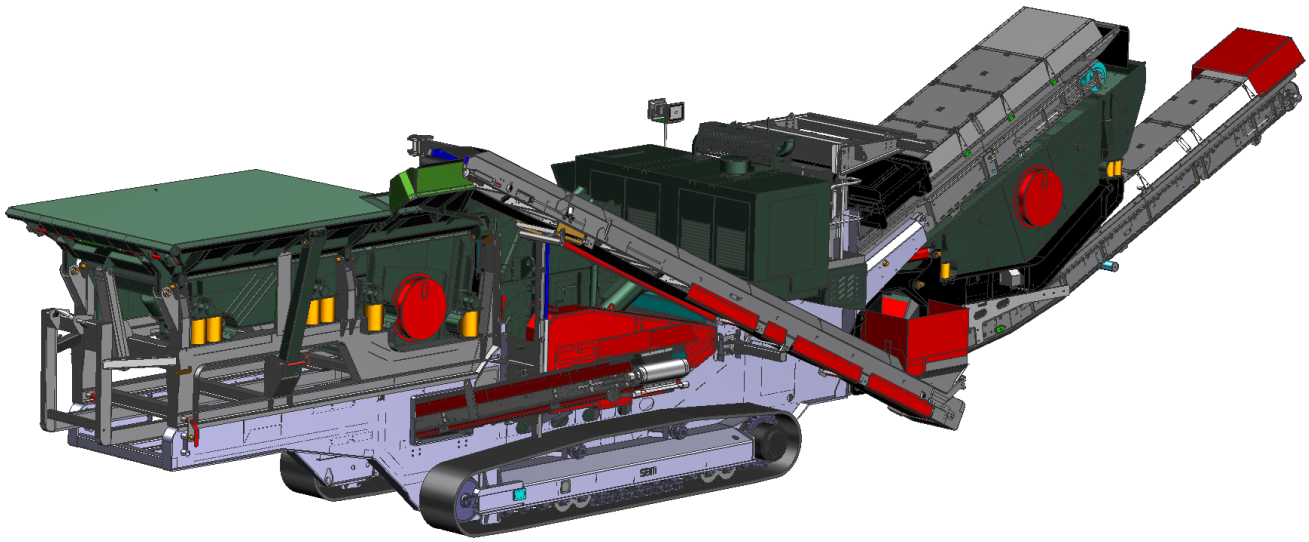

Translation

Original Operating Manual

Mobile crushing plant REMAX Type 1313 MAXI 42 1506 49

LEGAL NOTICE

Translation

Original Operating Manual

Mobile crushing plant REMAX 1313 MAXI 42 1506 49
Author: Andreas Brutter

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1 Foreword

Dear customer,

Thank you for choosing a high-quality SBM-MP system.

The experience of many generations of machines and a continuous process of development and optimisation in their construction has made SBM_MP systems a multi-purpose option for many industries.

2 About this documentation

This documentation describes the information required in order to correctly use the SBM-MP machine: Mobile crushing plant REMAX 1313 MAXI

Figures (Fig.) shown in the documentation may deviate from the machine supplied.

This documentation is subject to constant quality controls.
For the purpose of improving, updating, etc. the manufacturer reserves the right to make changes without prior warning.

Changes are documented in the ongoing version no. (e.g. Version 2.0). Please always use the latest version.

Version	Description	Chapter

Version no.

This documentation is intended for use by technically qualified personnel and must be read carefully and in full by such personnel.

Qualified personnel are those persons who - due to their training, experience and instruction, as well as their knowledge of the applicable standards, directives, accident prevention regulations and operating conditions - are authorised by the persons responsible for the safety of the machine to fulfil the role entrusted to them and who are also able to detect and avoid any potential hazards.

Acquaint yourself prior to commissioning with all handling criteria and instructions as required for trouble-free operation of the system.

This documentation is intended to support you in:

- Familiarising yourself with the machine/system;
- Using the machine in accordance with its appropriate use;
- Operating the machine/plant safely, professionally and economically;
- Increasing the reliability and operational lifetime of the machine/plant;

2.1 Applicable standards/regulations

In terms of its layout, contents and presentation, this documentation reflects the requirements of standard

- EN 82079-1 "Preparation of operating instructions" – Part 1: General principles and detailed requirements.

Further standards that should be observed when generating the documentation.

- ISO 3864 "Design principles for product safety labels".
- Machinery Directive 2006/42/EC (MDIR).

Translation from the original

EU – Statement of conformity

for complete machines/plants

(in accordance for machine guidelines 2006/42/EU, annex II A)

Manufacturer:

SBM – MINERAL PROCESSING GMBH
Oberweis 401
4664 Oberweis
AUSTRIA

Plant:
Order no.:
Plant no.:
Year of manufacture:

Regulations and guidelines with which the machine complies:

EC Directive

- Directive 2006/42/EC
- Directive 2006/95/EC
- Directive 2004/108/EC

EN Standarts

- EN ISO 12100:2010
- EN ISO 13849-1:2008

The undersigned hereby declares that the abovementioned machine complies with the above requirements.

Location: Oberweis

Date:

Originator of documentation

Name: Andreas Brutter
SBM Mineral Processing GmbH
Oberweis 401
4664 Oberweis
AUSTRIA

Signature:

.....
DI Erwin Schneller
Managing Director

2.2 Meaning of symbols used in this manual

In addition to the pictographs for the safety instructions, the manual also contains symbols which are utilised in order to highlight various text elements.

These symbols inform you as to what type of information is being presented.

The meanings of the symbols are as follows:

Tip/Info:
Anywhere that this symbol is displayed you will be given important information.

1. Action:
Anywhere that this symbol is displayed you should implement an action. Implement the action in accordance with the specified sequence.

■ List:
Lists that do not specify a certain sequence are presented as lists with bullet points.

2.3 Translation

This documentation has been produced by an ISO-certified translation office.

2.4 Storage of the documentation

The documentation must be stored carefully in a place that can be easily accessed.

The documentation must be stored until the system/machine is disassembled, and potentially transferred to any new operator.

By stating the specified machine number (XXXXXX K) on the cover sheet or type plate, copies of the documentation can be obtained from the manufacturer if the documentation: Is lost, destroyed or rendered unusable.

The obligations to preserve records of European and international regulations, such as European machinery directive, for example, apply for the documentation.

2.4.1 Folder storage

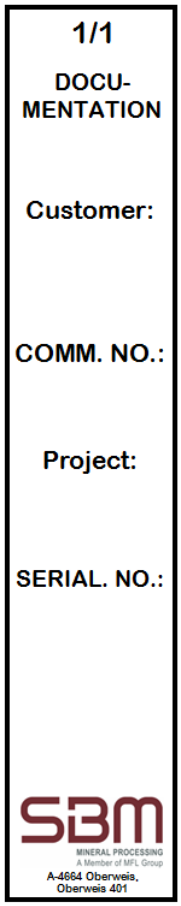


Fig. Folder spine

Example:

The updated documentation Version 2.0 will be sent to you.

1. Remove Version 1.0 of the documentation from the folder;
2. Dispose of Version 1.0 of the documentation;
3. File Version 2.0 of the documentation in the folder;
4. Instruct and inform your employees about the changes.

2.5 Codes and abbreviations

The following table provides you with an overview of the abbreviations used in the manual.

Abbreviations	Explanation
or	or
C	celsius
approx.	approx.
i.e.	in other words
etc.	et cetera
kVA	apparent output in kilovolt-amperes
max.	maximum
rpm	minimum
Nm	Newton x metre
e.g.	for example

Tab. Abbreviations

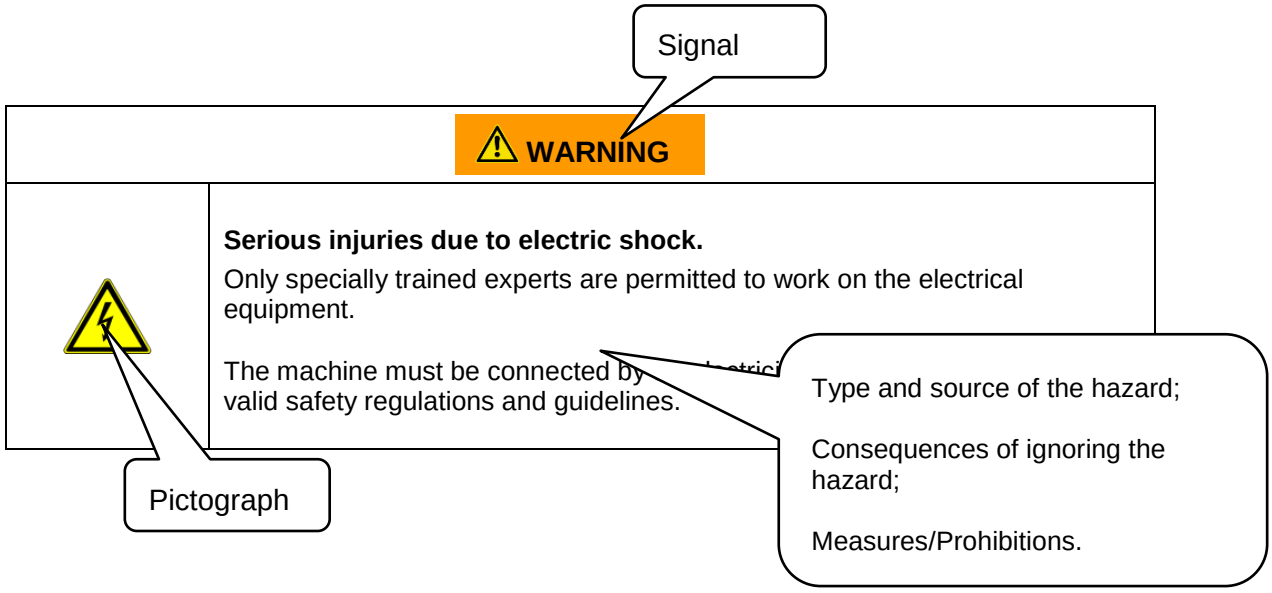
2.6 Depiction of safety instructions

The safety instructions always comprise a pictograph and signal word.

2.6.1 Format of the safety instructions

- The pictograph informs you about the type of hazard.
- The signal word provides information about the extent of possible injuries.
- The type of hazard is described in a few words.
- The consequences of the hazard inform you of the potential consequences in the event of a hazardous situation.
- The instructions on countering the hazard inform you as to how you must act in order to avoid the hazardous situation.

Example:



2.6.2 Meaning of the pictographs

This chapter provides an overview of the pictographs used for safety instructions as well as their meanings.

2.6.2.1 Warning signs

Warning signs warn of dangers or indicate a possible hazard.


Warning: general danger


Warning: dangerous electrical voltage


Warning: hand injuries


Warning: suspended load


Warning: hot surfaces


Warning: risk of being drawn in


Warning: falling bulk goods (conveyor belt)


Warning: high pressure hydraulic lines


Warning: falling bulk goods (material)


Warning: risk of crushing


Warning: risk of falling


Warning: danger from batteries

2.6.2.2 Prohibition signs

Prohibition signs show that an action should not be carried out or should be stopped.

Unauthorised access prohibited.

Unauthorised access forbidden.

Fire, naked flames and smoking prohibited

2.6.2.3 Instruction signs

Instruction signs show that an action should be carried out in order to prevent a hazardous situation.

Wear a protective helmet.

Wear eye protection.

Wear safety clothing.

Wear safety gloves.

Wear safety shoes.

Wear safety harness.

Attach lashing gear here

2.6.2.4 Combination / special signs

No unauthorised access / Read operating manual

Warning tape

EMERGENCY STOP button

2.6.3 Meaning of the signal words

Signal words	Used with……
⚠ HAZARD	…describes a hazardous situation with a high degree of risk that, if not prevented, can result in death or serious injury.
⚠ WARNING	…describes a hazardous situation with a medium degree of risk that, if not prevented, can have death or serious injury as a consequence.
⚠ CAUTION	…describes a hazardous situation with a low degree of risk that, if not prevented, can have slight or moderate injury as a consequence.
NOTE	…labels special actions and/or processes that are required for safe working on the system and, if not observed, have property damage as a consequence, or can result in subsequent risks.

2.7 Technical terms/designations

Technical terms/designations	Explanation
Commissioning	Specialist personnel (manufacturer). Trained electrician, trained mechanic
Commissioning	Commissioning the machine, which is carried out by the operator's instructed, trained personnel.
Re-commissioning	Commissioning the machine, e.g. following adjustment work, shut down, troubleshooting etc., which is carried out by the operator's instructed, trained personnel.
De-commissioning	Specialist personnel (manufacturer). Trained electrician, trained mechanic

3 Legal

3.1 Regulations of proper use

The REMAX type 1313 Maxi may only be used to prepare (feed, convey, crush) natural stone, building rubble, asphalt and gravel.

Use in potentially explosive atmospheres is forbidden.

Proper use also includes:

- Following the "REMAX type 1313 Maxi" documentation and the applicable documents.
- Always using the product within the specifications indicated in the technical data.

3.2 Foreseeable incorrect use

Any use of the equipment other than applications defined under "proper use" or use which goes above any beyond such defined applications shall be considered to be in violation of the regulations!

In the event of resultant damage,

- The operator bears sole responsibility,
- The manufacturer accepts no liability.

The following is also considered to be in violation of the regulations,

- Use and operation of the machine without having previously read and understood the documentation,
- Use of the machine outside of the specified limitations,
- Removal of the safety equipment or protective guards,
- Removal of the hazard or warning signs,
- Use of the machine if it is obviously/noticeably damaged or defective.
- Use of the machine in potentially explosive atmospheres.

3.3 Responsibility of the operator

The operator is obliged to ensure that only such personnel are approved for working on the machine who:

- are capable of working on the machine safely due to their mental and physical abilities,
- have reached the statutory minimum age for the operation of such machines,
- are familiar with the fundamental regulations pertaining to safety at work and accident prevention,
- have been instructed in writing (min. 1x annually),
- have read and understood this documentation.

	The local applicable regulations and laws must be observed!

3.4 Responsibility of the personnel

All personnel who are commissioned to work with the machine are obliged:

- to participate in training undertaken by authorised personnel prior to working with the machine for the first time,
- to observe the basic regulations for industrial safety and accident prevention,
- to read and observe this documentation.

3.5 Guarantee and liability

The contractually agreed guarantee periods apply for this system/machine.
All rights to guarantee services and liability are void in the event of improper or unprofessional use of the system.

3.5.1 Modifications or changes

All rights to guarantee services and the liability of the manufacturer shall be void in the event of unauthorised modifications or changes to the system/machine!

This also applies to welding work and cutting on load-bearing components.

The electromagnetic behaviour of the system must not be influenced in any way as a result of supplements or changes.

For this reason, never carry out changes or additions to the system without consulting the manufacturer and attaining their prior written agreement.

3.5.2 Spare and wearing parts, auxiliary materials

The use of spare and wearing parts supplied by third-party manufacturers can lead to hazards.
Only use original parts or parts that have been approved for use by the manufacturer.
The manufacturer assumes no liability for damage resulting from the use of non-approved spare parts, wearing parts and auxiliaries.

SBM-MP recommends keeping spare and wearing parts in stock.
Consult with: Customer Service, After sales / Homepage: www.sbm-mp.at

3.6 Conformity

SBM-MP designs and constructs its systems/machinery in accordance with the applicable standards and directives pertinent to the respective product, as per their current versions.

3.7 Handover confirmation

Proper acceptance of the system/machine will be documented at the time of handover to the operator in a transfer report, acceptance report.

SBM MINERAL PROCESSING GMBH
Oberweis 401, A-4664 Oberweis
TEL: +(43)3012 2703-0, FAX: +(43)3012 2703 8359
www.sbm-mp.at, office@sbm-mp.at

Takeover report
Commissing report

Please hand over one copy of the commissioning certificate to the employee of SBM, duly signed and stamped by an executive of the responsible department. Many thanks!

CUSTOMER:
ADRESS:

DELIVERY
ADRESS:

COMM.-No.: **PROJECT:**

PARTS/ITEMS TO BE DELIVERED BACK
(if agreed):

The plant/machine has been installed and started-up by SBM supervision and commissioned after instruction of the operating staff.

TRAINED OPERATING STAFF: .....

.....

Further it is confirmed, that the operating staff has been trained sufficiently and has been acquainted to the necessary maintenance works and safety devices.

The technical documentation (operating manuals and spare parts lists) has been sent by post.

Additional deliveries respectively open items have to be written on the following side.

❑ no additional deliveries/open items ❑ additional deliveries/open items

The signer herewith confirms the proper acceptance of the plant/machine:

SBM

..... Date, signature and company stamp
CONSIGNEE
printed name:
.....

..... Date, signature and company stamp
CUSTOMER
printed name:
.....

Date:

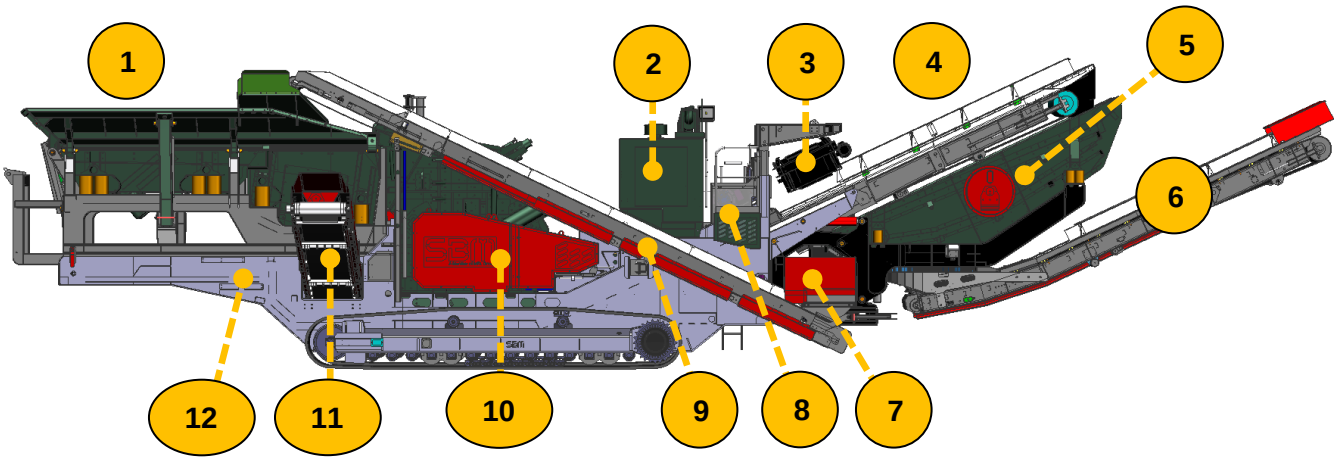
Rev.	Datum:	Erstellt:	Datum:	Freigabe:	Titel: Übernahme- Report / Inbetriebnahme-Report		
00	01.02.10	ARM	19.02.10	TIA			
01	17.03.10	ARM	19.03.10	TIA	SBM Mineral Processing – Dokument Nr.:	Seite:	Rev.
03	09.11.15	BRA	09.11.15	BRA	HM_Abnahmeprotokoll	1 von 3	**02**

3.8 Copyright

4 Machine description

This chapter provides an overview of the configuration and function of the machine.

Machine components- REMAX 1313 MAXI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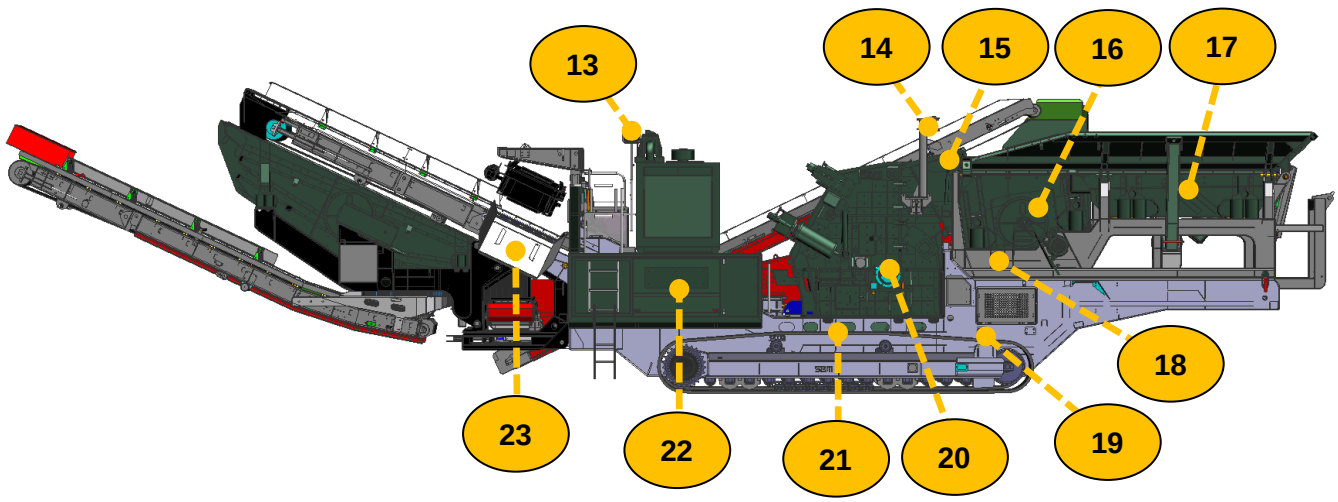
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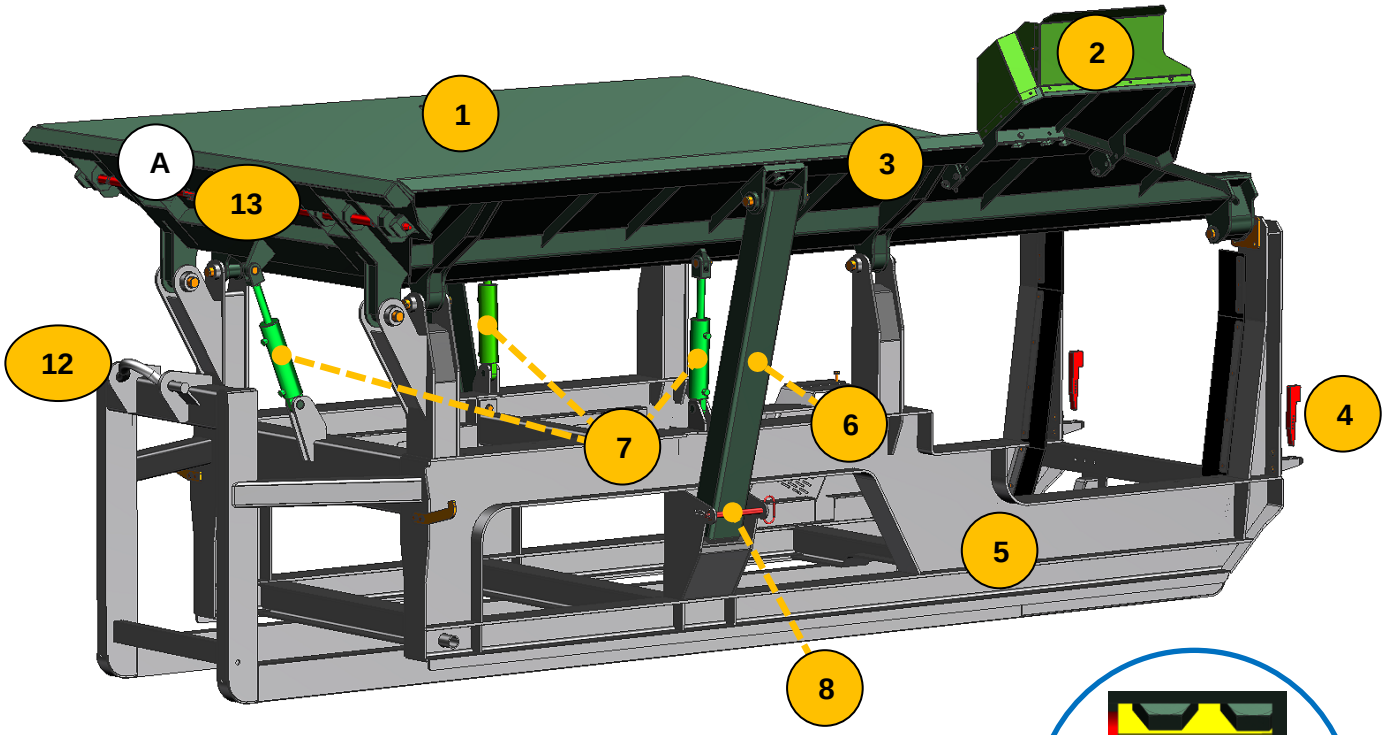
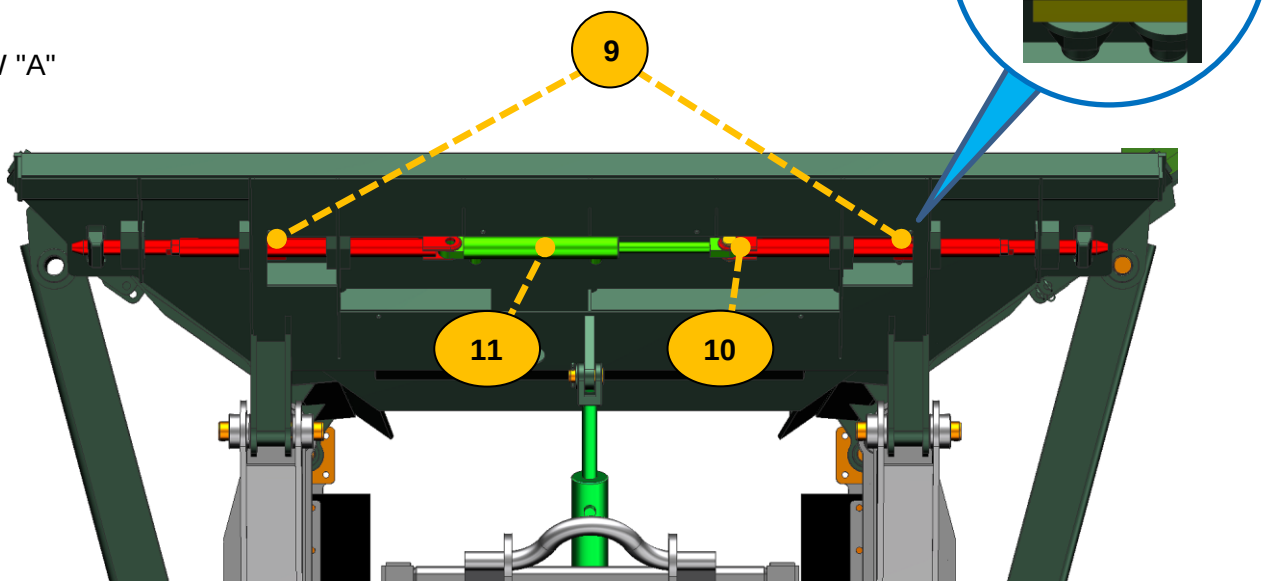
Item	Designation
1	Feed unit, complete
2	Diesel unit
3	Magnetic separator, complete
4	Conveyor belt type PBB-C SL10111782
5	Sifting machine KQ
6	Conveyor belt type PBB-C SL10112138
7	Conveyor belt type PBB-C SL10112225
8	Hydraulic unit, complete
9	Conveyor belt type PBB-C 75995049
10	Belt protector
11	Conveyor belt type PBB-C 75996349
12	Water tank, high-pressure cleaner type MAXI 155
13	Floodlight
14	Swing crane
15	Sprinklers
16	Pre-screener VARK type 12/20-2
17	Feed trough ARLM type 12/30
18	Manual control valve 3-fold
19	Transport frame, complete
20	Impact crusher RHS type 13/13/4
21	Feed trough FRLM type 13/29
22	Control cabinet
23	Chute (scrap iron)

Hopper, complete



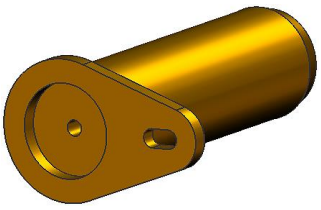
VIEW "A"



Item	Designation
1	Hopper side wall
2	Splash guard
3	Hopper side wall
4	Wedges (securing of chassis substructure)
5	Substructure
6	Support
7	Hydraulic cylinder 80-40-200
8	Support securing mechanism
9	Stop (locking rod)
10	Locking rod
11	Hydraulic cylinder 50-30-250
12	Hook mount
13	Hopper rear wall

Examples of securing bolts

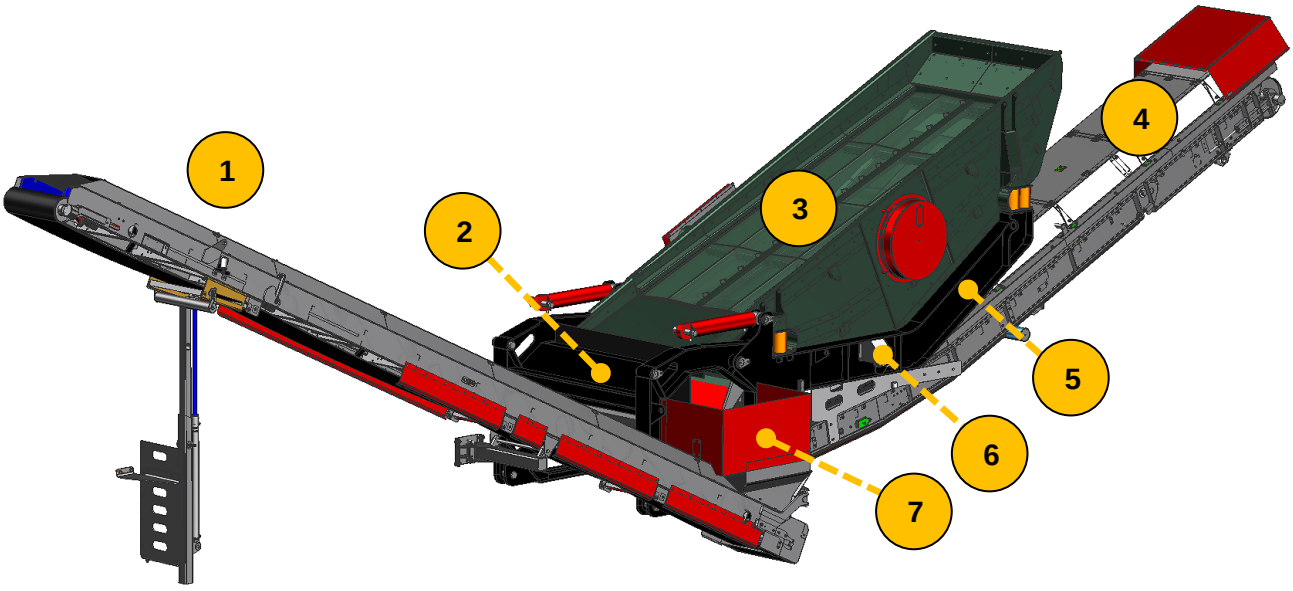
Screw locking device

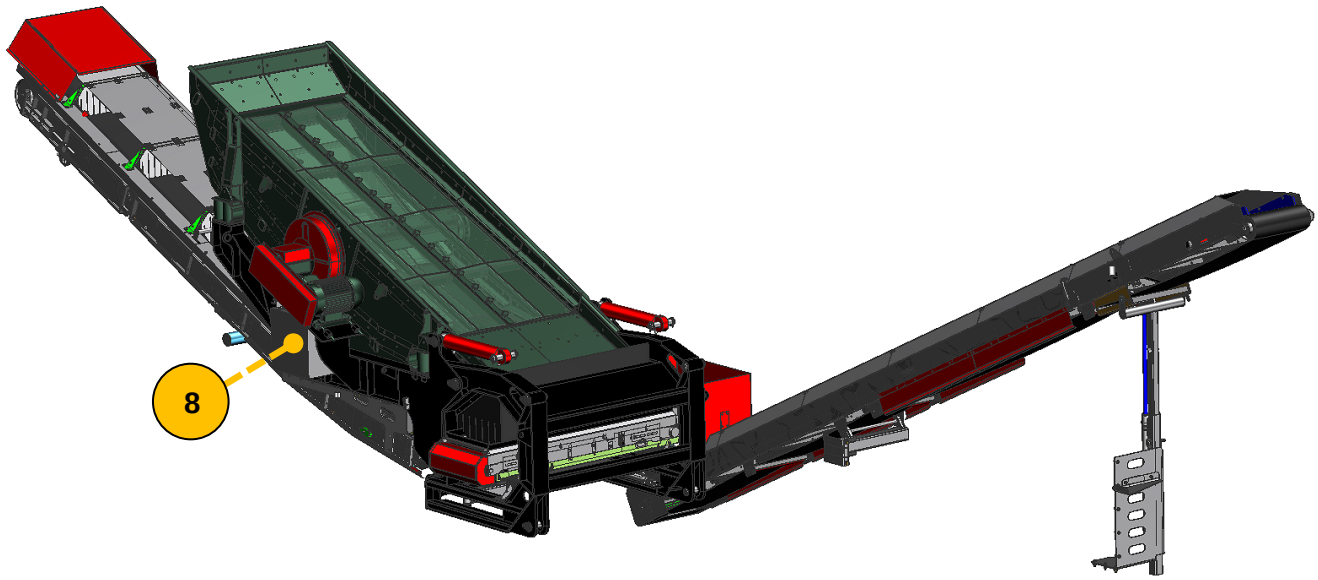


Washer and split pin

Securing wedges:
Washer, spring cotter!

Sifting unit

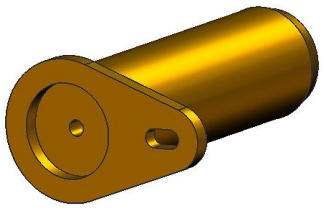




Item	Designation
1	Conveyor belt type PBB-C 75995049
2	Sifter attachment
3	Sifting machine KQ
4	Conveyor belt type PBB-C SL10112138
5	Substructure
6	Manual control valve 2-fold
7	Conveyor belt type PBB-C SL10112225
8	Control cabinet

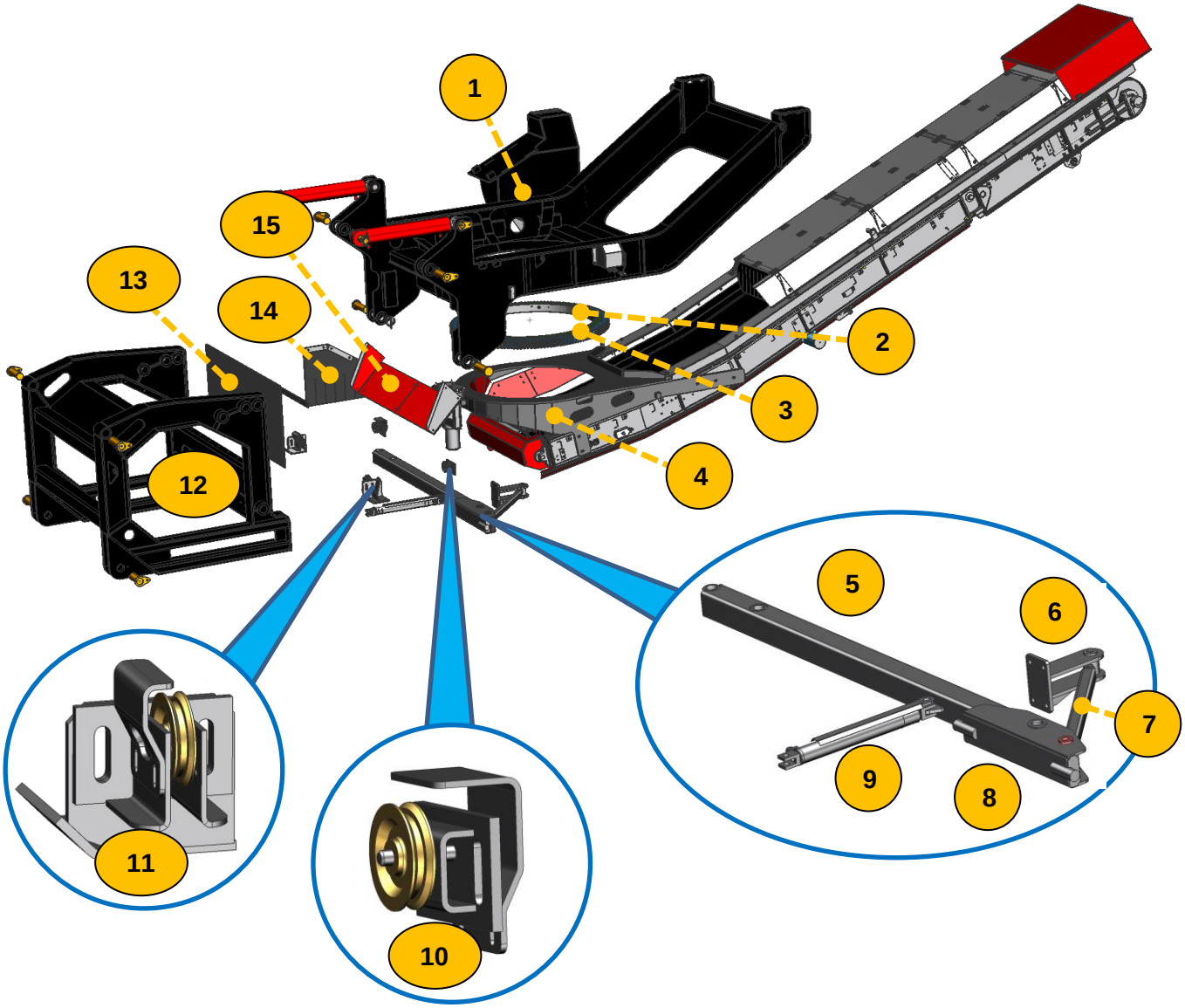
Examples of securing bolts

Screw locking device



Washer and split pin

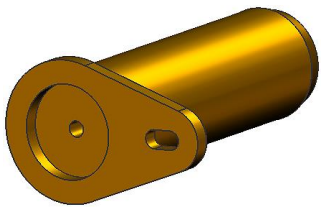
Sifter attachment



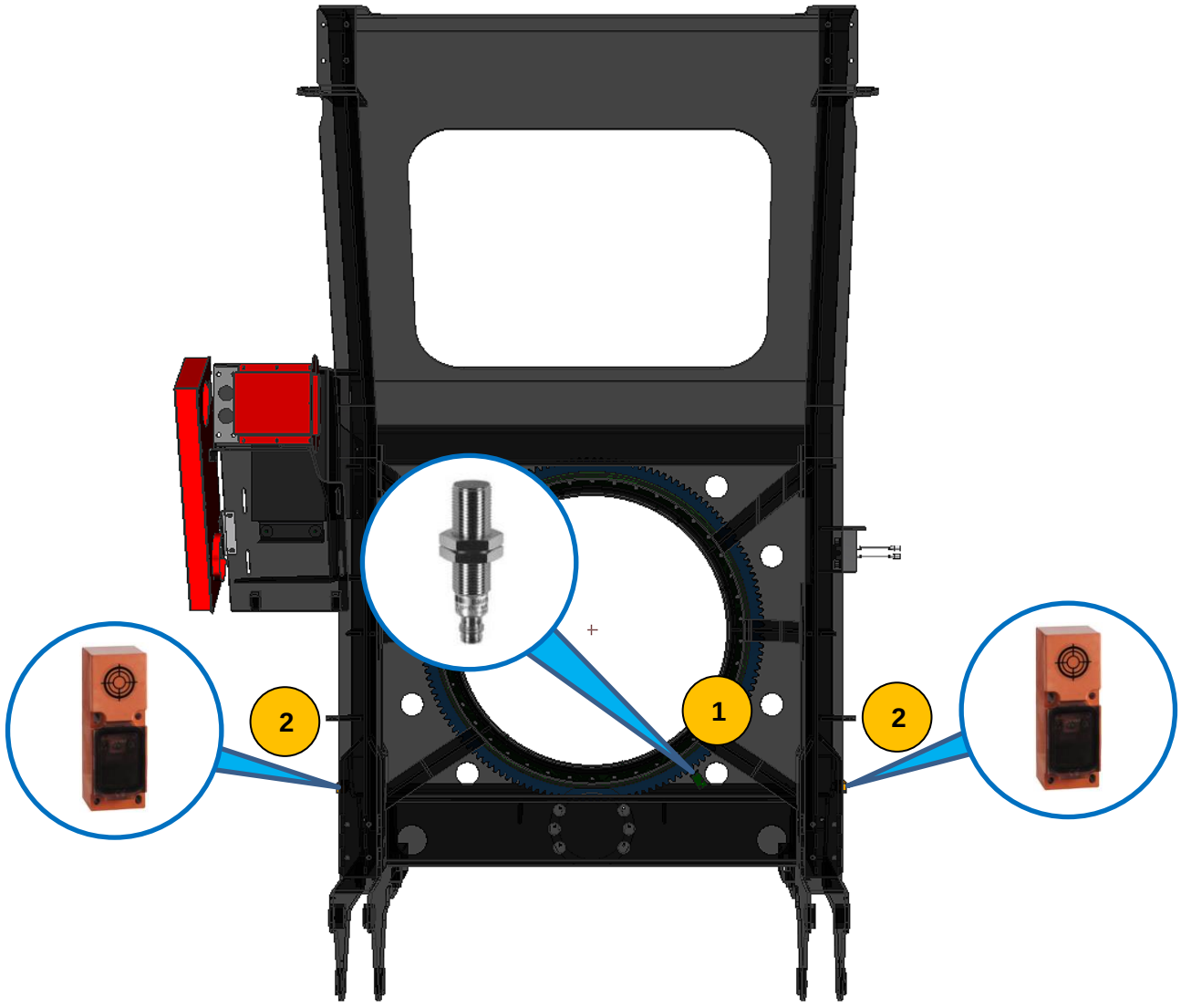
Item	Designation
1	Substructure
2	Grease chamber
3	Slewing ring - outer teeth
4	Swivel chute
5	Beam
6	Support (swinging out)
7	Support (swivelling)
8	Hanging fixture
9	Cover plate and hydraulic cylinder
10	Roller bracket (side) + roller bearing + safety guard
11	Bracket + roller bracket + roller bearing + safety guard
12	Sifter attachment
13	Wear rubber
14	Wear rubber
15	Chutes

Examples of securing bolts

Screw locking device

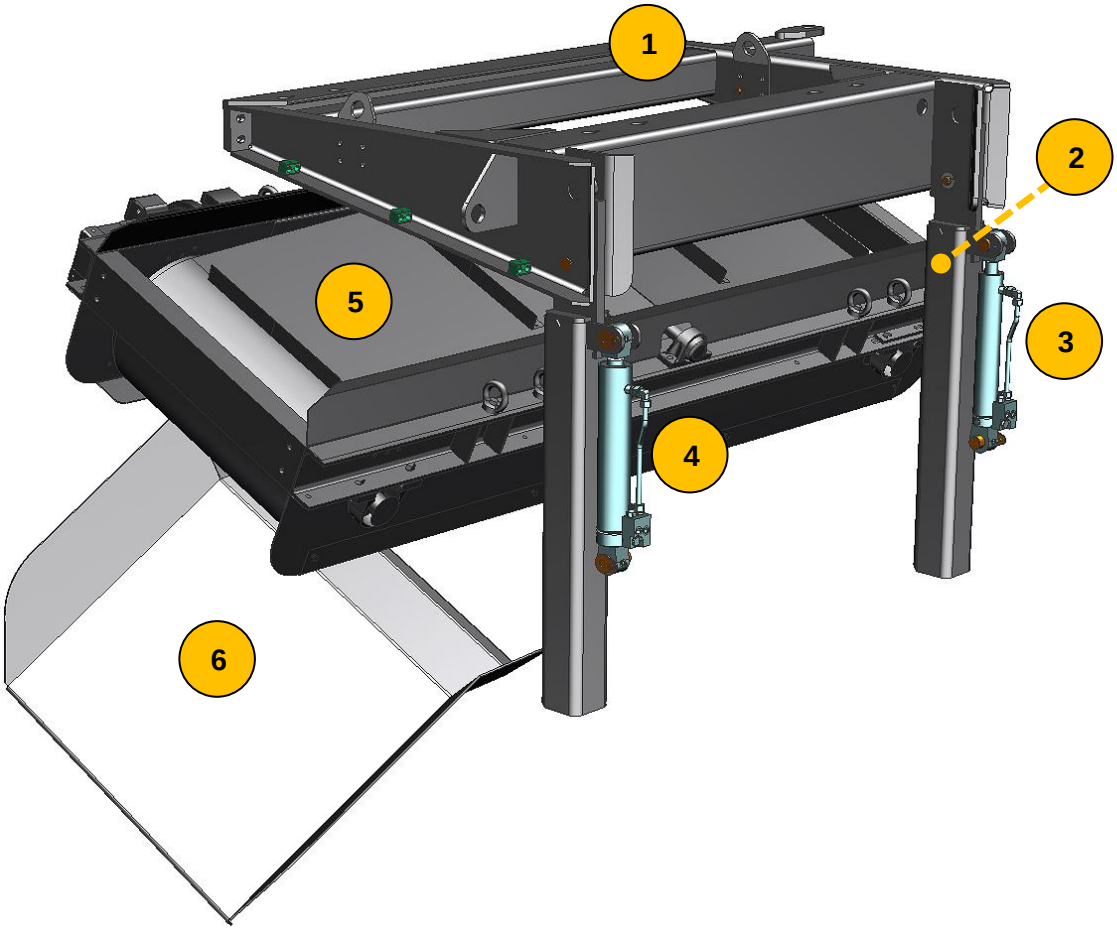


Washer and split pin

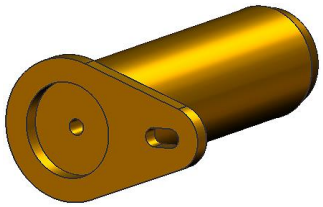


Item	Designation	Switching distance (Sn)
1	Inductive proximity switch type 12P1701/S35L	4 mm
2	Inductive proximity switch type IFL15-333-10/01AM20	

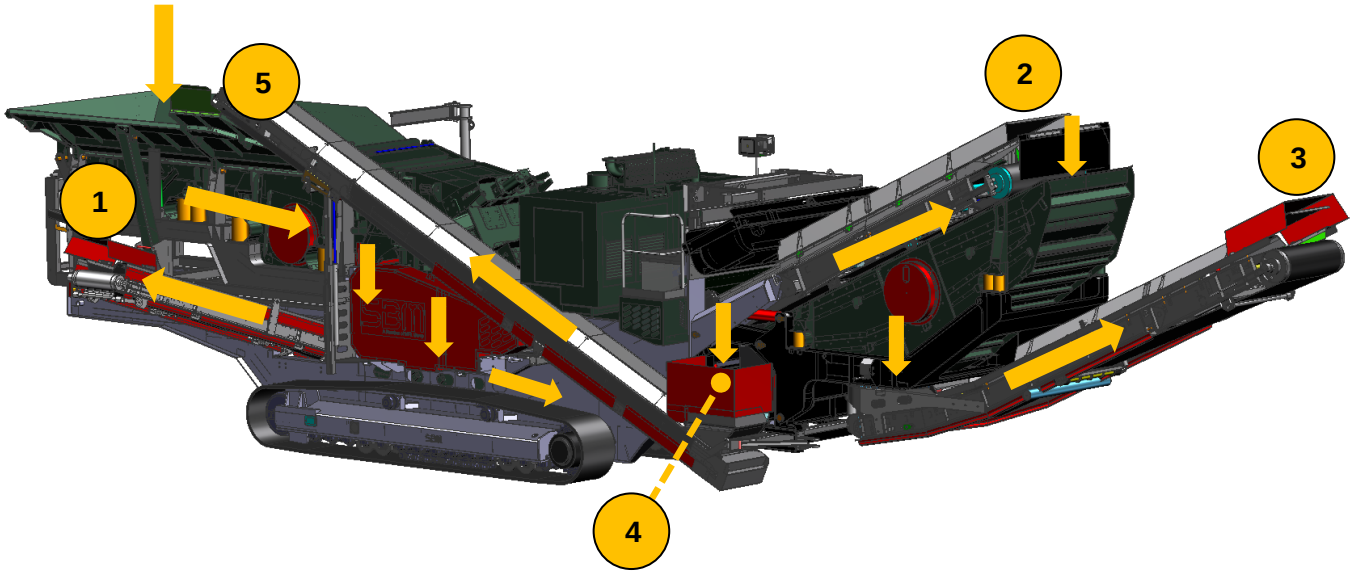
Magnetic separator



Item	Designation
1	Suspension for magnetic separator
2	Strut
3	Hydraulic cylinder 4737100
4	Hydraulic cylinder 4737200
5	Magnetic separator type CP25/160 SC2
6	Chute (scrap iron)

	Examples of securing bolts Screw locking device Washer and split pin	 

4.1 Process flow



Hopper ➔ Feed chute ARLM ➔ Pre-screener VARK ➔
Impact crusher RHS ➔ Conveyor belt no. 1 ➔ Feed trough FRLM ➔
Conveyor belt no. 2 ➔ Sifting machine KQ ➔ Conveyor belt no. 3 ➔
Conveyor belt no. 4 ➔ Conveyor belt no. 5 ➔ Hopper

4.2 Operating modes

Operating modes:

- Automatic mode
- Manual / Inspection mode

NOTE

Observe the E-operating manual!

4.2.1 Switch-on sequence

NOTE

Observe the E-operating manual!

4.2.2 Switch-off sequence

NOTE

Observe the E-operating manual!

4.3 Switching on the system

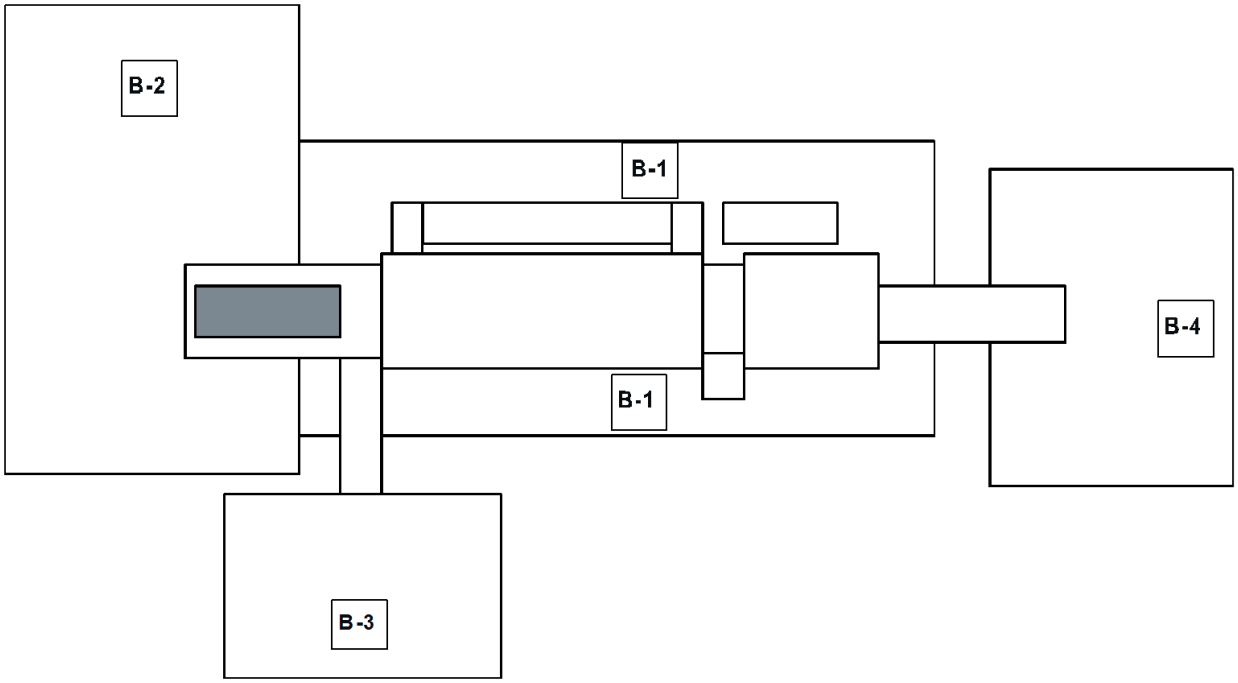
HAZARD	
	**Risk of injury due to incorrect commissioning.** Commissioning must be performed by the manufacturer (SBM-MP). If you do not have the commissioning carried out by a specialist from SBM-MP, please contact our customer service department prior to commissioning and follow the instructions.

NOTE

Observe the E-operating manual!

4.4 Operating personnel workstations

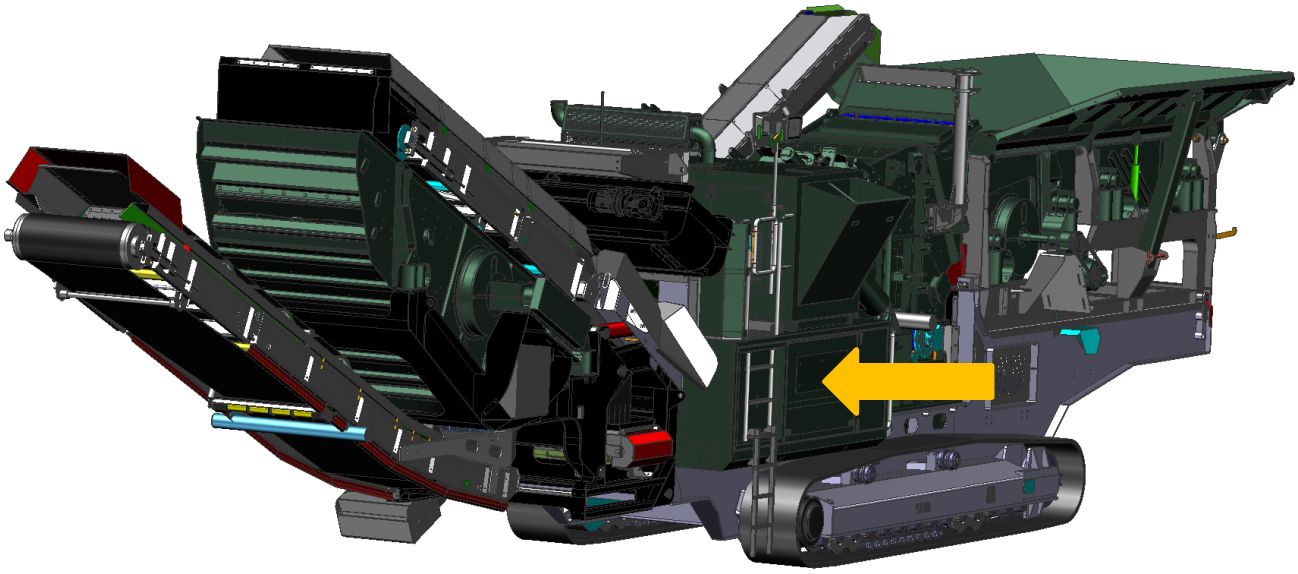
Operating area



Operating area	Description
B-1	Operating area for commissioning and maintenance of the machine Ensure free access.
B-2	Access area for in-feed of bulk goods Ensure access with self-propelled equipment.
B-3	Access area for the transport of pre-sifted bulk goods. Ensure access with self-propelled equipment.
B-4	Access area for the transport of the crushed product. Ensure access with self-propelled equipment.

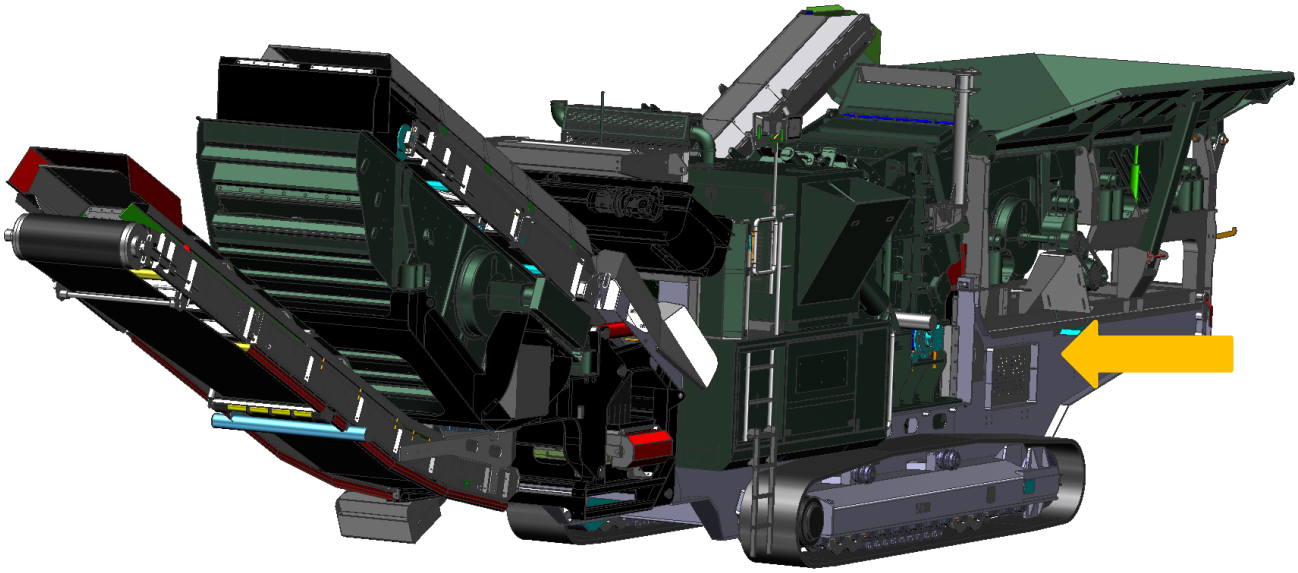
Start SYSTEM

Control cabinet



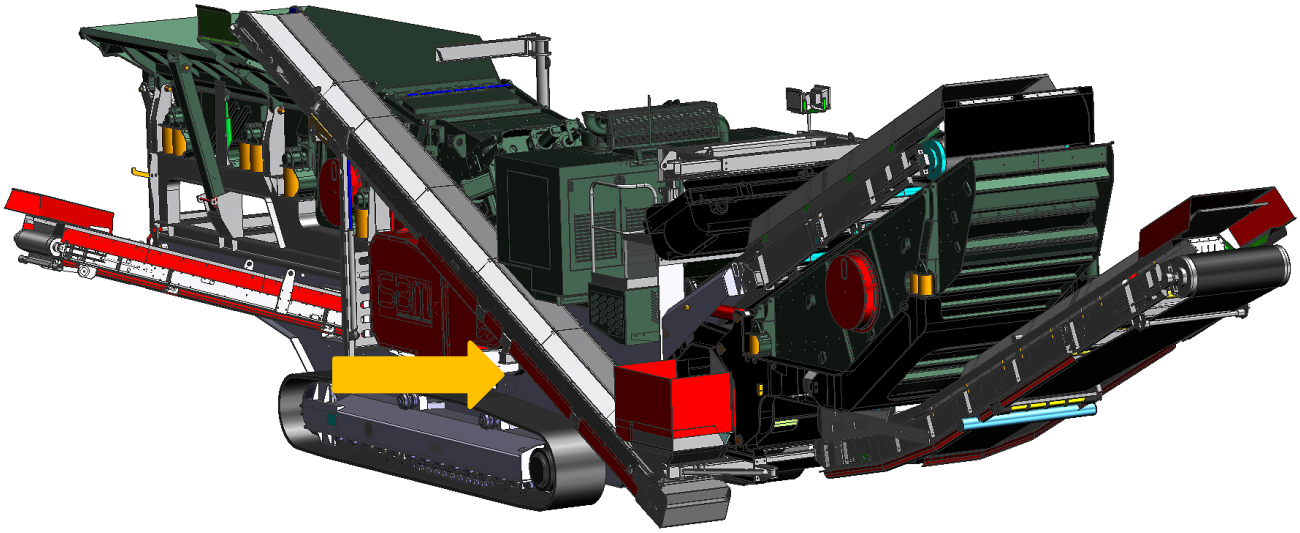
Transport position and operating position

Hopper manual control valve 3-fold



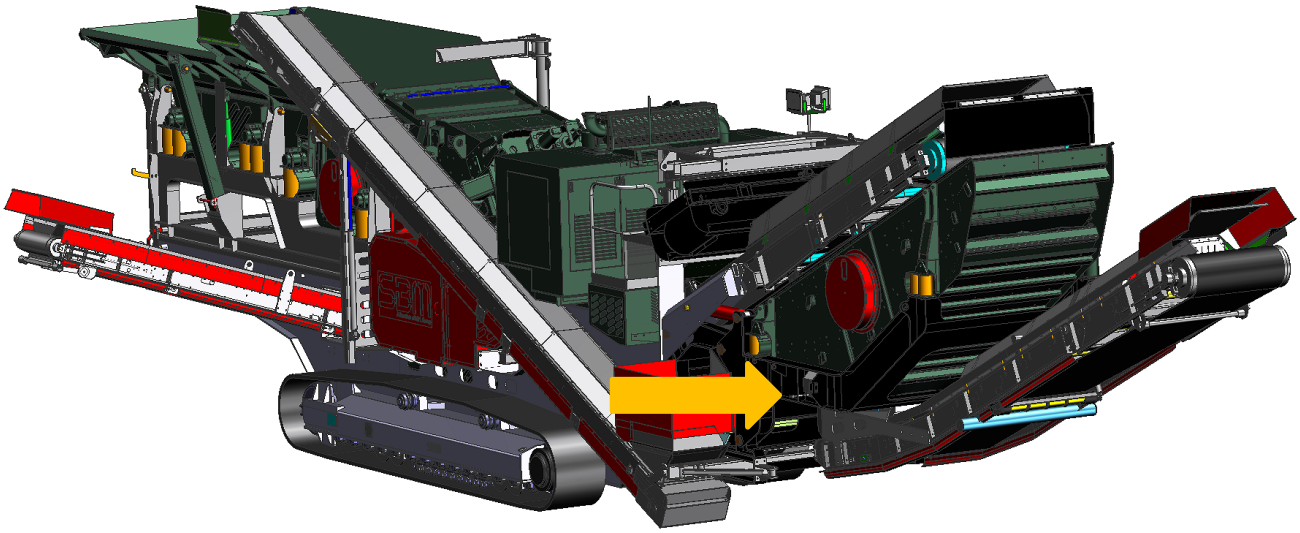
Transport position and operating position

Transport frame manual control valve 7-fold



Transport position and operating position

Sifting unit manual control valve 2-fold



4.5 Danger zone

⚠ WARNING	
	**Unauthorised access forbidden!** Risk of injuries due to unauthorised access to the machine. Only instructed employees and instructed personnel from external companies are permitted to dwell in the vicinity of the machine. Wear personally protective equipment Identification of the danger zone: e.g. cordons/barriers, notices, warning signals

During operation, no unauthorised persons are permitted in the danger zone!

During operation, no unauthorised persons are permitted in the danger zone!

NOTE

Refer to "Drawing of 42147749 danger zone" in the appendix!

4.6 Energy supplies (electricity, hydraulics, water etc.)

Diesel three-phase power unit type

Specification	Value	Unit	SAP no.
Diesel three-phase power unit			81204649
Model	DW 400 VO 15 M14H		
Tank	800	l	
Weight	4,200.00	kg	

Specification	Value	Unit	SAP no.
Diesel engine type VOLVO TAD 1355 GE			
Power	354.00	kW	
Speed	1,500.00	rpm	

Specification	Value	Unit	SAP no.
Generator type MECC-ALTE ECO 40-ISN			
Power	400.00	kVA	
Speed (51 Hz)	1,530.00	rpm	
Frequency	50.00	Hz	
Voltage (50 Hz)	3x400,00	V	
	230.00	V	
Protection class	IP21		
Rated current	580.00	A	

Specification	Value	Unit	SAP no.
Starter batteries (2x)			
Voltage	12.00	V	
	180.00	Ah	

Electrical equipment

Hazards	Measures
Unsafe condition	Electrical systems and operating equipment must be in a safe condition at all times Faults must be rectified immediately.
Use of unsuitable electrical systems	Electrical systems and operating equipment must comply with the respective operational requirements and must be capable of withstanding any loads that arise.
Danger, if components not suitable	Electrical components and operating equipment must comply with the applicable standards.
Influence of the ambient temperature	Faultless operation must be guaranteed for the electrical equipment at environmental temperatures between + 5°C and + 40°C (or + 55°C)
Influence of external bodies, liquids, etc.	Sufficient protection against the penetration of external bodies and liquids must be guaranteed.
Protective earthing	Electrical systems must be connected to the protective earthing system.
Unexpected machine start-ups	Install safety equipment to protect against unexpected machine start-ups.
Protection against electric shock	Incorporate the protection of personnel against electric shocks arising due to direct or indirect contact.
Danger if no protection against contact is present	Protection against contact must be present: Through housing, the insulation of live parts, guards, distance or obstacles.
Indirect contact	Protection against insulation defects must be present

Dealing with electrical energy

HAZARD	
 	**Hazard due to dangerous electrical voltage and current!** Only specially trained experts (electricians) are permitted to work on the electrical equipment. Establishment of a de-energised state 1. De-energise; 2. Safeguard against a restart; 3. Ensure a de-energised state; 4. Earthing and short circuiting; 5. Cover or enclose neighbouring live parts.

Checking of electrical systems

The system's electrical equipment must be checked regularly.
Loose connections, scorched cables, etc. must be repaired as soon as they are discovered.

Replacing fuses

Only fuses with ratings appropriate to the stipulated currents may be used.

Replacing components

PLEASE NOTE: The stipulated operating voltage must be observed when replacing electrical components and system components.

Malfunctions

PLEASE NOTE: The system must be brought to an immediate standstill and switched off in the event of faults in the electrical power supply or electrical equipment.

Operate the system only if the switch cabinets are free of damage and closed.

Hydraulics

⚠ WARNING	
	**Injuries due to pressurised hydraulic hose line!** Activities must be carried out with the system/machine at a standstill. Drain hydraulic lines. Never touch a hydraulic hose line under pressure with any part of the body. Only specially trained experts with specialist hydraulic knowledge are permitted to work on the hydraulic system.

Measures for safe operation of hydraulic hoselines!

Selection and ordering

Hydraulic hoselines should be selected and laid such that they will work safely with all intended applications and operational conditions of the system where they will be used.

Finishing of hoses by the operator

Hydraulic hoselines should only be procured in fully finished condition.

Identification of hoses for hydraulic hoselines

Name or identification of the manufacturer,
Number of product standard
Hose type
Operating pressure
Nominal diameter
Year of manufacture etc.

Installation of hydraulic hose lines

Avoidance of torsion
Permissible bend radius
Avoidance of point of abrasion, wearing and kinking
Avoidance of tensile and compressive stresses
Avoidance of the effects of temperature
Vibration consideration

Fire protection

If there are leaks in the hydraulic lines or their connections and hydraulic fluid comes in contact with naked flames or hot surfaces then they can ignite.
If the hydraulic fluid should escape under very high pressure then it can spray out in a fine mist which can ignite explosively due to the extremely large surface area presented by the many tiny droplets.

Representatives of the company:

e.g. officers for fire protection, etc.

Hydraulic unit

Specification	Value	Unit	Order no.	Weight
Tank capacity	65.00	l		
Volume flow (Q)	-			
Power (P)	-			
Pressure (p)	-			
Conditions of use				
Angled position	30.00	Degrees		
Thermal range of use	-25 - +40	Degrees Celsius (°C)		
Transport frame				
Manual control valve 7-fold			4905300	~ 13.00 kg
Sifting unit				
Hydraulic cylinder	60-32-500		4885300	~ 12.00 kg
Hydraulic cylinder	125-70-650		SLH194401	~ 80.00 kg
Hydraulic cylinder	63-40-340		SLH107490	~ 13.00 kg
Manual control valve 2-fold			SLH	~ -.00 kg
Hopper				
Hydraulic cylinder	80-40-200		4873500	~ 14.00 kg
Hydraulic cylinder	50-30-250		3336300	~ -.00 kg
Manual control valve 3-fold			SLH178952	~ 7.00 kg
Magnetic separator				
Hydraulic cylinder	63-40-325		4737100	~ 17.00 kg
Hydraulic cylinder	75-45-325		4737200	~ 22.00 kg

Sprinklers

Specification	Value	Unit	Order no.	Weight
Feed box sprinkler			51434949	
Sprinklers			51508449	
Tank (empty)	500.00	l	SLH90775	~ 30.00
Distributor block			SL041310	
Water filter			SLH199040	
High-pressure cleaner type MXI 155			SLH72614	~ 20.00
Water quality	Pure water			

4.7 Operating materials

Hydraulic oil

Type	Manufacturer	Designation	Field of application
ATF DMM	-	ATF DMM	Transmission oil

NOTE

The manufacturer's instructions and the safety data sheet must be observed!

Grease

Type	Manufacturer	Designation	Field of application
MOBILUX EP 2	ExxonMobil	MOBILUX EP 2	Grease

NOTE

The manufacturer's instructions and the safety data sheet must be observed!

Diesel

Number:
Processing status:

Operating instructions Operatic
per GefStoffV

Workplace/sphere of activity:

1. HAZARDOUS SUBSTANCE DESIGNATION

Diesel

2. HAZARDS FOR PEOPLE AND THE ENVIRONMENT

Hazard

- Inhalation or absorption through the skin can cause harm to health. Can irritate the respiratory passages, eyes. Temporary complaints (dizziness, headaches, nausea, difficulty concentrating) may arise.
- If ingested, diesel can enter the lungs and cause a life-threatening lung infection.
- Diesel is suspected of being carcinogenic!
- Liquid and vapour are flammable.
- Increased risk of ignition with soaked material (e.g. clothing, cleaning cloths).
- Avoid entry into waterways and soil!

3. PROTECTIVE MEASURES AND RULES OF CONDUCT

- Keep away from ignition sources! Do not smoke! No naked flames! Creeping vapours can lead to ignition over increased distances!
- Prevent contact with heated surfaces.
- Do not heat vessels containing diesel!
- Collect fuel-soaked cleaning cloths in sealed containers from non-flammable materials.
- Have a suitable fire-extinguisher (fire class B) ready.
- Avoid spray when filling and emptying! Avoid contact with the eyes, skin and clothing! Preventative skin protection required. Following skin contact clean the affected body parts thoroughly.
- Do not eat, drink, smoke or sniff excessively in the workplace.
- After completing work and prior to every break wash the hands and face thoroughly! Use skincare products!
- Do not leave vessels open! Change contaminated clothing! Do not carry fuel-soaked cleaning cloths in the pockets of clothing! Observe employment restrictions!
- **Eye protection**
- **Hand protection**: Select, e.g. with the aid of the glove database
- **Skin protection**: If applicable discuss with works doctor

4. CONDUCT IN THE EVENT OF A HAZARD

- Collect using absorbent, non-flammable material (e.g. diatomaceous earth, sand) and dispose of! Caution! Risk of slipping due to leaking diesel!
- Product is flammable, suitable extinguisher media:
- . Do not use: Powerful water jet! Risk of rupture and explosion with heating! If a fire breaks out in the vicinity, cool vessels with spray water!
- Observe alarm, escape and rescue plans!

5. FIRST AID

- **With every first-aid measure: Ensure personal protection and consult with a doctor.**
- **After eye contact:** Rinse under running water for 10 minutes with lids open or use eye cleaning solution. Always consult an ophthalmologist!
- **After skin contact:** Remove contaminated clothing immediately. Clean the skin with plenty of water and soap. No not use thinners/solvents!
- **After inhalation:** Fresh air! With loss of consciousness keep respiratory passages open. If necessary treat shock reaction and administer cardiopulmonary resuscitation.
- **After ingestion:** Do not induce vomiting, do not administer beverages. Swallowing can cause lung damage. Hospital!
- Consult with first aider.
- **Emergency number: 112**
- Always record any first aid measures in the accident log.

6. CORRECT DISPOSAL

- Do not dispose of in drains or waste bins!
  Collect in vessels suitable for disposal:

Date:

Next inspection appointment:

Signature:
Organisation/company manager

4.8 Type plate

The type plate is an important component for the identification of your machine.
The details on it serve as information during installation and when ordering spare parts.
Ensure that the details remain legible.

4.9 Noise, vibrations, dust

The "REMAX type 1313 Maxi" machine has been designed and constructed so that the risks posed by noise, vibration and dust (emissions) have been kept to a minimum and so that they reflect current engineering practice.

However, with systems of this size emissions cannot be prevented.

As the operator of the "REMAX type 1313 Maxi" machine you must provide the operating personnel with the requisite personal protective equipment in order to prevent physical injury due to the aforementioned emissions.

Information about the emission values:
Customer Service - Homepage: www.sbm-mp.at

5 Safety

5.1 General safety information

Only use the REMAX type 1313 Maxi when it is in a technically faultless condition, in accordance with the intended use and in a safety- and hazard-conscious manner with consideration of the documentation!

	Faults that may affect safety must be eliminated immediately!

5.1.1 Hazards when working with the machine

When using the "REMAX type 1313 Maxi" machine it is possible that hazards and impairments may occur:

- to the life and limb of the operating personnel or third parties,
- to the machine itself,
- to other property.

	Only authorised experts may access the system!

5.1.2 Hazards due to interactions with linked systems/machines

The safety of the "REMAX type 1313 Maxi" machine may be affected by interactions with linked systems/machines.

The "REMAX type 1313 Maxi" machine may only be put into operation once authorised personnel have determined that the system/machine, which the "REMAX type 1313 Maxi" machine is linked into complies with the requirements of the Machinery Directive (MDIR).

5.2 Safety-conscious work

Safety-conscious work on the "REMAX type 1313 Maxi" machine is only ensured if

- The system is operated by trained, expert, authorised and instructed personnel,
- The system is regularly and carefully maintained and repaired
- Responsibilities during operation are clearly defined by several persons
- There are no uncertainties in terms of security concerning the competences of the persons carrying out the work
- Keep unauthorised personnel away from the work area of the system
- Work is carried out in a safety and hazard conscious manner with consideration to the documentation.

Training on site (which is included in the contract) is carried out by the manufacturer.

Instructions concerning operation, maintenance and repair are carried out by the responsible personnel of the manufacturer during the mounting and commissioning phase (e.g. fitter, technician, etc.).

It is essential that the personnel employed on the system is included and instructed during the mounting and commissioning phase.

NOTE

Refrain from any unsafe working methods!

5.3 Safety equipment

	The operation of the "REMAX type 1313 Maxi" machine is forbidden without the prescribed safety equipment.

	Defective protective equipment may lead to hazardous situations.

	Maintenance and service doors MUST remain closed during operation (tighten screw connections).

For this reason:

- Switch off the machine immediately.
- Safeguard against a restart.
- If necessary, disconnect from the (electrical, hydraulic etc.) power.

Protective equipment:

During the implementation of certain work processes, it may be necessary to remove protective devices temporarily for technical reasons.

When carrying out this work special safety measures are required:

- Observe the operating and maintenance instructions of the manufacturers.
- Only task expert personnel, who have been specially trained, with this work,
- Reinstall safety equipment following these working processes.

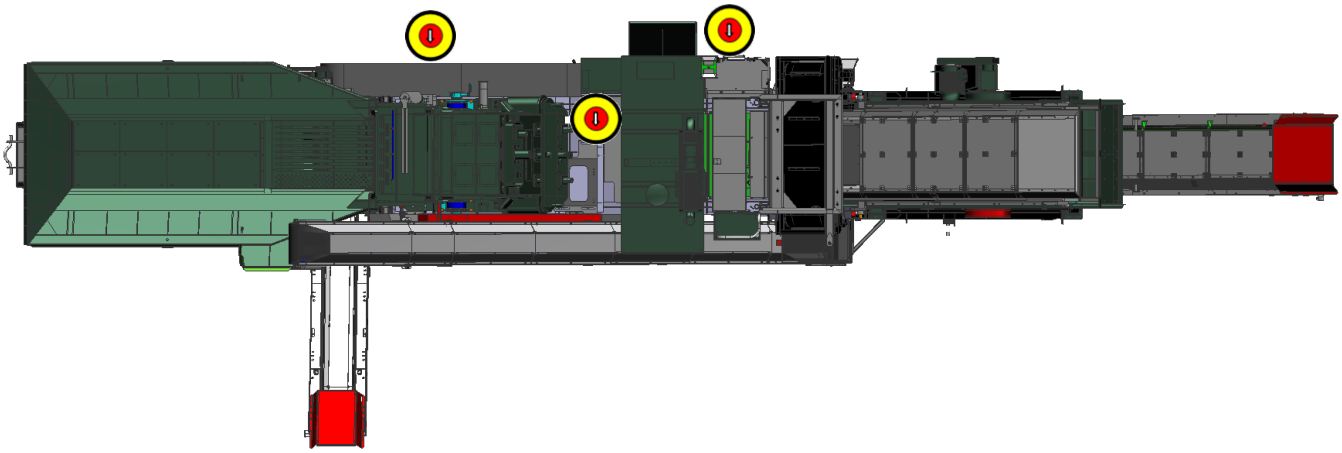
5.4 Emergency Stop command devices

Emergency Stop command devices (push buttons) are installed in the following locations:

Location	Quantity
Control cabinet	1
Ladder, right	1
Diesel three-phase power unit	1

Identification 

Position of Emergency Stop command device



RESET EMERGENCY STOP system

NOTE

Observe the E-operating manual!

Emergency Stop command devices / Service door switch / Rope pull switch

When an Emergency Stop command device, a rope pull switch or a service door switch is operated, all drives of the system part in question are shut down immediately.

Drives, which are braked by an FC during normal operation, coast freely.

The operated switching element is indicated on the test display in plain language.

Once the Emergency Stop command device and/or the rope pull switch have been reset or the service door has been closed, the Emergency Stop system can be reset (acknowledged) with the <RESET> button on the control cabinet.

The successful acknowledgement is signalled on the control panel OP77.

	Electrical systems, operating materials Checks and tests The local applicable regulations and laws must be observed!

	DO NOT use "Emergency Stop command devices" to switch off during normal operation!

	Each time prior to commissioning, operating personnel must make sure than there are no unauthorised personnel near the machine or system.

5.5 Rope pull switch

	The pull cord (Red) must be visible along its entire length!

	DO NOT use "Emergency Stop command devices" to switch off during normal operation!

NOTE

The installation of the Emergency Stop command devices must be completed by an electrician in accordance with applicable guidelines.

NOTE

The Emergency STOP function must not be bypassed!

NOTE

The manufacturer's instructions must be observed!

5.6 Warning signal

Warning signal: Start-up warning and fault

Horn

5.7 Protective earthing

	The local applicable regulations and laws must be observed!

	Electrical systems, operating materials Checks and tests The local applicable regulations and laws must be observed!

SBM-MP recommends:
Consult with: Electrical, measurement, steering, regulation controller

5.8 Machine labelling / Pictographs

Pictographs are mounted on the machine, displaying warnings of residual hazards that could not be eliminated by design.

Pictograph	Meaning	Article no.
	Unauthorised access forbidden	4153000
	Unauthorised access prohibited.	4152800
	Fire, naked flames and smoking prohibited	4153200

Pictograph	Meaning	Article no.
	Warning: dangerous electrical voltage	0719300
	Warning: hand injuries	3336700
	Warning: risk of being drawn in	3325900
	Warning: falling bulk goods (conveyor belt)	4154600
	Warning: high pressure hydraulic lines	4154400
	Warning: falling bulk goods	4154800
	Warning: risk of falling	3336500
	Warning: danger from batteries	3318700

	Damaged or missing pictographs must be replaced. Keep a minimum stock in storage.

Pictograph	Meaning	Article no.
	Wear a protective helmet	4151800
	Wear eye protection	4151700
	Wear hearing protection.	3319600
	Wear light respiratory protection	3319800
	Wear safety clothing	
	Wear safety gloves	3319700
	Wear safety shoes	4152400
	Wear safety harness	3341600
	Attach lashing gear here	4152000

Pictograph	Meaning	Article no.
	No unauthorised access / Read operating manual	4155300
	Warning tape	1510700
	EMERGENCY STOP button	4156300

	Damaged or missing pictographs must be replaced. Keep a minimum stock in storage.

5.9 Residual hazards

Suspended load

⚠CAUTION	
	**Risk of injury due to suspended load when lifting and transporting system parts!** Never remain under a suspended load. When lifting loads, only use trained personnel and ensure sufficient communication with the crane driver.

⚠ WARNING	
	**Risk of injury due to suspended or falling load when using unsuitable or defective lashing gear!** Use tested, labelled lashing gear, use lashing gear with sufficient load bearing capacity.

Falling bulk goods / Conveyor belt

⚠ WARNING	
	**Injuries to the head and chest area!** Activities must be carried out with the system/machine at a standstill. Wear personal protective equipment. Unauthorised access to hazardous locations is forbidden.

Falling bulk goods / Transition interface

⚠ WARNING	
	**Injuries to the head and chest area!** Activities must be carried out with the system/machine at a standstill. Wear personal protective equipment. Unauthorised access to hazardous locations is forbidden.

Maintenance, repair, fault rectification, adjustment activities

⚠ WARNING	
	**Bruising, crushing, loss of limbs due to entrapment by moving parts!** Activities must be carried out with the system/machine at a standstill. Safeguard system/machine against a restart. Actions must only be carried out by instructed personnel of the operator with specialist training, and specialist personnel (mechanical/electro-technical). Use tested ladders, scaffolding and catwalks. Replace protective equipment after disassembly.

Crushing and trapping

⚠CAUTION	
	**Risk of crushing and trapping at moving system parts!** Never reach between moving system parts. Never touch moving system parts. Prior to all work, safeguard these against unauthorised operation and unintentional movements!

Electric shock

⚠ WARNING	
	**Serious injuries due to electric shock!** Only specially trained experts are permitted to work on the electrical equipment. The system/machine must be connected by an electrician in accordance with the valid safety regulations and guidelines.

Burning

⚠CAUTION	
	**Risk of burning, surfaces of the motor can reach high temperatures.** Never touch hot surfaces! Prior to commencing work leave the motor to cool for approx. 30 min.

V-belts

⚠ WARNING	
	**Loss of limbs due to entrapment by moving parts!** Activities must be carried out with the machine at a standstill. Safeguard machine against a restart. Replace protective equipment after maintenance and repair activities.

Ladders, catwalks, etc.

⚠ VORSICHT	
	**Danger due to slipping, stumbling and falling!** Always keep the system area clean and free of objects. Never remove railings installed on catwalks, ladders etc., and keep them in good order. Unauthorised persons are prohibited from accessing the system areas and platforms! Only instructed employees and instructed personnel from external companies are permitted to be present in the system area.

Transport routes

⚠ VORSICHT	
	**Danger due to slipping, stumbling and falling!** Keep the transport routes clean. Remove material that has overflowed immediately.

Hydraulic line

⚠ WARNUNG	
	**Injuries due to pressurised hydraulic hose line!** Activities must be carried out with the machine at a standstill. Drain hydraulic lines. Never touch a hydraulic hose line under pressure with any part of the body. Only specially trained experts (trained mechanic with hydraulic knowledge) are permitted to work on the hydraulic system.

Access by unauthorised persons

⚠ WARNING	
	**Unauthorised access forbidden!** Risk of injuries due to unauthorised access to the system area and the platforms. Unauthorised persons are prohibited from accessing the system areas and platforms! Only instructed employees and instructed personnel from external companies are permitted to be present in the system area.

⚠ WARNING	
	**Unauthorised access forbidden!** Risk of injuries due to unauthorised access to, climbing on and crossing over the system. Only instructed employees and instructed personnel from external companies are permitted to dwell in the vicinity of the system. Activities must be carried out with the machine at a standstill. Safeguard system against a restart.

⚠ WARNING	
	**Unauthorised access forbidden!** Risk of injuries due to unauthorised climbing in the system area and on the platforms. Unauthorised persons are prohibited from climbing in the system areas and on the platforms! Only instructed employees and instructed personnel from external companies are permitted to be present in the system area.

Hopper

⚠ WARNING	
	**Unauthorised access forbidden!** Risk of injuries due to unauthorised access to the feed area. Only instructed employees and instructed personnel from external companies are permitted to dwell in the feed area. Identification of the danger zone: e.g. speed restriction Use personal protective equipment.

⚠ WARNING	
	**Injuries to the head and chest area!** Activities must be carried out with the system/machine at a standstill. Wear personal protective equipment. Unauthorised access to hazardous locations is forbidden.

5.10 Personal protective equipment

The safety category for the respective protective equipment must be determined by authorised personnel when evaluating the machine.

The operating personnel must be instructed on an annual basis with reference to the evaluation plan.

As the operator, you must make personal protective equipment of the evaluated safety category available.

As the operator of the "REMAX type 1313 Maxi" machine, you must make the following personal protective equipment available for the operation of the "REMAX type 1313 Maxi" machine.


Wear a protective helmet.


Wear eye protection.


Wear hearing protection.


Wear light respiratory protection


Wear safety clothing.


Wear safety gloves.


Wear safety shoes.


Wear safety harness.

Example

Instruction / Training Certificate			
Trainer:		Date:	
Training location:		Duration:	
Topic			
I have understood the instruction/training given and I have taken note of its content:			
Participant		**Department**	**Signature**
Date		**Signature of trainer**	
SBM-MP safety information received YES ☐ / NO ☐			

5.11 Qualification of the personnel

⚠ WARNING	
	**Unqualified personnel!** Serious injury due to incorrect machine handling. Staff being trained, coached, instructed or trainees within the framework of a general apprenticeship may only work on the machine when continuously supervised by an experienced staff member. **Experienced person** Trained electrician, trained mechanic

Activity	Qualification/training
Transport	Personnel with experience transporting machinery
Assembly	Personnel of the manufacturer with specialist training (trained electrician, trained mechanic) and experience of assembly activities with SBM systems
Commissioning	The manufacturer's personnel with specialist training (trained electrician, trained mechanic) and experience of commissioning SBM-MP systems
Commissioning	Instructed, trained personnel of the operator
Re-commissioning	Instructed, trained personnel of the operator
Operation	Instructed, trained personnel of the operator
Set-up	Instructed, trained personnel from the operator with specialist training (trained electrician, trained mechanic)
Maintenance, troubleshooting and fault elimination	Instructed, trained personnel from the operator with specialist training (trained electrician, trained mechanic)
De-commissioning	The manufacturer's personnel with specialist training (trained electrician, trained mechanic) and experience of commissioning SBM-MP systems

5.12 Tools, auxiliary aids and lifting devices

All tools, auxiliary aids and lifting devices (e.g. cranes, forklifts, etc.) which require operation by qualified or trained personnel must be operated exclusively by personnel who have the required qualifications.

	Self-propelled appliance Internal driving licence must be issued!

Ladders and scaffolding must be stable and erected on a firm base.

Ladders, scaffolding and other climbing aids must comply with local safety regulations.

Work that requires the special tool supplied must only be carried out using this special tool.

A damaged special tool must be replaced with an original tool from the manufacturer.

5.13 Behaviour in the event of accidents and emergencies

Basic safety regulations:

The operating personnel must be instructed on the basic regulations governing occupational health and safety and accident prevention.

You are responsible for this, as the operator of the "REMAX type 1313 Maxi" machine.

A safety plan / fire protection plan with the requisite measures must be drawn up stipulating conduct in the event of accidents or emergencies.

The operating personnel must be informed and instructed about the measures implemented. Personnel must confirm in writing that they have been briefed on the required action, and adhere to it.

Representatives of the company:

e.g. officers for fire protection, waste, industrial safety, etc.

Fire protection:

In the event of a fire, substances that are harmful to health may escape from the machine.

Fighting fire:

Disconnect the system/machine from the power supply if possible.

NOTE

As the proprietor of the "REMAX type 1313 Maxi" machine, you must provide equipment for fighting fires in accordance with the legal requirements.

6 Transport-Bearing

6.1 Transport

⚠CAUTION	
	**Risk of injury due to suspended load when lifting and transporting system parts!** Never remain under a suspended load. When lifting loads, only use trained personnel and ensure sufficient communication with the crane driver.

⚠ WARNING	
	**Risk of injury due to suspended or falling load when using unsuitable or defective lashing gear!** Use tested, labelled lashing gear, use lashing gear with sufficient load bearing capacity.

⚠ WARNING	
	**Unqualified personnel!** Serious injury due to incorrect system/machine handling. Staff being trained, coached, instructed or trainees within the framework of a general apprenticeship may only work on the system/machine when continuously supervised by an experienced member of staff. **Experienced person:** Experience with transporting systems/machines.

⚠ WARNING	
	Unauthorised access forbidden! Provide a minimum safety gap of 5 m on all sides of the system.

Prior to transportation:

- Stipulate the precise installation site,
- Stipulate the transport route and remove any potential obstacles,
- Keep unauthorised personnel away from the transport route and installation,
- Cordon off the transport route and installation site,
- Check the transport braces on the machine.

Readiness for transport

NOTE

Observe the E-operating manual!

Moving the system

NOTE

Observe the E-operating manual!

Transporting on a low loader

1. The REMAX Type 1313 Maxi can fundamentally be moved in both directions (forwards/backwards) on the low loader.
2. Maximum incline of the traversing bridge of the transport vehicle = 14°, maximum lateral inclination of the machine = 5°.
3. Secure the REMAX type 1313 Maxi (e.g. using clamping chains etc.).

NOTE

Prior to moving, check whether anyone is in the danger zone.

Remove the ground spike from the ground before moving the machine.

Total weight of the "REMAX type 1313 Maxi"- type plate on the bridge.

Ensure that there is a non-slip surface when driving the system onto a carrier vehicle, ramp etc!

The terrain to be covered must withstand the weight of the machine with a carrier vehicle.

Ensure that the path to be covered is free of larger rocks and is not uneven.

Secure the crushing plant on the carrier vehicle (e.g. using clamping chains etc.)!

After loading the machine, make sure that all parts are sitting properly!

Involve a second person for marshalling work when space is tight.

Only drive the REMAX type 1313 Maxi from the ground.

Remove loose parts from the machine!

Close all system, maintenance and service doors.

NOTE

Observe the E-operating manual!

6.2 Lashing gear

When selecting the lashing gear, make sure that the permissible bearing load complies with the weight of the system/machine at least (type plate).

Recommendation:

SBM-MP recommends using a mobile heavy-duty crane

Lashing gear:

- Only use tested lashing gear with safety hooks,
- Replace damaged lashing gear immediately,
- Only use lashing gear with sufficient bearing load,
- Attach lashing gear to marked attachment points  .

Information: Observe lashing gear operating instructions!

6.3 Loads

NOTE

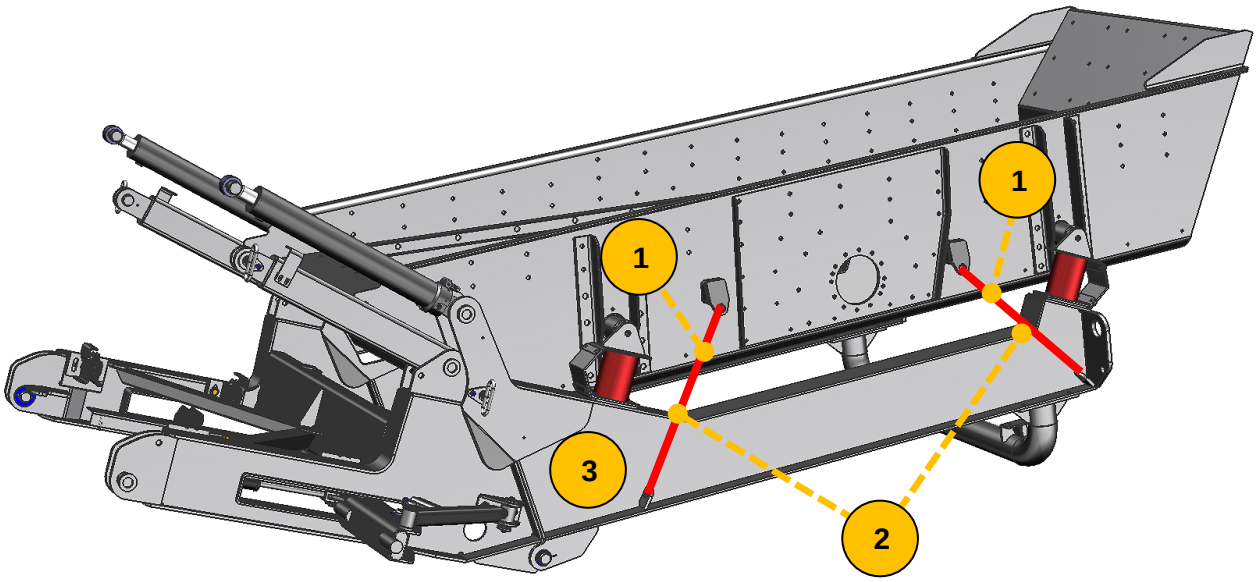
Information on the system/machine: "Technical data"

NOTE

Observe dimensional drawing 42150649 sheet 1-3!

6.4 Transport bracing

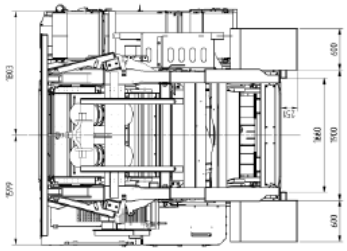
Transport bracing for sifting machine

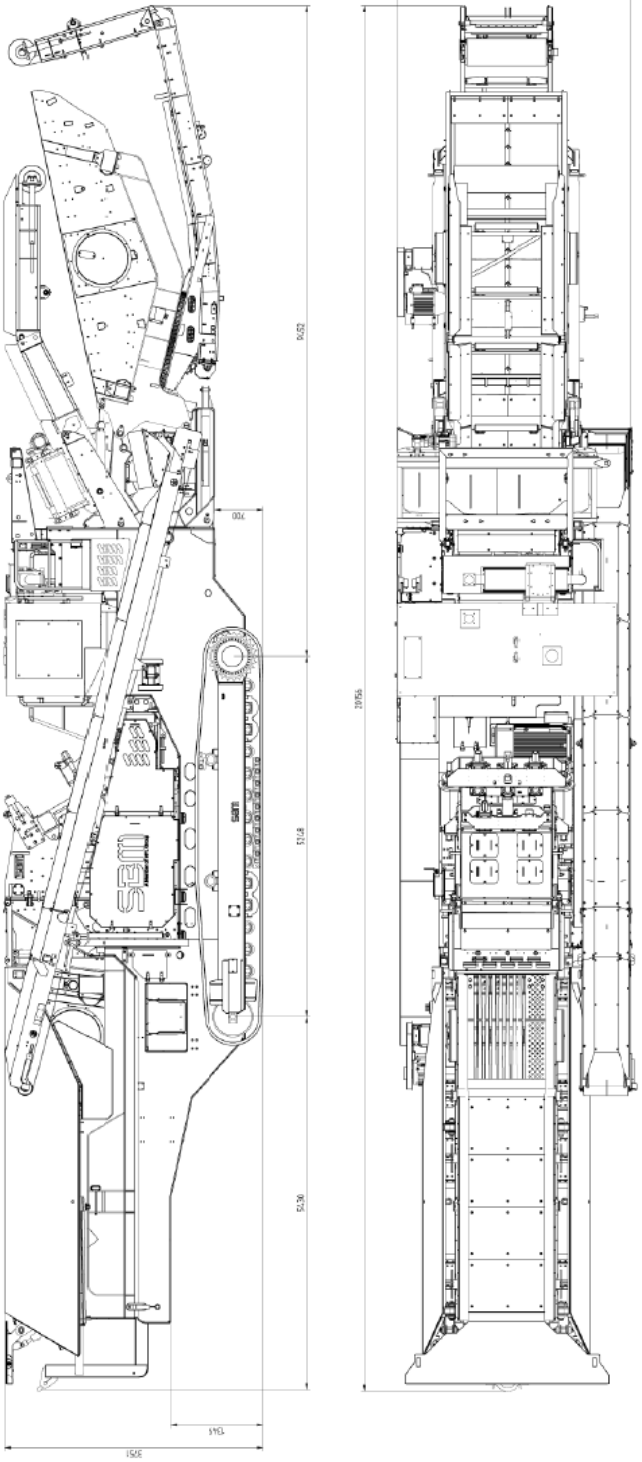


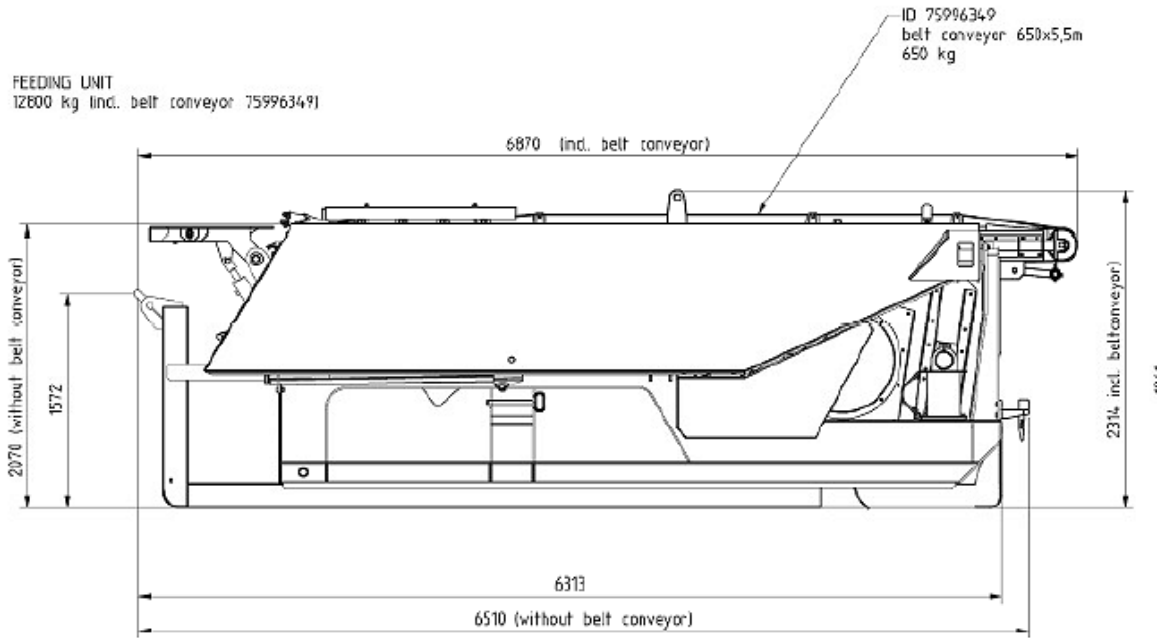
Item	Designation
1	Lashing strap
2	Edge guard
3	Substructure

6.6 Transport unit / Transport width

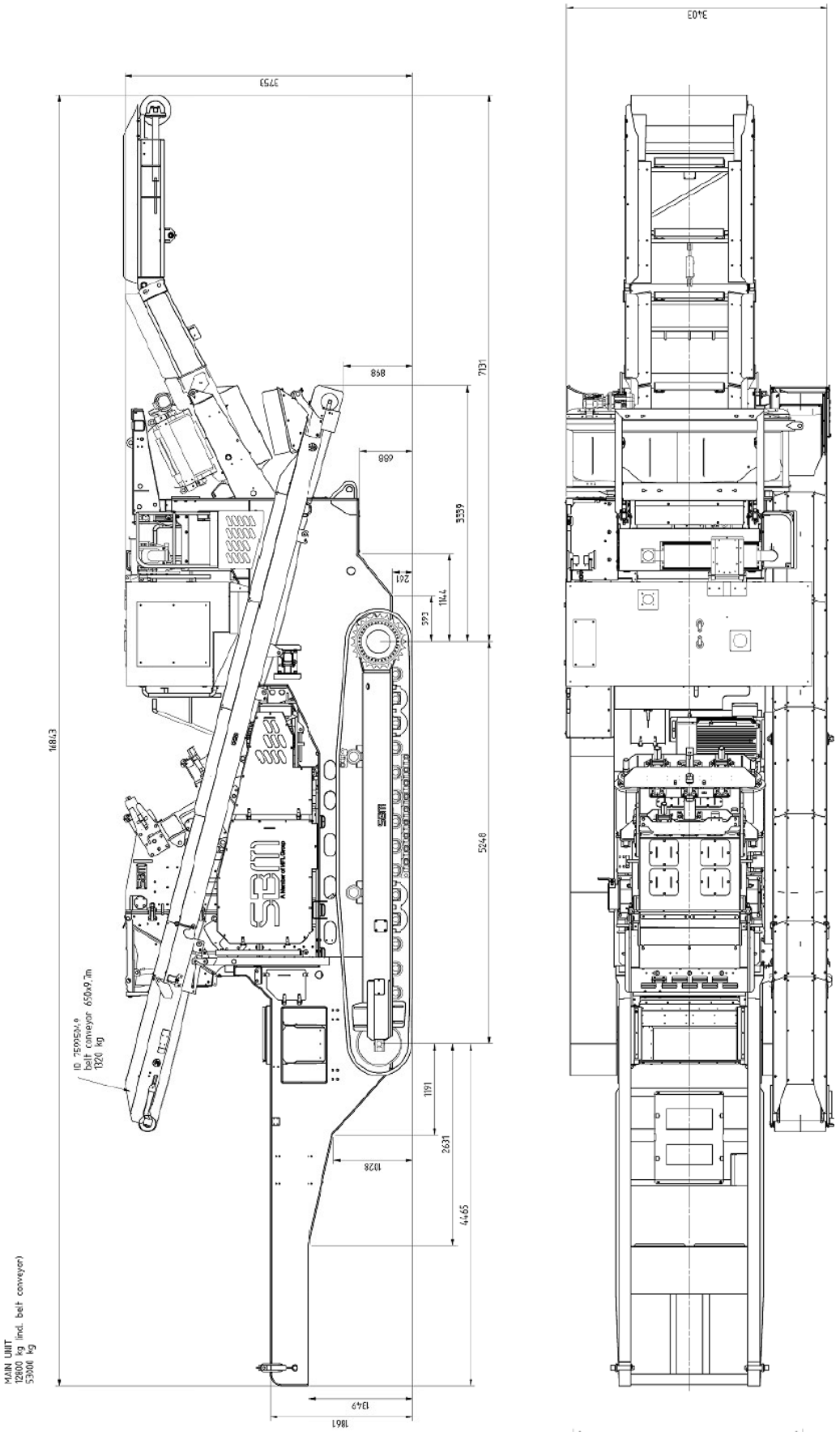
	Transport requires increased use of public roads, and requires a permit. Familiarise yourself with the statutory regulations, or commission a heavy haulage firm for this role.

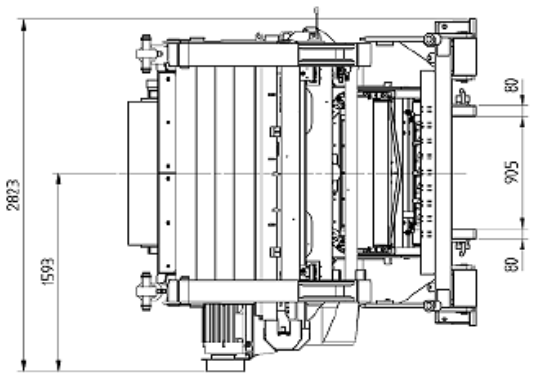


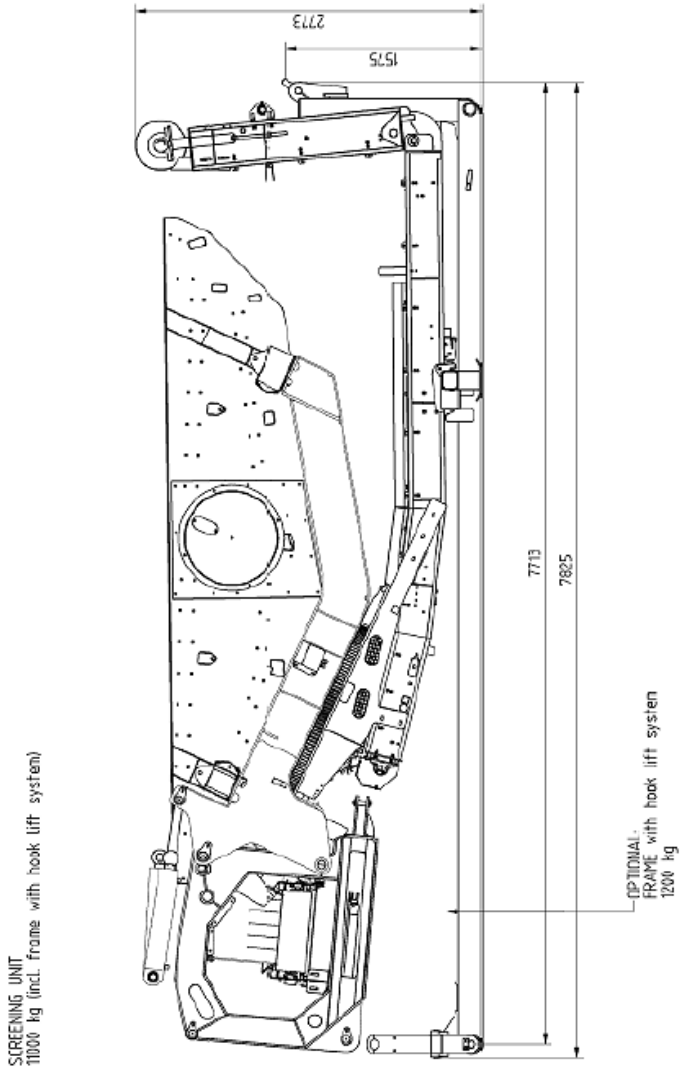



FEEDING UNIT
12800 kg (incl. belt conveyor 75996349)
ID 75996349
belt conveyor 650x5,5m
650 kg
6870 (incl. belt conveyor)
2070 (without belt conveyor)
1572
2314 incl. beltconveyor)
6313
6510 (without belt conveyor)


2985


3753
3403
16843
858
7131
688
3539
241
1144
593
5248
1191
2631
1028
4465
1349
1861
MAIN UNIT
12800 kg incl. belt conveyor)
53000 kg





NOTE

Observe dimensional drawing 42150649 sheet 2-3!

6.6 Carrying heavy loads

Multiple persons

If it is necessary to transport heavy loads without lifting equipment then it is imperative to have assistance from multiple persons.

PLEASE NOTE: Request assistance in good time! Ask for help!

Observe the general principles applicable to lifting and carrying and also ensure good coordination between persons involved:

- If multiple persons are transporting a load it is necessary for one person to take charge,
- The load must be lifted and lowered by all persons at the same time on command,
- Select persons of a similar height to assist,
- Ask a sufficient number of persons to assist, in order that the loss of one individual does not leave the remaining persons struggling,
- Persons assisting should not get in the way of each other - in particular where spatial conditions are tight,
- If possible, use tested support harnesses or tested lifting aids that are suitable for the respective load (kg),
- If possible divide the load between all persons.

7 Delivery and storage

7.1 Delivery

Check the "REMAX type 1313 Maxi" machine for completeness and transport damage immediately after delivery.
In the event of an incomplete delivery or transport damage, inform the courier and SBM-MP immediately.

7.2 Intermediate storage/storage

The operator is responsible for storage of the delivered parts.

After delivery all parts must be stored properly, per the information on the packing list.
These packing lists must be handed over to the operator upon delivery.

When storing the machine on an intermediate basis, observe the following points:

- Protect against access by unauthorised personnel,
- Store on a level surface with sufficient load bearing capacity,
- Store protected against weather conditions.

When storing for longer periods additionally observe the following:

- Protect bare surfaces against corrosion using suitable products.

8 Assembly/Disassembly

8.1 General

8.1.1 Assembly and installation

The assembly and installation of SBM-MP systems/machines must be carried out by specialist personnel with experience in these areas.

The general and local safety and accident prevention specifications must be adhered to.

8.1.2 Safety

⚠ WARNING	
	**Serious injuries due to electric shock!** Only specially trained experts (electricians) are permitted to work on the electrical equipment. The REMAX type 1313 Maxi must be connected by an electrician in accordance with the valid safety regulations and guidelines.

⚠ WARNING	
	**Bruising, crushing, loss of limbs due to entrapment by moving parts!** Activities must be carried out with the system/machine at a standstill. Safeguard system/machine against a restart.

⚠CAUTION	
	**Risk of injury due to suspended load when lifting and transporting system parts!** Never remain under a suspended load. When lifting loads, only use trained personnel and ensure sufficient communication with the crane driver.

⚠ WARNING	
	**Risk of injury due to suspended or falling load when using unsuitable or defective lashing gear!** Use tested, labelled lashing gear, use lashing gear with sufficient load bearing capacity.

⚠ WARNING	
	**Injuries due to pressurised hydraulic hose line!** Activities must be carried out with the machine at a standstill. Drain hydraulic lines. Never touch a hydraulic hose line under pressure with any part of the body. Only specially trained experts (trained mechanic with hydraulic knowledge) are permitted to work on the hydraulic system.

8.1.3 Requirement

All specifications, such as the tightening torques etc. can be found in the technical documentation.

In order that assembly of the system or system parts can be implemented professionally it is first necessary to ensure that

- the surface has sufficient load bearing strength,
- all parts to be assembled have been prepared and are complete,
- the required assembly materials and auxiliary equipment are present,
- all legal, industrial and official regulations are adhered to,
- all the required media, such as the power supply, are present.

The operator or an assembly coordinator assigned by the same is responsible for compliance with all accident prevention, safety and fire protection measures.

8.1.4 Procedure

NOTE

When delivering system parts it is possible that these may be coated with corrosion protection.
Only use commercially available, environmentally-friendly cleaning products to remove this corrosion protection.
Observe the manufacturer's safety data sheets when doing so.

During assembly adhere to points including the following, whereby these are only reference points.

- Clean the assembly surfaces,
- Prepare and check the installed system parts,
- Prepare the requisite assembly materials and auxiliary aids,
- Check whether all the requisite media, such as power supply, etc. are present (where required),
- Check that all media connections have been tested,
- Check that all parts have been correctly bolted, welded, glued, etc.

8.1.5 Information

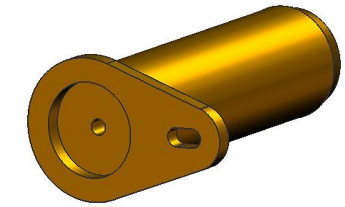
	Self-propelled appliance Internal driving licence must be issued!

	HV screw connection All HV - screwed connections that have been opened, must be replaced with new HV - screwed connections.

	Nord Lock wedge lock washers The manufacturer's instructions must be observed!

	Spring lock washer The spring lock washer must be replaced when the screw connection is opened.

	Screwed connections with hex. Nut ISO 7042 / 10511 If these screwed connections are loosened, it is necessary to replace the hex. Nut ISO 7042 or hex. Replace nut ISO 10511. Do not use these hex. nuts a second time! Example:  ISO 7042 / DIN 980  ISO 10511 / DIN 985

	Examples of securing bolts Screw locking device Washer and split pin  

	Securing wedges: Washer, spring cotter!

8.1.6 Installation waste

The operator is responsible for the cleanliness of the construction site.

Waste materials from assembly, such as scrap, building rubble, packaging, etc. must be collected on an ongoing basis, stockpiled centrally, and collected for disposal at least once a week.

All waste material categorised as special waste must be stored by the operator, taking account of statutory environmental protection regulations, and regularly disposed of.

NOTE

Chapter 14 "Environment and disposal"!

8.2 Assembly

NOTE

Observe the safety measures indicated in Chapter 8.1!

8.2.1 Stability

Erect the "REMAX type 1313 Maxi" machine in such a way that stability is guaranteed during operation and when not in operation and in all phases of transport, assembly, maintenance and dismantling and during failures.

8.2.2 Inspection mode (manual mode)

NOTE

Observe the E-operating manual!

8.2.3 Operating position

1. Transport between operating sites;

	Transport requires increased use of public roads, and therefore requires a permit. Familiarise yourself with the statutory regulations, or commission a heavy haulage firm for this role.

2. Unloading the REMAX type 1313 Maxi;

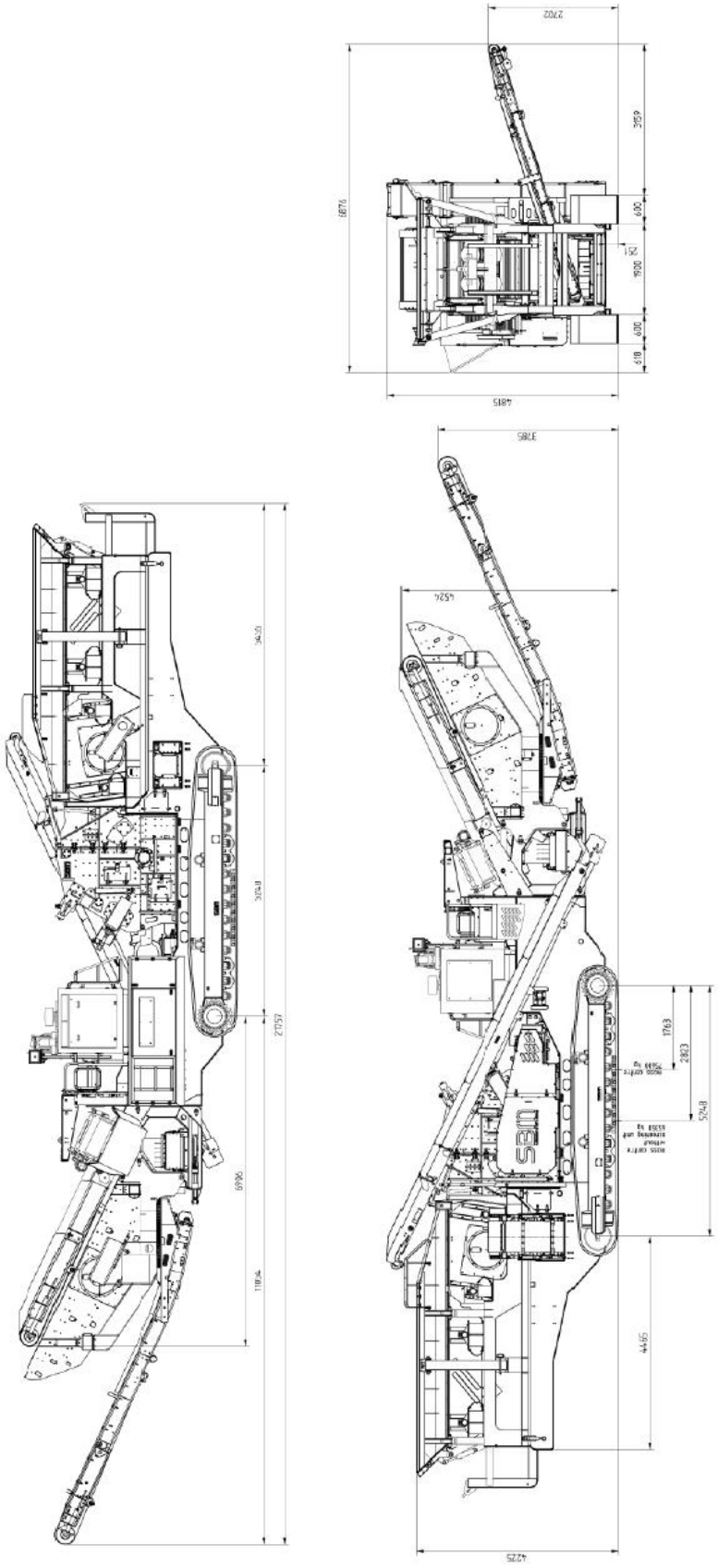
⚠CAUTION	
	**Risk of injury due to suspended load when lifting and transporting system parts!** Never remain under a suspended load. When lifting loads, only use trained personnel and ensure sufficient communication with the crane driver.

⚠ WARNING	
	**Risk of injury due to suspended or falling load when using unsuitable or defective lashing gear!** Use tested, labelled lashing gear, use lashing gear with sufficient load bearing capacity.

⚠ WARNING	
	**Unqualified personnel!** Serious injury due to incorrect system/machine handling. Staff being trained, coached, instructed or trainees within the framework of a general apprenticeship may only work on the system/machine when continuously supervised by an experienced member of staff. **Experienced person:** Experience with transporting systems/machines.

⚠ WARNING	
	**Unauthorised access forbidden!** Risk of injuries due to unauthorised access to the system area and the platforms. Unauthorised persons are prohibited from accessing the system areas and platforms! Only instructed employees and instructed personnel from external companies are permitted to be present in the system area.

Operating position



3. Fold down platform and ladder;
4. Use personal protective equipment;
5. Secure platform and ladder;
6. Fit railings;
7. Use personal protective equipment;
8. Secure railings;
9. Fold up side walls of hopper (hydraulic);
10. Fold up rear wall of hopper (hydraulic);
11. Secure side walls of hopper (hydraulic);
12. Secure rear wall of hopper
13. Use a safety harness (stop);
14. Swing out conveyor belts (hydraulic);
15. Use personal protective equipment;
16. Attach beams, tension cables;
17. Use a safety harness;
18. Connect power to control cabinet;
19. Earth "REMAX 1313 Maxi".

NOTE

Observe dimensional drawing 42150649 sheet 1!

NOTE

Observe the E-operating manual!

Control

NOTE

Observe the E-operating manual!

Hydraulic operating element

Chapter 4.4 Operating personnel workstations

APPENDIX

NOTE

Note when dismantling sifting, hopper unit!

8.3 De-commissioning and disassembly

HAZARD	
	**Risk of injury due to improper de-commissioning and disassembly.** Contact the manufacturer prior to de-commissioning and disassembly. If you do not have the decommissioning carried out by a specialist from SBM-MP, please contact our customer service department prior to decommissioning and follow the instructions.

WARNING	
	**Unqualified personnel!** Serious injury due to incorrect system/machine handling. Staff being trained, coached, instructed or trainees within the framework of a general apprenticeship may only work on the system/machine when continuously supervised by an experienced member of staff. **Experienced person:** Experience with transporting systems/machines.

CAUTION	
	**Risk of injury due to suspended load when lifting and transporting system parts.** Never remain under a suspended load. When lifting loads, only use trained personnel and ensure sufficient communication with the crane driver.

WARNING	
	**Risk of injury due to suspended or falling load when using unsuitable or defective lashing gear.** Use tested, labelled lashing gear, use lashing gear with sufficient load bearing capacity.

⚠ WARNING	
	**Bruising, crushing, loss of limbs due to entrapment by moving parts!** Activities must be carried out with the system/machine at a standstill. Safeguard system/machine against a restart.

NOTE

The manufacturer's instructions and the safety data sheet must be observed!

9 Maintenance

NOTE

Maintenance and lubrication instructions for REMAX type 1313 Maxi!

Components

NOTE

Adhere to operating instructions, maintenance instructions etc. and applicable documents!

10 Lubrication points

NOTE

Maintenance and lubrication instructions for REMAX type 1313 Maxi!

Components

NOTE

Adhere to operating instructions, maintenance instructions etc. and applicable documents!

11 Recurring inspections

e.g. lashing gear, personal protective equipment etc.

	The local applicable regulations and laws must be observed!

12 Recurring inspections of conveyor belts

	The local applicable regulations and laws must be observed!

e.g. Austria:
Operating Equipment Directive (AM-VO)

Text excerpt:

Conveyor belts with a conveyor length of 5 m or more must be checked to ensure safe operating conditions at least once annually, however at least once every 15 months.

This check can be carried out by trained internal personnel.

The results of the check must be documented in a test report.

Rectification of any defects found must also be documented in this report.

Germany:
Operational Safety Ordinance (BetrSichV)

13 Specification

13.1 Technical data

Machines no. 42 1506 49		
Specification	**Value**	**Unit**
Environmental temperature, steel structure	-25 - +40	Degrees Celsius (°C)
Operation		
Length	Dimensional drawing 42150649- sheet 1	mm
Width		mm
Height		mm
Transport		
Length	Dimensional drawing 42150649- sheet 2	mm
Width		mm
Height		mm
Travel speed	max. 1.00	km/h
Permitted climbing ability	max. 25.00	%
Permitted transverse tilt	max. 10.00	%
Continuous sound pressure level when idle	-	dB(A)
Total weight without sifter	Type plate	kg
Total weight with sifter	Type plate	kg
Electrics		
Operating voltage	400.00	V
Frequency	50.00	Hz
Protective earthing		

13.2 Environment

Environmental conditions

Designation	Value	Unit	Component no.
Feed chute ARLM type 12/30			SL6018579
Pre-screener VARK type 12/20/2			SL6018579
Impact crusher RHS			SL6018980
Feed trough FRLM type 13/26			SL6018585
Diesel three-phase power unit 400 kVA			81206849
Overbelt magnetic separator type CP20/140			51501649
Conveyor belt type PBB-C			SL10111782
Conveyor belt type PBB-C			75996349
Conveyor belt type PBB-C			SL10112138
Conveyor belt type PBB-C			SL10112225
Conveyor belt type PBB-C			75995049
Sifter substructure	-25 - +40	Degrees Celsius (°C)	
Sifting machine KQ			SL6018594
Hydraulics	-25 - +40	Degrees Celsius (°C)	
Frame	-25 - +40	Degrees Celsius (°C)	83291349

NOTE

Adhere to operating instructions and applicable documents!

	The operator must have the noise levels checked by an accredited agency!

	The operator must have the dust levels checked by an accredited agency!

14 Environment and disposal

Separate out all parts and machinery auxiliary and operating materials and dispose of in accordance with local regulations and guidelines.

If you have any questions about the disposal of machine parts as well as auxiliary and operating materials, please contact the manufacturer!

Representatives of the company:
e.g. waste disposal officers

	The local applicable regulations and laws must be observed!

NOTE

The manufacturer's instructions and the safety data sheet must be observed!

15 Customer service

We offer you the services and expertise required for our systems/machines around the world.

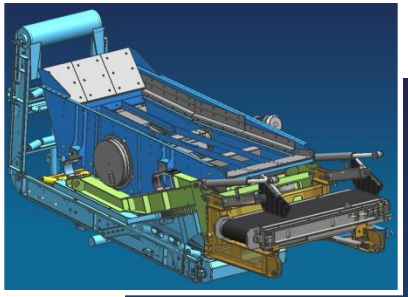
Homepage *www.sbm-mp.at*

16 APPENDIX

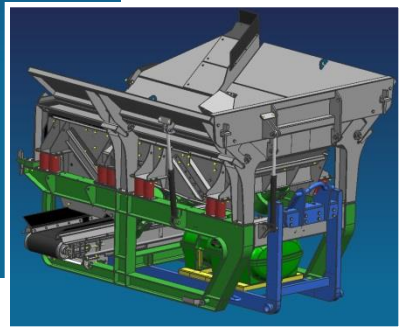
Dismantling of sifter, hopper unit of REMAX type 1313 Maxi

DISASSEMBLY/ASSEMBLY INSTRUCTIONS - SIFTING AND BUNKER UNIT

SIFTING UNIT



Crawler-mounted impact crushing system
REMAX 13XX

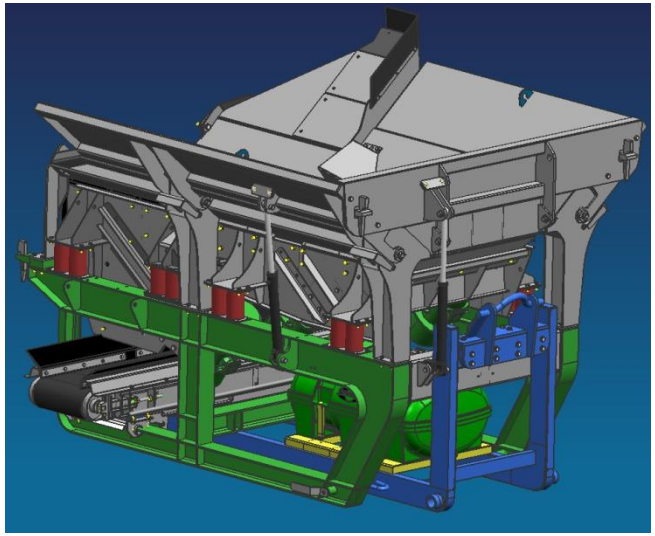


BUNKER UNIT

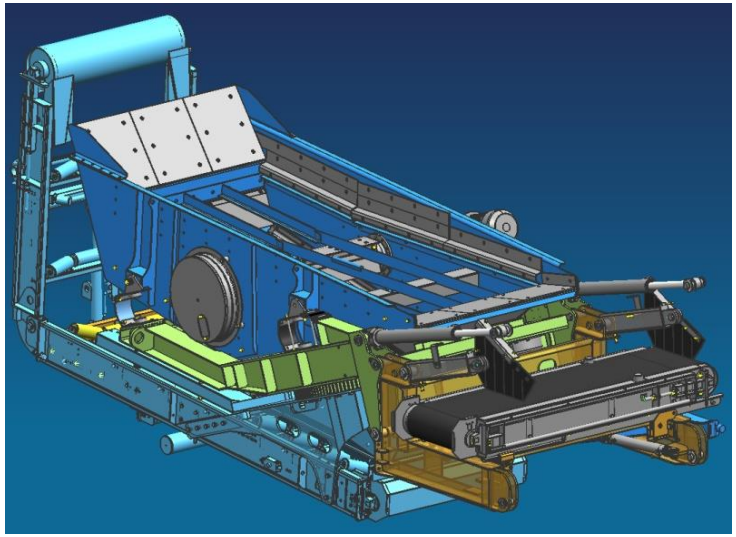
ASSEMBLY:

1. **START by assembling the BUNKER UNIT.**
2. **Insert the safety wedges and bolts for the bunker unit.**
3. **THEN assemble the SIFTING UNIT.**
4. **Insert the safety bolts for the sifting unit.**

BUNKER UNIT



SIFTING UNIT

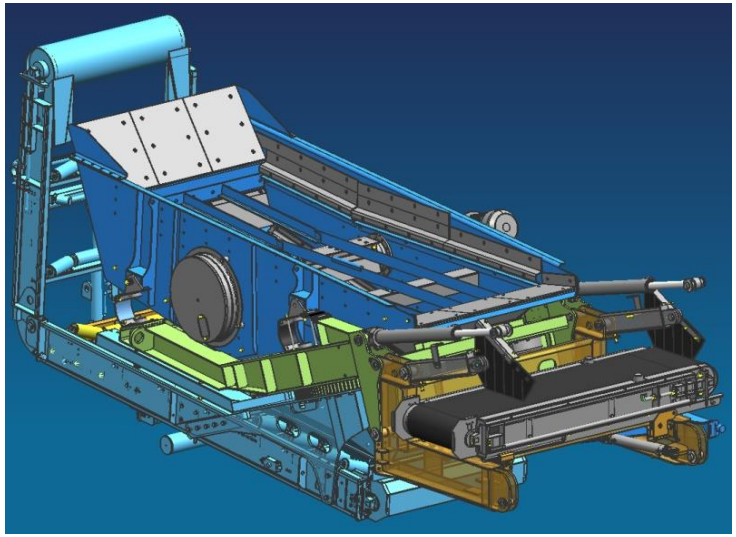


If assembly is not performed in this way, there is a risk of the centre of gravity lowering, which will cause the machine to tip over.

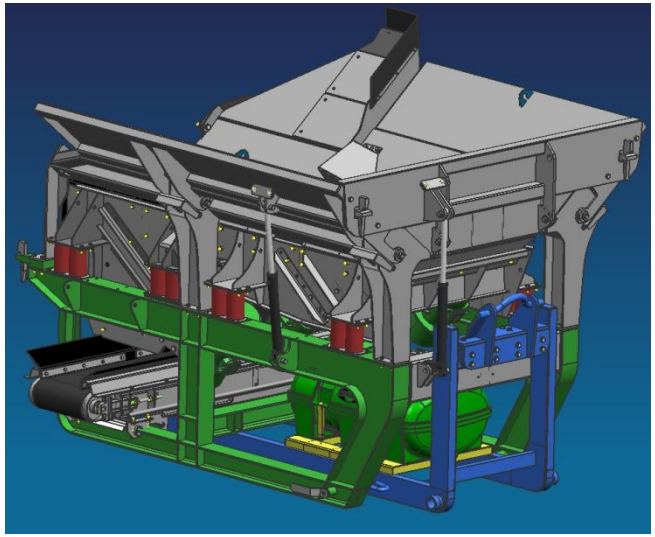
DISASSEMBLY

1. Remove the safety bolts for the sifting unit.
2. START by dismantling the SIFTING UNIT.
3. Remove the safety wedges and bolts for the bunker unit.
4. THEN dismantle the BUNKER UNIT.

SIFTING UNIT



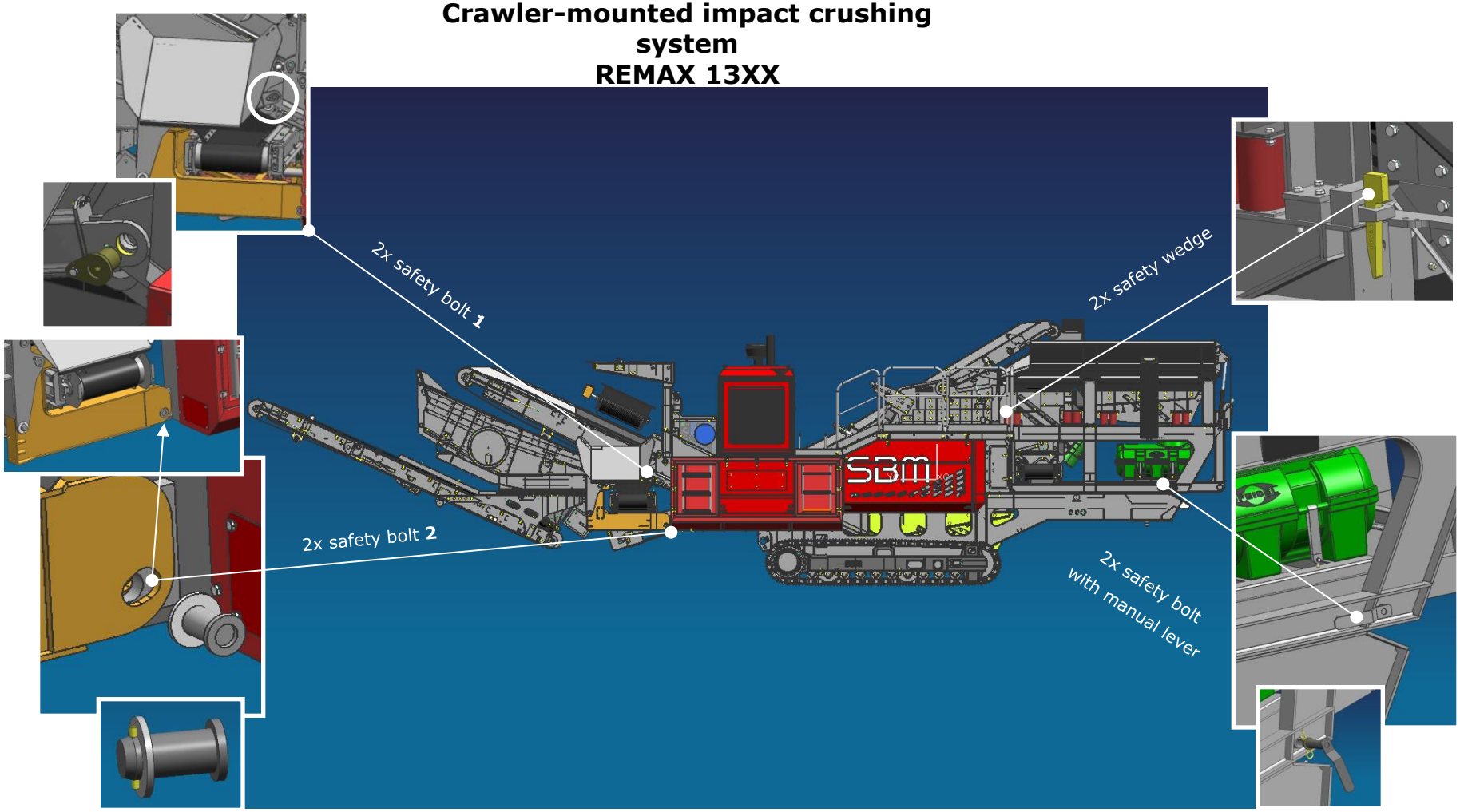
BUNKER UNIT



If disassembly is not performed in this way, there is a risk of the centre of gravity lowering, which will cause the machine to tip over.

SAFETY WEDGES AND BOLTS

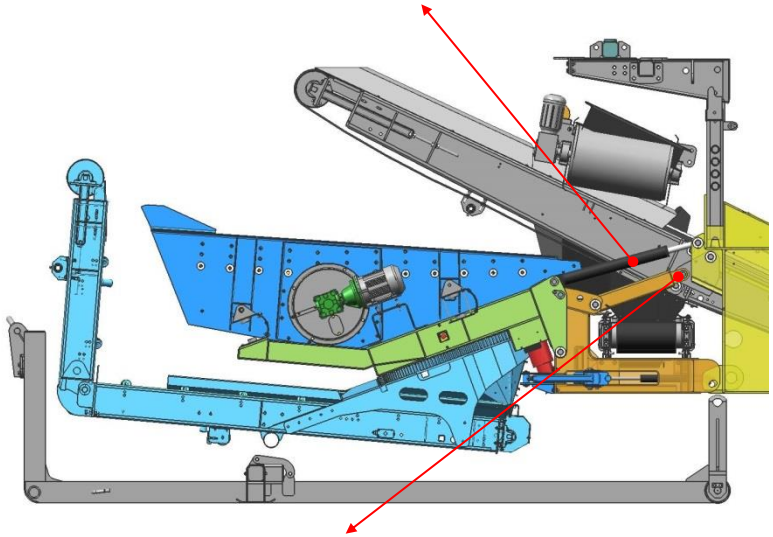
Crawler-mounted impact crushing system
REMAX 13XX



DISASSEMBLY OF SIFTING UNIT:

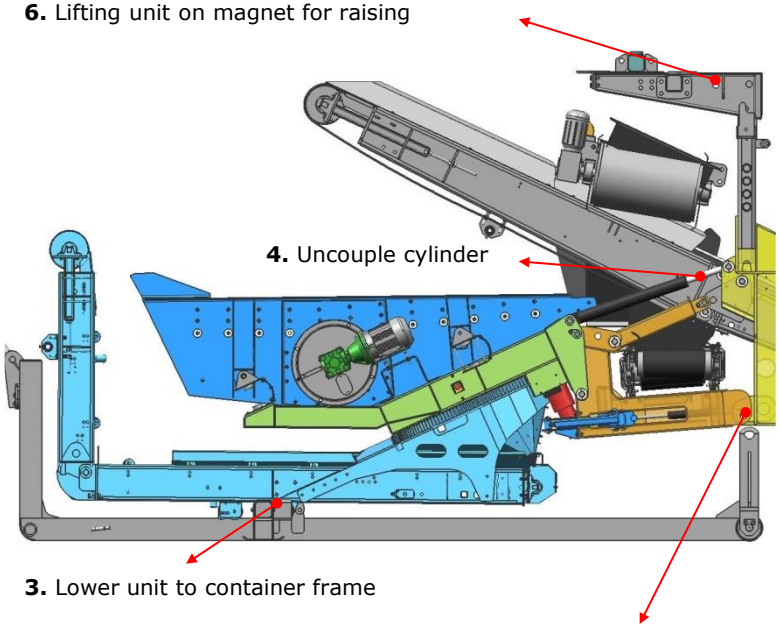
Crawler-mounted impact crushing system
REMAX 13XX

1. Extend cylinder to uncoupling position



2. Loosen brace (safety bolt 1) on transport frame

6. Lifting unit on magnet for raising

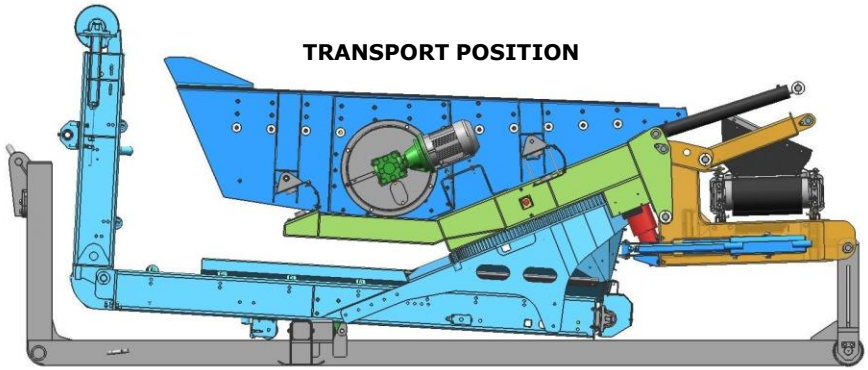


4. Uncouple cylinder

3. Lower unit to container frame

5. Remove safety bolt 2

TRANSPORT POSITION



ASSEMBLY TAKES PLACE IN REVERSE ORDER