAD OF SALES
ALEXANDER HEIZER ·+90 (0) 541 324 9157

alexanderheizer@isimsan.com.tr

#### **EUROPE:**

FRANCE ·BENELUX NOYAN JEAN ATIL ·+90 (0) 533 621 2902 sales@isimsan.com.tr

BALKAN
DANIELA MLADENOVIC ·+381621889995
sales@isimsan.com.tr

GERMANY · SWISS · AUSTRIA HORST KANTNER · +49 (0) 177 720 6520 sales@isimsan.com.tr

TURKEY
BAYCU TAYLAN ·+90 (0) 532 413 0323
sales@isimsan.com.tr

SPAIN ·PORTUGAL CLAUDIO KOWALSKI ·+34629442669

sales@isimsan.com.tr

ITALY ·RUSSIA ·UKRAINE
PIERLUIGI BRIGNOLI ·+39 338 697 6311
sales@isimsan.com.tr

#### **MIDDLE EAST:**

GULF STATES · JORDAN
YOUSEF SHREIM ·+971529333344
sales@isimsan.com.tr

**PAKISTAN ALEXANDER HEIZER +90 (0) 541 324 9157** 

sales@isimsan.com.tr

#### LATIN AMERICA:

ALEXANDER HEIZER ·+90 (0) 541 324 9157
ALL COUNTRIES
sales@isimsan.com.tr

#### **AFRICA:**

AFRICA (FRENCH LANGUAGE)
NOYAN JEAN ATIL ·+90 (0) 533 621 2902
sales@isimsan.com.tr

SOUTH AFRICA
CARL SPEIRS ·+27 (0) 833 046 478
sales@isimsan.com.tr

#### WORLDWIDE THERE FOR YOU

E-MAIL: sales@isimsan.com.tr

Ulucak Cumhuriyet Mah. 9081 Sok. No: 59 35735 Izmir / TURKEY +90 232 8770582 ·sales@isimsan.com.tr ·www.isimsan.com