

MMX^{press} THE **SUCCESSFULL** SYSTEM



MMX^{press}

Performance that
inspires



MASTER MIX - 10,5 m³



MEGA MIX **DUO** - 20 m³



MEGA MIX **DUO XL** - 32 m³

**MILLING- AND MIXING
EQUIPMENT FOR
EVERY APPLICATION**

11/2019

MASTER MIX - the original system - 3 to 6 tonnes - the proven sizes

The Master Mix series is the volume model of our MMX-Press range. Especially the 6-tonne model, due to its compact construction, is the most frequently sold equipment. The heart of this mobile Mill-/Mixing installation was and IS the ORIGINAL SUCTION-PRESSURE Mixer of TROPPER. There are now around 500 units operating in 23 different countries across Europe!

The Master Mix series appears in modern design. On the basis of smooth covers, the closed silencer cover with its rounded surfaces can be cleaned easily. Large aluminium covers provide easy accessibility to the powerful main units.



MMX 6216 QAD

Producing quality mixtures - Avoiding contamination!



„For us, simple operation matters - after a short time you can really work efficiently and quickly! The clean product change is also one of the big advantages of the MMX-Press. Here I know that TROPPER as the inventor of the suction-pressure mixer system has the most experience with complete discharge! At TROPPER, you will also find the right solution for special requirements such as mounting of a second roller mill or installation of a calibrated scale!“

MASTER MIX - Robust technology for top performance

Ongoing rise in sales of Mill-/Mixing installations (mobile or stationary) show the increasing importance of the Russian market. The modular construction of the MASTER MIX is ideally suited for such application variants. Also in Siberia-- the TROPPER installations work reliably. Serviceability and cost-effectiveness are appreciated.



MMX-Press in Russia

Complete discharge since 1992

As an operator of Milling and mixing equipment, you attach importance to clean and rapid product change. Since 1992, TROPPER Mill-/Mixing installations have been discharged with a simple and efficient system: Thanks to maintenance-free discharge cones, the tank is optimally emptied without any complex mechanical assembly! In combination with the standard impactor (cleans the mixer wall) and the discharge stop, you reach impressively clean solutions. As a contractor, you supply high-quality compound feed – we supply the right tool.

DRIVE / ENGINE

- Modern industrial diesel
- 331 kW / 450 hp - EU stage V (SCR-technology) with top-mounted water-cooler, easy cleaning
- NMV Direkt-drive from lorry

HAMMER MILL HM 660

- Output - 35 te/h
- Efficient milling performance - Screen area 1.1 m²
- 160 carbide metal hammers
- Choice of perforated strainers or wire screens
- Variants:
- **HM 500 Plus** - 120 carbide metal hammers

ROLLER MILL QR 600

- Output – 24 te/h
- Roller size l = 600 mm / ø 400 mm
- continuously adjustable hydraulic gap setting (automatic preselection by recipe input)

MIXER

- Capacity 3 – 18 te
- Tested mixing accuracy
- Thick-walled mixing container of quality steel or aluminium
- Impactor for complete discharge
- Low construction height

MIXER DISCHARGE

- optionally with HP 1.5 bar
- with feeding arm 6 te in 4 – 7 min.
- with hose in silo 6 te in 7 – 15 min.
- with discharge screw conveyor 6 te in 8 – 12 min.

- **SUCTION and PRESSURE SYSTEM**
- Outstanding original from the inventor
- Decades of experience
- Airblock with cooling and temperature management, optionally Airblock HP (1.5 bar)
- Conveying hoses ø 90 / 100 / 110 mm

FEEDING ARM / DISCHARGE SCREW

- Hydraulic rotary actuator and lift
- Operation at the rear and with joystick in the driver cab, optionally with pear switch/radio control
- Twice articulated feeding arm (folding)

OIL ADDITION

- Heated Oiltank 450 l bis 2.500 l
- Exact dosing by means of a flow meter
- Variant: molasses addition with tank, pump and counter

OPERATION AND MAINTENANCE

- Easily accessible power units
- 160 l stainless-steel hopper for sack-filled goods
- MMX Control Profi as standard

POSSIBILITIES FOR INDIVIDUALISED EQUIPMENT

- Acid addition with dosing tank
- Feed silo combined with storage space
- Printer version for records
- Centralised lubrication
- Radio remote control MMX TFT 11 / TFP 9
- Double roller mill for even better crushing performance

Tropper offers you long-term advantages:

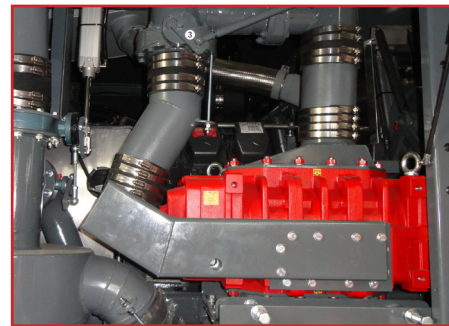
- **TROPPER stands for simple maintenance:** very good access to the units through large, wide-opening maintenance covers
- **Mixer size according to need:** choose from the complete range from 3 tonnes to 18 tonnes – we manufacture to your desired size!
- Tested mixing precision and calibratable scale (optional) for your quality assurance
- Simple and robust operation through rods and standard MMX Control unit
- Outstanding discharge output through optimised routing (optionally with HP up to 1.5 bar)
- Rapid product change through complete discharge to increase daily output
- Comprehensive personal advice and customer service
- Quick supply of replacement parts (optionally overnight by express courier)

Hammer mill HM 660 - powerful



The mill is fitted with 160 hammers, as a standard. Screen size increased by 30% - 1.1 m² screen area for better milling performance. Changing the screen is possible in the simplest manner without any tools. Thanks to the balanced material distribution and the variable fitting of the hammers, milling performances of over 35 tonnes of grain per hour are not uncommon. Robust construction methods and generously dimensioned support ensure a long operating life! Here, the engine power output is efficiently converted into grinding performance!

AIRBLOCK EXTRA Power **ECO Power**

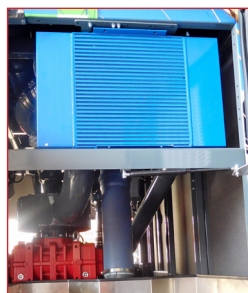


Thanks to the development of a large-volume compressor with enlarged bypass passage, the full suction performance is already reached at low

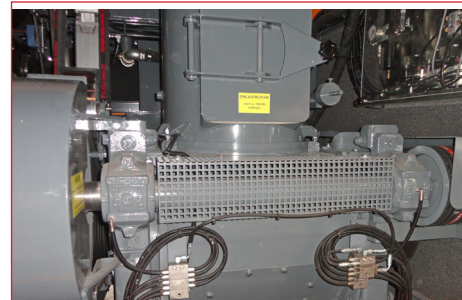
engine revolutions! In this way, feed supplements and soybean meal can be aspirated effectively. Thanks to this low speed, also maize or sugar beet pulps can be crushed optimally and with good structure. Indeed, the plant runs very smoothly and, above all, is really fuel-efficient!

AIRBLOCK HP - increased blowing performance!

The quiet-running TROPPEL AIRBLOCK provides new opportunities! Increase the blowing performance and speed up the discharge process of your mixing container by up to approx. 30%! Robust blower units and high-pressure technology up to 1.5 bar discharge pressure ensure optimal operating conditions and long-term durability.



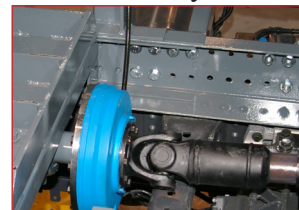
Roller mill QR 600 - robust



Concerning the solid roller mill, crushing performance and crushing quality are always the top priority. The large crushing rollers with a diameter of 400 mm and the proven belt drive enable the highest throughput. Easy roll gap setting during operation. Electronic speed monitoring for optimal safety. Installations with direct drive can optionally be equipped with a second roller mill for excellent crushing capacity with spelt or oats!

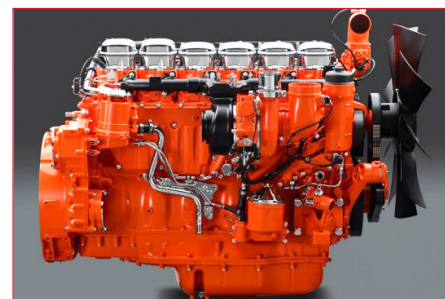
Your choice: Direct- or engine drive

Direct drive: Profit by the Euro 6 exhaust-gas technology of the new lorry product lines (e.g. Antos, Arocs, etc.). New methods of exhaust gas treatment save fuel, and the standards for exhaust emissions are observed. The power take-off of the new lorry manufacturers is released to 3000 Nm! Trust in the experience and the lead of TROPPEL, more and more units are driven by direct drive from a lorry! The maximum operation speed of 1,600 rpm during sucking ensures optimal performance with low consumption.



Aufbaumotor: Auxiliary engine:

For the use of Mill-/Milling installations (also without tractor unit, e.g. trailer, semi-trailer, stationary), we offer a fuel-efficient industrial-engine with EU stage V and SCR technology. The economical power pack works with 331 kW (450 hp). With top-mounted water-cooler for easy cleaning!



MASTER MIX INNOVATION - Suction-Pressure Mixer with discharge screw conveyor

As a full-liner, TROPPEL also supplies the MASTER MIX with a high-performance discharge screw conveyor. With the screw tube size of 220 mm, you achieve the highest discharge rates. The innovative feature consists in working with the ORIGINAL TROPPEL Suction-pressure system and a discharge auger. You are used to dust-free mixing with tested mixing precision from TROPPEL units. Combining this with the discharge screw conveyor opens up new possible applications for your TROPPEL MMX-Press: From low-dust sacking, easy filling of big bags to throughput grinding for biogas equipment; all possibilities are open to you, with the simple complete discharge that TROPPEL has been offering since 1992.



MMX 6218 QS with discharge auger



MMX 6216 QSD with discharge auger



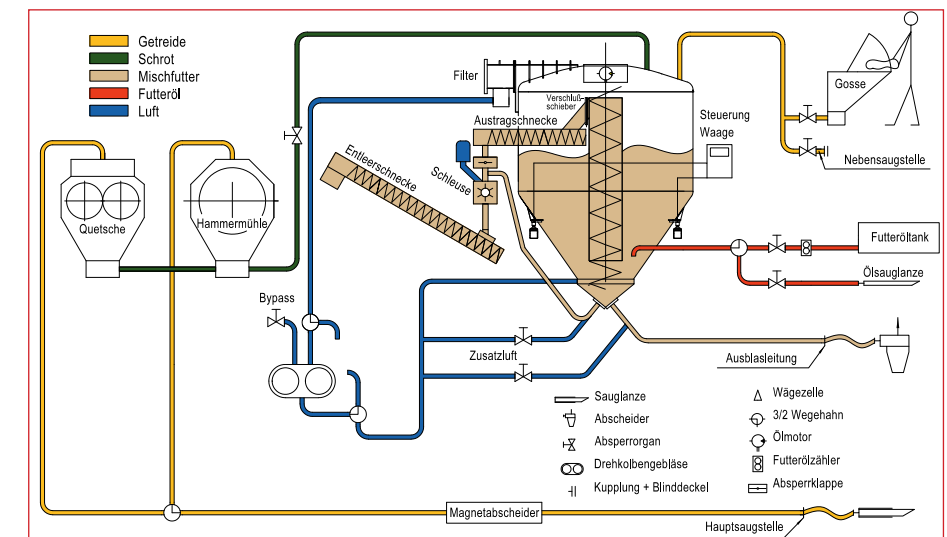
MMX 6218 QS with throughput auger



MMX 6218 QS with throughput auger



MMX 6216 QQSD with throughput auger



MIX OPERATION and THROUGHPUT OPERATION possible

MEGA MIX Twin – throughput grinding with weight

The newly developed **Twin** function completes the powerful MEGA MIX **Duo** with a decisive feature: the exact weight capture during throughput grinding (e.g. for biogas plants, preservation of moist cereals, etc.), without using a rotary valve! Further preservatives can be added if necessary. An impressive idea!



MEGA MIX - MEGA MIX Duo - SIZE FASCINATED THE PUBLIC!

Since its presentation at the Agritechnica 2005, it's become hard to imagine practical application without the unique and patented MEGA MIX. With a vehicle height of maximum 4 m, the mixer container of light-weight and high-strength aluminium holds up to 18 tonnes of feed content!

The MEGA MIX with efficient Jet filter 140 (optionally 2 Jet filters 140), with two vertical mixer screws and a high-performance drive ensures in combination with large pipe diameters high suction and blowing performance.

The MEGA MIX from TROPPER enables you to transport up to 18 tonnes on the road or to produce the same quantity of compound feed at once. Thanks to the large mixer volume, you will often need only half of the delivery trips to the external silo! As an option, you can fit the MEGA MIX with calibrated weighing, to weigh directly from the tank, for the sale of grain or premixes.



MEGA MIX **DUO** 13016 QAD

The new cost-effectiveness

ECO Power

- **Power Jet 140** > 40 % larger filter surface
- **Piping DN 150** > 15 % less conveying resistance
- **Airblock EXTRA Power** > 10 % less diesel consumption through reduced rotation speed
- **Speed control** > 20 % more feed structure
- **Airblock HP** > 30 % power enhancement during 1.5 bar discharge pressure

**MEGA MIX
PATENT
REGISTERED!**

14 years of MEGA MIX Duo - mix twice - drive once = flexibility with large mixes!

With the TROPPER MEGA MIX DUO you extend your field of application: It allows to produce simultaneously one mixture with 1 to 18 tonnes or two different mixes with 0.5 to 9 tonnes. The mixer is equipped with a separation wall (optionally rotatable). With the easy-to-operate MMX Control Profi, there is a separate weight display for each mixing chamber! You can work flexibly with the plant, of course with tested mixing precision.



MEGA MIX **DUO XL** 18518 QASH with HP discharging



MEGA MIX **DUO** 14018 QASH



MEGA MIX 9018 QA

Doppel-Power Jet 140 for MegaMix **Duo**



A second high-efficiency filter integrated in the mixer container for dust-free induced air. In connection with the enlarged mixer filling conduit (DN 150), the MEGA MIX duo achieves highest suction and blowing performance in continuous operation, with 2 separate mixtures and also with large mixes.

Second blow conduit (optional)



Enhance the blowing performance to up to 80 te/h by the use of a second blow conduit (see picture). To fill different silos simultaneously! Tried and tested.

Handing-over of vehicles and customer training:

Test mixture and detailed training included. Through ergonomic operation and simple maintenance, the operators of the MMX-Press from TROPPER are fully motivated



Clean Air Cyclone - design protection acquired



Allows dust-reduced filling of big bags and is, thanks to the applied suction and filter technology, ideally suited for application in warehouses

Radio remot unit



The versatile TFT 11 radio remote control is extremely robust, shows you the current mixer weight and allows you to operate 18 functions on the milling and mixing system. No mobile phone network required!

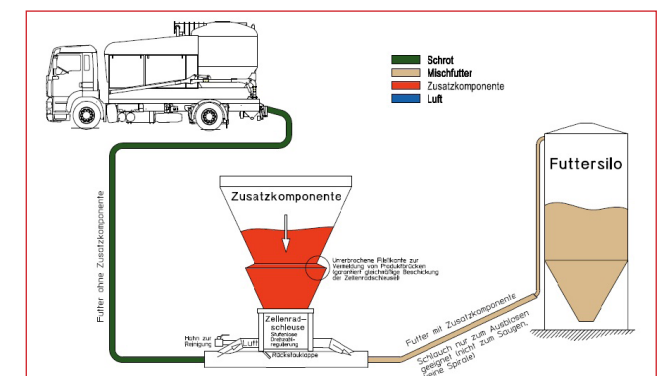
Digital Data Management 4.0

TROPPER offers the digitalization software SQ Edit (optional) for documentation on certified farms (QS, VLOG, Bio etc.). Current mixing data can be read out directly during the mixing process and used for further company processing (for delivery note, batch proof, invoice data etc.). The data is only stored on your computer. Dispatch by e-mail or USB stick to your office. An important step towards digitalization 4.0!



Dosage equipment INDOS X55

The INDOS X55 is coupled onto the pipe close to the feed silo. Special ingredients can be dosed without contacting the mill/mixing installation. With removable grain hopper for easy transport and cleaning. Can be refitted to every Mill-/Mixing installation.

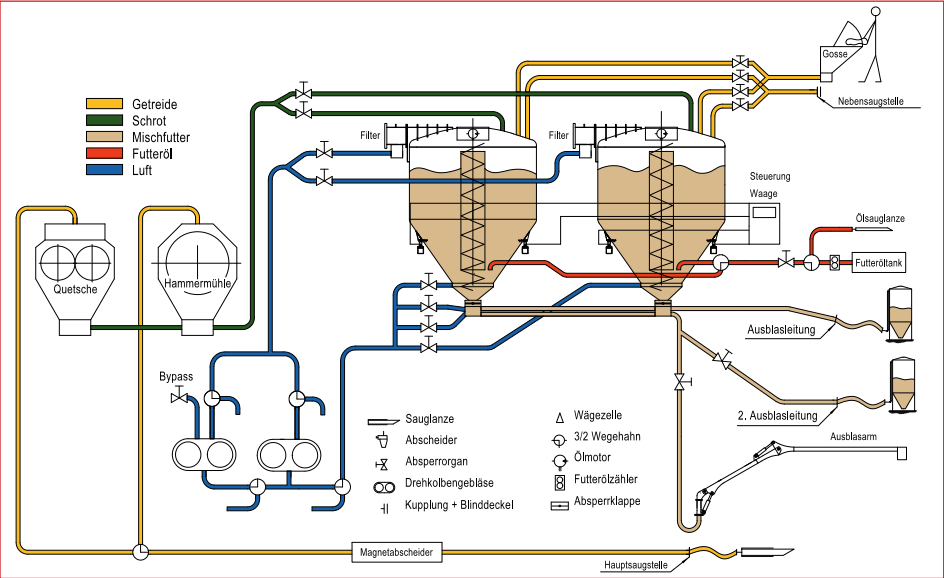


TWIN POWER - more opportunities for your success!

For continuous working (simultaneous suction, mixing and blowing), TROPPER has built its TWIN POWER with two independent mixers (size 2 x 3 to 2 x 7 tonnes of mixed feed). Two mixer containers combined with two blowers and a powerful drive with auxiliary engine or direct drive (only one power take-off from the lorry required), controlled by the newly designed und easy-to-operate MMX-Control Profi, ensure high suction and blowing performance. The installation can be built on semi-trailers or on 3- or 4-axle chassis. Many possibilities for individualised equipment.



MASTER MIX Twin Power 2 x 6216 QASH



TWIN POWER - Application variants:

- Twin - operation** > parallel filling of 2 different mixtures – only one travelling to the silo – can be simultaneously discharged into 2 silos
- Mega mixture** > both mixers are filled together with a large load – only one travelling to the silo - can be simultaneously discharged into 2 silos
- Stationary operation** > 1 mixture is aspirated – another previously mixed load is simultaneously discharged at the same stand
- Refilling operation** > 1 mixer is filled with an ingredient – can be dosed to the load in the second mixer



MASTER MIX Twin Power 2 x 3516 QAS



MASTER MIX Twin Power 2 x 5216 QA



MASTER MIX Twin Power 2 x 3518 QAS



MASTER MIX Twin Power 2 x 3518 QAS

MMX Control Profi - Mixing must remain simple!

The ergonomic operation centre is a modern management system und provides all important information at a glance. A backlit 10” colour display with user-friendly user interface provides a memory capacity for 10,000 customers or recipes with 15 ingredients per recipe. Data management on the operator unit, data exchange online with a notebook in the driver cab, via remote maintenance (GSM module) or with a PC using a USB stick. The receipt can be sent wirelessly from the lorry to the office!

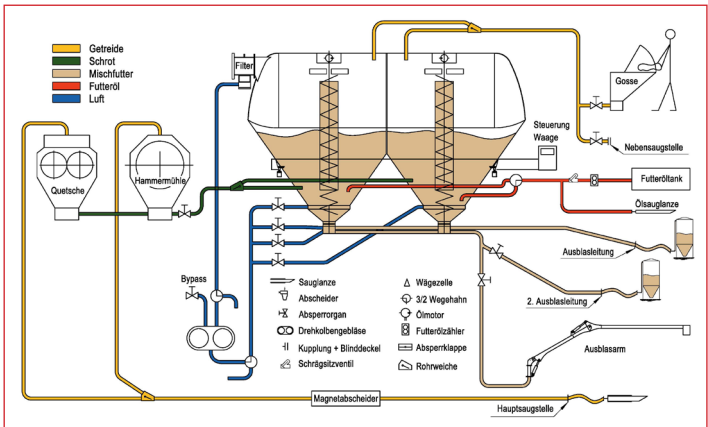
Product advantages:

- Fully-automatic recipe control for 2 recipes
- Automatic speed control – less frequent screen change (for good feed structure)
- Automatic performance regulation protects drive and power units from overload
- Automatic change-over hammer mill/roller mill
- Automatic oil and molasses addition
- Actual throughput rate per hour readable
- Remote maintenance possible via network/notebook
 - NEW user guidance with clear imagery
- User interface in 13 languages available
- Integrated graphics display with complete engine management - CAN-bus control



The ergonomic control centre with MMX Control Profi. A big plus for drivers of Mega Mix and Twin Power. Very easy to operate thanks to clear imagery and display of the most important operating states: you can see all specific data at a glance! The integrated engine management helps to keep the fuel consumption under control.

For us, innovation means enhancement of the proven and realizing ideas that had, until recently, been considered impossible!



Ablaufdiagramm für Mega Mix duo

MEGA MIX SEMI TRAILER: to come home with MORE!

Regarding the sales figures of the different MMX-Press models, the trend is towards MEGA MIX. Up to now we have sold more than 160 units of this successful mixer type! Mixer sizes up to 18 tons enable large mixing volumes and high transport capacity. You too, rely on the advantages of our MEGA MIX!



„We wanted a machine that functions simply. This raised the question about the simultaneous functioning of 2 recipes. -- And it works simply without any annoying manual weight confirmation! Indeed, those at Tropper are very practice-oriented; they know what a driver of mixing vehicles needs!“

PRACTICANS HAVE THE FLOOR:

„AWESOME“

The TROPPER MMX-Press MEGA MIX duo provides, above all, the opportunity to discharge simultaneously with 2 blow pipes, just awesome!

Günther Bösch, HEPP Lohnunternehmen, D-88422 Allershausen



Tropper
THE ORIGINAL SYSTEM
IS CONVINCING!

„TRANSPORTER“

Our drivers like working with TROPPER mixing equipment. Above all, we appreciate its high performance and operator's convenience! 18 tons capacity - this size is only available at TROPPER! Niels Frost Rasmussen, CR Foderservice, DK-5400 Bogense



„TIME-SAVING“

My fourth TROPPER MEGA MIX duo stands out because of its high efficiency. Mostly we finish our work already 1 hour earlier!

Philipp Kerler, D-85132 Schönaun



„ONE TIME“

Even difficult products such as spelt can be crushed in large quantities by two simultaneous roller mills and processed simultaneously!

Raoul Origer, L-8523 Beckerich



„FLEXIBLE“

TROPPER realizes new developments upon customer's request. In this way, we got three MEGA MIX TWIN with the possibility to invoice by weight when throughput grinding! James Hamer Glyn Hamer, GB-Herefordshire



„RELIABLE“

We have been a TROPPER customer for over 20 years and are still excited about the powerful suction-pressure technology!

Oliver Moik, D-88521 Ertingen



„LONG-TERM“

We appreciate having such an innovative partner with TROPPER. 14 delivered units by now show the long-term quality!

Ing. Vaclav Hulka, MVKS spol.s.r.o.



„ROBUST“

We appreciate not only the performance of the TROPPER MMX-Press, but also the proximity to the Austrian production site!

Andreas Ott, A-4753 Taiskirchen

