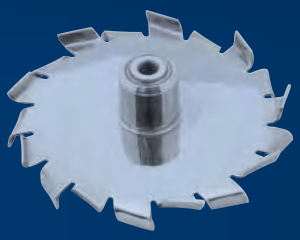
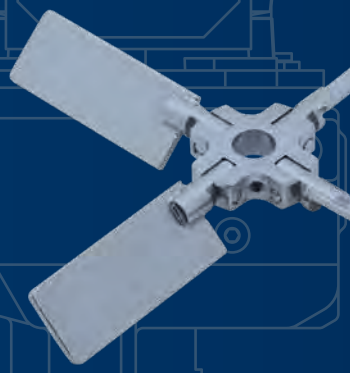
PRODUCT CATALOGUE





MADE IN GERMANY

GEPPERT
INNOVATIVE MIXING SOLUTIONS

CONTENTS

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GEPPERT RÜHRTECHNIK GMBH

Your experts in innovative agitator solutions

For over 45 years, Geppert Rührtechnik GmbH has stood for quality and reliability in agitator construction. We develop, manufacture, and distribute innovative agitators for all applications in the materials processing industries, such as, for instance, the chemical, pharmaceutical, biotechnological, paper and pulp, as well as food industries, and in water and wastewater treatment.

Our production in Erzhausen, Germany, is certified to quality management standard DIN EN ISO 9001.

Our skills and benefits at a glance

- We supply agitators for all applications in the materials processing industry
- From specification to test: everything is designed under one roof
- Versions with explosion protection to ATEX Directive 2014/34/EU
- Individually tailored solutions for specific customer requirements
- Over 45 years of experience in agitator construction and design
- More than 75,000 agitators supplied worldwide
- Numerous references from renowned customers worldwide
- Made in Germany

Our technology at a glance

- Drive ratings of up to 250 kW / 335 hp
- Shaft lengths of up to 30 meters / 98 feet
- Innovative mechanical seal program
- Wide range of stainless steels and special materials
- Application-specific coatings and surface qualities
- Comprehensive range of mixing elements with standard and special solution available

GEARED AGITATORS

We manufacture robust geared agitator solutions featured with helical geared, worm geared, parallel shaft geared, helical bevel geared as well as variable speed geared drives to match every application in the materials processing industries, such as, the chemical, pharmaceutical, biotechnological, paper and pulp industries, as well as in water and wastewater treatment.

GEPPERT
INNOVATIVE MIXING SOLUTIONS

GRS

Geared agitator with helical geared drive

The GRS geared agitator is equipped with a helical geared drive suited for a wide range of applications thanks to shaft lengths of up to 2,000 mm and drive ratings of up to 7.5 kW. The GRS series agitators have a standard output speed of 10 to 500 rpm.

The shaft mounting options available include sleeve coupling, flange coupling, quick-change coupling or precision-change coupling. The agitator shafts are balanced for concentric run after assembly of the mixer.

GRS equipped with pitched blade turbine

- Upon request, we supply the GRS series with frequency controlled drive.
- Depending on the specific mixing task, the GRS can be supplied with matching mixing elements and various seals.
- Type test certificate for explosive zone 0.

Technical data:

Product type [GRS]	Power [kW]	Speed [approx. rpm]	Shaft [d x L_{max} in mm]	Impeller [RO_{max}]	Height [approx. mm]	Flange dimensions [A/LK/Z; n x Ø S in mm]	Weight [approx. in kg]
GRS 300/0.25	0.25	300	20 x 1,200	250	450	140/115/95; 4 x 9	20
GRS 300/0.37	0.37	300	20 x 1,200	275	450	140/115/95; 4 x 9	22
GRS 300/0.55	0.55	300	20 x 1,200	300	500	140/115/95; 4 x 9	25
GRS 300/0.75	0.75	300	20 x 1,200	325	500	140/115/95; 4 x 9	27
GRS 300/1.1	1.1	300	25 x 1,200	350	550	160/130/110; 4 x 9	32
GRS 300/1.5	1.5	300	25 x 1,500	375	550	160/130/110; 4 x 9	35
GRS 300/2.2	2.2	300	30 x 1,800	400	650	200/165/130; 4 x 11	45
GRS 300/3.0	3	300	30 x 1,800	425	650	200/165/130; 4 x 11	50

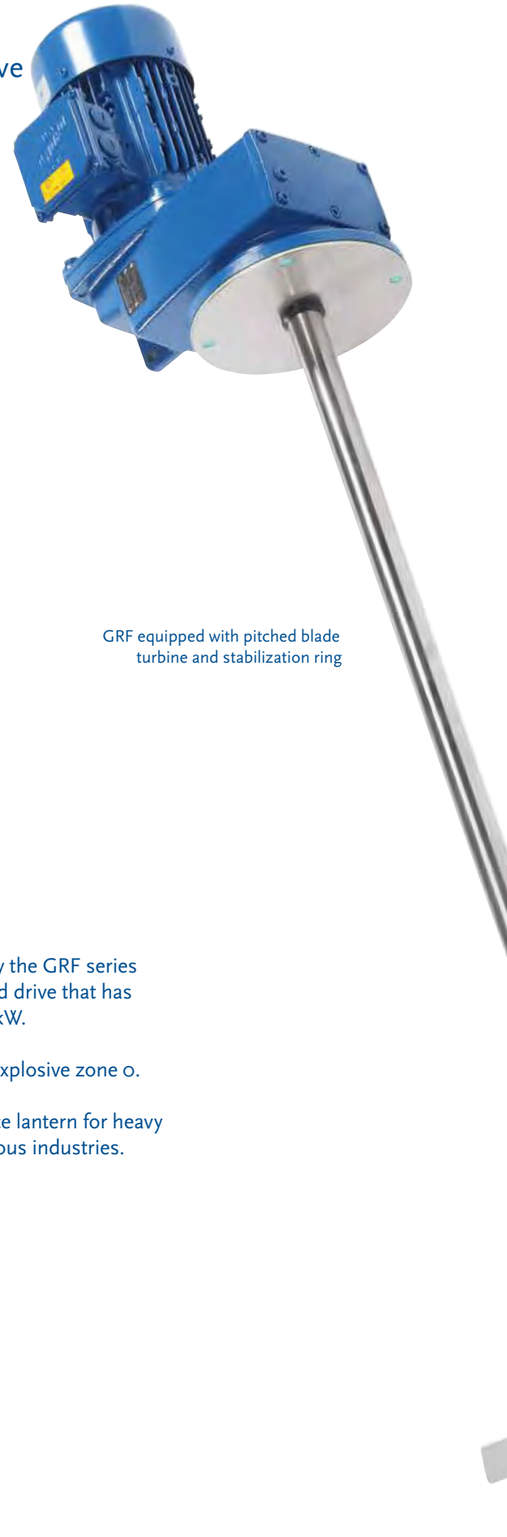
Other solutions for this series upon request.

GRF

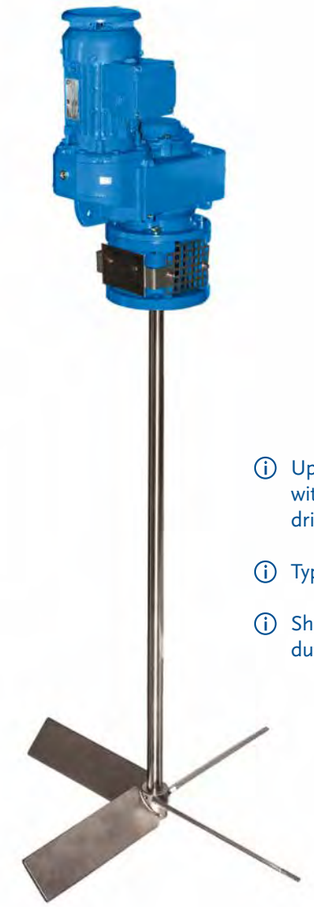
Geared agitator with parallel shaft geared drive

The agitator shaft of the GRF series geared agitator is directly mounted in the hollow shaft of the parallel shaft geared drive. Thus, no additional bearing housing is necessary. The gear bearings are adequately dimensioned and fully adapted to the requirements.

The GRF series is suited for a wide range of applications thanks to shaft lengths of up to 6,000 mm and drive ratings of up to 75.0 kW. It has a standard output speed of 1 to 400 rpm. The agitator shafts are balanced for concentric run after assembly of the mixer.



GRF equipped with pitched blade turbine and stabilization ring



GRF equippped with distance lantern for heavy duty applications in various industries

ⓘ Upon request, we supply the GRF series with frequency controlled drive that has drive ratings of up to 22kW.

ⓘ Type test certificate for explosive zone 0.

ⓘ Shown here with distance lantern for heavy duty applications in various industries.

Technical data:

Product type [GRF]	Power [kW]	Speed [approx. rpm]	Shaft [d x L_{max} in mm]	Impeller [RO_{max}]	Height [approx. mm]	Flange dimensions [A/LK/Z; n x Ø S in mm]	Weight [approx. in kg]
GRF 80/0.12	0.12	80	30 x 1,800	450	400	140/115/95; 4 x 9	25
GRF 80/0.25	0.25	80	30 x 1,800	550	400	140/115/95; 4 x 9	30
GRF 80/0.37	0.37	80	35 x 2,000	650	400	200/165/130; 4 x 11	40
GRF 80/0.55	0.55	80	35 x 2,000	700	415	200/165/130; 4 x 11	45
GRF 80/0.75	0.75	80	35 x 2,000	750	415	200/165/130; 4 x 11	48
GRF 80/1.1	1.10	80	40 x 2,400	800	480	250/215/180 ; 4 x 14	75
GRF 80/1.5	1.50	80	40 x 2,400	850	480	250/215/180; 4 x 14	80
GRF 80/2.2	2.20	80	50 x 3,000	900	560	250/215/180; 4 x 14	90
GRF 80/3.0	3.00	80	50 x 3,000	950	560	250/215/180; 4 x 14	95
GRF 80/4.0	4.00	80	60 x 3,600	1,000	600	300/265/230; 4 x 14	140
GRF 80/5.5	5.50	80	60 x 3,600	1,100	660	300/265/230; 4 x 14	160
GRF 80/7.5	7.50	80	70 x 4,200	1,200	700	350/300/250; 4 x 18	220
GRF 80/11.0	11.00	80	70 x 4,200	1,400	750	350/300/250; 4 x 18	260
GRF 200/0.12	0.12	200	30 x 1,800	300	400	140/115/95; 4 x 9	25
GRF 200/0.25	0.25	200	30 x 1,800	350	400	140/115/95; 4 x 9	30
GRF 200/0.37	0.37	200	35 x 2,000	350	400	200/165/130; 4 x 11	40
GRF 200/0.55	0.55	200	35 x 2,000	375	415	200/165/130; 4 x 11	45
GRF 200/0.75	0.75	200	35 x 2,000	400	415	200/165/130; 4 x 11	48
GRF 200/1.1	1.10	200	40 x 2,400	425	500	250/215/180; 4 x 14	75
GRF 200/1.5	1.50	200	40 x 2,400	450	500	250/215/180; 4 x 14	80
GRF 220/2.2	2.20	220	50 x 3,000	475	560	250/215/180; 4 x 14	90
GRF 220/3.0	3.00	220	50 x 3,000	500	560	250/215/180; 4 x 14	95
GRF 200/4.0	4.00	200	60 x 3,600	550	600	300/265/230; 4 x 14	140
GRF 200/5.5	5.50	200	60 x 3,600	600	680	300/265/230; 4 x 14	160
GRF 200/7.5	7.50	200	70 x 4,200	650	700	350/300/250; 4 x 18	200
GRF 200/11.0	11.00	200	70 x 4,200	750	750	350/300/250; 4 x 18	260

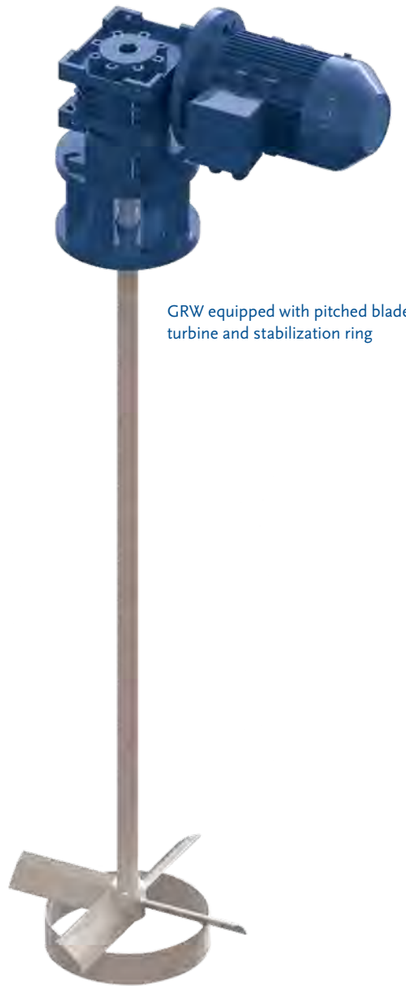
ⓘ Individually tailored solutions are technically possible up to max. 75 kW. Other shaft lengths for this series also upon request.

GRW

Geared agitator with worm geared drive

The GRW series is suited for a wide range of applications thanks to shaft lengths of up to 3,000 mm and drive ratings of up to 5.5 kW. It has a standard output speed of between 10 and 200 rpm. Low installation height thanks to horizontal position of the drive.

The agitator shaft of the GRW series geared agitator is directly mounted in the hollow shaft of the worm geared drive. Additional flanged or clamp couplings can be implemented upon request. The agitator shafts are balanced for concentric run after assembly of the mixer.



GRW equipped with pitched blade turbine and stabilization ring

ⓘ According to the specific mixing task, the GRW can be supplied with matching mixing elements and various seals.

ⓘ Upon request, we supply the GRW series with frequency controlled drives.

Technical data:

Product type [GRW]	Power [kW]	Speed [approx. rpm]	Shaft [d x L_{max} in mm]	Height [approx. mm]	Flange dimensions [A/LK/Z; n x Ø S in mm]	Weight [approx. in kg]
GRW .../0.12	0.12	30/40/70/140/200	20 x 1,200	150	110/87/60; 4 x 9	10
GRW .../0.37	0.37		30 x 1,800	170	180/150/115; 4 x 11	20
GRW .../0.55	0.55		30 x 1,800	200	180/150/115; 4 x 11	25
GRW .../0.75	0.75		30 x 1,800	200	180/150/115; 4 x 11	30
GRW .../1.5	1.50	35/70/140/200	40 x 2,400	250	210/176/152 ; 4 x 14	40
GRW .../2.2	2.20		40 x 2,400	300	280/230/170; 4 x 14	65
GRW .../3.0	3.00		40 x 2,400	300	280/230/170; 4 x 14	75
GRW .../4.0	4.00		50 x 3,000	350	320/255/180; 4 x 18	130
GRW .../5.5	5.50		50 x 3,000	350	320/255/180; 4 x 18	150

Other solutions for this series upon request.

GRK

Geared agitator with helical bevel geared drive

The GRK series geared agitator equipped with a helical bevel geared drive with reinforced bearing can be used for a wide range of applications due to its low installation height. This low installation height can be achieved thanks to horizontal position of the drive.

The agitator shaft of the GRK series is directly mounted in the hollow shaft of the gear and, upon request, this agitator shaft can be divided by flanged coupling. After assembly of the mixer, the agitator shafts are balanced for concentric run.

The GRK series features shaft lengths of up to 6,000 mm and drive ratings of up to 75.0 kW. It has a standard output speed of 0.1 to 250 rpm.

GRK equipped with pitched blade turbine and stabilization ring

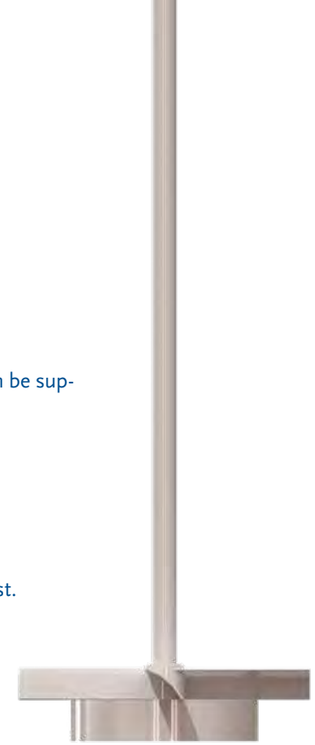
WE WILL BE HAPPY TO ASSIST YOU!

ⓘ According to the specific mixing task, the GRK series can be supplied with matching mixing elements and various seals.

ⓘ Upon request, we supply the GRK series with frequency controlled drives that have drive ratings of up to 22 kW.

ⓘ Type test certificate for explosive zone 0.

ⓘ Individually tailored solutions for this series upon request.



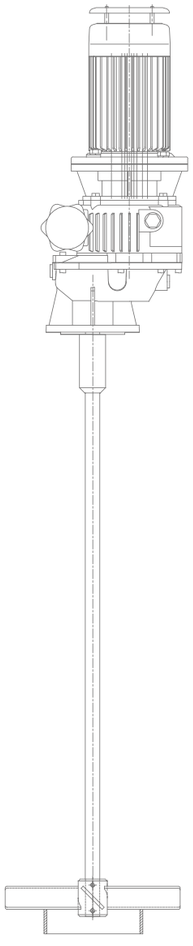
GRV

Geared agitator with variable speed gear unit

The GRV series can be used in versatile manner. It is equipped with a mechanically variable speed variation drive with drive ratings of up to 11.0 kW. Furthermore it can be supplied with geared drives that have a standard output speed of between 0 and 1,750 rpm.

The speed is adjustable with a hand wheel. The agitator shaft of the GRV series geared agitator is directly mounted on the shaft of the mechanical speed variator or with additional speed reduction (all before mentioned solutions possible).

The agitator shafts are balanced for concentric run after assembly of the mixer.



GRV equipped with pitched blade impeller

- ⓘ According to the specific mixing task, the GRV series can be supplied with matching mixing elements and various seals.
- ⓘ Solutions for this series upon request.
- ⓘ Individually tailored solutions.

MORE THAN 45 YEARS OF EXPERIENCE

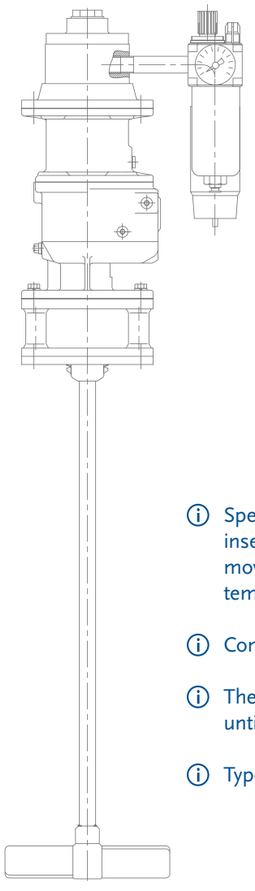
GRV equipped with propeller

GRP

Pneumatic agitator

The GRP is a pneumatic agitator equipped with either a helical geared drive or a worm geared drive. It is used for homogenizing, dispersing, emulsifying and suspending of low- and medium viscosity materials in small containers. The agitator shaft is directly mounted on the shaft journal.

Elastic operation, in other words: The speed of the agitator adapts to the viscosity of the media being mixed. Compact and easy-to-maintain construction as well as low weight allows an easy handling.



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- ⓘ Speed is sensitively and continuously adjustable, smooth start, insensitive to vapor, dust and smoke. Compressed air keeps all moving parts clean. Insensitive to heat, suitable for high ambient temperatures.
- ⓘ Compressed air expanding in the air engine cools the agitator drive.
- ⓘ The pneumatic agitators are explosion proof and overload proof until standstill.
- ⓘ Type test certificate for explosive zone 0.

Technical data:

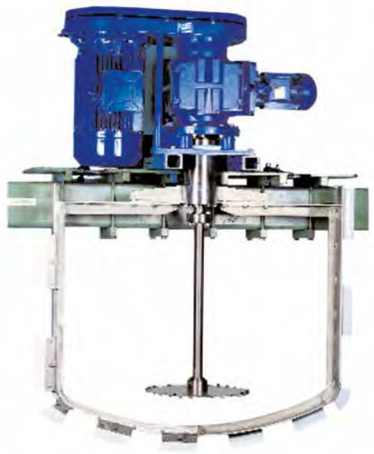
Product type [GRP]	Viscosity [max. m Pas]	Power [max. kW]	Power input [max. kW]	Speed [approx. rpm]	Compressed air supply [inch]	Shaft [d x L_{max} in mm]	Impeller [mm]	Height [approx. mm]	Flange dimensions [A/LK/Z; n x Ø S in mm]	Weight [approx. in kg]
GRP 600/1,0	5.000	1	0,5	60 – 600	1/4	25 x 1.200	200	280	160/130/110; 4 x 9	18
GRP 600/2,5	5.000	2,5	1,0	60 – 600	1/2	25 x 1.200	275	360	160/130/110; 4 x 9	28
GRP 400/1,0	2.000	1	0,5	40 – 400	1/4	30 x 1.200	200	280	160/130/110; 4 x 9	18
GRP 400/2,5	2.000	2,5	1,0	40 – 400	1/2	30 x 1.200	275	360	160/130/110; 4 x 9	28

Specification: Container volume 500 liters at 1 kW, 1.000 liters at 2,5 kW

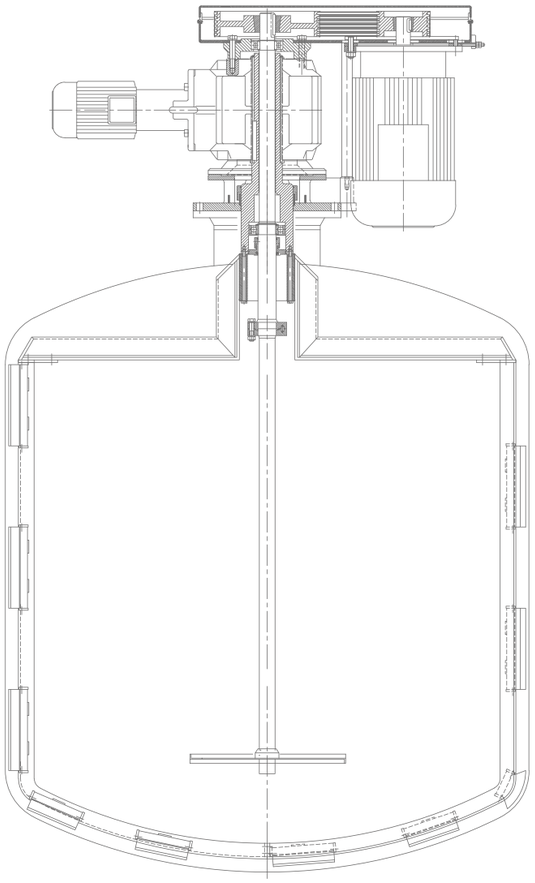
Other solutions for this series upon request.

KRK
Coaxial agitator

KRK coaxial agitator features two different impeller systems for parallel mixing. The KRK has two interdependent agitator shafts with a different number of revolutions that move in opposite directions. The faster agitator shaft is supported in the slower hallow shaft of the geared mixing unit.



KRK coaxial agitator with dissolver disc and anchor



- The KRK series is primary suitable for the dispersing of highly viscous media. The heat transfer is promoted.
- Explosion-proof series certified to ATEX Directive 2014/34/EU zone 0 and zone 1.
- Individually tailored solutions.

INDUSTRIAL AGITATORS

Industrial agitators are suitable for all applications in the materials processing industries. They are used in the chemical, pharmaceutical, biotechnological, paper and pulp industries, food industries as well as in water and wastewater treatment.

- Agitator shaft borne within robust bearing housing
- Highly versatile in application for shaft diameters of up to 130 mm
- Compatible with all common drives, seals and agitator elements
- Agitator shafts balanced for concentric run in our in-house test field

GEPPERT
INNOVATIVE MIXING SOLUTIONS

LRE
Simple top-entry agitator

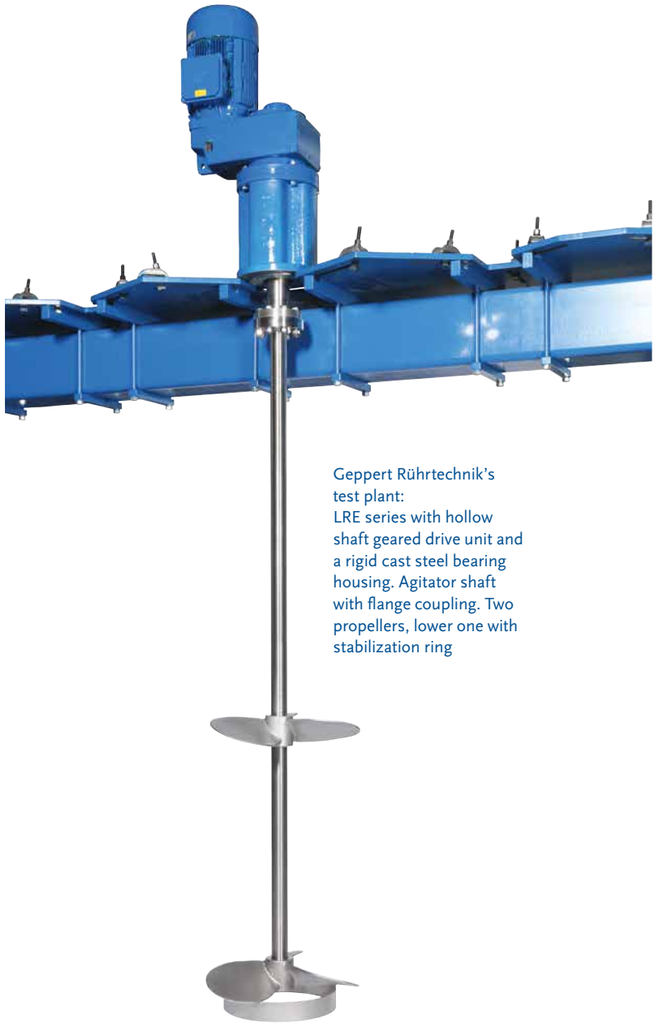
The LRE is the most simple solution of an industrial agitator. It consists of a hollow shaft geared drive (worm geared, parallel shaft geared or helical bevel geared drive) and a rigid cast steel bearing housing. Due to this construction high torques are achieved. The agitator shaft is borne within the gear box and the bearing housing and is divided by a flanged coupling below the mounting flange.

Drives with hallow shaft for LRE:

Parallel shaft geared drive unit

Helical bevel geared drive unit

Worm geared drive unit



Geppert Rührtechnik's test plant:
LRE series with hollow shaft geared drive unit and a rigid cast steel bearing housing. Agitator shaft with flange coupling. Two propellers, lower one with stabilization ring

- ⓘ According to your tank size, the LRE series agitator is available in four different frame sizes. Shaft diameters of 40 mm to 130 mm with lengths of up to 12,000 mm are realized.
- ⓘ Sealing housings supplied with shaft seals in various materials are feasible, stuffing boxes or mechanical seals are an alternative.
- ⓘ Explosion protection to ATEX 2014/34/EU for explosive zones 0 to 2 for gases and for explosive zones 20-22 for dusts (device group II, categories 1-3).
- ⓘ Equipment Protection Level (EPL) Ga,GB,Gc and Da, Db, Dc.

Technical data:

Product type [LRE (speed/power)]	Frame size	Flange dimensions [A/LK/Z; n x Ø S in mm]	Bearing shaft [d x L in mm]	Agitator shaft [d_{max} x L_{max} in mm]
LRE .../... – 1	1	200/165/130; 4 x 14	50 x 150	40 x 3,200
LRE .../... – 2	2	250/215/180; 4 x 18	70 x 200	60 x 4,800
LRE .../... – 3	3	350/300/250; 4 x 22	100 x 300	90 x 7,200
LRE .../... – 4	4	450/400/350; 4 x 26	140 x 300	130 x 12,000

Other solutions for this series upon request.

LRD
Top-entry sealed agitator

The LRD series top-entry sealed agitator can be used for mixing in closed containers with a mechanical seal. It is designed with a coupling housing. The agitator shaft is borne in the bearing housing and the mechanical seal (single- or double-acting). The seal can be exchanged without dismantling the mixer from the tank (also in case of a side entry).

- ⓘ Explosion protection to ATEX 2014/34/EU for explosive zones 0 to 2 for gases and for explosive zones 20-22 for dusts (device group II, categories 1-3).
- ⓘ Pharmaceutical version with FDA and GMP feasible.
- ⓘ According to the tank size, the LRD series agitator is available in four different frame sizes. Shaft diameters of 30 mm to 90 mm and shaft lengths of up to 10,500 mm are feasible.
- ⓘ Equipment Protection Level (EPL) Ga,GB,Gc and Da, Db, Dc.

LRD with double-acting mechanical seal and thermo-siphon system, helical gear and double screw bearing as well as flanged coupling

Drives with shaft journals for LRD series:

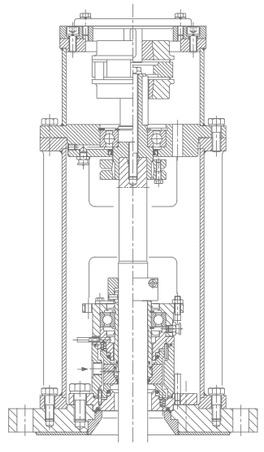
Three-phase motor

Helical geared drive unit

Parallel shaft geared drive unit

Variable speed geared drive unit

Helical bevel geared drive unit



LRD detailed view

Technical data:

Product type [LRD (speed/power)]	Frame size	Flange dimensions [A/LK/Z; n x Ø S in mm]	Bearing shaft [d x L in mm]	Agitator shaft [d_{max} x L_{max} in mm]
LRD .../... – 040	040	DN250 PN10; 395/350; 12 x 22	40 x 150	35 x 3,200
LRD .../... – 060	060	DN350 PN10; 505/460; 16 x 22	60 x 200	50 x 4,800
LRD .../... – 080	080	DN400 PN10; 565/515; 16 x 26	80 x 300	70 x 7,200
LRD .../... – 100	100	DN500 PN10; 670/620; 20 x 26	100 x 300	90 x 10,500

Other solutions for this series upon request.

LRK

Top-entry agitator for rigorous requirements

The top-entry agitator LRK is used to meet rigorous requirements regarding both bearing and smooth-running. In addition to its rigid cast steel bearing housing, this agitator series features a coupling housing with an elastic coupling to connect the drive with a shaft journal. Thus, the LRK can be supplied as a fast running agitator with long shafts. The agitator shaft is borne within the bearing housing and is divided by a flanged coupling below the mounting flange.

- ⓘ According to your tank size, the LRK series agitator is supplied in six different frame sizes. Shaft diameters of 40 mm to 130 mm with lengths of up to 12,000 mm can be realized.
- ⓘ Bearing housings with shaft seals of different materials are feasible, alternatively with stuffing boxes or mechanical seals.
- ⓘ Explosion protection to ATEX 2014/34/EU for explosive zones 0 to 2 for gases and for explosive zones 20-22 for dusts (device group II, categories 1-3).
- ⓘ Equipment Protection Level (EPL) Ga,GB,Gc and Da, Db, Dc.

LRK-A6 with double screw bearing in aluminum housing and elastic coupling that connects drive and bearing. Frequency inverter directly mounted on the drive itself with flanged coupling and two propellers

Technical data:

Product type [LRE (speed/power)]	Frame size	Flange dimensions [A/LK/Z; n x Ø S in mm]	Bearing shaft [d x L in mm]	Agitator shaft [d_{max} x L_{max} in mm]
LRK .../... – 1	1	200/165/130; 4 x 14	50 x 150	40 x 3,200
LRK .../... – 2	2	250/215/180; 4 x 18	70 x 200	60 x 4,800
LRK .../... – 3	3	350/300/250; 4 x 22	100 x 300	90 x 7,200
LRK .../... – 4	4	450/400/350; 4 x 26	140 x 300	130 x 12,000
LRK .../... – A5	A5	160/130/110; 4 x 9	30 x 100	25 x 1,500
LRK .../... – A6	A6	200/165/130; 4 x 11	40 x 100	35 x 2,000

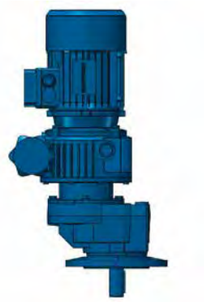
Other solutions for this series upon request.

Drives with shaft journals for LRK series:

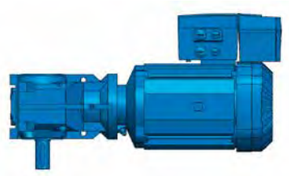
Three-phase motor

Helical geared drive unit

Parallel shaft geared drive unit



Variable speed geared drive unit



Helical bevel geared drive unit

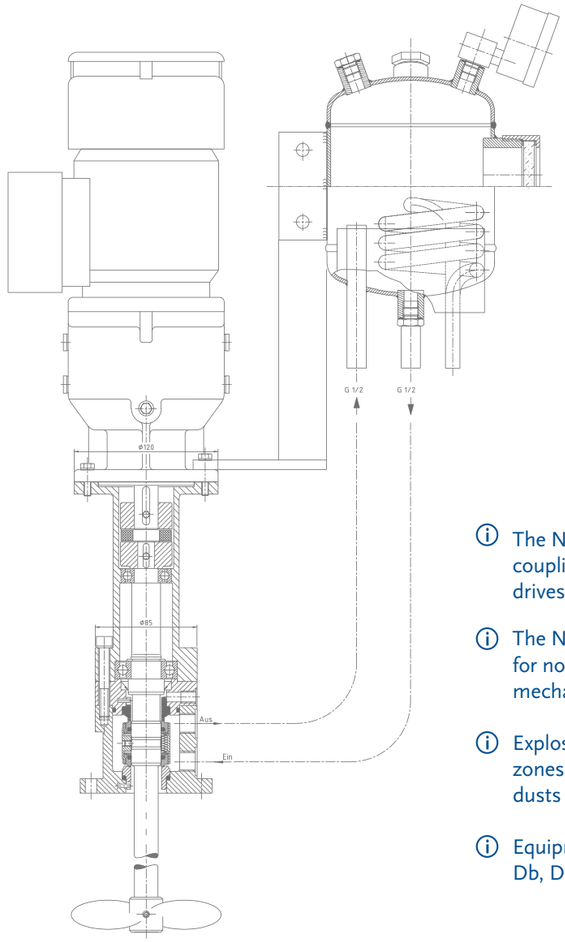
LRK agitator with double screw bearing in grey cast housing and elastic coupling between drive and bearing. Frequency inverter directly mounted on the drive itself with flanged coupling and two propellers

NRK

Compact top-entry agitator

The NRK series is a compact top-entry agitator that can be used to meet high requirements regarding both surfaces and cleaning inside and outside of the tank. Due to its' compact design, agitator shafts with diameters of 25 mm and lengths of up to 1,200 mm can be realized, making the NRK the ideal mixer for small tanks in food and drug industry.

GMP and FDA conform design.



NRK with propeller

- The NRK series agitator has an integrated bearing and coupling housing with flexible coupling to connect drives with shaft journals.
- The NRK can be supplied with radial shaft seal rings for non-pressurized operation or with liquid-lubricated mechanical seals on pressurized tanks.
- Explosion protection to ATEX 2014/34/EU for explosive zones 0 to 2 for gases and for explosive zones 20-22 for dusts (device group II, categories 1-3).
- Equipment Protection Level (EPL) Ga,GB,Gc and Da, Db, Dc.

Other solutions for this series upon request.

GLP

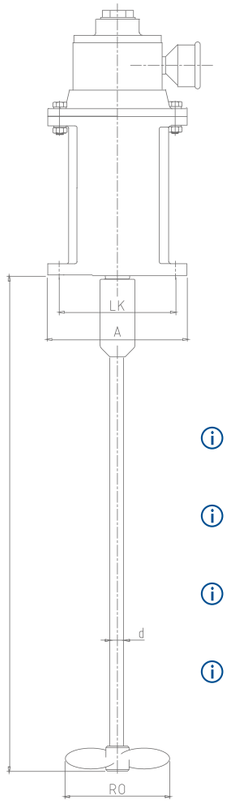
Pneumatic top-entry agitator

The GLP is a pneumatic top-entry series agitator that is used for homogenizing, dispersing, emulsifying and suspending in vessels and for viscosities up to 500 mPas for instance in wastewater treatment, chemical and cosmetics as well as in food industries.

The agitator speed adapts to the viscosity of the media being mixed. Compact and easy-to-maintain construction as well as low weight. Power transmission via elastic coupling in the bearing housing. The agitator shaft has a double bearing in an aluminum housing separated from the drive.

Speed is sensitively and continuously adjustable, smooth start, insensitive to vapor, dust and smoke. Compressed air keeps all moving parts clean. Insensitive to heat, suitable for high ambient temperatures. Compressed air, expanding in the air engine cools the agitator drive.

- Includes filters, pressure reducers with pressure gauge that indicates the secondary pressure.
- Available with a vessel clamp to fix the GLP on a drum.



GLP with maintenance unit and propeller

- Compressed air expanding in the air engine cools the agitator drive.
- The pneumatic agitators are explosion proof and overload proof until standstill.
- Explosion proof series certified to ATEX Directive 2014/34/EU zone 1·
- Equipment Protection Level (EPL) Ga,GB,Gc and Da, Db, Dc.

Technical data:

Product type [GLP]	Viscosity [max. mPas]	Power [max. kW]	Power input [max. kW]	Speed [approx. rpm]	Compressed air supply [inch]	Shaft [d x L_{max} in mm]	Impeller [mm]	Flange dimensions [A/LK/Z; n x Ø S in mm]
GLP 3000/1.0	500	1	0.5	3,000	1/4	20 x 1,000	125	160/130/110; 4 x 9
GLP 3000/2.5	500	2.5	1.0	3,000	1/2	20 x 1,000	150	200/165/130; 4 x 11

Other solutions for this series upon request.

SPR
Standard-propeller-agitator

The direct driven agitator SPR is Geppert Rührtechnik's solution for all industrial mixing tasks that demand a turbulent mixing with high peripheral speeds. It is driven by a three-phase-motor with poles between 2 and 8 as well as drive ratings between 0.25 kW and 75.0 kW. The SPR could also be equipped with a frequency inverter upon request (up to 7.5 kW).

SPR with propeller

The agitator shaft is directly connected at the shaft journal of the drive via sleeve or flange coupling. Solutions with quick-change or precisions-change coupling are also feasible for lower drive ratings of up to 3.0 kW. The standard agitator element is a propeller. Other mixing elements according to the mixing task upon request.

ⓘ Type test certificate numbers for zone 0 (category 1).

ⓘ Up to motor size 112, all SPR series agitators can also be provided with reinforced shaft.

ⓘ On request with directly mounted frequency inverter up to 22 kW.

ⓘ The SPR can be mounted as a stationary unit or – at a weight of up to 25 kg – it can also be mounted directly onto the open tank via a vessel clamp.

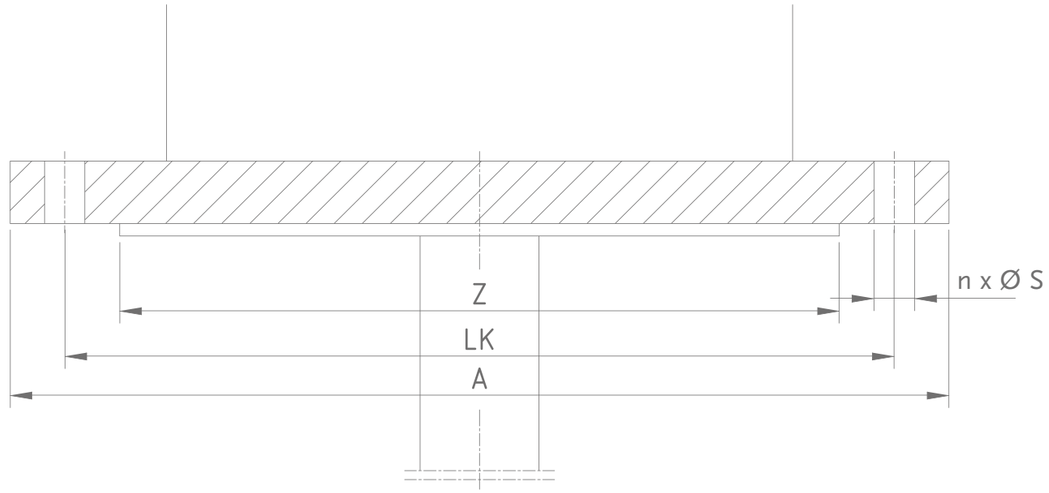
Technical data:

Product type [SPR]	Power [kW]	Speed [approx. rpm]	Recirculation [m³/h]	Shaft [d x L_{max} in mm]	Impeller [mm]	Height [approx. mm]	Flange dimensions [A/LK/Z; n x Ø S in mm]	Weight [approx. in kg]
SPR 4/0.25*	0.25	1,500	200	20 x 1,000	100	182	160/130/110; 4 x 9.5	9
SPR 4/0.37*	0.37	1,500	400	20 x 1,000	125	205	160/130/110; 4 x 9.5	10
SPR 4/0.55	0.55	1,500	400	20 x 1,000	125	205	200/165/130; 4 x 1.5	12
SPR 4/0.75	0.75	1,500	680	20 x 1,000	150	200	200/165/130; 4 x 11.5	14
SPR 4/1.1	1.10	1,500	1,100	25 x 1,250	175	250	200/165/130; 4 x 11.5	22
SPR 4/1.5	1.50	1,500	1,100	25 x 1,250	175	275	200/165/130; 4 x 11.5	25
SPR 4/2.2	2.20	1,500	1,540	30 x 1,500	200	305	250/215/180; 4 x 14.0	30
SPR 4/3.0	3.00	1,500	1,540	30 x 1,500	200	305	250/215/180; 4 x 14.0	33
SPR 4/4.0	4.00	1,500	2,240	30 x 1,500	225	325	250/215/180; 4 x 14.0	55
SPR 4/5.5	5.50	1,500	2,240	40 x 2,000	225	355	300/265/230; 4 x 14.0	78
SPR 4/7.5	7.50	1,500	3,200	40 x 2,000	250	415	300/265/230; 4 x 14.0	90
SPR 6/0.18*	0.18	1,000	260	20 x 1,000	125	182	160/130/110; 4 x 9.5	9
SPR 6/0.25*	0.25	1,000	450	20 x 1,000	150	205	160/130/110; 4 x 9.5	10
SPR 6/0.37	0.37	1,000	740	20 x 1,000	175	205	200/165/130; 4 x 11.5	12
SPR 6/0.55	0.55	1,000	740	20 x 1,000	175	220	200/165/130; 4 x 11.5	14
SPR 6/0.75	0.75	1,000	1,000	25 x 1,250	200	250	200/165/130; 4 x 11.5	22
SPR 6/1.1	1.10	1,000	1,500	25 x 1,250	225	275	200/165/130; 4 x 11.5	25
SPR 6/1.5	1.50	1,000	1,500	30 x 1,500	225	305	250/215/180; 4 x 14.0	30
SPR 6/2.2	2.20	1,000	2,100	30 x 1,500	250	325	250/215/180; 4 x 14.0	55
SPR 6/3.0	3.00	1,000	2,100	40 x 2,000	250	355	300/265/230; 4 x 14.0	78
SPR 6/4.0	4.00	1,000	2,700	40 x 2,000	275	415	300/265/230; 4 x 14.0	86
SPR 6/5.5	5.50	1,000	3,550	40 x 2,000	300	415	300/265/230; 4 x 14.0	94

* with reinforced shaft

Other solutions for this series upon request. 2- and 8-pole motors upon request. Larger shaft diameters or longer shafts also upon request.

FLANGE DIMENSIONS
Explanation of the flange dimensions



MADE IN GERMANY

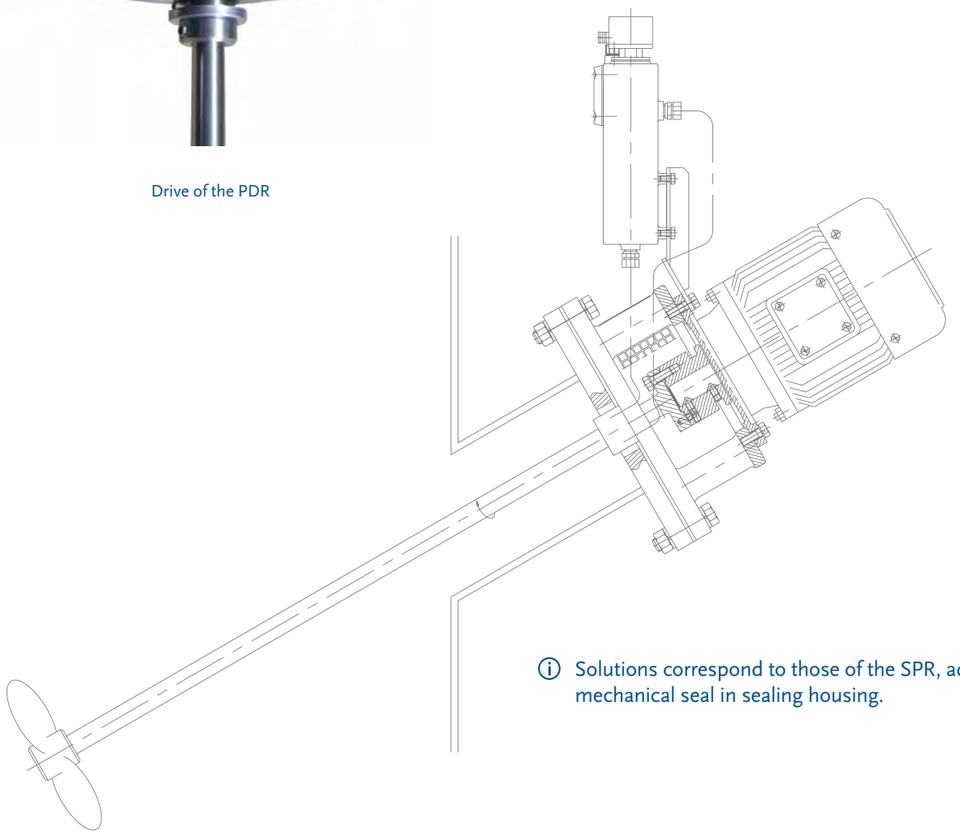
PDR

Side-entry agitator for mixing below liquid surface

Drive of the PDR

The PDR is a simple side-entry-agitator for mixing below the liquid surface. The PDR is recommended for applications where low viscous liquids are mixed turbulently in high tanks and where a top-entry mixer would be too heavy due to its shaft length and –diameter.

The sealing between the agitator and the vessel is done by means of a single-acting, internal mechanical seal which is lubricated by the mixing product or an additional fluid The agitator shaft is connected to the drive directly with a flange coupling inside the seal housing. By default, this agitator series is supplied with marine type propellers. Other mixing elements according to the mixing task upon request.



ⓘ Solutions correspond to those of the SPR, additionally mechanical seal in sealing housing.

Other solutions for this series upon request.

DRUM MIXERS

Our drum mixers are literally all-rounders that can be used for all applications in the materials processing industries. We provide you with the optimal solution for open or closed 200 l drums, low to high viscous media or either electric or pneumatic applications.

For applications in the food and pharmaceutical industry, we manufacture in all available steel and stainless steel grades, in the required surface qualities or coatings- ground and electro polished.

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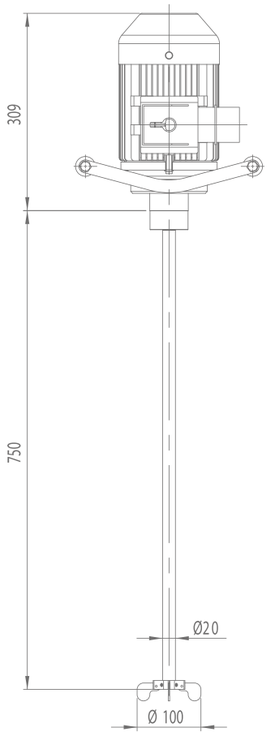
INNOVATIVE MIXING SOLUTIONS

FR

Electric drum mixer

The FR series is a fast running electric drum mixer that can directly be mounted on 200 l steel drums with a 2“ bung hole. The mounting on the drum is done with a 2” threaded adapter with which the agitator is screwed into the bung hole.

The agitator shaft is connected to the drive shaft by means of a sleeve coupling. Folding propellers are used as mixing elements, which can be inserted into the drum through the 2” bung hole when being folded.



FR with one folding propeller

FR 4/0.75 screwed onto a 200 l drum with two folding propellers

- The FR series mobile mixer is delivered as a turn-key solution with an on-/off-switch with low voltage breaker and connection cable.
- Upon request, the FR series mixer can also be supplied with an integrated frequency inverter.
- Additionally, we can supply your open lid drums with a traverse bridge or a vessel clamp.
- Explosion proofed solutions are available.

Technical data:

Type							Supply unit	Shaft		Mixing element 1	
	Explosion protection	Additional propeller	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Voltage [V]	Length [mm]	Diameter [mm]	Folding propeller	Diameter [mm]
FR 4/0.75			200	500	0.75	1,450	230/400	750	20	x	100
FR 4/0.75		x	200	1.000	0.75	1,450	230/400	750	20	x	100
FR 4/0.75	x		200	500	0.75	1,450	230/400	750	20	x	100
FR 4/0.75	x	x	200	1,000	0.75	1,450	230/400	750	20	x	100

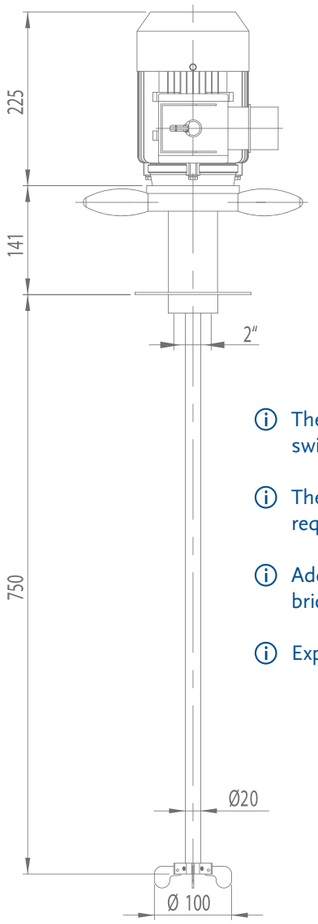
Other solutions for this series upon request.

FR-LX

Lightweight mixer with direct screwing into 2“ bung hole

The FR-LX series mixer stands for easy handling. Aluminum being the material of the housings and the adapters, this is a lightweight solution with a total weight of only 10 kg.

The agitator is screwed directly onto the on-top 2” bung hole of the tank thanks to either a 2”-steel or a 2”-fluoroware coupling. Therefore, this agitator can not only be screwed onto steel tanks but also onto plastic tanks with bung hole.



Drawing of the FR-LX

- The mobile mixer FR-LX is by default equipped with an on-/off-switch with low voltage breaker and connection cable.
- The FR-LX could also be equipped with a frequency inverter upon request.
- Additionally, we can supply your open lid drums with a traverse bridge or a vessel clamp.
- Explosion proofed solutions are available.

FR-LX for easiest handling

Technical data:

Type								Supply unit	Shaft		Mixing element 1	
	On/Off Switch with plug	Explosion protection	Additional propeller	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Voltage [V]	Length [mm]	Diameter [mm]	Folding propeller	Diameter [mm]
FR-LX 4/0.37	x			200	500	0.37	1,450	230/400	750	20	x	100
FR-LX 4/0.37	x		x	200	500	0.37	1,450	230/400	750	20	x	100
FR-LX 4/0.37	x	x		200	500	0.37	1,450	230/400	750	20	x	100
FR-LX 4/0.37	x	x	x	200	500	0.37	1,450	230/400	750	20	x	100

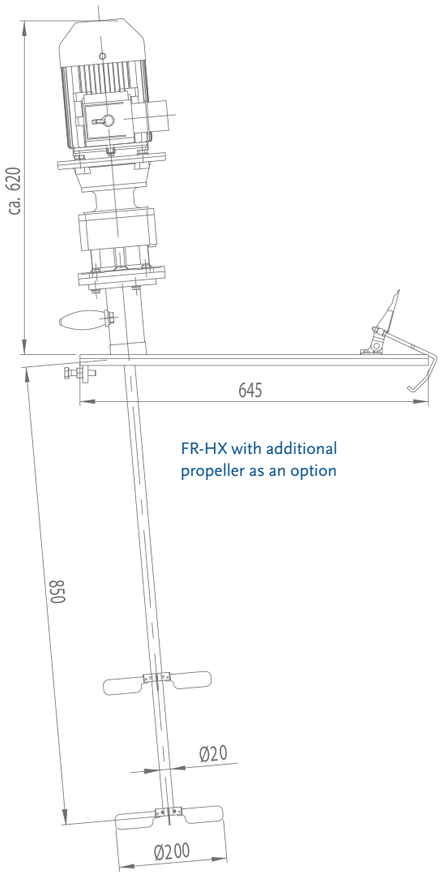
Other solutions for this series upon request.

FR-HX

Mixer for highly viscous media

The FR-HX is Geppert Rührtechnik's drum mixer for highly viscous media of up to 5,000 mPas. The foldable mixing elements with a diameter of 200 mm demand a non-vertical installation in the tank. This installation is realized due to a traverse with a welded 2"-socket. Additionally the traverse allows the use of the agitator when the drum is open.

FR-HX with folding propellers for highly viscous media



FR-HX with additional propeller as an option

ⓘ The mobile mixer FR-HX is by default equipped with an on-/off-switch with low voltage breaker and – upon request – with a connection cable.

ⓘ The FR-HX could also be equipped with a frequency inverter upon request.

ⓘ Explosion-proof design after ATEX (2014/34/EU) for operation in ex-zones 0-2 for gases and zones 20-22 for dusts (device group II, category 1-3).

Technical data:

Type									Supply unit	Shaft		Mixing element 1	
	Drum traverse	On/Off Switch with plug	Explosion protection	Additional propeller	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Voltage [V]	Length [mm]	Diameter [mm]	Folding propeller	Diameter [mm]
FR-HX 300/0.75	x	x		x	200	5,000	0.75	300	230/400	850	20	x	200
FR-HX 300/0.75	x		x	x	200	5,000	0.75	300	230/400	850	20	x	200

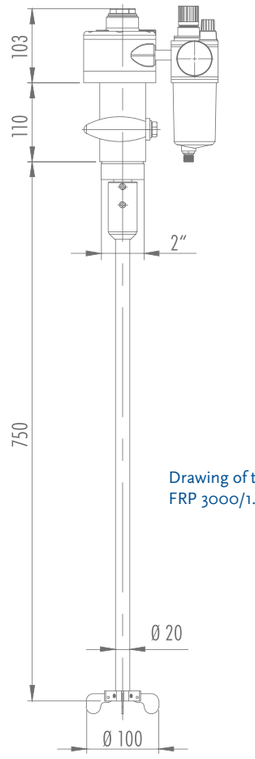
Other solutions for this series upon request.

FRP

Pneumatic drum mixer

The FRP is Geppert Rührtechnik's fast running pneumatic air mixer that can be directly mounted on 200 l steel drums with a 2" bung hole. The FRP is mounted onto the drum with a 2" threaded adapter. The agitator is screwed into the bung hole.

We do offer one drive especially adapted for low viscous media and one drive especially adapted for medium viscous media of up to 1,000 mPas. The agitator shaft is connected to a bearing shaft within the drum mixer housing by means of a sleeve coupling. This bearing shaft is connected to the drive shaft. Folding propellers are used as agitator elements, which can be inserted into the drum through the 2" bung hole when being folded. As a mobile mixer, the FRP can be delivered as a turn-key machine with a service kit for the lubrication of the compressed air and a noise muffler.



Drawing of the FRP 3000/1.0

FRP 3000/1.5 for screwing into 2" bung hole tanks with two folding propellers

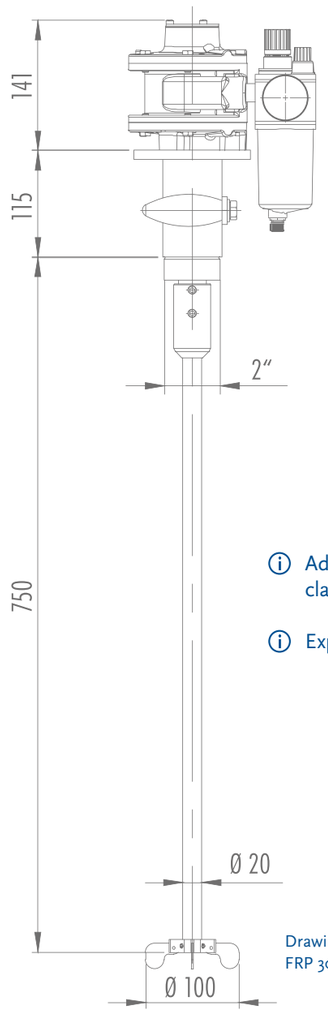
ⓘ Explosion proofed solutions are available.

Technical data:

Type									Supply unit	Shaft		Mixing element 1	
	Explosion protection	Additional propeller	Main-tenance unit	Muffler	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Compres-sed air supply [inch]	Length [mm]	Diameter [mm]	Folding propeller	Diameter [mm]
FRP 3000/1.0			x	x	200	500	0.5	3,000	1/4	750	20	x	100
FRP 3000/1.0		x	x	x	200	500	0.5	3,000	1/4	750	20	x	200
FRP 3000/1.0			x		200	500	0.5	3,000	1/4	750	20	x	100
FRP 3000/1.0		x	x		200	500	0.5	3,000	1/4	750	20	x	100
FRP 3000/1.0	x		x		200	500	0.5	3,000	1/4	750	20	x	100
FRP 3000/1.0	x	x	x		200	500	0.5	3,000	1/4	750	20	x	100
FRP 3000/1.0	x		x		200	500	0.5	3,000	1/4	750	20	x	100
FRP 3000/1.0	x	x	x		200	500	0.5	3,000	1/4	750	20	x	100

Other solutions for this series upon request.

FRP 3000/2.5 with folding propeller



Drawing of the FRP 3000/2.5

ⓘ Additionally we can provide you with a vessel clamp applicable for open lid drums.

ⓘ Explosion proofed solutions are available.

Technical data:

Type									Supply unit	Shaft		Mixing element 1	
	Explosion protection	Additional propeller	Main-tenance unit	Muffler	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Compressed air supply [inch]	Length [mm]	Diameter [mm]	Folding propeller	Diameter [mm]
FRP 3000/2.5			x		200	1,000	1	3,000	1/2	750	20	x	100
FRP 3000/2.5		x	x		200	1,000	1	3,000	1/2	750	20	x	200
FRP 3000/2.5			x	x	200	1,000	1	3,000	1/2	750	20	x	100
FRP 3000/2.5		x	x	x	200	1,000	1	3,000	1/2	750	20	x	100
FRP 3000/2.5	x		x		200	1,000	1	3,000	1/2	750	20	x	100
FRP 3000/2.5	x	x	x		200	1,000	1	3,000	1/2	750	20	x	100
FRP 3000/2.5	x		x	x	200	1,000	1	3,000	1/2	750	20	x	100
FRP 3000/2.5	x	x	x	x	200	1,000	1	3,000	1/2	750	20	x	100

Other solutions for this series upon request.

FRP-LX

Lightweight mixer

The FRP-LX mixer series has been designed for easiest operation. Aluminum being the material of the housings and the adapters, it has a weight of only 6 kg.

The agitator is screwed directly onto the on-top 2" bung hole of the tank thanks to either a 2"-steel or a 2"-fluoro-ware coupling. Therefore, this agitator can not only be screwed onto steel tanks but also onto plastic tanks with bung hole.

ⓘ Additionallywe can provide you with a vessel clamp applicable for open lid drums.

ⓘ Explosion proofed solutions are available.

The mobile mixer FRP-LX is by default equipped with a maintenance unit for the oiling of the pressurized air and mufflers.

FR-LX directly screwed into 2" bung hole with folding propeller

Technical data:

Type									Supply unit	Shaft		Mixing element 1	
	Explosion protection	Additional propeller	Main-tenance unit	Muffler	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Compressed air supply [inch]	Length [mm]	Diameter [mm]	Folding propeller	Diameter [mm]
FRP-LX 1025/0.5			x		200	500	0.5	1,025	1/4	750	20	x	100
FRP-LX 1025/0.5		x	x		200	500	0.5	1,025	1/4	750	20	x	200
FRP-LX 1025/0.5			x	x	200	500	0.5	1,025	1/4	750	20	x	100
FRP-LX 1025/0.5		x	x	x	200	500	0.5	1,025	1/4	750	20	x	100
FRP-LX 1025/0.5	x		x		200	500	0.5	1,025	1/4	750	20	x	100
FRP-LX 1025/0.5	x	x	x		200	500	0.5	1,025	1/4	750	20	x	100
FRP-LX 1025/0.5	x		x	x	200	500	0.5	1,025	1/4	750	20	x	100
FRP-LX 1025/0.5	x	x	x	x	200	500	0.5	1,025	1/4	750	20	x	100

Other solutions for this series upon request.

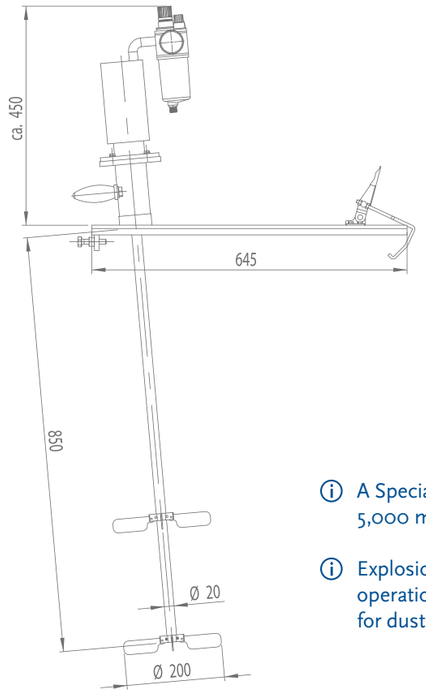
FRP-HX

Mixer for highly viscous media

The FRP-HX is Geppert Rührtechnik's drum mixer for highly viscous media of up to 5,000 mPas. The foldable mixing elements with a diameter of 200 mm demand a non-vertical installation in the drums. This installation is realized due to a traverse with a welded 2"-socket. Additionally the traverse allows the use of the agitator when the drum is open.

The mobile mixer FRP-HX is by default equipped with a maintenance unit for the oiling of the pressurized air and mufflers.

FRP-HX series with stainless steel traverse and maintenance unit screwed onto a 2" bung hole tank



ⓘ A Special solution for highly viscous liquids of up to 5,000 mPas.

ⓘ Explosion-proof design after ATEX (2014/34/EU) for operation in ex-zones 0-2 for gases and zones 20-22 for dusts (device group II, category 1-3).

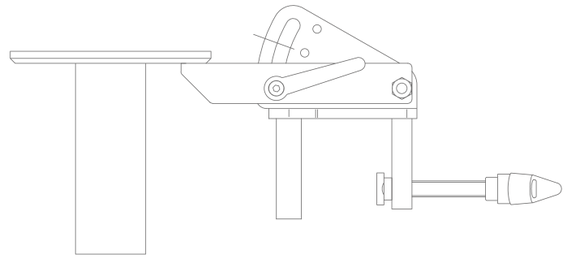
Technical data:

Type										Supply unit	Shaft		Mixing element 1	
	Drum traverse	Explosion protection	Additional propeller	Main-tenance unit	Muffler	Capacity [l]	Max. Viscosity [mPas]	Power [kW]	Speed [rpm]	Compressed air supply [inch]	Length [mm]	Dia-meter [mm]	Folding propeller	Dia-meter [mm]
FRP-HX 450/2.5	x		x	x		200	5,000	1	450	1/2	850	20	x	200
FRP-HX 450/2.5	x		x	x	x	200	5,000	1	450	1/2	850	20	x	200
FRP-HX 450/2.5	x	x	x	x		200	5,000	1	450	1/2	850	20	x	200
FRP-HX 450/2.5	x	x	x	x	x	200	5,000	1	450	1/2	850	20	x	200

Other solutions for this series upon request.

EQUIPMENT

Equipment options for drum mixers



SPR with clamping device

By means of a traverse or a vessel clamp, the drum mixers could also be used for open drums.

TOTE TANK MIXERS

Geppert Rührtechnik has designed tote tank mixers for all plastic and stainless steel IBCs with a capacity of 400 to 1,500 liters. They are delivered including traverse with rapid clamping system for plastic IBC. The mixing elements fit to all filling holes of a minimum diameter of 150 mm. Versions with explosion protection for the explosive zones 0 or 1 are also available.

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INNOVATIVE MIXING SOLUTIONS

CR-E

Electric tote tank mixer for plastic IBCs

The tote tank mixers CR-E are designed for operation on plastic containers with filling openings of 150 mm and volumes from 600 l up to 1,200 l. The customer may choose between various viscosity-related basic versions of fast-running and slow-running mixers with electric drives. The agitator shafts are connected to the drive shafts with sleeve couplings or borne within the gear's hollow shaft (worm gears). The agitator shafts are balanced for concentric run after assembly.

The mixer is mounted on a container traverse bridge, which is included in the scope of supply and clamped with a rapid fixing system to the cage frame of the IBC. The plastic bulk of the container is therefore not harmed by any static or dynamic loads by the agitator. The fixing of the traverse bridge is adjustable for various container models.

ⓘ The impellers are designed to fit through the filling opening 150 mm when being inserted.

ⓘ The electric container mixers are delivered with on-/off-switches with low-voltage breaker. The electric container mixers can also be supplied with frequency converter drives.

ⓘ Explosion-proof mixers are also feasible.

CR-E 6/0.75 with traverse bridge

Technical data:

							Mixing element 1		Mixing element 2	
Product type [CR-E]	Capacity [l]	Viscosity [max. mPas]	Power [max. in kW]	Speed [approx. rpm]	Supply [V]	Shaft [dxL$_{max}$ in mm]	Diameter [mm]	Type	Diameter [mm]	Type
CR-E 4/0.75	650	500	0.75	1,500	230/400	20 x 800	125	Propeller	125	Propeller
CR-E 6/0.75	1,000	500	0.75	1,000	230/400	20 x 1,000	150	Propeller	150	Propeller
CR-E 200/0.75	650	2,000	0.75	200	230/400	30 x 800	350	Folding propeller	140	Impeller for remains
CR-E 200/0.75	1,000	2.000	0.75	200	230/400	30 x 1,000	350	Folding propeller	140	Impeller for remains
CR-E 300/1.5	1,000	10.000	1.50	300	230/400	25 x 1,000	350	Folding propeller	140	Impeller for remains

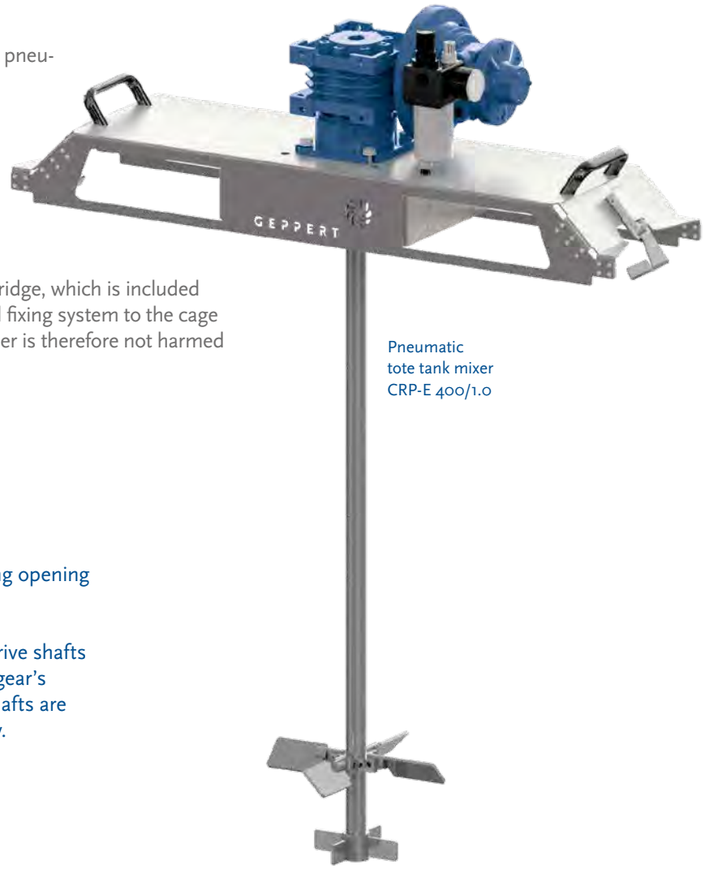
Other solutions for this series upon request.

CRP-E

Pneumatic tote tank mixer for plastic IBCs

The tote tank mixers CRP-E are equipped with a pneumatic drive. It has been especially designed for plastic IBCs with filling openings of at least 150 mm and volumes from 600 l up to 1,200 l. The fast running pneumatic agitators are equipped with bearing and coupling housings. By means of the maintenance unit, pressurized air is enriched with oil for the vane drive.

The mixer is mounted on a container traverse bridge, which is included in the scope of supply and clamped with a rapid fixing system to the cage frame of the IBC. The plastic bulk of the container is therefore not harmed by any static or dynamic loads by the agitator.



Pneumatic tote tank mixer CRP-E 400/1.0

ⓘ Folding propellers that fit through the filling opening DN 150 mm are used for geared agitators.

ⓘ The agitator shafts are connected to the drive shafts with sleeve couplings or borne within the gear's hollow shaft (worm gears). The agitator shafts are balanced for concentric run after assembly.

ⓘ Explosion-proof mixers are also feasible.

Technical data:

							Mixing element 1		Mixing element 2	
Product type [CR-E]	Capacity [l]	Viscosity [max. mPas]	Power [max. in kW]	Speed [approx. rpm]	Compressed air supply [inch]	Shaft [dxL$_{max}$ in mm]	Diameter [mm]	Type	Diameter [mm]	Type
CRP-E 3000/1.0-A5	650	500	0.50	3,000	1/4	20 x 800	125	Propeller	–	–
CRP-E 3000/2.5-A6	1,000	1,000	1.00	3,000	1/2	20 x 1,000	150	Propeller	–	–
CRP-E 400/1.0	650	2,000	0.50	400	1/4	30 x 800	200	Folding propeller	140	Impeller for remains
CRP-E 400/2.5	1,000	2,000	1.00	400	1/2	30 x 1,000	275	Folding propeller	140	Impeller for remains
CRP-E 600/1.0	650	5,000	0.50	600	1/4	25 x 800	200	Folding propeller	140	Impeller for remains
CRP-E 600/2.5	1,000	5,000	1.00	600	1/2	25 x 1,000	275	Folding propeller	140	Impeller for remains

Other solutions for this series upon request.

CR-M

Electric tote tank mixer for stainless steel IBCs

The tote tank mixers CR-M are designed for operation on stainless steel containers with filling openings of DN 350 mm up to DN 450 mm and mixing volumes from 400 l up to 1,500 l. Depending on the viscosity of the mixing material, CR-Ms with fast running or gear reduced drives are available. The agitator shafts are connected to the drive shafts with sleeve couplings or borne within the gear's hollow shaft (worm gear). The agitator shafts are balanced for concentric run after assembly.

The mixer is mounted on the container's manway lid, which is clamped with butterfly screws or a clamp ring. The manway lid is supplied by the container manufacturer or by the customer. The impellers are designed to fit through the filling opening DN 400 when being inserted.

CR-M 200/0.75 with pitched blade turbine

ⓘ The electric container mixers are delivered with on-/off-switches with low-voltage breaker. The electric container mixers can also be supplied with frequency converter drives.

ⓘ All CR-M series mixers can be supplied as follows:
- Lid
- Explosion-protection design

Technical data:

							Mixing element 1		Mixing element 2	
Product type [CR-E]	Capacity [l]	Viscosity [max. mPas]	Power [max. in kW]	Speed [approx. rpm]	Supply [V]	Shaft [dxL$_{max}$ in mm]	Diameter [mm]	Type	Diameter [mm]	Type
CR-M 4/0.75	650	500	0.75	1,500	230/400	20 x 800	125	Propeller	125	Propeller
CR-M 6/0.75	1,000	500	0.75	1,000	230/400	20 x 1,100	150	Propeller	150	Propeller
CR-M 200/0.75	650	2,000	0.75	200	230/400	30 x 800	350	Pitched blade turbine	–	–
CR-M 200/0.75	1,000	2,000	0.75	200	230/400	30 x 1,100	350	Pitched blade turbine	–	–
CR-M 300/1.5	1,000	10,000	1.50	300	230/400	25 x 1,100	350	Pitched blade turbine	–	–

Other solutions for this series upon request.

CRP-M

Pneumatic tote tank mixer for stainless steel IBCs

The CRP-M series tote tank mixers are featured with a pneumatic drive and it were designed for the application in stainless steel tanks with filling openings of DN 350 mm up to DN 450 mm and mixing volumes of 400 l to 1,500 l. The fast running pneumatic agitators are equipped with bearing and coupling housings. By means of the maintenance unit, pressurized air is enriched with oil for the vane drive.

The mixer is mounted on the container's manway lid, which is clamped with butterfly screws or a clamp ring. The manway lid is supplied by the container manufacturer or by the customer. The impellers are designed to fit through the filling opening of at least 400 mm when being inserted.

CRP-M 3000/2.5-A6
with propeller

ⓘ All CR-M series mixers can be supplied as follows:
- Lid
- Muffler
- Explosion-protection design

Technical data:

							Mixing element 1	
Product type [CR-E]	Capacity [l]	Viscosity [max. mPas]	Power [max. in kW]	Speed [approx. rpm]	Supply [V]	Shaft [dxL$_{max}$ in mm]	Diameter [mm]	Type
CRP-M 3000/1.0-A5	650	500	0.50	3,000	1/4	20 x 800	125	Propeller
CRP-M 3000/2.5-A6	1,000	1,000	1.00	3,000	1/2	20 x 1,100	150	Propeller
CRP-M 400/1.0	650	2,000	0.50	400	1/4	30 x 800	200	Pitched blade turbine
CRP-M 400/2.5	1,000	2,000	1.00	400	1/2	30 x 1,100	275	Pitched blade turbine
CRP-M 600/1.0	650	5,000	0.50	600	1/4	25 x 800	200	Pitched blade turbine
CRP-M 600/2.5	1,000	5,000	1.00	600	1/2	25 x 1,100	275	Pitched blade turbine

Other solutions for this series upon request.

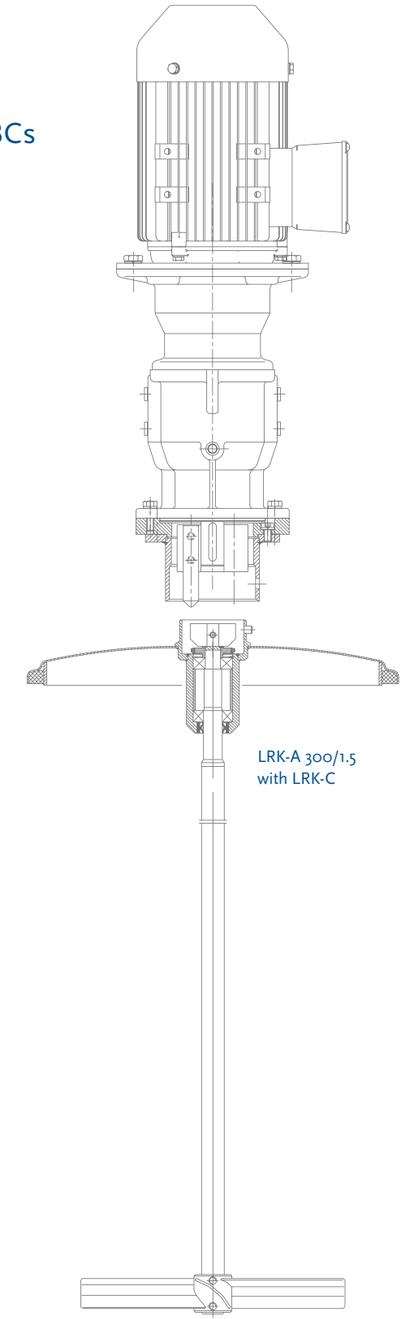
LRK-C WITH LRK-A DRIVE

Electrical tote tank mixers for stainless steel IBCs

The LRK-C series tote tank mixer and their drive units LRK-A are a special solution designed for operation on stainless steel containers with filling openings of DN 350 mm up to DN 450 mm and mixing volumes from 400 l up to 1,500 l. The customer may choose between various viscosity-related basic versions of fast-running and slow-running mixers with electric drives.

The mixing unit that remains in the container is connected to the drive unit with a bayonet coupling and a clutch. The drive is dismountable so that one drive unit can be used for several mixer units interchangeable. The mixer is mounted on the container's manway lid, which is clamped with butterfly screws or a clamp ring. The agitator shafts are borne in a bearing housing, which is welded into the container lid on the product side.

The impellers are designed to fit through the filling opening DN 400 when being inserted.



LRK-A 300/1.5
with LRK-C

ⓘ If required, the electric tote tank mixers are delivered with on-/off-switches with low-voltage breaker.

ⓘ The electric container mixers can also be supplied with frequency converter drives.

ⓘ Explosion-proof mixers are also feasible.

Technical data:

Product type [LRK-A]	Capacity [l]	Viscosity [max. mPas]	Power [max. in kW]	Speed [approx. rpm]	Mixing unit
LRK-A 6/0.75	1,000	500	0.75	1,000	LRK-C NV
LRK-A 200/0.75	1,000	2,000	0.75	200	LRK-C HV
LRK-A 300/1.5	1,000	10,000	1.5	300	LRK-C HV

Other solutions for this series upon request.

EQUIPMENT
Equipment for tote tank mixers

Equipment for tote tank mixers for plastic IBCs:

- Traverse bridge
- Lifting lug for cranes
- On-/off-switch without ex-protection
- On-/off-switch with ex-protection
- Frequency inverter controlled drive
- Maintenance unit for pneumatic drive

Equipment for tote tank mixers for stainless IBCs:

- Container lid
- Lifting lug for cranes
- On-/off-switch without ex-protection
- On-/off-switch with ex-protection
- Frequency inverter controlled drive
- Maintenance unit for pneumatic drive

WE WILL BE HAPPY TO ASSIST YOU!

TRIPOD AGITATORS

Geppert Rührtechnik offers a multitude of popular standard solutions for tripod agitators that meet all of your expectations. For us, an easy handling as well as the compliance to safety regulations are a matter of course. We will be happy to discuss the details with you!

GEPPERT
INNOVATIVE MIXING SOLUTIONS

SRW
Floor stand mixer

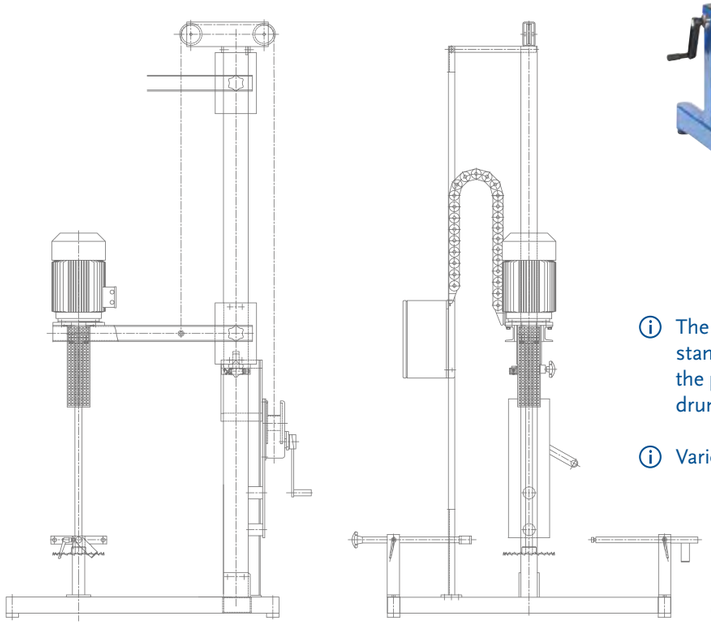
Rigid stand with H-foot for tanks that range in volume from 100 l. Under these conditions, the stand can be equipped with all fast running or gear-reduced mixers and their matching mixing elements. Mixer powers from 0.37 kW to 7.5 kW and support loads up to 100 kg – by means of a reinforced stand loads up to 300 kg – can be realized.

The agitator is positioned on a telescope sleeve that is moved via the spring-suspended lid connected to the stand. The lift is done by a geared hand-wheel or electric with a lift drive and chain drive or via a threaded spindle. The mixer is positioned on a cantilever beam which is fixed to a support slide that is moved on the stand column. The electric or pneumatic supply is guided through a laterally mounted energy chain.

Floor stand SRW with agitator GRS-D 300/1.5 with ex-protection, spring suspended lid and vessel clamp as well as pitched blade turbine

ⓘ The floor stand mixer SRW is available in two standard sizes that are particularly designed for the processing of exchangeable vessels such as drums and IBCs.

ⓘ Various tank sizes upon request.



Side and front view of a SRW

Technical data:

Product type [SRW]	H-foot inner dimensions [mm]	H-foot outer dimensions [mm]	Outreach [mm]	Lift height [mm]	Lift mechanism
SRW-S – Gr.1	950 x 804	1,070 x 1,078	450	1,225	Hand wheel
SRW-S – Gr.2	1,250 x 1,046	1,370 x 1,320	700	1,225	Hand wheel
SRW-E – Gr.1	950 x 804	1,070 x 1,078	450	1,225	Electric
SRW-E – Gr.2	1,250 x 1,046	1,370 x 1,320	700	1,225	Electric

Other solutions for this series upon request.

FRW
Mobile stand mixer

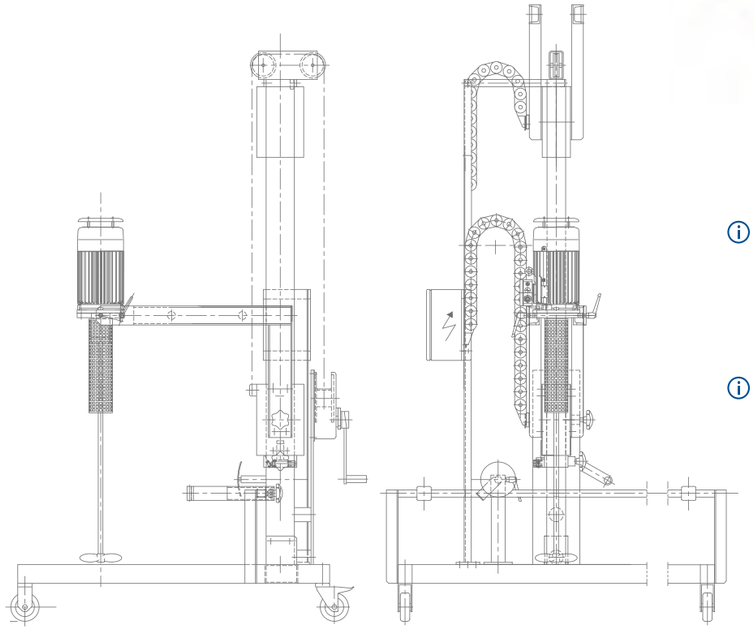
Mobil stand with H-foot for tank volumes from 100 l. The mobility of the tripod is ensured by using castors and fixed castors. The tripod can be moved due to The lift is done by a geared hand-wheel or electric with a lift drive and chain drive. Mixer powers from 0.37 kW to 7.5 kW and support loads up to 100 kg can be realized (with ex-protection only realizable to a limited extend). Under these conditions, the stand can be equipped with all fast running or gear-reduced mixers and their matching mixing elements.

The mixer is positioned on a cantilever beam which is fixed to a support slide that is moved on the stand column. The FRW is equipped with fixed and steerable wheels for mobility. The electric or pneumatic supply is guided through a laterally mounted energy chain.

Mobile stand mixer FRW with agitator SPR 6/0.75 and frequency converter, shaft protection sleeve and vessel clamp

ⓘ The mobile stand mixer FRW is available in two standard sizes that are particularly designed for the processing of exchangeable vessels such as drums and IBCs.

ⓘ Various tank sizes upon request.



Side and front view of a FRW

Technical data:

Product type [FRW]	H-foot inner dimensions [mm]	H-foot outer dimensions [mm]	Outreach [mm]	Lift height [mm]	Lift mechanism
FRW-S – Gr.1	950 x 804	1,070 x 1,078	450	1,225	Hand wheel
FRW-S – Gr.2	1,250 x 1,046	1,370 x 1,320	700	1,225	Hand wheel
FRW-E – Gr.1	950 x 804	1,070 x 1,078	450	1,225	Electric
FRW-E – Gr.2	1,250 x 1,046	1,370 x 1,320	700	1,225	Electric

Other solutions for this series upon request.

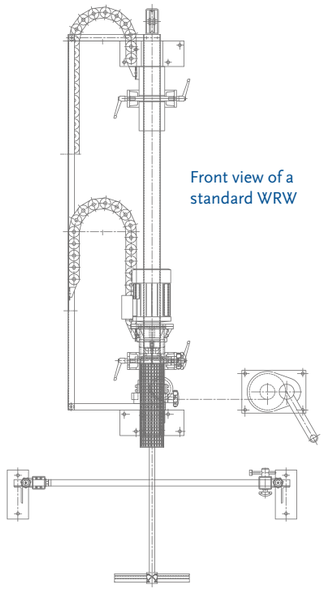
WRW
Wall mounted stand mixer

Rigid stand for wall-mounting for tank volumes from 100 l. Mixer powers from 0.37 kW to 7.5 kW and support loads up to 100 kg can be realized. Under these conditions, the stand can be equipped with all fast running or gear-reduced mixers and their matching agitator elements.

The lift is done by a geared hand-wheel or electric with a lift drive and chain drive or via a threaded spindle. The mixer is positioned on a cantilever beam which is fixed to a support slide that is moved on the stand column. The electric or pneumatic supply is guided through a laterally mounted energy chain.

The stand WRW is available in two standard sizes, thus enabling the processing of various tank sizes. The standard sizes are particularly designed for the processing of exchangeable vessels such as drums and IBCs.

Wall mounted stand mixer WRW with rope winch



Front view of a standard WRW

Technical data:

Product type [WRW]	Outreach [mm]	Lift height [mm]	Lift mechanism
WRW-S – Gr.1	450	1,225	Hand wheel
WRW-S – Gr.2	700	1,225	Hand wheel
WRW-E – Gr.1	450	1,225	Electric
WRW-E – Gr.2	700	1,225	Electric

Other solutions for this series upon request.

WRW/SRW
Double column wall-mounted stand mixer/floor stand mixer

Rigid stand for wall-mounting or floor stand for mixers from 100 kg. The stand consists of 2 u-shaped columns with a ball-borne support slide with a cantilever beam for the mixer. The double-column stand allows the processing of tank volumes up to 4 m3, depending on the tank dimensions.

Mixer powers up to 75.0 kW and support loads up to 1,000 kg can be realized. Under these conditions, the stand can be equipped with all fast running or gear-reduced mixers and their matching agitator elements.

The lift is done electrically by a lift drive and chain drive. The electric supply is guided through a laterally mounted energy chain.

ⓘ The customized solutions for instance a stand mixer with H foot or stand equipped with coaxial agitator type KRK are feasible.

Other solutions for this series upon request.

Reinforced stand with dual agitator, incl. scale and positioning device for various containers

SV 30
Small stand mixer

The SV 30 is a small stand mixer with manual stroke adjustment and spring suspended lid for small batches that range in volume from 20 l up to 100 l and agitator drives of up to 1.5 kW. It is supplied with helical gear agitators of up to 0.75 kW or fast running agitators of up to 1.5 kW and the suitable mixing elements.

Thanks to the H stand as well as two hook blocks, the SV 30 can be moved. The weight is balanced by means of a counterweight positioned in the stand column itself. The pneumatic supply is guided through a laterally mounted energy chain.

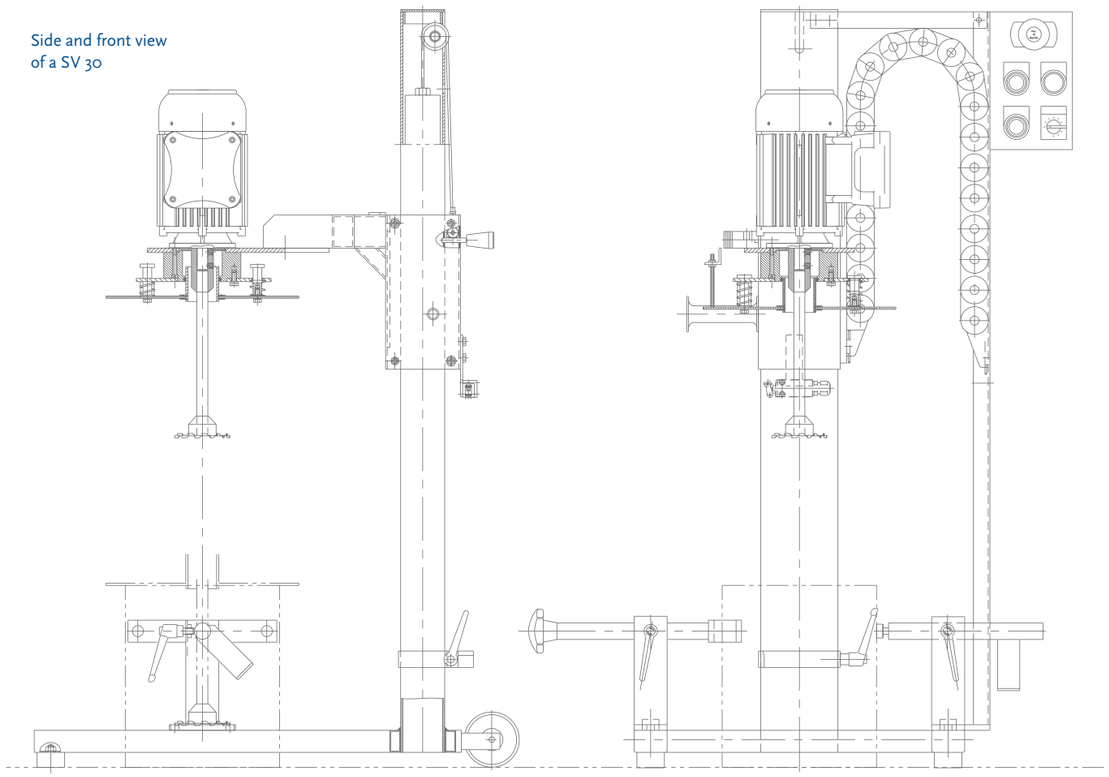
ⓘ Explosion-proof design ATEX 2014/34/EU feasible.

Small stand mixer SV 30

Technical data:

Product type	Capacity [l]	Power [max. kW]
SV 30	20-100	up to 1.5 kW

Other solutions for this series upon request.



Side and front view of a SV 30

SAFETY AND EQUIPMENT

Safety equipment and options for tripod agitators

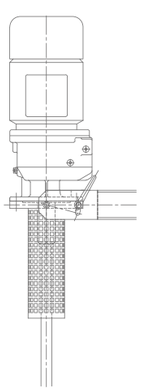
Safety equipment

The tripod agitators are equipped with electric and mechanic safety devices after EC guideline for machinery 2006/42/EG which prevent the mixer from accidental starting and prevent access to moving parts. We provide you with extensive risk analysis for each tripod agitator to consider all possible sources of danger. Thus, our whole range of tripod agitators is CE-certified.

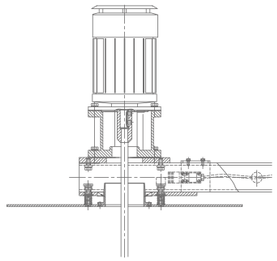
Mechanical safety equipment

The stand mixers can be protected against access to moving parts with a shaft protection sleeve when used in open tanks which are big enough or with a spring-suspended lid when the tanks are small or tanks with various heights are used. The lift way is covered by bellows and the mixing tank is clamped in mixing position or checked by a limit switch arm.

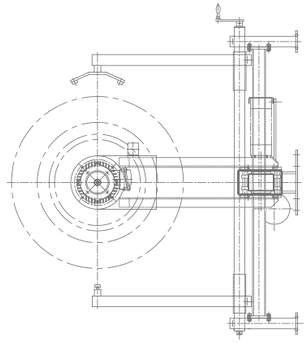
According to the customers' requirements, the spring suspended lid could be supplied with level sensors, and various nozzles and hubs for filling.



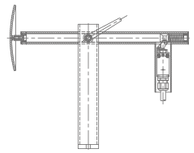
Shaft protection sleeve



Spring-suspended lid



Vessel clamp



Limit switch arm

Electric safety equipment

The stand mixer is delivered with an electric safety control which allows operation of the mixer only when the mixer is in mixing position and when a vessel is positioned below the mixer.

Examples for Safety Control Boxes

- Single safety switch for manual stroke adjustment
- Single safety switch for electric stroke adjustment
- Ex-proof safety switch for manual stroke adjustment
- Ex-proof safety switch for electric stroke adjustment
- Ex-proof safety switch (control box outside of area with potentially explosive atmosphere, handling in this area)
- Pneumatic mixers feature a pneumatic safety switch with pneumatic limit switch.

Equipment options for tripod agitators

Depending on the standard models, our tripod agitators can be equipped with a wide range of options and special features. Geppert Rührtechnik engineers this product line to your individual mixing task.

Drives

- Drives with fixed speed
- Drives with special voltage
- Drives with thermistors for fc inverter operation
- Drives with integrated fc inverters
- Drives with helical gear box
- Drives with parallel shaft gear box
- Drives with worm gear box
- Mechanical variable speed geared drive
- Pneumatic drives
- Pneumatic gear drives

Lift

- Manually with geared hand-wheel
- Electrically with lift drive and chain drive or via a threaded spindle

Tank positioning

- Manually with laterally movable brackets
- Laterally movable brackets with hand wheel and threaded spindle
- Limit switch arm for containers with plate switch
- Folding for use of drums and containers

Spring suspended lit

- Basic closed design with short lift way for single, open vessels and drums
- Basic closed design with long lift way for open vessels with various heights
- Limit switch-controlled filling and inspection flap (also as part of the lid)
- Nozzles and hubs for filling, pumps, aspiration, level sensors

Wetted parts

- Stainless steel (1.4571) without surface treatment
- Ground and polished surfaces with recess-free transitions between single compounds
- Plastic covers (PP, PVDF)
- Coating with E-CTFE or PFA
- Special steels (1.4462, 1.4539, Hastelloy)
- For applications in the field of food and drug industry or clean room technology, the stand mixers can be manufactured completely in stainless steel with the lift mechanism being completely encased. The casing and the stand frame can be ground and polished.

Protection from rotating parts

- Basic grip protection sleeve from perforated sheet for fixed agitator shaft couplings
- Grip protection sleeve with flap and limit switch for exchangeable agitator shafts
- Spring-suspended lid with bellow
- Spring suspended lid with telescope sleeve

Explosion protection

Depending on the process requirement our tripod agitators feature an explosion-proof design to ATEX RL 2014/34/EU for operation in rooms classified as ex-zone 1 and 2 and tanks classified as ex-zone 0 - 2.

EQUIPMENT OPTIONS

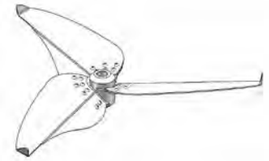
At Geppert Rührtechnik we are happy to provide you with competent advice regarding the mixing elements, the wetted parts, and the seals that fit your individual mixing task

GEPPERT
INNOVATIVE MIXING SOLUTIONS

MIXING ELEMENTS

Our agitators can be combined with all mixing elements that fit your individual mixing task.

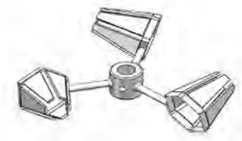
Geppert mixing elements:



gLX-mixer

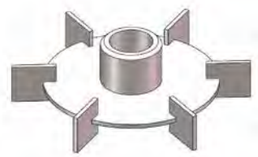
gCP-mixer

gHM-mixer

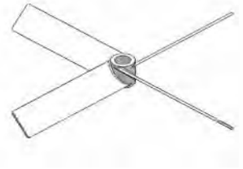


Hexagonal mixer / Spiral mixer

Standard-mixing elements:



Six-bladed rushton impeller



Pitched blade turbine

Propeller

Anchor

Segmental helical ribbon impeller

Disperser disc

Trapezoid mixer

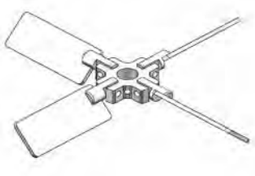
Special mixing elements:

Multi-stage counterflow impeller

Interacting MSC-impeller

V-impeller

Folding propeller small



Folding propeller big

ⓘ Other special mixing elements upon request.

WETTED PARTS

Depending on the reactor process and operating mode, a range of materials are available for the wetted parts.

Stainless steels: 1.4571, 1.4404, 1.4301, 1.4462, 1.4539, Hastelloy

Special metals: Titanium, Tantalum, Zirconium

Unalloyed steels: St 37-2, St 52-3

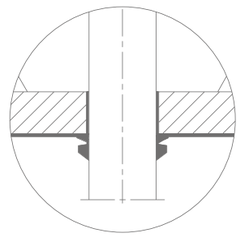
Covers: PP, PVDF, PTFE

Coatings: Hard-rubber-lining, hard/soft-rubber-lining, Halar (E-CTFE), PFA, conductive coatings for explosion-proof applications

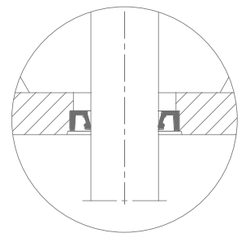
SEAL TECHNOLOGY

Depending on the reactor process and operating mode, the agitators can be supplied with varied seals for pressurized and non-pressurized operation. Usually, these seals are mounted within sealing housings.

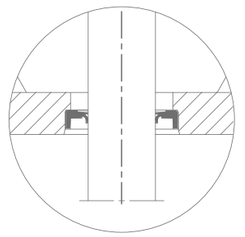
For applications in the food and pharmaceutical industries, we manufacture in all available stainless electro polished steel grades. All coatings and sealing materials are supplied with the relevant FDA[1] certificates of conformity.



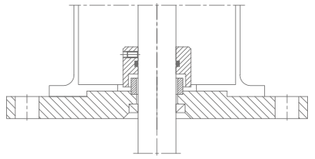
V-ring lip seal



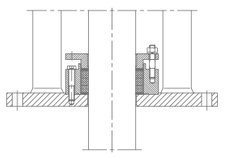
Radial shaft seal ring



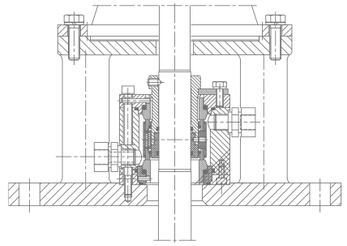
Garlock lip seal



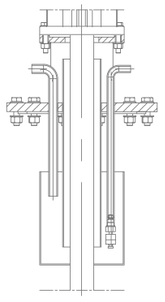
Labyrinth seal



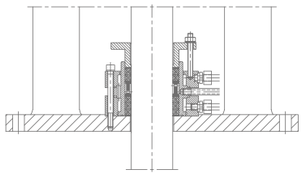
Stuffing box



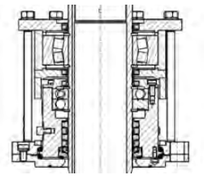
Mechanical seal (single- or double-acting)



Water lock



Stuffing box with lubrication



Lip cartridge

[1] FDA: Food and Drug Administration

INDIVIDUALLY TAILORED SOLUTIONS
Advantage trough pioneering

Service

Our concept of service lies far beyond the ordinary. Not only do we offer professional consulting services and individually tailored solutions but also comprehensive after-sales services. We can implement our mixing solutions in your plants. We look forward to assisting you in terms of trainings. As a matter of course, we take care of your agitation tests in our technical center, later modifications and optimizations.

Our in-house test plant

In order to ensure the high quality and long service life of our agitators, we have set up an in-house plant for testing our agitators. At the end of the manufacturing process, all of our agitators undergo a specific test procedure with a final test run. Here, we can test agitators with a shaft length of up to twelve meters and mixing elements with a diameter of up to six meters.

All Geppert Rührtechnik mixing systems are delivered with O&M Manual and worldwide technical service.

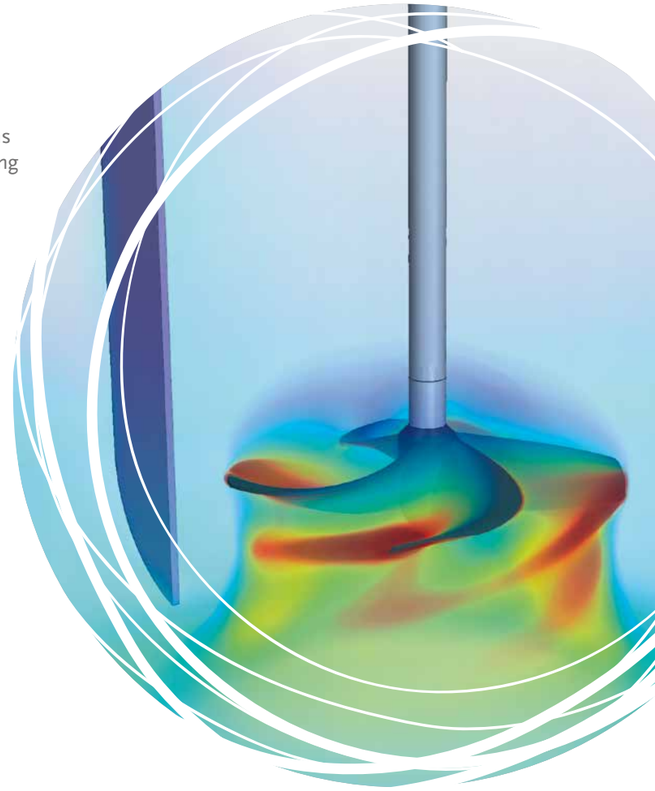
THINK FLUID DYNAMIX® –
fluid dynamic solutions with CFD[1]

Challenging, customer-specific mixing technology solutions can be numerically simulated as early as during the planning phase, and the results are analyzed. This means increased design confidence, high-quality solutions and, as a result, reduced project duration and costs.

Our experts from THINK Fluid Dynamix® are specialists in the application of numerous techniques such as flow simulations in real time and artificial intelligence methods for automated optimization. This enables processes, such as mixing and homogenization, to be analyzed more accurately under consideration of all applicable process parameters, and complex tasks to be processed more efficiently.

These methods set entirely new standards in terms of design reliability and efficiency. Allow us to contribute to your success!

www.think-fluid-dynamix.com



EXPLOSION PROTECTION TO ATEX –
trust the experts!

Geppert Rührtechnik GmbH has been a certified manufacturer of explosion-proof agitator drives since 2003. This made us one of the first companies to develop and produce ATEX-compliant agitators.

Our agitators are certified to ATEX Directive 2014/34/EU (formerly Directive 94/9/EC) in gas or dust explosion proof designs. In addition, the majority of agitator types has type test certificates for explosive zone 0, and can be used in applications in which an explosive atmosphere, arising from a mixture of air with flammable substances in the form of gas, vapor, or mist, is present.

We offer ATEX-compliant controls for our explosion-proof design agitators. Talk to us and make use of our many years of experience on the topic of explosive protection. We will be happy to assist you!

Our services in the field of explosion proof agitators

- Providing advice on zoning
- Solutions to avoid explosive zones
- Providing advice on choice and control of sensor systems
- Assistance in preparation of explosive zones documentation
- Certification of your entire mixing plant in cooperation with the federal Technical Inspection Agency TÜV

[1] CFD: Computational Fluid Dynamics

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