

construction machinery manufacture

UMP 1 - flexible mixing pump systems

made with practical orientation - universally usable - flexible with high efficiency - easy handling



concreting - grouting - plastering - tuckpointing and repointing - restoration - ecological building

baustarke Technik



Our machine manufacture mixing pumps built with passion

Our construction machinery manufacture, Deutsche Foerdertechnik, has its head office in Saxony, one of the eastern states of Germany. We produce and develop our products in Bautzen, about 60 km south-east of the state's capital Dresden.

Since its founding in 2006, Deutsche Foerdertechnik has been the manufacturer of self-developed construction machinery technology – made in Germany. This has been made possible due to years of experience with building technology. We have been working in the machine construction sector for more than four decades and have specialised in construction machines since 1991.

Trading with a range of building machinery and different materials handling technologies for renting, sale and service and the resultant problems motivated us to look for new solutions.

We have developed concrete and innovative technical solutions step by step on the basis of matters concerning machine construction, requirements of our customers, and many practical experiences. The end product of this long and intensive practical development phase is the universal mixing pump system UMP 1. The technology used here solely concentrates on the daily requirements in the construction industry.

Apart from the standard use, we have also developed the mixing pump system UMP 1 for materials difficult to process with, for instance, special grain properties or consistencies and other specific uses.

As a medium-sized company focussing on production, quality assurance, practical needs, ecological aspects and customer-orientation, we hold flexibility and implementation of individual solution concepts for special requirements to be of supreme important.



Deutsche Fördertechnik

We work for the best case flow. The UMP 1 is a continuously operating mixing pump for factory premixed, machinable materials in powder form, such as plaster, mortar or grout material. Plastering and grouting mixtures, pasty components or spackling compounds as well as material with a thinner consistence like leveling compounds can be processed. UMP 1 can be fed with bag as well as silo goods with injection hoods or transfer hoods.

It is made for use as mixing and conveying pump, plastering or clay plastering machine, screed pump and horizontal continuous mixer.

Use as mixing pump

For all dry mortar such as cement, grouting mixtures, plaster and mortar for stonework, machine plaster, plaster to defog, lime plaster, cement plaster, limecement plaster, insulating plaster, reinforcing mortar, floating screed or technical mortar.

■ Use as conveying pump

For wet products and pasty materials such as: finishing coats, decoration plaster, tackifying and basecoat mortar, spackling compound or mortar for grouting.

Use as horizontal continuous mixer

For mixing products like: plaster and mortar for stonework, cement screed, concrete or technical mortar products.

Use as screed machine

Possible usage for processing anhydrite flowing screed, floating floor screed or cement screed.

UMP 1 machine series overview

UMP 1 Standard plus

universally usable mixing and conveying pump, 4,0-kW-drive power supply: 400 V /16 A

UMP 1 Dualpower

universally usable mixing and conveying pump, 4,0-kW-drive power supply: dual switchable 230 V, 16 A and 400 V. 16 A

■ UMP 1 Singlepower

universally usable mixing and conveying pump, 3,0-kW-drive power supply: 230 V / 16 A



■ UMP 1 L-Power

clay plaster machine with option for usage as universally usable mixing and conveying pump, 4,0-kW-drive power supply: 400 V / 16 A

UMP 1 L-Power dual

clay plaster machine with option for usage as universally usable mixing and conveying pump, 4,0-kW-drive power supply: dual switchable 230 V, 16 A and 400 V. 16 A

Five individualized kinds of machines on the basis of a solid technical concept, it's a solution for many demanding tasks of construction business.



UMP 1 - mixing pumps with an ideal weight concreting - grouting - plastering



23 kg mixing and conveying unit with mixing shaft

33 kg material container unit with dosing shaft

79 kg

motor and control unit



UMP 1 - mixing pumps with an ideal weight specially for clay plaster also for universal usage





UMP 1 highlights - plus points for our mixing pumps

+ *plus point* Universal usage

As the short name UMP = Universal Mixing Pump suggests, the machine series offers variable areas of use such as mixing pump, plastering and clay plastering machine, conveying pump, continuous flow mixer and screed machine. UMP 1 also offers a wide range of options for the materials to be processed that, with just a simple replacement of the material container the special clay plaster machine UMP 1 L-Power , can be further extended for processing conventional construction materials.

+ green plus

For different kinds of construction material and processing that, you need one machine only and make sure that energy and logistical potential also natural resources will be protected.

+ plus point

Comfortable operating principle

We have succeeded in converting the conventional vertical working of mixing pumps to a more comfortable horizontal processing. As one result there is an optimized filling and working height for user.

+ *plus point* Reduction of machine weight

Being really light-weight at 135 kg or 157 kg, the UMP 1 is much better than comparable mixing pumps and therefore guarantees a flexible and easy handling. A high performance and a low weight that's the best combination for working with best results in comfort.

+ green plus

Efficient and minimized utilization of resources.

+ *plus point* Optimized frame size

The size is also minimized and optimized, leading to a considerably reduced space requirement while transporting the UMP 1. It also offers the possibility of a noticeably higher loading capacity in transport vehicles.

+ green plus

Optimized used resources and an optimal usage of logistical potential and loading capacities.





UMP 1 highlights - plus points for our mixing pumps



A MINUS for

CO₂ emissions noise emissions materials input logistical effort and energy use

A environment for energy efficiency and natural resources



+ *plus point* Loss of CO₂ emissions

The UMP 1 series also takes into consideration the environmental aspects with the reduction in CO_2 emissions while operating the mixing pumps up to 45 percent against comparable technology with same performance.

+ green plus

Loss of \mbox{CO}_2 emissions - it's much better for climate and environment.

+ *plus point* Lower noise emission

In the matter of noise protection it's a good working with the UMP 1 machine series. The continuous sound level it's less than 70+/- 1 dB. That's why it can be used in residential areas or sacred buildings easily. It's possible to use everywhere, noise protection being observed to a special degree.

+ green plus

It makes a lower noise emission for a healthier environment

+ *plus point* Lowered energy use

Our continuous utilization of motor output and reduction of energy requirement during mixing and pumping procedure allow the energy consumption of the mixing pumps to be reduced to just 3.0 kW or 4.0 kW at a comparable output of a 5.5 kW mixing pump.

+ green plus

Energy resources will be used clever and efficient.

+ *plus point* Manufacturing location

We are producing in Germany in the federal state Saxony and working together with a lot of local firms. It will be secured jobs here and reduced the logistical effort.

+ green plus

A reduced logistical effort - it's going easy on energy and natural resources and also it's a lower emission for environment.

Extended functions for a maximum flexibility the optional UMP 1 extras make it possible

Dual operation mode 230 V, 16 A or 400 V, 16 A

Two versions of mixing pump UMP 1 be equipped with a freely selectable dual operation mode. In case of UMP 1 Dualpower and UMP 1 L-Power dual the user can switch over to 230 V mode or 400 V high voltage current mode. With the 230 V, 16 A operation mode performance it's widely the same as in 400V mode, that's why it can be used anywhere there is no 400 V power supply.

Usage can be extended so for situations without an option for a machine operation with a 400 V power supply.



Integrated booster pump

The built-in booster pump for water enables a machine operation without a connection to a water supply system, for instance while working with water from a barrel.

It keeps a constant water pressure in case of varying water pressure conditions at construction site. In operation there is an automatic switch on/switch-off as needed for usage.

It can be used in a manual mode for water supply from a barrel at construction area too. In sum a solution for maximum flexibility and comfortable handling.



Speed control in conveying pump mode

Flexibility it's being popular today. That's why the machine processing should be made for a wide range of materials and different uses.

Speed control in the conveying pump mode is made for an individual conveying capacity regulation.

It's making sure a more precise material application and an optimal distribution of it. This function makes sense for tuckpointing and repointing or for particular cases with individually mixed compounds or grout and plaster materials.



UMP 1 L-Power well-equipped for everything from professional for clay to a general use



Standard material container for exchanging it to be ready for processing conventional construction materials such as lime plaster or high-grade plaster. UMP 1 L-Power with material container for processing clay plaster earth-moist or dry.



The UMP 1 Standard is operating with 400 V/16 A electric power. The Standard plus version, is equipped with an efficient high-output 4.0 kW drive.

Standard equipment

mixing pump UMP 1 Standard plus, 400 V, 16 A with 4,0 kW drive complete with:

pump unit D 6 3 maintenance-free standard geared motor 4,0 kW mixing shaft standard dosing shaft variant 1 water flow meter 100-1000 l/h air compressor with pressure switch-off mixing zone fine plaster spraving gun connector for remote control mortar pressure hose 25 mm, length 10 m, cpl. with couplings air hose 1/2", length: 10,0 m, complete with couplings mortar pressure gauge tool bag operating instructions

Machine parameters:

length 1710 mm width 650 mm height 780 mm total weight ca. 135 kg hoppercontent ca. 70 liter filling height 730 mm hoppercontent with extension hopper 145 liter filling height 910 mm; optional equipment

Technical data:

drive 4,0 kW; 400 V/50 Hz possible pumping capacites ca. 5 - 35 l/min with D-pumps ca. 35 - 65 l/min with R-pumps conveying distance* max. 45 m with plaster, with motar pressure hose NW 35: max, 50 m with calcium sulfate flow screed. with motar pressure hose NW 35: working pressure max. 30 bar

Operational requirements:

power connection 400 V fuse protection 3 x 16 A slow-blow fused water connection 3/4 inches with Geka-coupling water pressure mind. 2,5 bar at working machine

Features:

High-output 4.0 kW drive with an efficient energy consumption. Equipped with a three-phase-control-unit.

	UMP 1
400 V, 16 A	Standard plus

Other optional equipment for this machine can be seen under the machine accessories section.

> * Guide values, depending on the material, pump status, conveying height, material consistency, material quality and material composition.





UMP 1 Dualpower can be used for operation in 230 V/16 A mode as well as for working with electric high power, in a 400 V/16 A mode.

Standard equipment

mixing pump UMP 1 Dualpower, switchable, 230 V/400 V, 16 A, with 4,0 kW drive complete with:

pump unit D 4 3 maintenance-free UMP V 1 aeared motor 4.0 kW electrical cable 3 x 2,5 mm², 25,0 m mixing shaft standard dosing shaft variant 1 water flow meter 100-1000 l/h air compressor with pressure switch-off mixing zone fine plaster spraying gun connector for remote control mortar pressure hose 25 mm, length 10 m, complete with couplings air hose 1/2", length: 10,0 m, complete with couplings mortar pressure gauge tool bag operating instructions

Machine parameters:

length 1710 mm width 650 mm height 780 mm total weight ca. 135 kg hoppercontent ca. 70 liter filling height 730 mm hoppercontent with extension hopper 145 liter filling height 910 mm; optional equipment

Technical data:

drive 4,0 kW; 400 V/50 Hz possible pumping capacites ca. 5 - 35 l/min with D-pumps ca. 35 - 65 l/min with R-pumps conveying distance* max. 45 m with plaster with motar pressure hose NW 35; max. 50 m with calcium sulfate flow screed, with motar pressure hose NW 35 working pressure max. 30 bar

Operational requirements:

power connection 230 V/400 V fuse protection 1 x 16 A/3 x 16 A slow-blow fused water connection $\frac{3}{4}$ inches with Geka-coupling water pressure mind. 2,5 bar at working machine

Features:

Operating mode can be selected by the user. Performance is widely retained in 230 V mode. Equipped with a three-phase-control-unit.

	UMP 1
230 V 16 A/400 V 16 A	Dualnower

Other optional equipment for this machine can be seen under the machine accessories section.

* Guide values, depending on the material, pump status, conveying height, material consistency, material quality and material composition.



The UMP 1 Singlepower mixing pump is operating without any reduction in the output in single phase 230 V/16 A mode for the most part. It needs a 230 V, 16 A power supply only.

Standard equipment

mixing pump UMP 1 Singlepower, 230 V, 16 A with 3,0 kW drive complete with:

pump unit D 4 3 maintenance-free UMP V 1 aeared motor 3,0 kW electrical cable 3 x 2,5 mm2, 25,0 m mixing shaft standard dosing shaft variant 1 water flow meter 100-1000 l/h air compressor with pressure switch-off mixing zone fine plaster spraving gun connector for remote control mortar pressure hose 25 mm, length 10,0 m, complete with couplings air hose 1/2", length: 10,0 m, complete with couplings mortar pressure gauge tool bag operating instructions

Machine parameters:

length 1710 mm width 650 mm height 780 mm total weight ca. 135 kg hoppercontent ca. 70 liter filling height 730 mm hoppercontent with extension hopper 145 liter filling height 910 mm; optional equipment

Technical data:

drive 3,0 kW; 400 V/50 Hz possible pumping capacites ca. 5 - 35 l/min with D-pumps ca. 35 - 65 l/min with R-pumps conveying distance* max. 25 m with plaster with motar pressure hose NW 25; max. 50 m with calcium sulfate flow screed, with motar pressure hose NW 35 working pressure max. 30 bar

Operational requirements:

power connection 230 V fuse protection 1 x 16 A slow-blow fused water connection $\frac{3}{4}$ inches with Geka-coupling water pressure mind. 2,5 bar at working machine

Features:

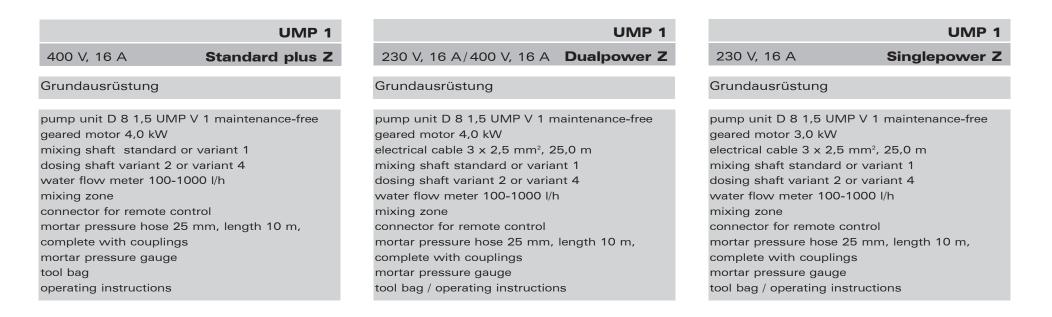
For usage without an option for a machine operation with a 400 V power supply.

	UMP 1
230 V, 16 A	Singlepower

Other optional equipment for this machine can be seen under the machine accessories section.

* Guide values, depending on the material, pump status, conveying height, material consistency, material quality and material composition.





Machines of UMP 1 Z-series made and equipped for grouting, tuckpointing, repointing and geothermic usage, here especially for refilling boreholes. Grouting ring beams or door frames, borehole injections, filling joints or processing screed products all this is possible with the specialised UMP 1 Z-series. Further it can be used as a conveying pump with various building materials. The UMP 1 Z-series is made for using in selected fields of application and has a modified equipment without compressor, fine plaster spraying gun and air horse. For applications such as grouting, tuckpointing, repointing, working with screed products and refilling boreholes in the field of geothermics, the UMP 1 Z-series it's a good alternative solution. To upgrading the Z-machines for usage as plastering machine, it's easily possible any time.

UMP 1 L-Power has been optimized for use with clay plaster products. With a second material container it can be used universally for conventional construction materials.

Standard equipment

mixing pump UMP 1 L-Power, 400 V, 16 A with 4,0 kW drive complete with:

pump unit D 6 3 maintenance-free standard geared motor 4,0 kW mixing shaft standard dosing shaft variant 5 for L-Power water flow meter 100-1000 l/h air compressor with pressure switch-off mixing zone fine plaster spraving gun connector for remote control mortar pressure hose 25 mm, length 10,0 m, complete with couplings air hose 1/2", length: 10,0 m, complete with couplings mortar pressure gauge tool bag operating instructions

Machine parameters:

length 1710 mm width 650 mm height 810 mm total weight ca. 157 kg hoppercontent ca. 115 Liter filling height 700 mm

Technical data:

drive 4,0 kW; 400 V/50 Hz possible pumping capacites with D-pumps; ca. 5 - 35 l/min with D-pumps ca. 35 - 65 l/min with R-pumps conveying distance* max. 45 m with plaster with motar pressure hose NW 35, max. 50 m with calcium sulfate flow screed, with motar pressure hose NW 35 working pressure max. 30 bar

Operational requirements:

power connection 400 V fuse protection 3 x 16 A slow-blow fused water connection $\frac{3}{4}$ inches with Geka-coupling water pressure mind. 2,5 bar at working machine

Features:

Special mixing pump for clay products, with an option for usage with all conventional construction materials. Equipped with three-phase-control-unit.

	UMP 1
400 V, 16 A	L-Power

Other optional equipment for this machine can be seen under the machine accessories section.

* Guide values, depending on the material, pump status, conveying height, material consistency, material quality and material composition.





UMP 1 L-Power dual with a selectable operation mode has been optimized for use with clay products. With a second material container it can be used universally.

Standard equipment

mixing pump UMP 1 L-Power dual 230 V/400 V, 16 A switchable 4,0 kW drive complete with:

pump unit D 4 3 maintenance-free UMP variant 1 geared motor 4,0 kW electrical cable 3 x 4.0 mm², 25 m mixing shaft standard dosing shaft variant 5 for L-Power water flow meter 100-1000 l/h air compressor with pressure switch-off adapter for a separate circuit for air compressor in 230-V-mode mixing zone fine plaster spraving gun connector for remote control mortar pressure hose 25 mm, length 10,0 m, complete with couplings air hose 1/2'', 10 m, complete with couplings mortar pressure gauge

tool bag, operating instructions

Machine parameters:

length 1710 mm width 650 mm height 810 mm total weight ca. 157 kg hoppercontent ca. 115 Liter filling height 700 mm

Technical data:

drive 4,0 kW; 400 V/50 Hz possible pumping capacites with D-pumps; ca. 5 - 35 l/min with D-pumps ca. 35 - 65 l/min with R-pumps conveying distance* max. 45 m with plaster with motar pressure hose NW 25, max. 50 m with calcium sulfate flow screed, with motar pressure hose NW 35 working pressure max. 30 bar

Operational requirements:

power connection 230 V/400 V fuse protection 1 x 16 A/3 x 16 A slow-blow fused Wasseranschluss ³/₄" mit Geka-Kupplung water pressure mind. 2,5 bar at working machine

Features:

Special mixing pump for clay products, with an option for usage with all conventional construction materials plus selectable operation mode 400 V or 230 V. Equipped with a three-phase-control-unit.

UMP 1

230 V, 16 A/400 V, 16 A L-Power dual

Other optional equipment for this machine can be seen under the machine accessories section.

* Guide values, depending on the material, pump status, conveying height, material consistency, material quality and material composition.



UMP 1 mixing pumps - optional machine equipment rotos stators - D-pump units and R-pump units

rotor stator D3 spray, UMP, white-green*

ca. 6 liter/min quality made in Germany for usage with: high-grade plaster or clay finishing coats fine Art.-Nr. 90501-90520

rotor stator D3 special, UMP, rose*

ca 6 liter/min quality made in Germany for usage with: mortar products such as mortar for grouting Art.-Nr. 90501-90538

rotor stator D4 3, standard, green* ca 12-15 liter/min quality made in Germany for usage with: clay finishing coats fine, tackifying and basecoat mortar Art.-Nr. 90502-90521

rotor stator D4 3, special, green* special rotor, green marked quality made in Germany for usage with: tackifving and basecoat mortar. mortar for grouting Art.-Nr. 90502-spezial-90521

rotor stator D4 3, UMP, sky-blue* rotor standard, black auality made in Germany for usage with: tackifving and basecoat mortar and for plastering with 230 V mode, Art -Nr 90502-90522









rotor stator D4 3 UMP. sky-blue* special rotor, green marked quality made in Germany for usage with: basecoat mortar, mortar for grouting, for plastering with 230 V mode Art.-Nr. 90502-spezial-90522

rotor stator D6 3, orange, standard*

ca. 24 liter/min quality made in Germany for usage with: lime-cement-plaster, lime plaster, clay plaster, coarser-grained Art.-Nr. 90503-90523

rotor stator D6 3, spiral, orange* ca. 24 liter/min quality made in Germany for usage with: lime-cement-plaster, lime plaster or plaster for insulation Art.-Nr. 90503-90524

rotor stator D6 3, V 1, zinc yellow* ca. 24 liter/min quality made in Germany for usage with: lime plaster, special plaster, grout material Art.-Nr. 90503-90528

rotor stator D6 3, UMP V 2, beige* ca. 22 liter/min quality made in Germany for usage with: materials with special textures and compositions Art -Nr 90503-90525





- rotor stator D8 1.5. UMP V 1. light grev* ca. 30 liter/min quality made in Germany for usage with: screed/concrete BE 04, BE 08 arouting mortar, grouting compound Art.-Nr. 90504-90529
- rotor stator D8 1,5, UMP V 2, pastel violet* ca 30 liter/min quality made in Germany for usage with: levelling screed, floating screed, grouting mortar, grouting compound Art.-Nr. 90504-90532

rotor stator R7 1,5, UMP, V1 light grey* quality made in Germany for usage with: ready-mixed concrete 0-8 mm, floating screed Art.-Nr. 90515-90550

rotor stator R8 1,5, orange* quality made in Germany for usage with: levelling screed, floating screed. special materials Art -Nr 90516-90551











* maintenance-free pump units









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UMP 1 mixing pumps - optional machine equipment selected accessories

air hose 1/2", 5 m for mixing pump, with couplings complete with 2 x Geka-coupling	ArtNr. DF-90122	extension hopper UMP 1 to extending the hopper capacity to 145 Liter	ArtNr. DF-90001	medium to lubricate mortar pressure hoses 5 liter/bucket, ready mixed	ArtNr. DF-90658
air hose 1/2", 10 m for mixing pump, with couplings complete with 2 x Geka-coupling	ArtNr. DF-90121	extension hopper - protection grille large version for using with UMP 1 machines	ArtNr. DF-90002	mortar pressure hose NW 25 complete with hydraulically fitted couplings and rotary coupling, 5 m	ArtNr. DF-90668
assembling spray, slide spray assembly aid for rotors and stators spray can, 400 ml	ArtNr. DF-90656	fine plaster spraying gun NW 25 short version complete with spraying nozzle 14 mm	ArtNr. DF-90607	mortar pressure hose NW 25 complete with couplings 10 m	ArtNr. DF-90604
compression flange for R-pumps usage with UMP 1 machines	ArtNr. DF-10008	fine plaster spraying gun NW 25 long version, cranked complete with spraying nozzle 14 mm	ArtNr. DF-90608	mortar pressure hose NW 25 complete with hydraulically fitted couplings 10 m	ArtNr. DF-90632
double air compressor with pressure switch-off 400 V	ArtNr. DF-90681	fine plaster spraying gun NW 35 short version complete with spraying nozzle 16 mm	ArtNr. DF-90677	mortar pressure hose NW 35 complete with couplings 10 m	ArtNr. DF-90657
ejection part with swan's neck coupling mail d=35 mm for set up the material consistency	ArtNr. DF-90681	gluing gun for mortar with 15 m cable, 25 female part for grouting and filling	ArtNr. DF-90638	mortar pressure hose NW 35 complete with couplings 20 m	ArtNr. DF-90674
electrical cable 5 x 2,5 mm² - 25 m, 16 A power connection cabler	ArtNr. DF-90600	hose holder fixing tool for mortar pressure hoses	ArtNr. DF-90664	setting gauge for air tube nozzle and spraying nozzle stainless steel	ArtNr. DF-90670 - 8200
electrical cable 5 x 4,0 mm² - 50 m, 16 A power connection cable	ArtNr. DF-90601	injection hood complete with monofilter without probe	ArtNr. DF-10008	spraying gun complete with couplings for cleaning construction machinery	ArtNr. DF-90653
erection bar and flange for assembly or disassembly for operating with rotor and stator	ArtNr. DF-90685-90686	material container standard replacement container for UMP 1 L-Power	ArtNr. DF-36029-8200	water hose for mixing pump 3/4" complete with couplings 20 m/40 m	ArtNr. DF-90605/90606





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Zeppelinstr. 11 D-02625 Bautzen phone +49 35 91 / 53 09 54 fax +49 35 91 / 31 89 65 7 email: info@deutsche-foerdertechnik.com www.deutsche-foerdertechik.com



We made in Germany



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