



ZEMMLER® MULTI SCREEN® MS 3200-ST-ET
Operating Manual

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1 General information

Notice!



Please read the operating manual carefully before bringing the machine into service, to assure a maximum utilization. You will be better informed about the mode of operation and functionality of the machine.

Please read the manual and keep it safe.

Please observe and follow all safety instructions.

Notice!



All contemplated technical data and instructions refer to series-production status of the trommel screening machine ZEMMLER® MULTI SCREEN® MS 3200-ST-ET dated:

September 2017

1.1 Field of application

The trommel screen ZEMMLER® MULTI SCREEN® MS 3200 ST-ET is a stationary screening machine. This machine classifies bulk material in 2 fractions in one working stage with high volumetric flow.

The ZEMMLER® MULTI SCREEN® MS 3200-ST-ET has been designed to screen various materials like compost, soil, sand, cinder, gravel, wood chips and waste, down to 2 mm grain size.

1.2 Information about the machine

Description	ZEMMLER® MULTI SCREEN® MS 3200-ST-ET
Machine no.	MS 3200 030
Year of manufacturing	09/2017
Version	1.0
Manufacturer / Distributor	ZEMMLER® Siebanlagen GmbH Nobelstraße 11 03238 Massen-Niederlausitz Germany  +49 3531 7906-0  +49 3531 7906-11  info@zemmler.de  www.zemmler.de

1.3 Scope of delivery



The ZEMMLER® MULTI SCREEN® MS 3200-ST-ET is standard equipped with the following accessory:

- Operating and service manual (2x)
- CE – declaration of conformity (2x)
- Spare parts catalog (2x)

2 Documentation

The documentation about the trommel consists of the following parts:

Operating manual

1. The operating manual (abbreviated „OM“) informs about function, assembling, bringing into service, transportation, handling, service, maintenance and removal from service of the machine.
The operating manual is no text book but a reference book.
2. The operating manuals of modification parts and –machines are added at this operating manual's addendum.



Notice!

At correspondence with staff of Zemmler Siebanlagen GmbH, please use machine parameter according to *chapter 1.2 –Information about machine*

2.1 Operating manual



This operating manual is an essential part of the machine and mandatory for a successful and save service of the machine.

The operating manual includes important advices to work the double trommel save, appropriate and efficient. Paying attention to the operation manual helps avoiding danger, reduces repair costs and down time and increases reliability and durability.

The operating manual must be available at the operator of the machine and has to be read and applied by any staff member working with or by the machine:

- operation, troubleshooting at working process, disposal of utilities and additive,
- attendance (service, care, maintenance), quality assurance and/or transportation
- e.g.

2.2 Target audience

The operation manual is a reference book for informing service personnel and operator. If necessary for expert staff working for maintenance, troubleshooting and quality assurance on the double trommel. This operating manual is to disburden a save and professional operating of the machine.

2.3 Symbols and warning notices within the operating manual

The accident prevention regulations and common safety advices have to be complied during service of the double trommel. Important advices like safety related advices are marked by equivalent symbols.

The symbols and structural elements of the operating manual have the following appearance and meanings:



Caution – Danger for people!

This symbol marks common work safety advices. Consequence of non observance will cause danger for life and living.

Pay close attention to the work safety advices and behave very careful in these cases.



Warning – Danger due to electric voltage!

This symbol marks common work safety advices. Consequence of non observance will cause danger for life and living by electric voltage.

Pay close attention to the work safety advices and behave very careful in these cases.



Warning – Risk of hand injury!



Warning – Danger by retracting body or body parts!

This symbol marks common work safety advices. Consequence of non observance will cause danger for life and living by retracting at the drum or carrier idlers.

Pay close attention to the work safety advices and behave very careful in these cases.

**Attention – Damage to trommel!**

This symbol marks all safety advices linking to regulations, instructions or sequence of operation which have to be strictly followed. Consequence of non observance will cause in damaging or destroying the trommel and/or other machine parts as well as false production.



This symbol emphasizes examples of use and other useful information of this operating manual.

**Duty of instruction!**

This symbol marks all advices referring to certain instructions, which have to be strictly followed. Consequence of non observance will cause in damaging or destroying the double trommel and/or other machine parts as well as false production.

2.4 Guarantee of commitment and warranty

The machine documentation including all of its parts is copyrighted. Each and every application outside the restrictions of the law of copyright without our permission is forbidden and chargeable. This in particular reckons for duplication and editing.

An abandonment of the operating manual to a third party is forbidden and obligates to pay damage.

All information and advices for the service and maintenance of the machine considering our current experiences and knowledge in all conscience. We reserve the right to all technical changes due to the improvement of this particular machine. Only these spare parts, approved by us and listed in the spare part book, are being allowed to use.

We are liable for possible mistakes or default, under exclusion further demands, within the liability of guarantee of the main agreement. Claims for damages exist likewise in extend arranged duties of compensation of the main agreement.

Translations are done at best knowledge. We cannot take liability for mistranslation.

The delivered German version of this documentation remains authoritative.

The textual and graphical descriptions do not necessary match the scope of delivery respectively a spare part order. The drawings, graphics and photomontage do not accord the scale 1:1.

2.4.1 Warranty

Warranty:

Beyond legal warranties for defects of the distributor, we as manufacturer guarantee under the following premises an acceptable durability of proper use Zemmler Siebanlagen GmbH products.

The warranty expense to the function of Zemmler Siebanlagen GmbH products and covers all defects, detectable to fabrication or material failures.

We do not take liability for secondary damages!

We do not take liability for damage to property or persons caused by faulty operating or ignoring of all safety advices. In such cases any claim of warranty expires.

Condition of warranty:

Our warranty consists exclusively in a free repair of our product and or in a free spare part delivery to the first – end customer within our chosen time of warranty.

The costs, expenses, postage and suchlike of the warranty recipient will not be substituted. A claim of warranty is only accepted at sight of the default component. The exchange of a default component will be exclusive by Zemmler Siebanlagen GmbH or by a service company, authorized by us.

A claim of warranty expires once repairs are done by not authorized service companies and/or use of not original spare parts.

Time of warranty:

The time of warranty is 12 month or 1000 working hours, depending on what case occurs first. It starts with the day of delivery to the first - end customer. In case of complains or warranty, please contact the distributor or manufacturer

Zemmler Siebanlagen GmbH.

Caveat emptor and limitation of liability:

All exchangeable parts, like screws, connection pins and so on are excluded of this warranty Further more we take no liability for damage caused by:

- improper and inappropriate use
- wear parts (belts, rubber straps, stripper, screens, brush elements)
- faulty and sloppily use
- No observance of maintenance advices, operating advices, changes, inspection and self repair chemical and physical as well as damage on the machine surface due to improper use, like damage by sharp objects.

3 Safety advices

3.1 Preface to safety

The chapter *Safety advices* gives an overview about all safety relevant aspects for operating the double trommel.

General safety advices bear on to safety-related condition of the double trommel. This is postulate for operation and maintenance as well as handling operating materials and auxiliary materials.

Beyond general advices, in each individual chapter of the operating manual are explanations given of procedure or instruction on how to act, if necessary, are labeled with concrete safety advices.

Primary attention to all safety advices (in general and concrete) enables an efficient protection of personnel as well as environmental danger and a safe and undisturbed service of the double trommel.

Zemmler Siebanlagen GmbH advises operator, by the means of given operating manual, to adjust work flows of the service according to set up a safety concept or to adjust a current safety concept. Essential adjustments or advices for realization of this concept should be configured in written form within the operating manual for individual areas of operation.

The double trommel meets the highest presently valid norms of technology and is generally safe to operate. We construct and produce our machines according to machine guidelines 2006/42/EG.

It may be danger potential of the machine if it is operated by uneducated personnel, improper or non intended use.

Thus each person operating or maintaining the machine must have read and understood the operating manual before fulfilling its tasks. This also applies to person who have on such or similar machine or had been educated by Zemmler Siebanlagen GmbH.

It is recommended to the owner, to receive a written conformation of the personnel of having noticed the content of the operating manual. Notice of the content of the operating manual is a premise to protect persons of danger as well as avoiding other faults.

The operating manual has to be accessible at any time to operating and maintenance personnel!

Finally accountable for an accident free service is the owner or of the owner authorized personnel which have to operate the machine according to the owner's assignment.

Information about operational safety refers to presently valid ordinance of the European Union. Adequate laws and country ordinances have to be observed and complied in other countries. The current stand of laws has to be assessed by the owner for both at European Union and other countries.

Beside the safety advices of the operating manual all general valid safety and accident prevention instructions must be observed and followed.

All specifications of the operating manual are boundless to obey!

3.2 Operational safety

By following all advices for operational safety, danger to persons, environment and or the double trommel can be avoided.

Ignoring these advices can cause under certain circumstances the following:

- Danger to persons due to mechanical, electrical or chemical reaction
- Endangering environment
- Breakdown of the double trommel and or other machine components

Ignoring the safety regulations can lead to loss of any kind of claim of damages!

3.3 Conventional usage



The operating safety of the double trommel is only ensured by correct usage according to the information of the operating manual.

The double trommel is a system build specifically for screening bulk goods into 3 fractions. At this, attention has to be paid for its maximum and minimum grain size as well as the maximum humidity of the bulk good. Please look at *chapter 12 – Technical information*

Every other or exceeding usage will not be conventional! Here from resulting damage will be the liability of the owner. This is also applies for unauthorized changes on the machine.

Part of conventional usage is adherence of starting-, operating- and maintenance regulations, prescribed by Zemmler Siebanlagen GmbH. Also the authorized bulk goods as well as listed operating materials and auxiliary materials.

Furthermore, only original spare parts are allowed to be disposed. Wrong or faulty spare parts can lead to damage of the machine.

Maintaining the manufacturer's guidelines for operation, maintenance and cleaning are essential for conventional usage. By unauthorized usage and non appropriate appliance will result in exclusion of liability.



Notice!

Our specialist will kindly answer your questions concerning bulk goods and the according screens to assure an efficient utilization of the machine.

3.4 Danger signs on the trommel screen

Signs attached directly on the machine or associated secondary installations like danger signs, direction of rotation arrows, operation signs e.g. must be absolutely observed. It is forbidden to remove this signs and they have to be kept readable.

The symbols of the danger signs have the following appearance and meaning:



Warning – Danger by retracting body or body parts



Warning - Risk of hand injury!



Warning – Danger due to electric voltage!



Wearing ear protection and helmet



Wearing glove

3.5 General safety advices about the technical condition of the machine

The machines construction and manufacturing meets current state and regulations of technology.

To avoid danger and ensure efficient capacity it is forbidden to make changes or remodeling on the machine which are not explicitly authorized by Zemmler Siebanlagen GmbH. This also applies for program editing of the programmable system control.

Arbitrary changes or remodeling especially those endangering personnel, environment or the machine are generally forbidden.

In these operating manual stated set points respectively its ranges must not be exceeded.

To be used spare parts must meet technical demands defined by Zemmler Siebanlagen GmbH. This is warranted by original spare parts.

The owner is beholden to keep the machine in an acceptable and operating safe condition. In

particular all safety installations and interlocks must be easy to access and constantly checked for unobjectionable operation.

3.6 General safety advices for operator

The operating manual is an essential part of the machine. The operator provides correspondence for the operating personnel to have noticed the guidelines.

The operating manual has to be updated by the operator according to national regulations about accident prevention and environment protection. Including information about obligatory supervision and notification requirement regarding operating characteristics like work organization, work flow and personnel.

Beside effective and binding regulations (accident prevention and safety at work) of the country of operator as well as sight of usage all authorized regulations for safe and proper operation have to be paid attention to.

The operator has to commit the operating personnel to wear personal riot gear as far local regulations envisage so.

First aid equipment has to be placed within reach! The places of fire extinguishing devices have to be announced!

Fire detectors and fire fighting possibilities shall be provided.

Only appoint trained and instructed personnel. Competences of personnel for operating, mounting, maintaining and servicing have to be clearly structured.

A machine operator has to be chosen to take responsibility for the entire machine and personnel. Educating, instructing or schooling personnel in general is only allowed to operate the machine under permanent supervision of experienced specialists.

3.7 General safety advices for operating personnel

Only authorized, educated and instructed personnel are allowed to operate and maintain the machine. The personnel have to be instructed about possible danger.

Instructed personnel is, who is informed about the assigned task and possible danger at incorrect behavior and if necessary semi-skilled as well as taught about needful protection and precaution.

Specialist is who is, based on job training, knowledge and experiences as well as knowledge of relevant stipulation, able to judge the assigned duties and detects possible danger.

If the personnel not educated as necessary, it has to be accordingly taught. This can be by Zemmler Siebanlagen GmbH by order of the owner.

Competency for operation and maintenance must be clearly defined and adhere in order to avoid inexplicit competences in the aspect of safety.

The machine must be operated and maintained by persons who are expected to do a reliable duty. To be of no consequence every method of operation has to be banned which endangers persons, environment or the machine. Persons under the influence of drugs, alcohol or pharmaceuticals affecting the ability to response are not allowed to

operate the machine at all.

Employee selection must consider minimum age, protection of minors of respective country and if applicable thereupon founded specific to profession regulations.

The operator has to make sure that no unauthorized persons operate the machine.

Unauthorized persons like visitors must not get in touch with the machine. They must keep an adequate safety clearance.

To avoid person damage work wear of operating and maintaining personnel must meet accident prevention regulations and suggestions of Employer's Liability Insurance Association (no wide sleeves, low breaking strength et cetera).

According to implemented workings personnel body protection gear has to be worn like eye protection, ear protection, protective clothing.

3.8 Behavior in case of danger and accidents



In case of danger or accidents the machine can be shut down by emergency-stop switch

The emergency-stop function causes an immediately stop of the machine irrespective the present position of machine parts.

Activate safety devices only in case of emergency. Do not use them to normally stop the machine.

Always be prepared for accidents and fire!

Keep first-aid supplies (first-aid box, eye rinse bottle et cetera) and fire extinguisher in reach.

Personnel must be familiar with handling and location of safety devices, accident enunciator, first-aid facilities and rescue facilities. Hereby the best possible assistance at accidents and defense of danger can be assured.

3.9 Safety advices for maintenance

Accomplish maintenance duties only at stand still of machine.

For all maintenance duties, pay attention to shut down procedure and essential safeguards as describes in this operating manual.

At all operating disruption assures that all safeguards work properly.

Maintenance cycle and repeating check of engine, hydraulic system and technical equipment have to be planed and arranged respectively commissioned be the owner.

At breakdown of the machine, operation has to be immediately suspended; the machine has to be run empty and turned off. The affected parts have to be repaired or exchanged.

After installation work and maintenance all safety devices have to be checked if installed correctly and work properly.

Safety devices must not be bypassed or set out of function.

Certain maintenance duties can only be done by specialists. This applies especially for hydraulic and electric components..

3.10 Safety advices for work position on the trommel



The only objects within the working position are the ones needed for the particular working stage.

The operator must always be within spitting distance of the machine and supervise the operation. The machine must not run without supervision.

Upon completion of operation, the machine must be run empty and turned off.

Secure machine against unintended restart.

3.11 Safety advices for emissions

3.11.1 In general



Caution!

Operating the machine can cause emission. Under certain operating conditions these emissions can endanger the health of the personnel.

The operator has to take care of abiding the permitted maximum emission values.

3.11.2 Noise emission



Caution!

Operating the machine causes noise emission. These emissions are over mandatory threshold.



These emissions can endanger the health of personnel. The operator has to assure that its employees wear adequate ear protection.

4 As-built documents



Caution – tilting danger of trommel!

Installing the trommel on soft grounds or uneven grounds may cause the machine to tilt during operating.
Assure for enough solid and even grounds.

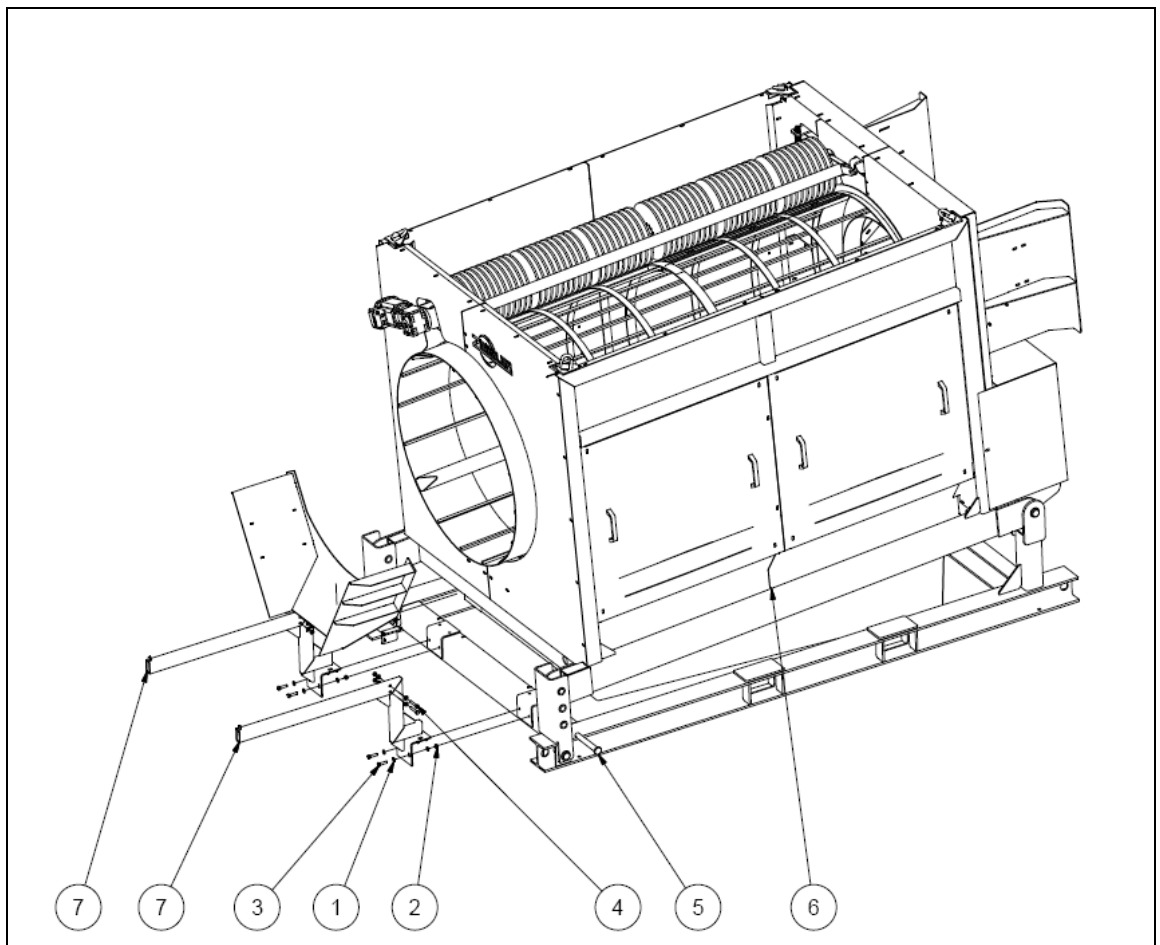


fig. 4-1: As-built docu

Pos.	Amount	Component
1	16	Washer
2	8	Hex nut
3	4	Hex bolt
4	4	Hex bolt
5	4	Bolt adjustment trommel
6	1	MS3200
7	2	Holder Big Bag
8	1	Feeding hopper

4.1 Further components

4.1.1 Feeding hopper

The feeding hopper moves the material into the trommel.



fig. 4-2: Feeding hopper

4.1.2 Single trommel

The screening machine consists of a single trommel. The mesh size of the screens can be changed by choosing different sizes of wire screen. Furthermore, by changing the trommel inclination (3° , 5° and 7°), the material in the trommel can be regulated.

Outer diameter of trommel: 1.300 mm

Screening surface: 10,2 m²

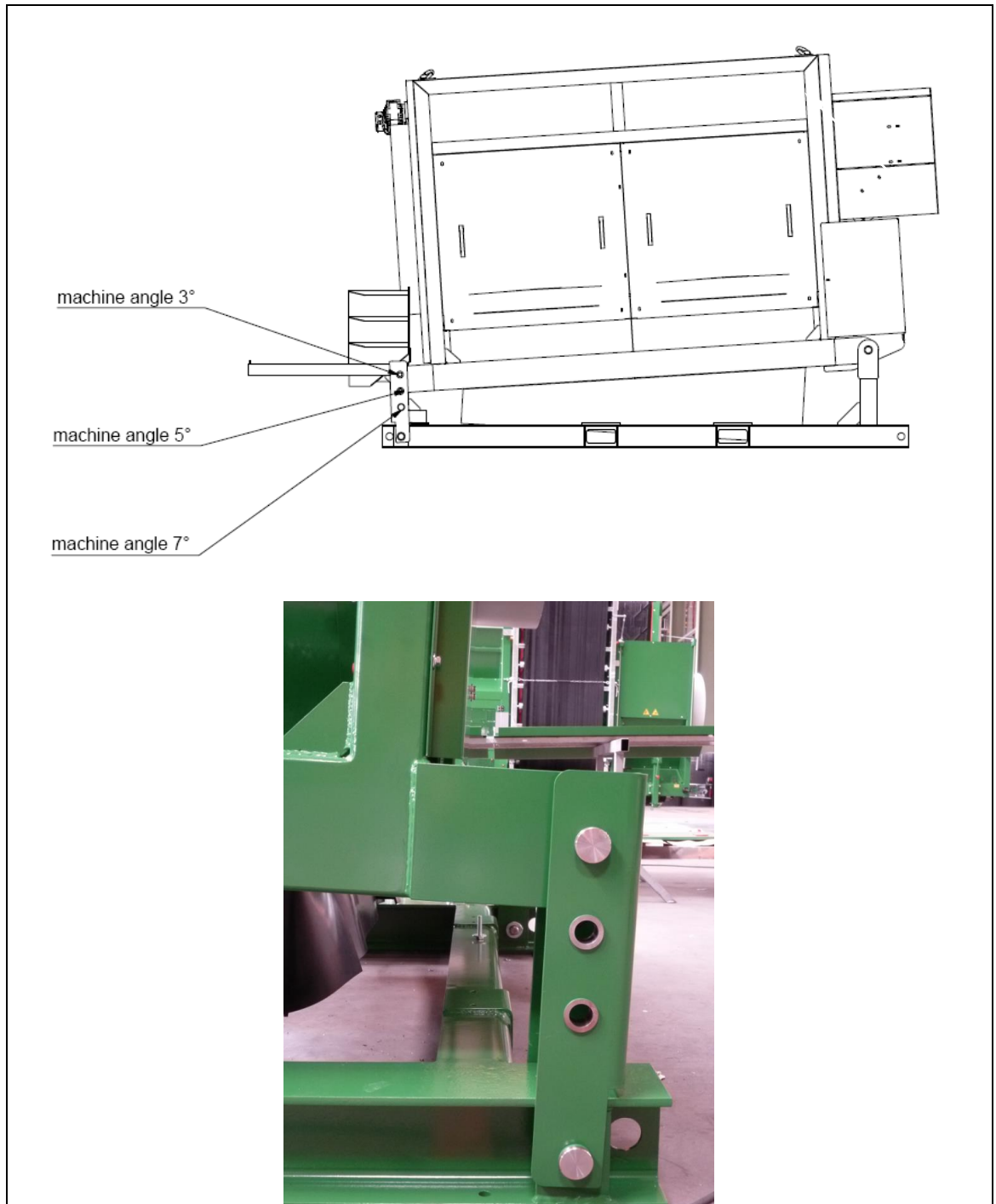


fig. 4-3: Inclination of trommel

4.1.3 Motor

The machine is equipped with two electric drive motors, which drive the trommel and the trommel cleaning brush.

5 Operating mode



Attention!

Before operating the machine, it has to be checked for functioning condition and operating safety.

The machine is equipped with two motors, a frequency converter, a setpoint generator and four emergency stops.

The operator is responsible for correct wiring.

Both motors must be connected with a left-hand rotation field.

Electric motors:

UL 1004-1, certificate no.: 20141113-E189357

Frequency converter:

UL 508 C, certificate no.: NMMS.E155763

Emergency stop:

UL 508, certificate no.: 20140218-E352710

5.1 Operating unit trommel motor



fig. 5-1: Operating unit



Start



Stop / Reset



Navigate



Increase/decrease speed

6 Putting into operation

6.1 Initial operation



Caution - Danger of tipping over the trommel screen!

By placing the trommel screen on a non-load bearing or uneven surface, tilting can occur during operation of the system.
Provide a sufficiently firm and level surface.

After installation, initial operation and a test run of the machine, the machine can be operated considering the operating manual and the effective labor protection and accident prevention regulations.



Attention!

Before operating the machine, it has to be checked for functioning condition and operating safety.

Before each service the operator has to visual inspect the entire machine and the light bar has to be dismounted.

6.2 Putting into operation after maintenance or breakdown

The machine can be brought back to operation after all service and maintenance procedures have been correctly completed.



Attention!

Before operating the machine, it has to be checked for functioning condition and operating safety.

Before each service the operator has to visual inspect the entire machine and the light bar has to be dismounted.

Check that all tools, utilities and packages are removed.

Ensure that all secure arrangements and stabilization occur according to guidelines of bringing into service.

6.3 Putting into operation after longer idleness

In case of a longer idleness the entire machine has to be cleaned.

Before bringing the machine into operation after a longer idleness the machine has to be again visually inspected. Safety protections have to be installed and have to be checked for functioning

7 Service and maintenance

7.1 General service and maintenance

The consequent procedure of maintenance and abidance of all time intervals are an important premise for a reliable functionality of the machine.

This chapter defines working which has to be done by operating personnel or qualified specialists.

After each operation of the double trommel all parts have to be checked for abrasive wear and damage. Replace defect parts immediately or let it be changed by specialists to avoid damage of other parts. If separating protectors have to be removed, they have to be remounted after contact..



Notice!

To order spare parts, please indicate type of machine and data of type plate.



Notice!

Please read service and maintenance instructions of engine producer. These are part of maintenance procedure and are **not** listed in this manual.

7.2 Safeguard at service and maintenance

At all workings every listed safeguard and if applicable; recommended shutdown procedures must be observed and followed.

At workings for which safeguards (like cladding panels) have to be removed, one emergency stop has to be pressed.

For several specific works it is necessary to install additional security devices.

7.3 Emptying the machine

For realization of maintenance required during operation of machine it must be completely empty. This means no further bulk must be fed to the machine and all belt conveyor of all three fractions must run empty.

7.4 Maintenance



Attention – damaging the trommel screen!

Before every start of production all safety devices must be checked for correct function. The scheduled checks must be done by trained personnel.



Notice!

Subsequent maintenances are important for perpetuation of function and guarantee claims.

7.4.1 Maintenance – daily

Make daily visual checks of entire machine.

Shut down and secure machine if suspect sound occur. Change all defect machine parts considering all aspects of safety. Use conforming to standards tools and spare parts.

Change all defect machine parts considering all aspects of safety. Use conforming to standards tools and spare parts.

If necessary contact customer service of Zemmler Siebanlagen GmbH.

7.4.2 Maintenance – monthly



Vorsicht – Verletzungsgefahr!

Tragen Sie bei allen Wartungsarbeiten immer Arbeitsschutzkleidung, Arbeitsschutz Handschuhe und Schutzbrille.

- B1** Make weekly check of cleaning brush. The cleaning brush must always engage the meshes of the drum to realize a high cleaning efficiency.
If broken brush elements are detected, secure the machine and change the defect brush elements considering all aspects of safety. Use conforming to standards tools and spare parts.
- B2** Grease the entire machine weekly.

7.5 Maintenance schedule



Attention – damaging the trommel screen!

Before every start of production all safety devices must be checked for correct function. The scheduled checks must be done by trained personnel.



Notice!

Subsequent maintenances are important for perpetuation of function and guarantee claims.

interval		pos. no.	component / description
in phases	A daily (10h)	A1	Visual check of entire machine
		A2	Sound check
	B Weekly (50h)	B1	Check cleaning brush of double trommel
		B2	Check lubrication points
	C 100 h	C1	Check bearing and pulleys
	D 250 h	D1	Check bearing and pulleys
	E 500 h	E1	Check bearing and pulleys
	F 1000 h	F1	Check bearing and pulleys
	G 1500 h	G1	Check bearing and pulleys
	H 2000 h	H1	Check bearing and pulleys

7.6 Screens exchange

- **Remove wire screens:**

1. Open the right side door of the trommel in the direction of travel.
2. Using the hand, place the clamping station of the trommel at the mounting height and loosen the screws.
3. Loosen both ends of the wire screen with help of the mounting lever out of the clamping station.
4. Carefully pull the screen out of the machine.

- **Apply wire screens:**

1. Position clamping station of the trommel by hand just above the conveyor belt under the trommel.
2. Hook the end of the wire screen without screws into clamping station.
3. Rotate trommel by hand until the pad is completely wrapped around the trommel.

Put ends into clamping station with mounting lever and use the screws to tighten the wire screen pad.



Warning - retraction of bodies or body parts

Danger of retracting of body parts while rotating the double trommel.

Special care while working on the trommel.

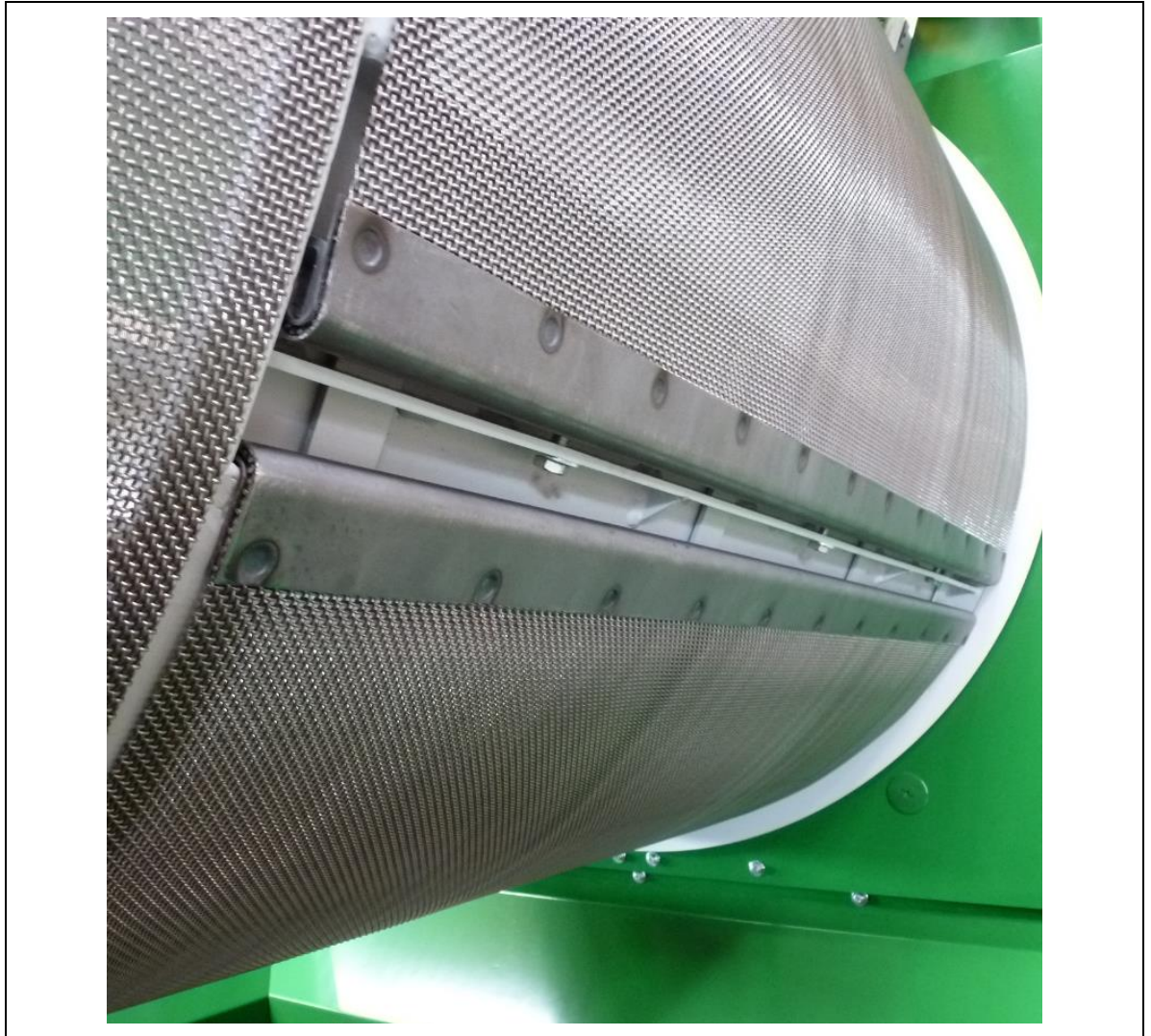


fig. 7-1: Clamping station of the wire screen pads



Notice!

The machine has to be turned off and secured while mounting the wire screens. The machine must also be empty.

7.7 Position of lubrication points



Note!

Lubricate regularly the lubrication points.

The machine is equipped with three central lubrication points. These are clearly marked as such, see the example below.



fig. 7-2: Position of lubrication points

7.8 Operating fluids



Attention – damaging the trommel screen!

The listed operating fluids are approved for operating on the ZEMMLER® MULTI SCREEN® MS 3200 ST.

Use always fluids which are listed in the manual of the engine manufacturer in order to avoid damages on the machine or components.

Operating fluid	Amount	Type	Standard
Lubricate grease			ISO 6743



Notice!

For questions about alternative operating fluids, please contact the customer service of Zemmler Siebanlagen GmbH.

7.9 Cleaning the machine



Notice!

The machine must always be run empty.

The visual check is to be done from the review of the double trommel and conveyor belts.



fig. 7-3: Visual check of trommel screen

7.10 Exchange of brush elements



Caution – Risk of injury!

Always wear protection clothes, protection gloves and safety goggles when maintaining the machine.

Exchange of brush elements

1. Disassemble the complete brush alignment by means of the fittings (1).
2. Lift up the alignment with a crane, pulley or other adequate tool from the machine.
3. The two brackets (2) of the brush shaft must be disassembled and removed.
4. It is now possible to take off the brush elements and spacer of the shaft.
5. The brush elements can be reassembled in opposite order.

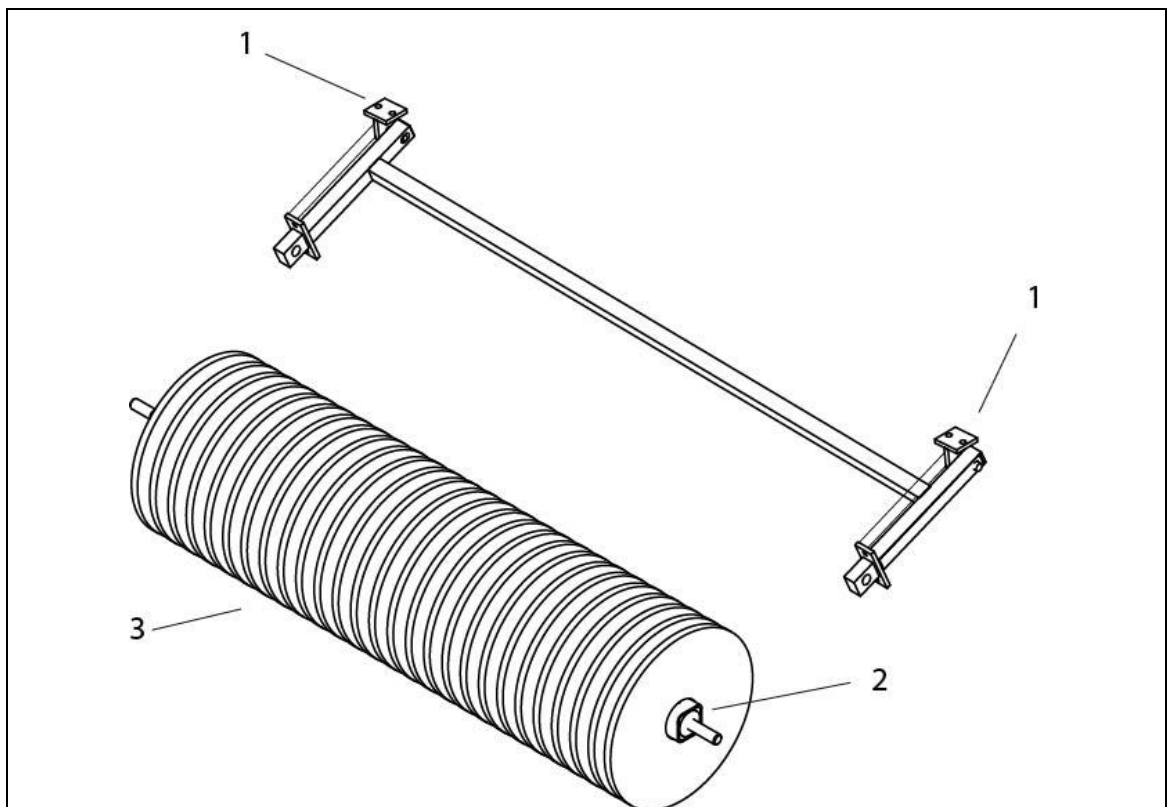


fig. 7-4: Layout of brush elements



Notice!

If you need new brush elements, please contact Zemmler Siebanlagen GmbH. Our service technician will help you with words and deeds.

7.11 Safeguard after maintenance



Attention – Damaging the machine!

Check the entire machine by visual inspection for operational readiness.

No scattered tools, spare parts, etc.

8 Technical information

8.1 Lateral view

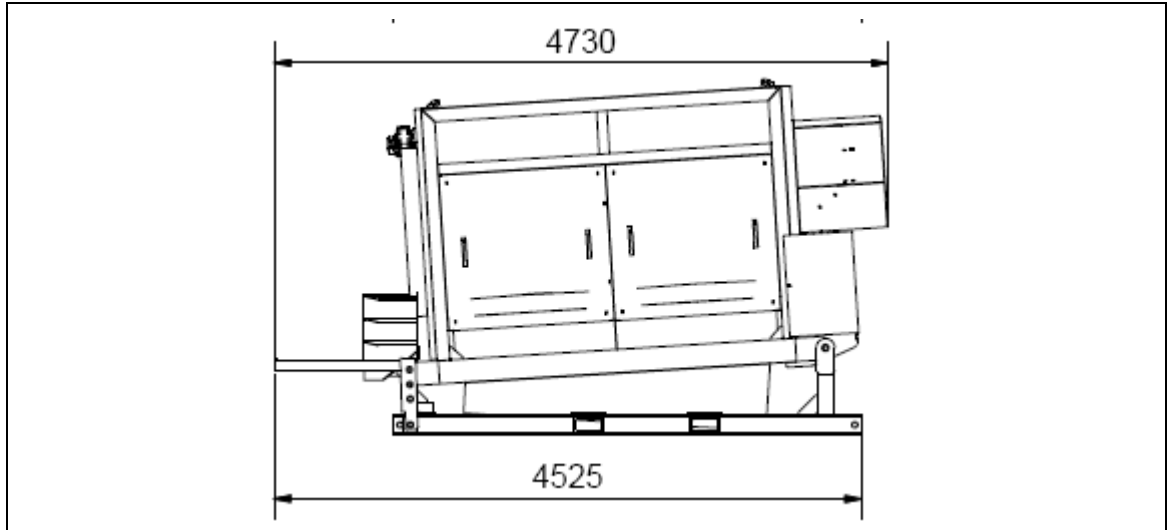


fig. 8-1: lateral view

8.2 Back and front view

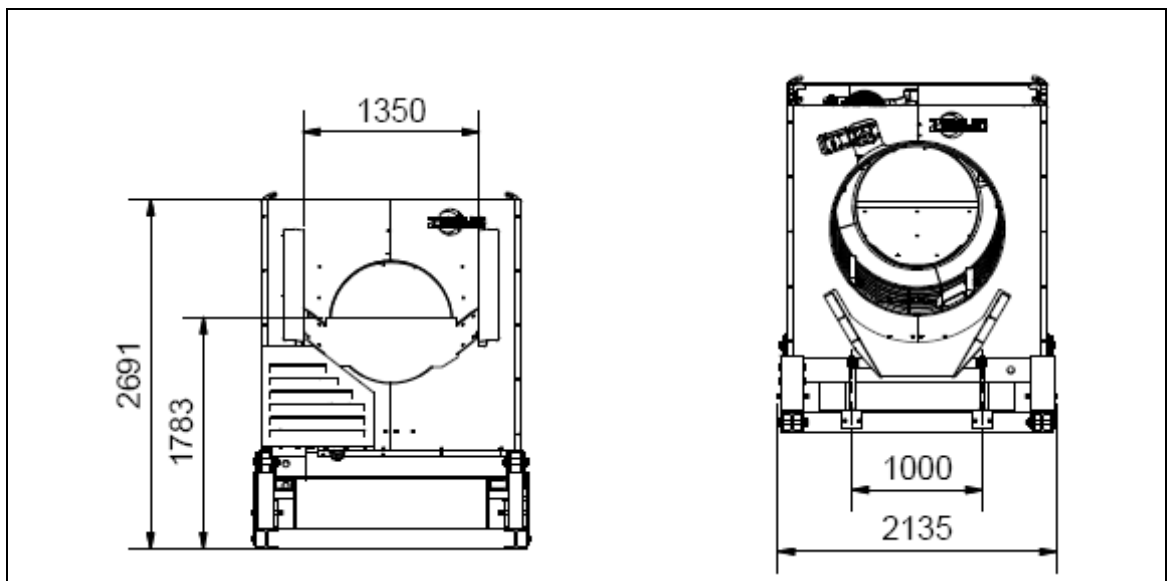


fig. 8-2: back and front view

8.3 Top view

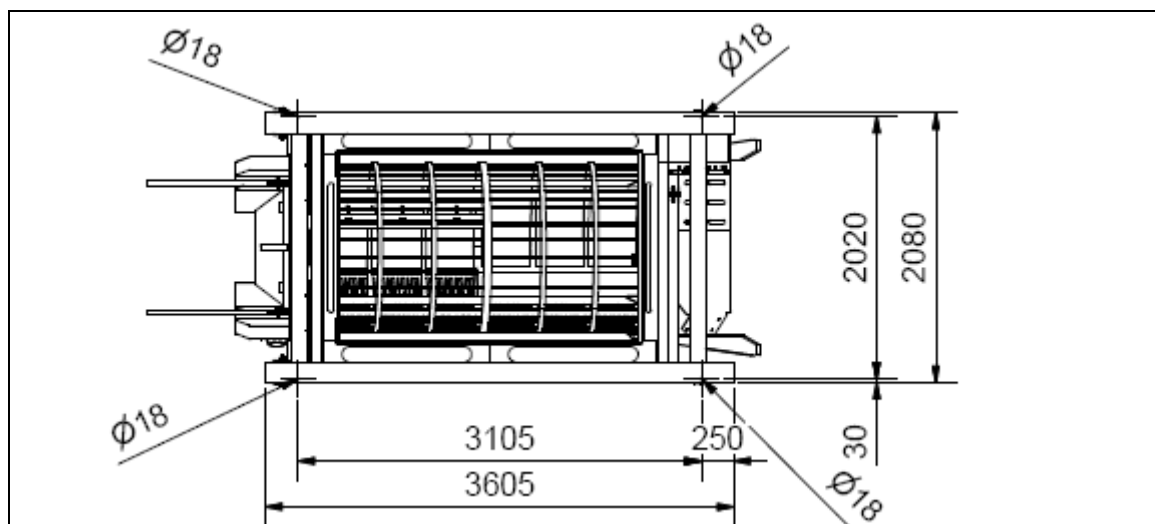


fig. 8-3: Top view

8.4 Performance data

Screening materials:

Compost, wood chip and recycling material till up to 80 mm

Operating:

1 person

Capacity of double trommel:

about 5-60 cbm / hour
(depending on material, feeding, chosen functions and screen meshes)

8.5 General data

Stationary trommel screening machine MS 3200-ST-ET – Transportation measurements

Length: 4.674 mm

Width: 2.146 mm

Height: 2.687 mm

Weight

(empty): ca. 2.570 kg

8.6 Specifications motor

Helical-Bevel gear unit - trommel UL 1004-1, certificate no:20141113-E189357

Performance: 5,5 kW

Current:	15,3/8,8 A
Voltage:	277/480 V
Spiroplan gear unit - brush	UL 1004-1, certificate no:20141113-E189357
Performance:	0,75 kW
Current:	2,6/1,49 A
Voltage:	277/480 V

8.7 Type plate

The type and manufacturer plate is located on the right hand side of the chassis.

The data of type plate, in particular the serial number are to be named when ordering spare parts in order to avoid mistakes and to ensure a smooth order process.

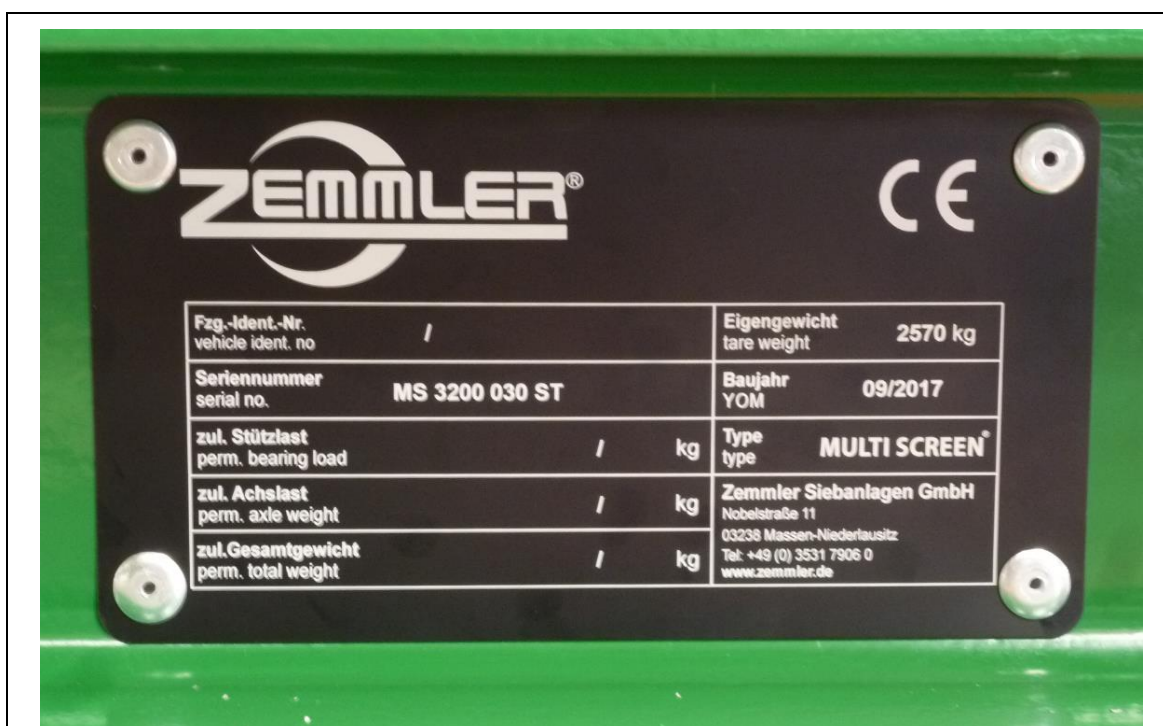


fig. 8-4: Type plate

9 Final disposal

Machines taken completely out of service have to be disposed according to legal directives. Single components have to be separated about material and element groups and turned in at the point of acceptance.

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10 Appendix

10.1 CE- declaration of conformity

10.2 Operating instruction

10.3 Spare parts catalog