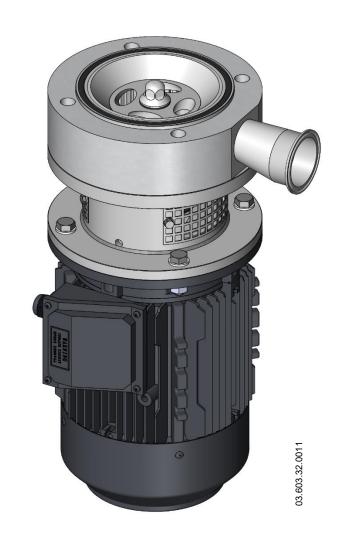
# TANK BOTTOM MIXER ME-6100 RE







#### **INOXPA S.A.U.**

Telers, 60 17820 - Banyoles (Spain)

hereby declare under our sole responsibility tha the

Machine: TANK BOTTOM MIXER

Model: ME-6100 RE

Type: ME-6103 RE, ME-6105 RE, ME-6110 RE,

ME-6125 RE, ME-6130 RE,

Serial number: IXXXXXXXX to IXXXXXXXX

XXXXXXXXIINXXX to XXXXXXXXIINXXX

fulfills all the relevant provisions of the following directive:

Machinery Directive 2006/42/EC

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment

Regulation (EC) nº 1935/2004 Regulation (EC) nº 2023/2006

and with the following harmonized standards and/or regulations:

EN ISO 12100:2010 EN 60204-1:2018 EN ISO 14159:2008

EN 1672-2:2005+A1:2009

EN IEC 63000:2018

The technical file has been prepared by the signer of this document.

David Reyero Brunet Technical Office Manager 14th October 2025

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Document: 03.603.30.03EN Revision: (A) 2025/10



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fulfils all the relevant provisions of these regulations:

Supply of Machinery (Safety) Regulations 2008
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (as amended)

and with the following designated standards:

EN ISO 12100:2010 EN 60204-1:2018 EN ISO 14159:2008

EN 1672-2:2005+A1:2009

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Document: 03.603.30.04EN Revision: (A) 2025/10

# 1. Índex

1.	ĺ	Índex	
2.	. (	Generalities	
	2.1	1. Instructions manual	5
	2.2	2. Compliance with the instructions	5
	2.3	3. Warranty	
3.		Safety	
	3.1	1. Warning symbols	6
	3.2	2. General safety instructions	6
4.	. (	General Information	
	4.1	1. Description	8
	4.2	2. Operating principle	8
	4.3	3. AplicatiOn	8
5.	ı	Installation	
	5.1	1. Reception of the mixer	9
	5.2	2. Identification of mixer	9
	5.3	3. Transport and storage	10
	5.4	4. Location	11
	5.5	5. Electrical installation	11
	5.6	6. Assembly	12
	5.7	7. Pressure vessel	12
6.		Start-up	
7.	. 1	Troubleshooting	
8.		Maintenance	
	8.1	1. General considerations	16
	8.2	2. Maintenance	16
	8.3	3. Lubrication	16
	8.4	4. Spare parts	16
	8.5	5. Conservation	16
	8.6	6. Disassembly and assembly of the mixer	16
9.	. 1	Technical Specifications	
	9.1	1. Materials	22
	9.2	2. Simple mechanical seal	22
	9.3	3. Double mechanical seal	22
	9.4	4. Motor	22
	9.5	5. Another specifications	22
	9.6	6. Dimensions	23
	9.7	7. Exploded drawing ME-6103/6105/6110 RE	24
	9.8	8. Exploded drawing ME-6125/6130 RE	26
	9.9	9. Exploded drawing ME-6103/6105/6110 RE double mechanical seal	28
	9.1	10. Exploded drawing ME-6125/6130 RE double mechanical seal	29
	9.1	11. Option drain	30

# 2. Generalities

#### 2.1. INSTRUCTIONS MANUAL

This manual contains information about the reception, installation, operation, assembly, disassembly and maintenance of the Tank Bottom Mixer ME-6100 RE.

Carefully read the instruction prior to starting the mixer, familiarize yourself with the installation, operation and correct use of the mixer and strictly follow the instructions. These instructions should be kept in a safe location near the installation area.

The information published in the instruction manual is based on updated data.

INOXPA reserves the right to modify this instruction manual without prior notice.

#### 2.2. COMPLIANCE WITH THE INSTRUCTIONS

Not following the instructions may impose a risk for the operators, the environment and the machine, and may result in the loss of the right to claim damages.

This non-compliance may result in the following risks:

- failure of important machine/plant functions.
- failure of specific maintenance and repair procedures.
- possible electrical, mechanical and chemical hazards.
- risk to the environment due to the type of substances released.

#### 2.3. WARRANTY

Any warranty will be void immediately and lawfully and, additionally, INOXPA will be compensated for any civil liability claims submitted by third parties, in the following cases:

- the service and maintenance work have not been carried out in accordance with the service instructions, the repairs have not been carried out by our personnel or have been carried out without our written authorisation.
- modifications have been carried out on our material or equipment without written authorisation.
- the parts or lubricants used are not original INOXPA parts and products.
- the material or equipment has been improperly used, has been used negligently, or has not been used according to the instructions and their intended.

The General Conditions of Delivery already in your possession are also applicable:



The machine may not undergo any modification without prior approval from the manufacturer.

For your safety, only use original spare parts and accessories.

The usage of other parts will relieve the manufacturer of any liability.

Changing the service conditions can only be carried out with prior written authorization from INOXPA.

Please do not hesitate to contact us in case of doubts or if further explanations are required regarding specific data (adjustments, assembly, disassembly, etc.).

# 3. Safety

#### 3.1. WARNING SYMBOLS



Safety hazard for people in general and/or for equipment



Electric hazard

**ATTENTION** 

Important instruction for the protection of the equipment and its functions

#### 3.2. GENERAL SAFETY INSTRUCTIONS



Read the instruction manual carefully before installing and starting the mixer. Contact INOXPA in case of doubt.

#### 3.2.1. DURING THE INSTALLATION

The Technical Specifications of chapter 9.



The installation and use of the mixer should always be in accordance with applicable regulations in regard to health and safety.

Before starting up the mixer, check that it is properly anchored and its shaft is perfectly aligned. Incorrect alignment and/or excessive stress during coupling can cause serious mechanical problems in the mixer.

Take all possible precautions when lifting the mixer. Always use properly attached slings when moving the mixer with a crane or other lifting device.

Keep the motor and the switchboard under control, particularly in areas where there is a risk of fire or explosion.

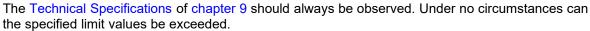


When cleaning, do not spray directly on the engine.

Do not disassemble the mixer until the switchboard has been disconnected. Remove the fuses and disconnect the power cable supplying the motor.

All electric work should be carried out by specialised personnel.

#### 3.2.2. DURING OPERATION





Before starting up the mixer, remove all the tools used during the assembly.

Do not open the tank while the mixer is in operation.

Do not operate the mixer when the rotating parts are not equipped with their guards or are not properly assembled.

If the mixer operates in an open bank, the safe distances of the moving parts should be in accordance with ISO 13857:2019.



The mixer has rotating parts. Do not place hands or fingers in the mixer while it is operating. This may cause serious injuries.

Do not touch the parts of the mixer that are in contact with the fluid when in operation. When the mixer operates with hot fluids (temperatures above 50°C), there is a risk of skin burning. In such cases, collective-protection means (in this order or priority: separation, protective screen, heat-insulating material) or, in the absence of this, individual protection gear (gloves) must be used.



The mixer and its installation can generate sound levels above 85 dB(A) under unfavourable operating conditions. In such cases, the operators must use devices for protection against noise.

#### 3.2.3. DURING MAINTENANCE





The mixer cannot operate without fluid. Standard mixer s are not designed to work during the filling or emptying of tanks.

The maximum operating conditions of the mixer should not be exceeded. Nor should the operating parameters for which the mixer was initially designed be modified without written authorisations from INOXPA.



Do not leave loose parts on the floor.

Do not disassemble the mixer until the switchboard has been disconnected. Remove the fuses and disconnect the power cable supplying the motor.

All the electric work should be carried out by specialised personnel.

# 4. General Information

#### 4.1. DESCRIPTION

The size ME-6100 RE is high-shearing tank-bottom mixers

In the big size mixer has been designed so that the mechanical seal is accessible from inside the tank. As such, whenever it is necessary to change the seal, there is no need to detach the mixer from the tank. This range can be used in both open and closed tanks at atmospheric pressure or operating under pressure or in vacuum. They are especially suitable for work in conjunction with anchor-type agitators.

#### 4.2. OPERATING PRINCIPLE

- The impeller sucks the fluid through the holes at the top.
- Once this suction is completed, the fluid reaches the impeller blades and this push it towards the stator where it is sheared.
- The fluid is expelled radially through the stator slots at high speed, and it is driven towards the discharge side of the mixer, where it returns to the top of the tank, thus recirculating the product.

#### 4.3. APLICATION

Bottom mixers are suitable for particle-reduction processes, dissolution, dispersion, and emulsion. Given their hygienic design, these mixers are suitable for industries as demanding as cosmetics, foodstuffs, and pharmaceutics. They can also be used in other types of industries such as adhesives, chemicals, paints, and plastics.



Each mixer has performance limits. The mixer was selected for a given set of mixing conditions when the order was placed. INOXPA shall not be held responsible for any damage that might be suffered or malfunctioning of the equipment of the information provided by the buyer is incomplete or incorrect (e. g. nature of the fluids or installation details).

# 5. Installation

#### 5.1. RECEPTION OF THE MIXER



INOXPA is not liable for any deterioration of the material caused by its transport or unpacking. Visually check that the packaging has not been damaged.



If the mixer is supplied without a drive or other element, the purchaser shall be responsible for its assembly, installation, start-up and operation.

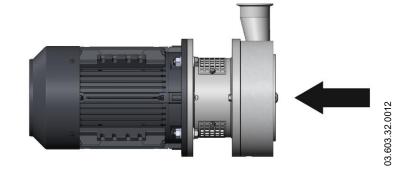
When receiving the mixer, check the packaging and its content to ensure that it matches the delivery note. INOXPA packs the mixer in their fully assembled form or disassembled on a case-by-case basis. Ensure that the mixer has not been damaged in any way. If it is not in good conditions and/or any parts are missing, the carrier must submit a report as soon as possible.

The following documentation is included with the mixer:

- Shipping documents.
- Instructions and Servicing manual for the mixer.
- Instructions and Servicing manual for the motor when the mixer is supplied with a motor by INOXPA.

Unpack the mixer and check the following:

- The mixer stator and rotor, removing any remaining packaging material.
- Check that the mixer and motor have not suffered any damage.
- If not in good material condition and/or if not all the parts are included, the shipping carrier should submit a report as soon as possible.



#### 5.2. IDENTIFICATION OF MIXER

The mixer is identified using a rating plate fixed onto the motor. The type of mixer and the serial number appear on the nameplate.



ME-	6100	RE		
		Тур	е	
		RE	Recirculation	
	Size			
	6103			
	6105			
	6110			
	6125			
	6130			
Head	Head assembly			
ME	MIXER en	nulsif	fier	

## **5.3. TRANSPORT AND STORAGE**





According to the model, the mixer s are too heavy to be stored or installed manually. Use an appropriate mode of transport. Do not handle the mixer by the shaft as this may become deformed.





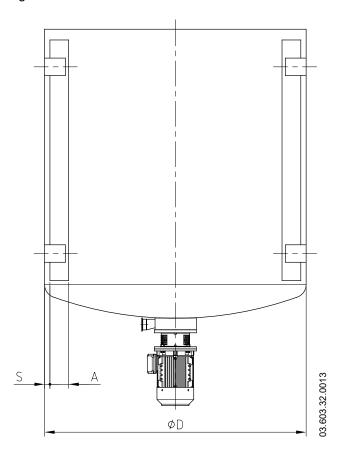
Take all possible precautions when lifting the mixer. Always use properly attached slings when moving the mixer with a crane or other lifting device.

If the mixer is not to be installed immediately, it must be stored in an appropriate place. The shaft must be stored in a horizontal position and placed on wooden supports or for a similar material. In this position, the shaft will not becoming deformed but it must not be subject to any type of load.

#### 5.4. LOCATION

Place the mixer in such a way as to facilitate inspections and checks. Leave enough room around the mixer for service, disassembly and maintenance operations. It is very important to be able to access the electric connection device of the mixer, even when in operation.

For a good mixing process, it may be necessary to place a deflector in the tank. Ask our Technical Department for information on any particular application. If required, the approximate dimensions for the deflector for different tank diameter are shown in the next figures and the next table:



Ø D	300	400	500	600	800	1000	1200	1600	2000	2500	3000	3500	4000
A	20	30	35	40	50	70	80	115	130	180	200	240	280
S	5	5	10	10	10	15	20	20	30	30	50	50	50



If the mixer operates in an open bank, the safe distances of the moving parts should be in accordance with ISO 13857:2019.

#### 5.5. ELECTRICAL INSTALLATION

Before connecting the electrical motor to the mains, check local regulations on electrical safety as well as the applicable standards.

Check the instructions manual of the manufacturer of the motor for information on how to connect it to the mains.



Take the connection of the electrical motors must be performed by qualified personnel.

Take the appropriate measures to prevent any fault.

The motor must be provided with devices for protection against power overload and short-circuits.

The mixer cannot be used in areas where there is a risk of fire or explosion when this has not been specified in the order.

#### 5.6. ASSEMBLY

- Place and assemble the mixer at the bottom of the tank ensuring that the O-ring is fitted.
- Once placed on the tank flange, place the screws and washers in their corresponding bore holes and fasten them tightly.
- Make sure that the order components of the installation are prepared and ready for start-up of the mixer.

#### 5.7. PRESSURE VESSEL

Fort the models with double mechanical seals, it is necessary to install a pressure vessel.

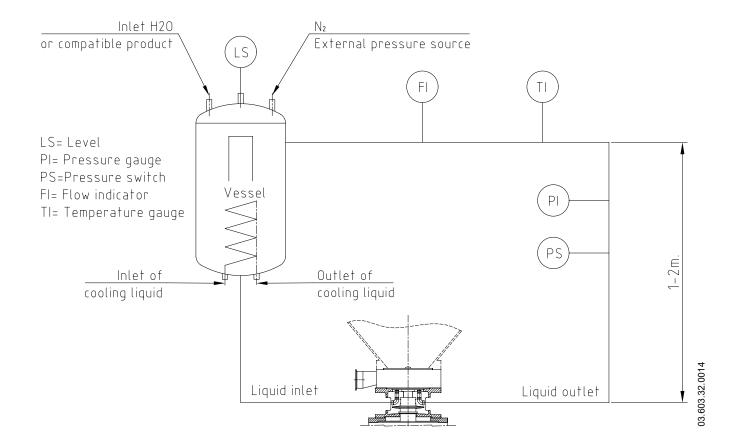
## **ATTENTION**



ALWAYS install the pressure vessel at a height from 1 to 2 meters above the inlet and outlet of the seal

ALWAYS supply the flushing liquid through the lower connection of the seal chamber.

Thus, the flushing liquid will be discharged through the upper connection.



# 6. Start-up



The start-up of the mixer can be carried out provide the instructions indicated in the chapter 5. Installation have been followed.

Never touch pipes or the mixer when hot fluids are circulating.

Do not operate the mixer when the rotating parts are not equipped with their guards or are not properly assembled.

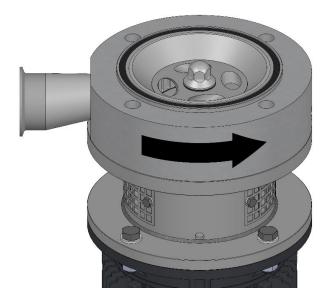
- Check that the power supply matches the rating indicated on the motor plate.
- Check the level of fluid in the tank. When not specified in the order, the mixer cannot be operated during the filling or emptying of the tank.
- Check that the mechanical seal is in the condition required to operate properly (see technical specifications).



#### **ATTENTION**

The mixer can NEVER operate without fluid.

- All the guards must be in place.
- The performance of the mixer-emulsifier depends on the viscosity of the fluid being mixed. To properly
  operate the equipment, follow this loading procedure:
  - 1. Pour all the low-viscosity components inside the vessel.
  - 2. Start up the mixer.
  - 3. Check that the direction of rotation of the propellers is correct (it must rotate clockwise when see form the drive side). See the next figure:
  - 4. Add the remaining fluid or soluble components.
  - 5. Add any solids that require to be cut or a predetermined time for reaction.
  - 6. Add the remaining components, including solids to stabilize the preparation or to increase viscosity.



03.603.32.0015



Follow the direction of rotation of the mixer components as indicated by the arrow attached to the engine. An incorrect direction of rotations results in a loss of mixing performance.

Check the electrical consumption of the motor.

## **ATTENTION**



Do not modify the operating parameters for which the mixer was initially designed without written authorisation from INOXPA (risk of damage and user hazard).

Follow the instructions for use and the safety requirements described in the instruction manual for the tank in which the mixer is mounted.

Mechanical risk (e.g. drag, shear, cutting, impact, flattening and pinching). If the mixer element is accessible from the top or the tank inspections hatch, then the user will be exposed to the abovementioned risks.

The tank must be fitted with protective devices and safety equipment. Consult the manufacturer's instructions manual



#### **ATTENTION**



Introducing an object or solid raw material may cause the mixer and other mechanical parts to break and compromise its safety or guarantee.

# 7. Troubleshooting

The attached table lists solutions to problems that may arise while operating the mixer. It is assumed that the mixer has been properly installed and that is has been selected correctly for the specific application. Contact INOXPA if technical assistance is required.

Mot	Notor overload								
Û	Insu	sufficient mixing							
	Û	Vibrations and noise							
		Û	Lea	ks					
			Û	PROBABLE CAUSES	SOLUTIONS				
•	•			Viscosity of the liquid too high	Reduce the viscosity, e.g. by heating the liquid				
•				High density	Increase motor power				
•	•	•		Tank too big for the chosen mixer	Check with the technical department				
	•	Wrong direction of rotati		Wrong direction of rotation	Change direction of rotation				
	•			Mixer speed too low	Increase the speed				
		•		Liquid level insufficient or none	Check liquid level in the tank				
		•		Shaft bended	Replace the shaft				
•		•		Worm bearings to motor.	Replace the bearings mixer				
			•	Seal damaged or worn	If the lip seal is worn, replace it. If the mechanical seal is damaged, consult the technical department.				
		•		The impeller rubs	Decrease the temperature.				
			•	Damaged O-ring	Replace the V-ring				



If the problems persist stop using the mixer immediately. Contact the mixer manufacturer or the representative.

# 8. Maintenance

#### 8.1. GENERAL CONSIDERATIONS

This mixer, just like any other machine, requires maintenance. The instructions contained in this manual cover the identification and replacement of spare parts. The instructions are aimed at maintenance personnel and those responsible for the supply of spare parts.

Carefully read chapter 9. Technical Specifications.



Maintenance work can only be carried out by qualified personnel that are trained and equipped with the necessary resources to carrying out this work.

Before beginning maintenance work, ensure that the electric motor is disconnected and that the tank is empty.

All parts or Materials that are replaced must be properly disposed of/recycled in accordance with the current directives applicable in each area.



Before beginning maintenance work, ensure that the mixer is disconnected.



The symbol indicates that the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.

#### 8.2. MAINTENANCE

- Inspect the mixer regularly.
- Do not fail to keep the mixer clean.
- · Check the state of the motor.
- Check the state of the bearings.
- Check the sealing: mechanical seal.

The time interval between each preventive maintenance may vary in accordance with the work conditions Motor maintenance shall be carried out in accordance with the manufacturer's instructions, see the instructions manual.

#### 8.3. LUBRICATION

The lubrication of the bearings of the motor or the gear motor will be carried out according to the manufacturer's instructions.

#### **8.4. SPARE PARTS**

To order spare parts it is necessary to indicate the type and serial number included on the mixer's characteristics plate, as well as the position and description of the part as found in chapter 9. Technical Specifications.

#### 8.5. CONSERVATION

If the mixer is out of service for a considerable period of time, clean and treat the parts with VG46 mineral oil. The shaft must be stored in the horizontal position and on wooden supports or on supports of a similar material.

#### 8.6. DISASSEMBLY AND ASSEMBLY OF THE MIXER



The disassembly and assembly of the mixer's should only be carried out by qualified personnel using only appropriate tools. Ensure that staff read these instructions manual attentively, particularly the instructions that relate to their work.



Stop the motor from starting up when carrying out assembly and disassembly work on the mixer. Place the mixer switch in the "off" position.

Lock out the electrical switchboard or place a warning sign.

Remove the fuses and take them to the workplace.

#### 8.6.1. DISASSEMBLY OF THE MIXER

- Empty the tank.
- Disconnect the cables from the motor terminals.
- Remove the protector (47) by taking out the screws (50).
- Disconnect the pressure vessel if there is.
- Enter the tank through the inspection hatch if possible. If not, detach the equipment from its location. In the latter case, remove the screws and washers fastening the mixer to the tank. This process must be carried out using a pallet truck in order to support the mixer and move it. Take care to ensure that the mixer is supported by the lantern/motor connection part for better stability and to prevent it from falling.
- Remove the O-rings (80E) from the mixer casing (01).
- Separate the mixer casing (01) from the lantern (04) by removing the screws (52C) and its washers (53C).
- Remove the stator (22) from the seal cover (03) by removing the Allen screws (51A), and then proceed to remove the O-rings (80A) and (80D).

#### 8.6.2. DISASSEMBLY SIMPLE MECHANICAL SEAL

- To remove the rotor (21), hold the shaft (05) with a spanner on the flats available on it, and use a pipe wrench to remove the nut (45) with a mallet blow in counter-clockwise direction; the O-ring (80B) will come out with the nut.
- In the following steps, take care not to knock or damage the simple mechanical seal.
- Now remove the rotating part of the rotor (21) and rotary part the simple mechanical seal (08).
- Remove the key (61) from the shaft (05).
- Remove the seal cover (03) by unscrewing the corresponding Allen screws (51). Remove the stationary part of the simple mechanical seal (08) together with its spring and pins (ME-6125/6130 RE), which is attached to the seal cover (03). (See figure 8.1 and 8.2)
- Remove the O-ring (80) from the seal cover (03). Loosen the studs (55) on the shaft (05) and separate it from the drive (93).
- Remove the splash ring (82) and the V-ring (81) from the shaft (05).

#### 8.6.3. DISASSEMBLY DOUBLE MECHANICAL SEAL

- Disconnect the fittings to the seal cover (03).
- To remove the rotor (21), hold the shaft (05) with a spanner on the flats available on it, and use a pipe wrench to remove the nut (45) with a mallet blow in counter-clockwise direction; the O-ring (80B) will come out with the nut.
- In the following steps, take care not to knock or damage the mechanical seal.
- Now remove the first rotating part of the rotor (21) first rotary part doble mechanical seal (08).
- Remove the key (61) from the shaft (05).
- Loosen and remove the inlet and outlet connections (92) of the cooling system from the seal cover (03).
- Remove the seal cover (03) by unscrewing the corresponding Allen screws (51). Remove the first stationary part of the double mechanical seal (08), which is attached to the seal cover (03).
- Remove the O-ring (80) from the seal cover (03).
- Loosen the studs (55) on the shaft (05) and separate it from the drive (93).
- The remaining parts of the double mechanical seal (08) will come out with the shaft. Remove the second stationary part of the double mechanical seal (08) together with its spring and pins (ME-6125/6130 RE), then loosen the studs (55A) on the sleeve seal (13) and remove the second rotating part of the doble mechanical seal (08) together with its O-ring (80C). (See figure 8.3 and 8.4)
- Remove the splash ring (82) and the V-ring (81) from the shaft (05).

#### 8.6.4. DISASSEMBLY DRIVE

- Finally, remove the motor (93) from the lantern (04) by removing the screws (52A) washers (53A) and nuts (54A).
- In the *ME-6125/6130 RE* remove from bottom lantern (04) the protector (47A) and special gasket (18).
- In the *ME-6125/6130 RE* finally, remove the base plate (42) and the countersunk screws (50A), washers (53) and nuts (54) from the lantern (04).

#### 8.6.5. ASSEMBLY DRIVE

- In the *ME-6125/6130 RE* place from the lantern (04) the base plate (42) and fix with the countersunk screws (50A), washers (53) and nuts (54).
- In the ME-6125/6130 RE place from bottom lantern (04) the protector (47A) and special gasket (18).
- Place the drive (93) in an upright position and fasten the lantern (04) assembly to the drive using the screws (52A), washers (53A) and corresponding nuts (54A).

#### 8.6.6. ASSEMBLY THE SHAFT

- Connect the shaft (05) to the drive (93).
- Check the assembly dimensions for the seal (see figure 8.1 to figure 8.5). Once checked, tighten the set screws (55) on the shaft (05).
- Place the V-ring (81) and slide it down until it rests on the lantern (04).
- Place the splash ring (82) over the shaft (05), as close as possible to its mounting position.

#### 8.6.7. ASSEMBLY SIMPLE MECHANICAL SEAL

- Place the O-ring (80) on the cover (03).
- Place the cover (03) to the lantern (04) using the Allen screws (51).
- Place the stationary part of the upper mechanical seal (08) together with its O-ring and its spring on the seal cover (03), making sure to align the notch with the pins on the cover (03). (See figure 8.1)
- In the ME-6125/6130 RE place the springs and pins in the cover (03). (See figure 8.2)
- Place the key (61) on the shaft (05).
- Install the rotating part of the simple mechanical seal (08) on the rotor (21), making sure to align the notches with the pins on the rotor.
- Secure the rotor (21) to the shaft (05) with the nut (45) and the corresponding O-ring (80B).
- Check the dimention between the impeller (21) and the cover (03). It is approximately 0.5 mm all the way around.

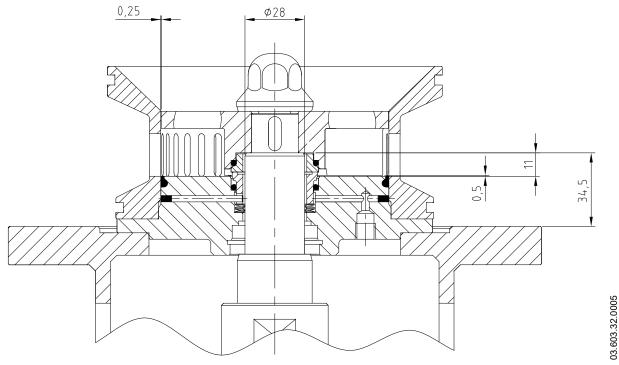


Figure 8.1 Assembly dimensions for size ME-6103/6105/6110 RE.

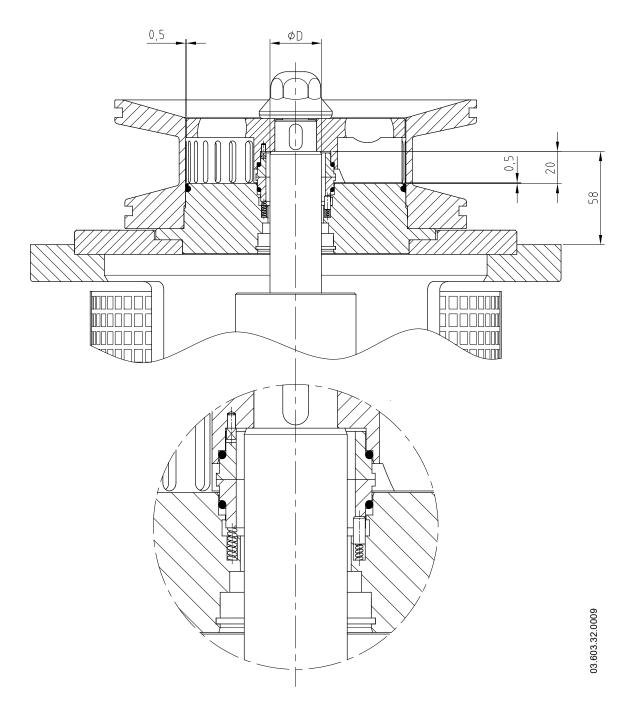


Figure 8.2 Detail springs and pins positions for size ME-6125/6130 RE.

Size	ØD
ME-6125 RE	Ø32
ME-6130 RE	Ø50

#### 8.6.8. ASSEMBLY DOUBLE MECHANICAL SEAL

- Fit the O-ring (80C) on the sleeve (13) and fasten this on the shaft (05) using the studs (55A).
- Place the second rotating lower part of the double mechanical seal (08) with its O-ring on the sleeve seal (13) by aligning the notch on the seal with the set screws (55A).
- Attach the cooling system connections (92) to the seal cover (03).
- Place the O-ring (80) on the cover (03).
- Place the O-ring, spring and stationary part of the bottom second mechanical seal (08) on the cover (03), making sure to align the notch on the seal with the pins on the cover (03). (See figure 8.3)
- In the ME-6125/6130 RE, place the O-ring, spring and pins positioners of second stationary part of the
  mechanical seal (08) on the seal cover (03), making sure to align the notch with springs positioners. (See
  figure 8.4)
- Attach the above assembly to the lantern (04) using the Allen screws (51).
- Place the first stationary part of the upper double mechanical seal (08) together with its O-ring on the seal cover (03), making sure to align the notch with the pins on the cover (03).
- In the ME-6125/6130 RE, place the stationary part of the first mechanical seal (08) together with its O-ring on the seal cover (03), making sure to align the notch with the springs and the pins positioners on the top of the cover seal (03).
- Place the key (61) on the shaft (05).
- Install the first rotating part of the double mechanical seal (08) on the rotor (21), making sure to align the notches with the pins on the rotor.
- Secure the rotor (21) to the shaft (05) with the nut (45) and the corresponding O-ring (80B).

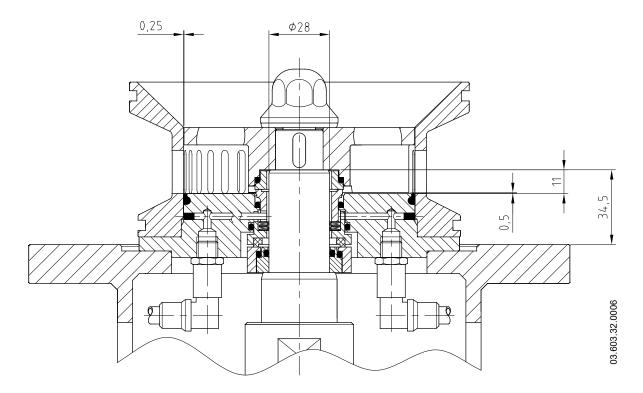


Figure 8.3 Assembly dimensions for doble mechanical seal the size ME-6103/6105/6110 RE.

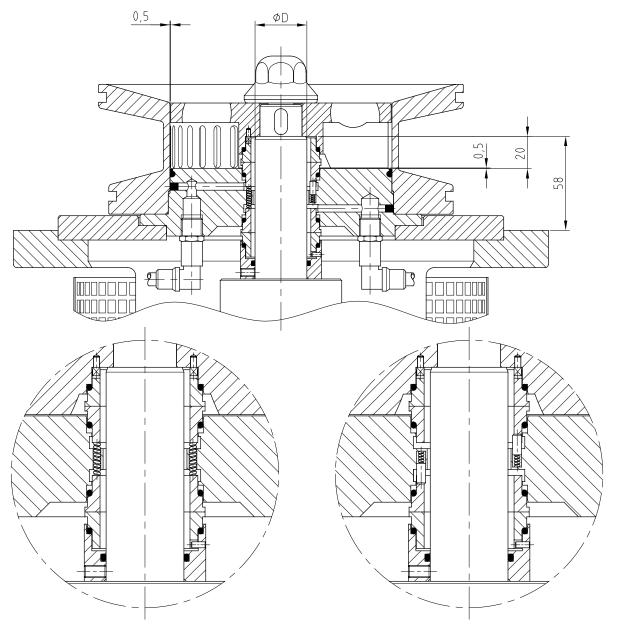


Figure 8.4 Detail springs for size ME-6125/6130 RE.

**Figure 8.5** Detail pins positioners for size ME-6125/6130 RE.

Size	ØD
ME-6125 RE	Ø32
ME-6130 RE	Ø50

## 8.6.9. ASSEMBLY THE MIXER

- Now, place the O-rings (80A) and (80D) on the stator (22) and fix this to the cover (03) using the Allen screws (51A).
- Place the O-ring (80E) on the casing (01) and attach this to the lantern (04) using the screws (52C) and its washers (53C).
- Install the mixer in its position on the tank. This process should be carried out with the help of a manual pallet truck, for both holding and moving the mixer. Make sure that the mixer is supported on the side of the lantern-motor connection in order to increase stability and prevent it from falling over.
- · Connect the cooling circuit.
- Install the lantern protection (47) and tighten the screws (50).
- Connect the cables to the motor terminals.

# 9. Technical Specifications

#### 9.1. MATERIALS

Parts in contact with the product 1.4404 (AISI 316L)
Other steel parts 1.4307 (AISI 304L)

Seals in contact with the product EPDM

Other materials for optional gaskets check with the supplier

Surface finish Ra  $\leq 0.8$ 

#### 9.2. SIMPLE MECHANICAL SEAL

Material stationary part Carbon (C)

Material Rotary part Silicon carbide (SiC)

Material V-ring NBR

#### 9.3. DOUBLE MECHANICAL SEAL

Material 1n stationary part

Material 1n rotary part

Silicon carbide (SiC)

Silicon carbide (SiC)

Material 2n stationary part

Silicon carbide (SiC)

Material 2n Rotary part

Seal coolant flow rate

2 - 4 I/min

Material V-ring

NBR

Maximum pressure of work 150 - 200 kPa (1,5 - 2 bar) above the mixer operating pressure

#### 9.4. MOTOR

Motor IE3 B5

Speed (rpm) 2 poles = 2900 rpm a 50Hz

4 poles = 1450 rpm a 50Hz

Protection IP55

Connection 3 ~, 50Hz, 220-240VΔ/380-420VY

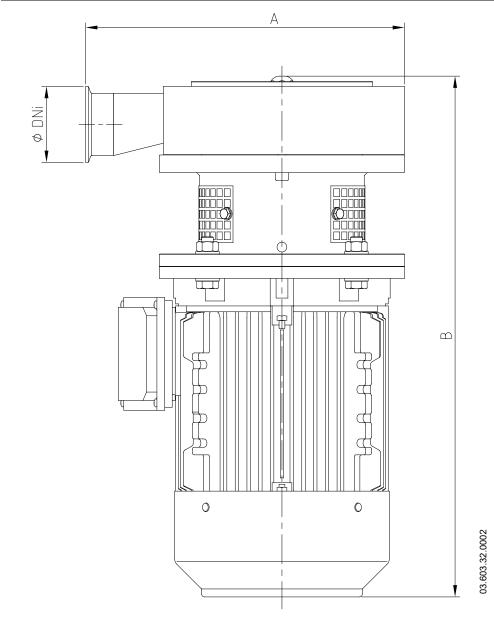
 $3 \sim$ , 50Hz,  $380-420V\Delta/660-690VY$ 

#### 9.5. ANOTHER SPECIFICATIONS

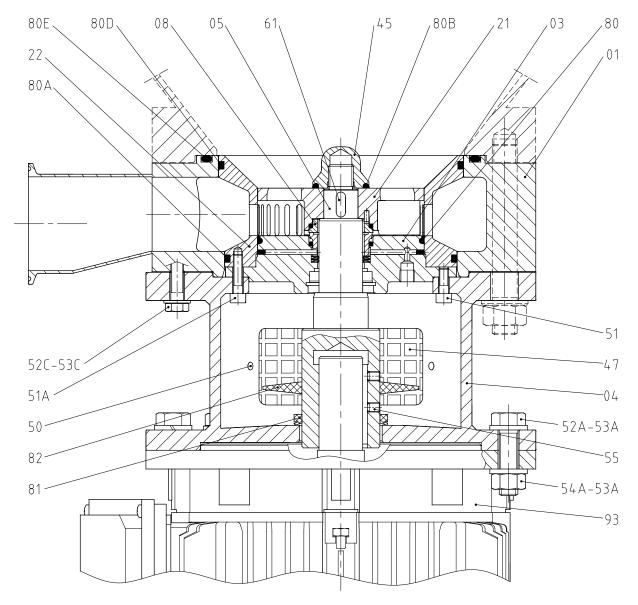
Type mixer	Power [kW]	Speed [rpm]	Weight [kg]
ME-6103 RE	2,2	3000	40
ME-6105 RE	4	3000	65
ME-6110 RE	7,5	3000	115
ME-6125 RE	18,5	3000	180
ME-6125 RE	22	3000	260
ME-6130 RE	22	1500	280

## 9.6. DIMENSIONS

Tuna minar	Dower Float	Dimensions [mm]			
Type mixer	Power [kW] —	Α	В	ØDNi	
ME-6103 RE	2,2	225	455	1 ½"	
ME-6105 RE	4	325	535	2 ½"	
ME-6110 RE	7,5	330	595	2 ½"	
ME-6125 RE	18,5	405	810	2 ½"	
ME-6125 RE	22	405	885	2 ½"	
ME-6130 RE	22	490	925	4"	



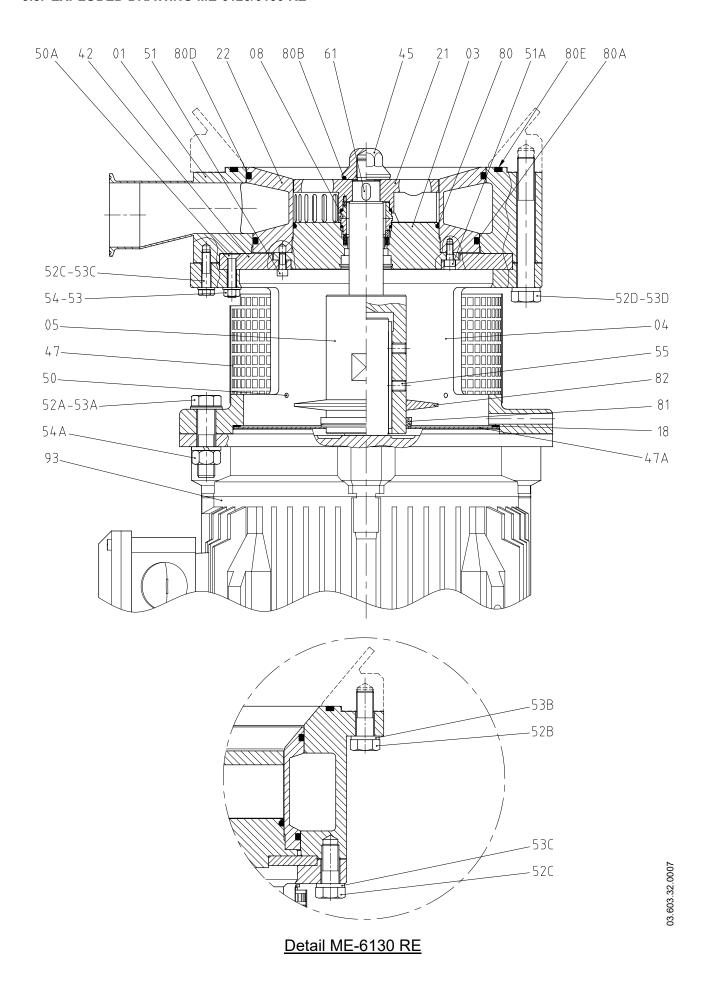
## 9.7. EXPLODED DRAWING ME-6103/6105/6110 RE



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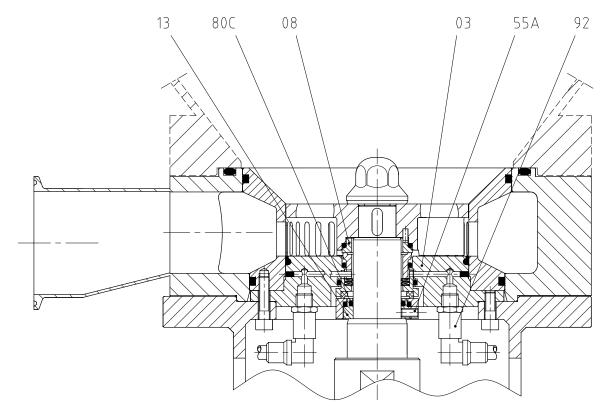
Position	Description	Quantity	Material
01	Mixer casing	01	1.4404 (AISI 316L)
03	Cover seal	01	1.4404 (AISI 316L)
04	Lantern	01	1.4307 (AISI 304L)
05	Shaft	01	1.4404 (AISI 316L)
08	Mechanical seal	01	-
21	Rotor	01	1.4404 (AISI 316L)
22	Stator	01	1.4404 (AISI 316L)
45	Blind nut	01	1.4404 (AISI 316L)
47	Lantern protection	02	1.4307 (AISI 304L)
50	Screw	04	A2
51	Screw	04	A2
51A	Screw	02	A2
52A	Screw	04	A2
52C	Screw	02	A2
53A	Flat washer	08	A2
53C	Flat washer	02	A2
54A	Nut	04	A2
55	Stud	02	A2
61	Key	01	1.4404 (AISI 316L)
80	O-ring	01	EPDM
80A	O-ring	01	EPDM
80B	O-ring	01	EPDM
80D	O-ring	01	EPDM
80E	O-ring	01	EPDM
81	V-ring	01	NBR
82	Splash ring	01	EPDM
93	Motor	01	-

#### 9.8. EXPLODED DRAWING ME-6125/6130 RE



Position	Description	Quantity	Material
01	Mixer casing	01	1.4404 (AISI 316L)
03	Cover seal	01	1.4404 (AISI 316L)
04	Lantern	01	1.4307 (AISI 304L)
05	Shaft	01	1.4404 (AISI 316L)
08	Mechanical seal	01	-
18	Special gasket	01	PTFE
21	Rotor	01	1.4404 (AISI 316L)
22	Stator	01	1.4404 (AISI 316L)
42	Base plate	01	1.4307 (AISI 304L)
45	Blind nut	01	1.4404 (AISI 316L)
47	Lantern protection	02	1.4301 (AISI 304)
47A	Protector	01	1.4307 (AISI 304L)
50	Screw	08	A2
50A	Screw	02	A2
51	Screw	04	A2
51A	Screw	02	A2
52A	Screw	04	A2
52B	Screw	08	A2
52C	Screw	04	A2
52D	Screw	08	A2
53	Flat washer	02	A2
53A	Flat washer	08	A2
53B	Flat washer	08	A2
53C	Flat washer	04	A2
53D	Flat washer	08	A2
54	Nut	04	A2
54A	Nut	02	A2
55	Stud	02	A2
61	Key	01	1.4404 (AISI 316L)
80	O-ring	01	EPDM
80A	O-ring	01	EPDM
80B	O-ring	01	EPDM
80D	O-ring	01	EPDM
80E	O-ring	01	EPDM
81	V-ring	01	NBR
82	Splash ring	01	EPDM
93	Motor	01	-

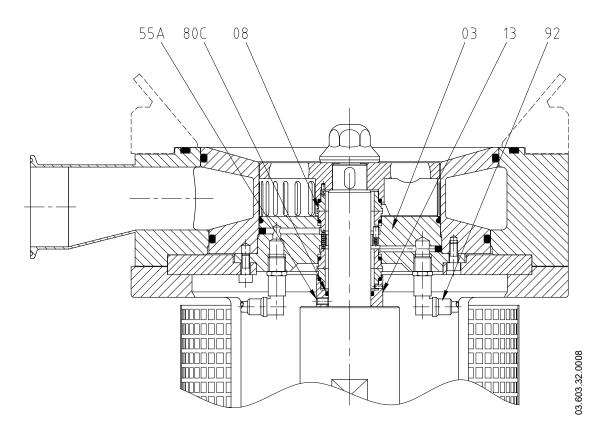
# 9.9. EXPLODED DRAWING ME-6103/6105/6110 RE DOUBLE MECHANICAL SEAL



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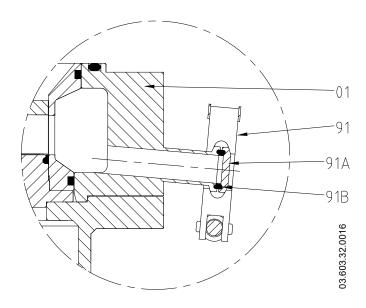
Position	Description	Quantity	Material
03	Cover double mechanical seal	1	1.4404 (AISI 316L)
08	Double mechanical seal	1	
13	Jacket double mechanical seal	1	1.4404 (AISI 316L)
55A	Stud	3	A2
80C	O-ring	1	EPDM
92	Fittings	2	-

## 9.10. EXPLODED DRAWING ME-6125/6130 RE DOUBLE MECHANICAL SEAL



Position	Description	Quantity	Material
03	Cover double mechanical seal	1	1.4404 (AISI 316L)
08	Double mechanical seal	1	-
13	Jacket double mechanical seal	1	1.4404 (AISI 316L)
55A	Stud	3	A2
80C	O-ring	1 EPDM	
92	Fittings	2	-

## 9.11. OPTION DRAIN



Position	Description	Quantity	Material
01	Mixer case	1	1.4404 (AISI 316L)
91	Heavy CLAMP	1	1.4307 (AISI 304L)
91A	Blind CLAMP ferrule	1	1.4404 (AISI 316L)
91B	O-ring	1	EPDM

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Please visit www.inoxpa.com to access the information.



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