MANDAM



MANDAM MIX 800

OPERATION MANUAL

GLIWICE 2007

DECLARATION OF CONSISTANCE

P.P.H. MANDAM Sp. z o.o.

We declare on our own responsibility that produced:

MANDAM MIXER 800
(model, type like on the data plate)

symbol: MANDAM MIXER 800

which is described in this declaration, meets safety rules, health rules and environment protection code from job-control statement 98/37/EC concerned with machines and safety elements.

For completing appriopriate requirements for safety, health and environment protection from statement 98/37/EC, the following norms are taken into consideration:

- PN-EN ISO 12100-1:2005
- PN-EN ISO 12100-2:2005
- PN-EN 294:1994,
- PN-EN 1553:2002.

This declaration of consistance will lose its validity if:

MANDAM MIXER 800

is changed or rebuild without our permission.

Gliwice, October 2007r.

V-ce Prezes Zarządu
Dyrektor ds. Techniczno-Organizacyjnych

mgr inż. Józef Seidel

Prezes Zarządu
Dyrektor

inż. Bronisław Jakus

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Attention!

Before work plase read operation manual.

In this manual you may find basic information such as application notes, technical data, safety rules, maintenance and service data, and more.

For details and/or explanation please contact nearest MANDAM dealer.



This is a warning mark. Please pay a special attention to marked information being essential for your safety and a proper operation.

1. Application note:

1.1 MANDAM MIXER is to be used for agricultural and construction purposes as well.

1.2 Agricultural use such as: preparation of fodder, grain, dried organic and animal originated formula.

1.3 Construction use such as: concrete, gravel, lime, mortar.

1.4 Mixer is to be attached directly to the tractor's 3-point hitch assembly. Minimal lift capacity at hooks 60 kN. Front ballast should be no lighter than 20% of tractor's gross weight.

1.5 For loadning and unloading the mixer should rest on the solid ground.
It is not allowed to load/unload the mixer when machine is in the air and/or during the transport.

1.6 Power is transfered through a pto shaft directly from tractor's output (450-540 rpm) to mixer's transmission.

1.7 Mandam mixer is to be used for intended purposes only. Unproper use is to revoke warranty.

1.8 Manufacturer is not responsible for a failure to occure when operating against the manual.

1.9 Person operating the mixer is to obbey general safety rules.



1.10 When driving with a machine on public road follow local traffic regulations. The mixer is not equipped with any reflective signs nor lights. For public road transportation mixer should be equipped with proper light ser as required by local law. Maximum transport speed of 15km/h (9 mph) must not be exceeded.

1.11 Any modification of the mixer is to void warranty. Manufacturer is not responsible for any failure, damage or accident of/causedby modified machine.

2. General safety rules:

2.1 Machine is to be operated by qualified person only. Please read manual before operation.

2.2 It is not allowed to operate the machine when intoxicated, drunk or under medication. Operating when impaired may cause an accident.

2.3 It is not allowed to use/carry the mixer on the tractor smaller than 60 kW. Installed on the small tractor may cause an overweight and a loss of control.

2.4 One should install counterweight on the tractor's front hitch in order to prevent overweight and loss of ballance.

2.5 The protection net is not to be removed when in operation. The protection cover must be installed and secured with a lock when in operation.

2.6 Please check against for foreign bodies/people/animals entering the drum before operation.

2.7 It is not allowed to enter in between the tractor and the mixer when in operation.

2.8 Do not fill the mixer's drum if not resting on the ground.

2.9 Use onlny recommended PTO shaft (see technical specification).
Protection covers/sleeves over the PTO shaft must be installed as well.

2.10 Turn off the engine when connecting/disconnecting the mixer to/from the tractor.

2.11 Never leave tractor with a running engine.

2.12 When driving with a mixer connected, watch the ground clearance. The gap must be no smaller than 30cm (12”).

2.13 Maximum transport speed of 15km/h (9 mph) is not to be exceeded.

2.14 When on public road obey traffic rules. Install aftermarket lights/singns if needed (not supplied).



2.15 No service/maintenance is to be carried when machine is running. In odrer to service the mixer, turn off the engine and put the machine on the ground.

2.16 Secure protection net when opened.

3. Technical specification:

no.	Element	Info
General data		
1	Tractor requirements	Min. Power output 60kW, cat.II hitch, min. Lift cap. @ hooks 60 kN
2	Drum capacity	800 dm³
3	Filling depth	max. 450 mm
4	Drum height	700 mm
5	Drum diameter	1500 mm
6	Overall dimension L/W/H	1514 X 1500 X 1450 mm (1250 mm w/o protection net)
7	Min. Power required	19 kW
8	Max transport speed	15 km/h (9mph)
9	Weight	635 kg (1400 lbs)
Tramsmission data		
10	Shaft profile	Type W 1-⅜" Z6
11	Speed	450-540 rpm
12	Ratio	7,75:1
13	Rotor speed	58-70 rpm
14	Rated input power	19 kW (26 hp)
15	Rated output torque	260 da Nm
16	Oil capacity / type	Approx. 4,5 L - EP90 class transmission oil
17	Weight	W/o oil 65 kg (144 lbs)
PTO shaft (oprtional)		
18	Recommended type	Bondioli & Pavesi (7143071PL007V28) LMFR (5R-502-4-BA-P402)
19	Rated power	22 kW
20	Torque nominal/dynamic	400/600 Nm
21	Overload release clutch	500-550 Nm
22	Lenght min. (telescopic)	710 mm (210 mm min. Segment Insertion)
23	Protection	Cover + sleeve

4. Standard and optional equipment:

4.1 Standard equipment:

4.1.1 Mixer

4.1.2 Side protection board

4.1.3 Tubular frame

4.1.4 Outlet

4.1.5 Hitch pins and security chain

4.1.6 Operation manual

4.2 Optional equipment:

4.2.1 PTO shaft protection cover

4.2.2 PTO shaft (see technical req. For details)

5. Operation

5.1 Preparation



5.1.1 before work apply grease to all transmission greaseports

5.1.2 fill transmission with EP90 class oil, approx. 4,5 L. Check the level. Secure plug.

5.1.3 Check the tractor against required power and rotation.

5.1.4 Connect mixer to the tractor's hooks. Adjust the level, secure all pins.

5.1.5 If rear installed make sure the front-end of the tractor has a sufficient counterweight.

5.1.6 Close outlet shutter.

5.1.7 Check the drum against foreign bodies.

5.1.8 Adjust wall scrapers for proper wall gap. Tighten bolts and nuts.

5.1.9 Close and secure protection net.

5.1.10 Install outlet, tubular frame and protection board. Tighten bolts and nuts.

5.2 Working with a mixer

5.2.1 make sure the transmission is filled with on oil

5.2.2 free run the mixer at 400 rpm

5.2.3 fill the drum with coponents. Do not open protection net when filling up the mixer.

5.2.4 make sure not to overfill (watch max. Fill line placed on the drum wall or watch the gap in between the surface of filling and a rotor being no smaller than 10 mm (4”).

5.2.5 For mixing action run the rotot at 450-540 rpm

5.2.6 Mixer can be angled (0°-12°) for better efficiency

5.2.7 To empty lift a mixer up 30-40 cm (12-16”)

5.2.8 Open the outlet shutter

5.2.9 Keep running untill no filling remains inside of the drum

6.Transport and maintenance

6.1 transport

6.1.1 Empty the drum. It is not allowed to transport the mixer with a filled drum.

6.1.2 Turn off the pto shaft

6.1.3 Make sure there are no people/animals/objects in between the tractor and a mixer.

6.1.4 Double check all connection points in between the tractor and the mixer.

6.1.5 Make sure :

- protection net is secured in place,
- outlet shutter is closed,
- tubular frame, protection board and outler fastened or placed inside of the drum

6.1.6 lift the mixer on the rear hitch. Watch the ground clearance to be no smaller than 30cm (12”)

6.1.7 When on public road obey traffic rules. Install aftermarket lights/singns if needed (not supplied).

6.1.8 Maximum transport speed of 15km/h (9 mph) is not to be exceeded.

6.1.9 Drive carefully. Obbey traffic reguation.

6.2 Maintenance and storage:

6.2.1 Mixer should be cleaned after each use. Use hose and a running water to flush away all remaining substance.

6.2.2 Store machine under the roof, away from precipitation.

6.2.3 Covering the drum is recommended.



6.2.4 Check transmission against oil leaks. Refill with appropriate oil if needed (see 5.1.2).

6.2.5 Relube all greese points.

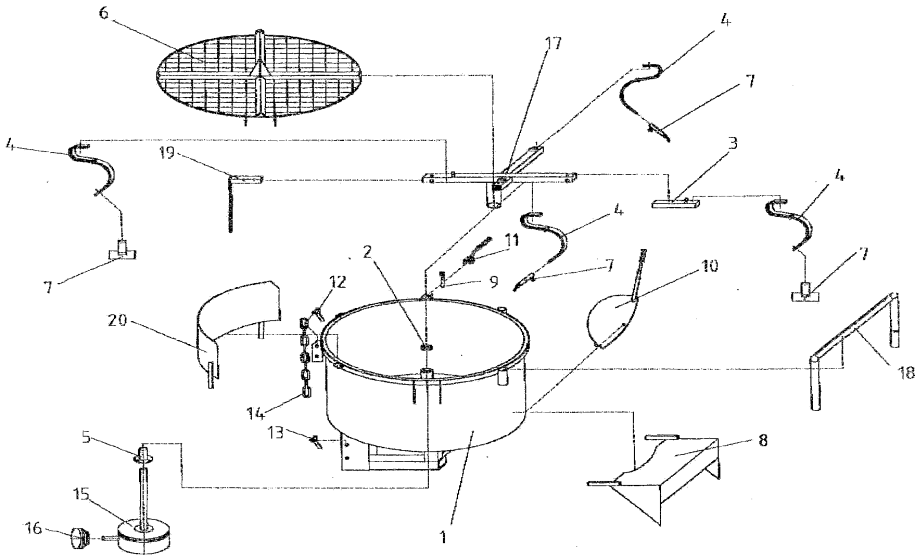
6.2.6 Relube PTO shaft (see shaft manual for details)

6.2.7 Rest PTO sfaft on the holder.

8. Spare parts list

Spare parts list for Mandam MIX800

Pos.	Element	Index
1	Drum 1500	
2	Bearing	
3	Arm short	
4	"S" leaf spring	
5	Hub	
6	Protection net	
7	Scraper	
8	Outlet	
9	Pin	
10	Outlet shutter	
11	Lever	
12	Upper hitch pin	
13	Lower hitch pin	
14	Chain	
15	Transmission 7,75:1 (w/o hub pos.5)	
16	PTO shaft protection	
17	Rotor	
18	Tubular frame	
19	Wall scraper	
20	Side protection	



9. Warranty

9.1 Warranty period – MANDAM Mixer is under warranty for 1 (one) year from the date of purchase (an invoice should be presented). Warranty is not transferable.

9.2 Warranty does not apply to the machine used against its intended purpose.

9.3 Warranty does not apply to the not maintained machine.

9.4 One should follow operation manual.

9.5 Working with unproper (non recommended) PTO shaft may cause a machine defect.

9.6 Local dealer is representing MANDAM in all warranty issues. To obtain any additional information or purchase spare parts, please contact closest Mandam Dealer.

9.7 Warranty procedure – in case of failure it is recommended to present to local dealer/seller brief description and, if possible, pictures of defected parts/elements.

9.8 All arguable issues to be discussed individually.

Note: For more information contact: sales@mandam.com.pl

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GUARANTEE CERTIFICATE
MANDAM MIXER 800

Type .....

Serial no. .....

Year of production .....

Date of sale .....

The guarantee is valid for 12 mouths from the day of sale.
Guarantee service in the name of producer provides

.....
(Fills the seller)

....
(Producer's stamp) (Seller's stamp)

When the claim is reported, the guarantee certificate should be shown.