

# MODUL 200®

Mobile Shotblaster

Instruction manual



Manual MODUL 200®

## C NTEC®

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## 1 Machine applications

Shotblasting of horizontal, dry floors such as concrete and steel surfaces with or without a coating and asphalt using CONTEC® blasting tools. The use of the machine outside is only possible in dry weather.

2 Technical data.			
MODUL 200®			
Working width (mm)	200 (8 in)		
Turbine power (kW)	9 kW, 12 hp		
Weight (kg)	210 (462 Lbs)		
Power requirements	230 V, 3 phases, 32 A		
Dimensions (LxHxB) (cm)	152 x 122 x 34		
Dimensions (HxLxW) (in)	(48 x 60 x 13)		
Average value of acceleration a <sub>hv</sub> *	$2.2 \text{ m/s}^2$		
Noise level Lwa *	96 dB(A)		
Noise level Leq *	85 dB(A)		
MODUL 200® + MODUL 200® EU			
Working breadth (mm)	415 (17 in)		
Turbine power (kW)	2 x 9 kW, 2 x 12 hp		
Weight (kg)	325 (715 Lbs)		
Power requirements	230 V, 3 phases, 63 A, 60 Hz		
Dimensions (LxHxB) (cm)	152 x 122 x 54		
Dimensions (HxLxW) (in)	(48 x 60 x 22)		
Average value of acceleration a <sub>hv</sub> *	$2.2 \text{ m/s}^2$		
Noise level L <sub>wa</sub> *	96 dB(A)		
Noise level Leq *	85 dB(A)		

## 3 Safety rules for operating the MODUL 200® shotblast machine

The MODUL 200<sup>®</sup> mobile shotblast machine is constructed according to existing safety rules and regulations. These technical precautions should not be removed or changed under any circumstances. While operating the machine the following items should also be kept in mind:

Disconnect the machine before commencing any servicing or maintenance work – however menial. Never unplug the machine while it is still running.

This notice can be found in every manual but in nearly every part of the MODUL 200® high electrical currents are transmitted. The danger of injury is therefore not only from electric shock, but also from moving parts of the machine.

It is necessary to use safety goggles with side protectors and ear plugs. All persons, in the operating area of the shotblaster must take these precautions. When switching on, or lifting the machine during blasting, it is possible that shot escapes at high speed. Unprotected eyes can be seriously damaged in this case.



Never wear loose or badly fitting clothing. Flapping sleeves may be pulled into the machine causing serious injury.

All rotating parts of the machine are suitably protected by covers, which prevent clothes or similar from entering the machine. Under no circumstances should these covers be removed before you switch the machine on.

Access by unauthorised persons into the blasting area should be prevented. (Due to a high risk of slipping on lost shot)

The MODUL 200® should be switched off immediately if unusual noises or vibrations are detected during the operating of the machinery. A thorough check must be carried out in order to detect the cause.

Always pre check the floor for undulation, stones, screws, or other foreign bodies. It might be necessary to brush, or in extreme cases, vacuum the floor. Wet or oily spots can make blasting impossible and damage the dust collector.

Check the power cables regularly as damage may have occurred while operating the machine. Always disconnect the cables before examination and treat all electrical parts with extreme care.

## 4 Operating and blasting

Operating the MODUL 200<sup>®</sup> must be carried out according to the safety rules in chapter 6.

Transport the MODUL 200<sup>®</sup> and the dust collector to the floor which is to be blasted. Lifting the machine will make transportation somewhat easier. In between the rear wheels on the axel is a pin. By slotting the lifting bar (Appendix diagram No. 185) over this pin the machine can be lifted. If the machine is lifted, make sure that it can't slip down from its raised position. Align the hole in the end of the right rear wheel swing arm (Appendix diagram No. 193) and the hole in the machine side frame. Now push the clutch pin (Appendix diagram No. 209) through both holes.

Check and make sure that all wear & tear parts (defined in chapter 11) are in good condition. If there are any doubts, replace them immediately. Check the power cables.

Connect MODUL 200® with the hose to the dust collector. It is important, that there are no lesions or holes in the length of hose. Even small holes or a bad connection can significantly decrease the performance of the dust collector. If small rooms are to be blasted, it is sensible to use the hose support arch (Appendix diagram No. 169). Connect the hose to the end of the arch. The arch will then hold the hose away from the rear wheels when reversing.

Connect the power cables of MODUL 200® and the dust collector to the sockets. Insulation tape or similar can be used to secure the power cable to the hose. The blaster needs a 32 A, 3



phases, 230 V, 60 Hz connection. When operating a double unit (MODUL 200® + MODUL 200® EU) a 63 A, 3 phases, 60 Hz connection is required.

Check the floor for screws, nuts, or stones etc., and sweep the floor if necessary, with a brush or vacuum system. Small obstacles like joints pose no problems for MODUL 200<sup>®</sup>. If there are bigger undulations or similar check if it is possible for the machine to drive over them before the turbine is switched on.

#### **ATTENTION!**

In the case of severe undulations or difficult joints on the floor it is possible for the magnetic frame of the machine to rise too far above the floor. The sealing of the shotblaster becomes ineffective and shot escapes from the machine at high speed. This can cause injury to persons and equipment. Before operating always check the condition of the floor to prevent this from occurring.

Lift the control panel and remove the shot compartment lid (Appendix diagram No. 159 - 161). Make sure that the shot valve lever (Appendix diagram No. 165) is on "close" position and fill the shot compartment with shot until level with the sieve. Do not fill above the sieve level as suction from the dust collector will suck it away with the dust.

#### **ATTENTION!**

Only place new or clean shot in the shot compartment.

Clean the sieve (Appendix diagram No. 157) in the shot compartment if it is blocked.

Take the clutch pin (Appendix diagram No. 209) out of the drill in the rear side of the machine and put it into the holes of the drive axle (Appendix diagram No. 213). Take the lifting bar and put the machine in the lower position.

Check the distance of the magnetic frame to the floor. The basic rule is the closer to the floor the better. Unfortunately, floors are never ideal and mostly uneven. The distance must be adapted to the floor but should never be more than 10 mm.

Switch the dust collector on.

Pull out the emergency STOP button (Appendix diagram No. 241) and press the START button (Appendix diagram No. 35). on the control panel. If the indicator light of the button does not stay on when you release your finger, then the motor wants to start in the wrong direction. In this case two phases of the power supply must be swapped with each other.

Press the lever (Appendix diagram No. 237) of the drive unit switch and check the direction and the speed. With the direction forward / reverse switch (Appendix diagram No. 33) it is possible to change the direction. Only blast in the direction in which the operator has to walk backwards. The speed is regulated by the speed regulator (Appendix diagram No. 27) on the lower right end of the control panel. Drive the machine to the place where blasting should begin.

Now switch the star delta switch (Appendix diagram No. 31) of the turbine motor from 0 to star (Y) position. Make sure, that the blast wheel is rotating in the correct direction. The right



direction is indicated by a red arrow on the belt drive cover (Appendix diagram No. 187). In case of wrong rotation, switch the shotblaster off and disconnect the main cable. The plug of the machine is a phase reverse plug. Turn the two pins in the plug of the machine cable with a screwdriver. Switch the star delta switch again from 0 to star position. When the required RPM is reached it then is safe to switch to the delta position whereby the motor runs at full performance.

Press the lever (Appendix diagram No. 237) of the drive unit switch. MODUL 200<sup>®</sup> will start to move with a time delay. Open the shot valve slowly with the shot valve lever (Appendix diagram No. 165). Do not attempt to open it before the machine is moving or deep holes will be blasted into the floor.

The Ammeter on the control panel indicates the power consumption of the turbine motor. Make sure that the consumption is not higher than 15 A (22A US version).

After a few meters of blasting close the shot valve and stop the machine. Check the track on the floor. If the track is not evenly blasted, adjust the position of the shot cage as described in the "Maintenance & Adjustment" Chapter.

Repeat the blasting. When the machine is stopped it must be allowed to come to a complete standstill before switching on the reverse drive direction switch.

#### **ATTENTION!**

Abrupt reversing of the drive direction switch causes damage to the drive motor drive circuit. First stop the machine then reverse the switch!

The dust container of the dust collector has to be emptied on a regular basis. The intervals depend on the size of the container and on the condition of the floor.

## 5 Maintenance & Adjustment

**ATTENTION!** Disconnect the main cable before starting any maintenance or adjusting.

#### 5.1 Adjust the blasting path

The blasting path is adjusted by turning the shot cage (Appendix diagram No. 119) in the blast wheel cover (Appendix diagram No. 117). If blasting leaves an uneven path, then one side of the path is being blasted more heavily than the other.

Remove the shot hose (Appendix diagram No. 125) between the shot valve and the shot enter pipe (Appendix diagram No. 123). The shot enter pipe is secured with two clamps (Appendix diagram No. 121) on the blast wheel cover which can be removed by unscrewing two nuts. The shot cage is situated under and held in position by the shot enter pipe. On removing the shot enter pipe the shot cage turns freely. Above the centre of the cage window is a marking point (pin) which is helpful for orientation.

If the path is heavier blasted on the left hand side compared to the right, turn the cage anti –



clockwise. Turn in a clockwise direction if the path is heavier on the right-hand side. Reconnect the shot enter pipe with the clamps, connect the shot hose and try a short test run. Repeat the adjustment if necessary, until the path is smooth, even and without variation.

#### 5.2 Adjusting the height of the MODUL 200®

There are three adjustable screws for changing the height of the MODUL 200<sup>®</sup>. By changing the height, the gap between the floor and the magnetic frame is adjusted accordingly. For a more effective performance, the smaller the gap between floor and machine, the better. (Less wear & tear and loss of abrasive). However, a rough, uneven floor requires a slightly larger gap than a smooth floor.

For changing the height of the front of the machine, the screw for adjusting is situated on the upper end of the drive unit frame (Appendix diagram No. 227) under the control panel. For the back of the machine, the two screws are situated on the rear wheel unit.

Unscrew the nuts of the screws – this applies to all screws. Turning the screws clockwise lifts the machine, turning them anti clockwise lowers it. The gap between the magnetic frame (Appendix diagram No. 207, 79 and 81) and the floor should be the same all over. For most floors, this figure is between 5 mm and 10 mm.

On the front and sides of the magnetic frame are rubber strips (Appendix diagram No. 83) which act as protective seals against escaping abrasive. If the height of the machine is changed, the height of the rubber strips must also change accordingly. Slacken screws of the brackets (Appendix diagram No. 85 and 86) which clamp the rubber strips and place them in the desired position. They should always lie snug to the floor.

#### 5.3 Wear & tear on the blast wheel and shot cage

The blast wheel (Appendix diagram No. 115) is a pure wear & tear part and must be checked regularly. CONTEC® recommend a first check after 30 hours of blasting. The life of the blast wheel depends on the application of the machine.

For example, a lot of wear & tear occurs when blasting soft concrete with a lot of surface fat. Concrete dust is a very aggressive substance and increases wear & tear enormously. This decreases when blasting steel or ceramic tiles. To give an accurate figure for the lifetime of the wheel is therefore impossible. As a rough guide, this could be anywhere between 30 and 100 hours.

Take off the shot hose (Appendix diagram No. 125) in between the shot valve and the shot enter pipe (Appendix diagram No. 123). Loosen the four nuts which secure the blast wheel cover (Appendix diagram No. 117) to the machine. Remove the blast wheel cover carefully. Between the blast wheel cover and the blast chamber is a rubber sealing which may, during the process of operation stick to both sides. Pay special attention not to tear or rip it. Failure to do so will result in damage to this sealing.

Now the blast wheel should be visible. In the middle of the blast wheel there is a hexagonal shaped screw. Loosen the screw and remove the wheel from the blast chamber. Check the wear & tear on the wheel. The thickness of the four blades should not be less than 5 mm. If less, the blade could break and destroy the whole wheel.



The shot cage (Appendix diagram No. 119) is like the blast wheel – a pure wear & tear part and must be checked regularly. Two different kinds of wear & tear on the cage are possible. The window in the cage has a width of 30 mm. Change the cage if this width is more than 33 mm. The second type of wear & tear is the decrease in the thickness of the cage wall itself. Change the cage before a hole appears. If the blast wheel and cage are in a good condition replace the parts using the opposite direction to that described above.

#### 5.4 Wear & tear on the linings

The blast chamber and a large part of the reclaim chamber are protected by linings. These prevent the machine from destroying itself. The linings must be changed if the thickness is less than one third of the original thickness in any one place. The most wear & tear happens to the side (Appendix diagram No. 1) and top linings (Appendix diagram No. 3) of the blast chamber. The thickness of these linings is 10 mm. Should the wear & tear be more than 6 mm they must be changed. If they are changed too late, the machine will blast a hole in its frame in a short time.

#### Changing the linings:

On both sides of the MODUL 200® are the side covers (Appendix diagram No. 71 and 73) for the reclaim chamber and blast chamber. Remove the side covers by loosening the screws. The side linings can now be easily removed. On the upper end of the blast chamber are two screws directly under the turbine motor. Loosen the nuts of these screws and turn them out by 8 mm. The top lining can now be removed. If this proves difficult, tap gently, but firmly on both sides with a hammer. The motion of the hammer will remove trapped dust and shot which may hinder removal of the linings.

The front and back linings of the blast and reclaim chambers are each secured by four (vive) nuts on the outside of the chambers. Remove the blast wheel (Refer to "wear & tear on the blast wheel and shot cage"). Loosen the four (vive) nuts and remove the linings. The installation of the new linings is the reverse procedure to removing them. The lifetime of the linings should normally be 200 hours. Again, a precise figure cannot be given for the same reasons described for the blast wheel – i.e. depending on the application.

#### 5.5 Wear & tear on the shot stop in the separator

On the inner side of the shot compartment lid in the separator is the shot stop (Appendix diagram No. 161). This takes away the energy of the high-speed rebounding shot, thus preventing the destruction of the shot compartment. It also prevents the dust collector from sucking shot out of the machine. The shot stop should be regularly checked. Changing the shot stop is easily done by removing the two screws on the shot compartment lid.

#### 5.6 Belt drive

The belt drive is made to last at least 500 hours – but only if it is tensioned correctly. To check the tension, remove the belt drive safety cover (Appendix diagram No. 187). It shouldn't be possible to move the belt (Appendix diagram No. 97) more than half a cm in each direction halfway between the pulleys. If it is too loose, adjust the tension by loosening the four screws which hold the turbine motor (Appendix diagram No. 91). On the upper side



of the motor flange (Appendix diagram No. 181) is a nut. Turn this in a clockwise direction until the tension of the belt is correct. Tighten the four screws of the motor and tighten the nut.

#### **ATTENTION!**

Secure the belt drive safety cover!

#### 5.7 Wear & tear on the back skirt

The back skirt (Appendix diagram No. 199 to 205) on the rear of the blast opening serves to prevent shot from escaping and thereby minimises the loss of shot. If the skirt is worn out it must be replaced. Remove the screws of the bracket which secures the skirt. Remove the worn-out parts, exchange them and replace the skirt to it's former position.

#### 5.8 Wear & tear on the magnetic frame and the blast opening

Around the magnetic frame are several parts which must be regularly checked. The parts are subject to wear & tear through action of the shot and through contact with the floor. In the front and side areas are the magnetic frames. These are easily removed. The left and right frames (Appendix diagram No. 79 and 81) are screwed to the side cover. The front frame (Appendix diagram No. 207) is screwed to a bracket on the reclaim chamber. After removing the magnetic frame, on the rear side of the opening is another part (Appendix diagram No. 197). The back skirt, mentioned in 8.7, is screwed to this part. Wear & tear happens mainly to this part if it is in contact with the floor. As previously mentioned, it is important to check all parts regularly. In doing so, it is not necessary to unscrew the magnetic frame, just place the machine carefully on its side and check for wear & tear.

#### **5.9 Bearings**

Bearings are always tricky in mechanical engineering. To change bearings is generally simple if the rules are observed. However, for the purpose of this manual, too complex to describe in any detail. If you have any doubts always refer to trained or experienced engineer.

The bearings for the MODUL 200®, are situated in the motors, the drive unit lever, the turbine axle housing, the drive unit frame and the wheels. Never attempt to change the motor bearings by yourself. Return the motors to CONTEC® or take them to a reputable motor rewind technician.

The turbine axle housing is the most difficult item to deal with. The bearings inside are under the greatest stress from the operation of the machine. The lifetime of such high-speed revolving bearings is between 500 and 1000 hours. To change the bearings, send the machine or machine housing to CONTEC®.



## 6 Troubleshooting

If, after activating the machine by pressing "START" the run lamp is lit but all or part of the motor is not running – check the following:

- Is the power connection correct?
- Are the cables in a good condition and properly laid?
- Are the fuses in the control panel closed?
- Is the motor overload protection in the control panel closed?

#### The turbine motor is not working.

- Has the blast chamber filled up with shot and blocked the blast wheel during transportation of the machine?
- Is the motor overload protection in the control panel closed?

#### The drive motor is not working.

- Is the fuse for the drive unit in the control panel closed?
- Are both (glass) fuses on the control circuit OK?
- Does the drive wheel turn easily when not connected to the drive motor?

#### The blast performance is too low.

- Is the blast wheel turning in the right direction?
- Has the blast wheel worn out?
- Has the shot cage been correctly adjusted?
- Has the shot cage worn out?
- Is the sieve in the shot compartment blocked?
- Is the shot valve blocked?
- Is the shot worn out? (Check the size of the balls)

### MODUL 200<sup>®</sup> works for a short time and loses all the shot (carpeting effect).

- Is the blast wheel rotating in the correct direction?
- Has the blast wheel worn out?
- Has the shot cage been correctly adjusted?
- Has the shot cage been worn out?
- Do the rubber seals of the magnetic frame lie snugly with the floor?
- Have the rubber seals worn out?
- Is the height of the machine positioned too high?
- Is the belt of the turbine too lose? (The belt will slip on the pulleys and the blast wheel will not rotate quickly enough).
- Is it possible to blast the floor? Check the condition.
- Is it dry and not too elastic or soft?



### 7 The modular system

#### 7.1 Connecting MODUL 200<sup>®</sup> EU to MODUL 200<sup>®</sup>

In the following the connection of a MODUL 200<sup>®</sup> EU to a MODUL 200<sup>®</sup> basic unit is described. It is assumed, that the control panel for a double unit has already been prepared.

Remove the left side cover (Appendix diagram No. 71) of MODUL 200<sup>®</sup>. Now remove the left side linings of the blast chamber (Appendix diagram No. 1) and the reclaim chamber (Appendix diagram No. 9). Above the left side cover is another cover (Appendix diagram No. 153) for the shot compartment, remove this also.

Remove the back skirt (Appendix diagram No. 199 to 205) and the rubber sealing (Appendix diagram No. 83) of the magnetic frame.

Place the MODUL 200® carefully on its right side. Taking care not to damage the shot valve lever or the remote-control cable.

Remove the upper rear wheel (Appendix diagram No. 189). Place the level adjustment connector in the now empty axle of the rear wheel system.

Insert the clutch for the shot valves into the shot valve axle (Ap. diagram No. 133).

Place the separating linings (thickness 15 mm) for the reclaim and blast chamber in the position of the removed side linings.

Place the MODUL 200® EU carefully on MODUL 200®. Make sure that the level adjustment connector of the rear wheel is connected to both machines and that the position of the separating linings is correct.

Without the aid of power tools, hand screw both units together and connect the side cover to MODUL  $200^{\circ}$  EU. Now connect the rear wheel to MODUL  $200^{\circ}$  EU. Return the machine to the normal upright position then screw first the side cover and then both units tight together. Connect the shot compartment side cover to MODUL  $200^{\circ}$  EU

Lift the control panel and remove the shot compartment lids (Appendix diagram No. 159 to 163). Align the valve (Appendix diagram No. 129) of MODUL 200<sup>®</sup> EU to the same position of the MODUL 200<sup>®</sup> valve. To align the valves correctly loosen the screws of the shot valves and place them in the same position. Pull the clutch on both valve axles and secure them.

Connect the double back skirt to both units. Connect the rubber seals to the magnetic frames.

Loosen the cable protector on the right side of the machine and insert the cable of the MODUL 200® EU turbine motor inside. Connect the plug of the cable to the socket on the control panel.

#### 7.2 Additional and interchangeable parts for the extension of MODUL 200®

Additional parts:

Clutch for the shot valves

Connection pin for the rear wheel swing

Interchangeable parts:

Back skirt

Rubber sealing for the magnetic frame

Separating linings



## 8 Wear & tear parts

Definition of wear & tear parts:

Blast wheel, Shot cage, Linings,

Magnetic frame, Bracket for the back skirt, Back skirt,

Rubber sealing for the magnetic frame,

Shot stop, Blast wheel cover,

Shot hose,

Poly-V belt of the turbine,

Poly-V Pulleys of the turbine

## 9 Shot

Different floors need different shot. Here is a list of shot with the fitting application.

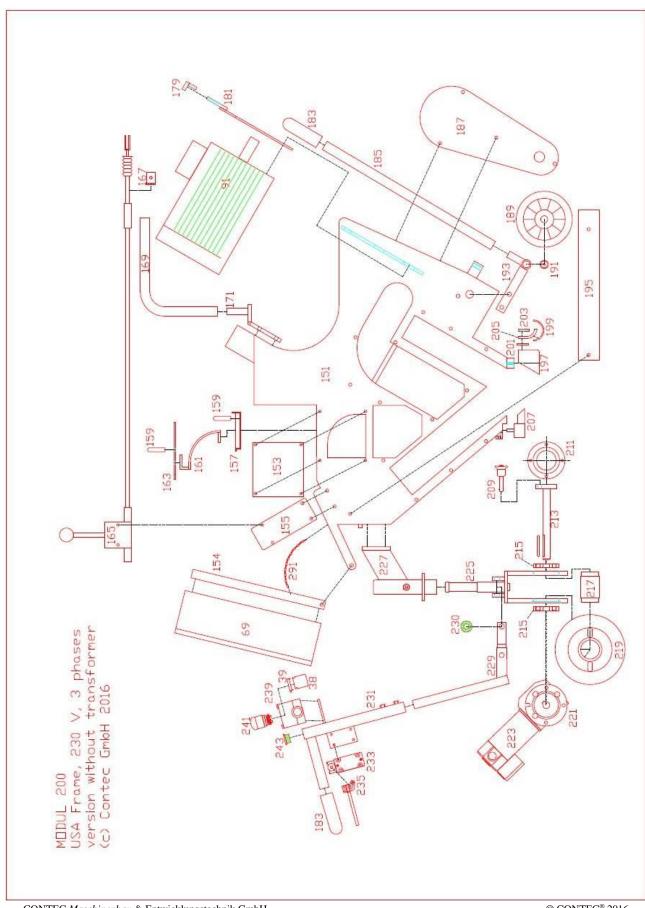
According to	According to	Shot size	Application
BSS 2451	SAE J444a		
S390	S390	1,0-1,7 mm	Plain concrete or coatings
S340	S330	0,85-1,4 mm	Plain concrete to achieve a fine profile
G34-G47		0,85-2,0 mm	Concrete with difficult coatings.
			Steal surfaces like bridges, ship decks and tanks.
			G34-G47 should never be used pure. Always
			mix it with S390/340/330. Not more then 1 part
			of G34 – G47 on two parts of S390/340/330

## 10 Appendix

Diagrams Wire diagram Part list

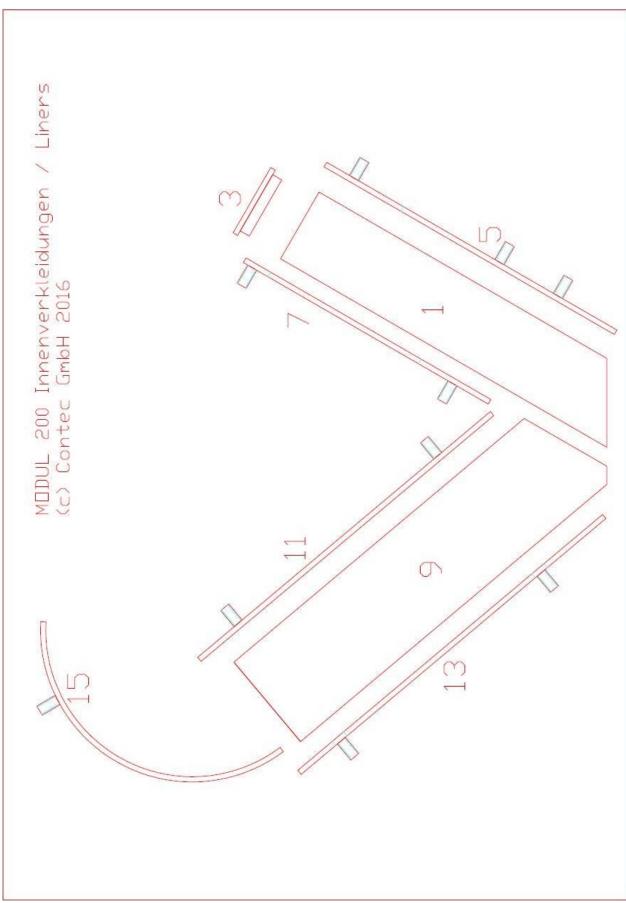


## PARTS BREAKDOWN



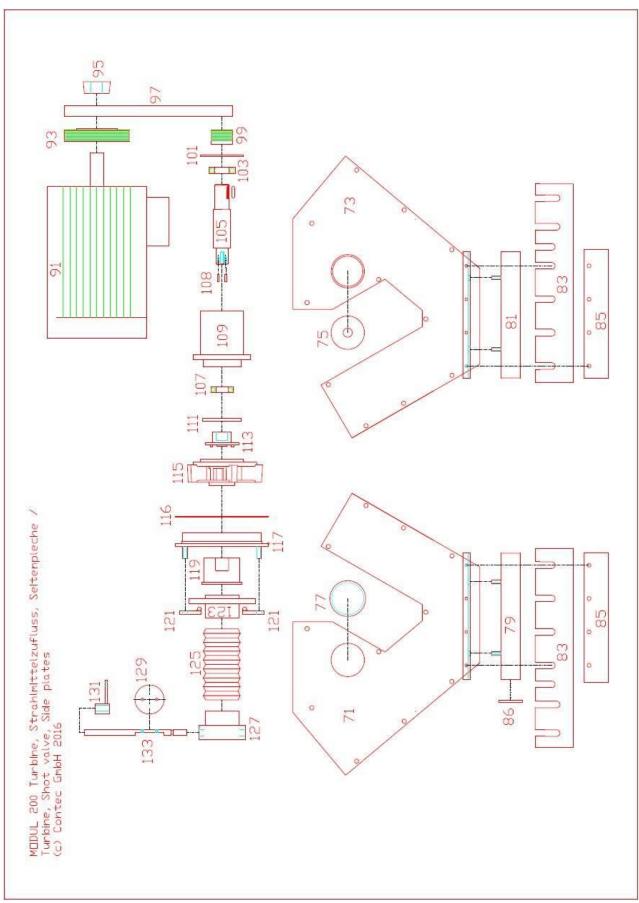


38		Description	QTY
	8750203308	Contact Element	2
39	8750202309	Mounting Adapter	3
69	8750101000	Complete Control Panel	1
91	8755140075	Motor 7,5 KW	1
151	8710100000	Machine Frame	1
153	8730102700	Shot Compartment Cover left and right	2
154	8730100104	Bar for Control Panel Bracket	2
155	8730100103	Bracket Control Lever	1
157	8730100400	Sieve without Handle	1
159	8790215016	Handle	2
161	8730100504	Shot Stop	1
163	8730100501	Shot Compartment Lit only	1
165	8790200010	Control Lever	1
167	8730100701	Bracket for Shot Valve Cable at Frame	1
169	8730102802	Hose Support Arch	1
171	8730102801	Hose Support Bracket	1
179	8730102300	Bracket for Belt Tensioner	1
181	8730100600	Belt Tensioner	1
183	8770212610	Rubber Grip	2
185	8730100900	Lifting bar	1
187	8730102501	Belt Cover	1
189	8780203160	Rear Wheel	2
191	8730100804	Axis	2
193	8730100800	Swing Rear Axis	1
195	8730100700	Cabel Pipe	1
197	8730102600	Retaining Plate for Back Skirt	1
199	8730101501	Back Skirt half Pipe	1
201	8770233503	Back Skirt Rubber under Bracket	1
203	8730101502	Bracket for Back Skirt	1
205	8770230006	Back Skirt Rubber	1
207	8730101200	Front magnetic Frame	1
209	8790250001	Drive Pin	1 1
211	8730100205	Drive Unit Axis Cover	1
213	8730170202	Drive Axis	1
215	8761206191	Bearing	2
217	8730170201	Axis for Drive Wheel	1
219	8780203200V	Drive Wheel	1
221	8750202020	Gearbox	1
223	8750202019	Drive Unit Motor	1
225	8730100200	Drive Unit Frame	1
227	8730100204	Lifting Tube	1
229	8730100302	Lower Lifting Arm	1
230	8761206002	Bearing	2
231	8730100303	Top Handle	1
233	8750201001	Drive Unit Switch complete	1
235	8730100304	Drive Unit Lever Alloy	1
239	8750202102N	Housing for Emergency Switch	1
241	875020210211	Emergency Switch	1
243	8770273535	Plastic Plug	1
291	8790201010	Chain for Electic Box	1



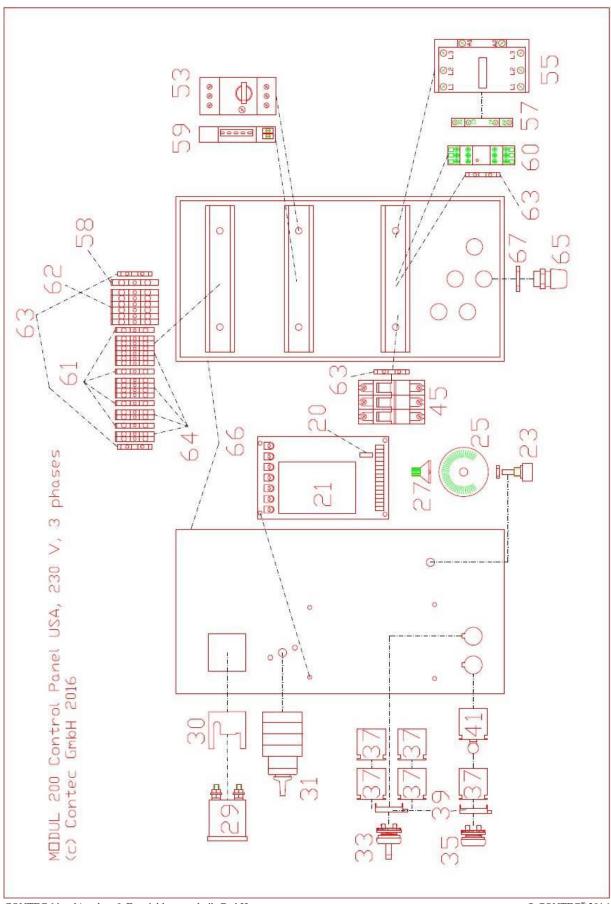


Item #	Part #	Description	QTY
1	8720120008	Side Lining Blast Chamber	2
3	8720120005	Top Lining Blast Chamber	1
5	8720120003	Lining Blast Chamber Bearing Housing	1
7	8720120004	Front Lining Blast Chamber Blast Wheel Cover	1
9	8720120007	Side Lining Reclaim Chamber	2
11	8720120002	Lining Reclaim Chamber inside	1
13	8720120001	Front Lining Reclaim Chamber outside	1
15	8720120012	Curved Lining Reclaim Chamber	1





Item #	Part #	Description	QTY
71	8730101100	Side Covering right	1
73	8730101000	Side Covering left	1
75	8770270070	Cap 70 mm	1
77	8770271070	Plug for hole diameter 70 mm	1
79	8730101400	Right magnetic Frame	1
81	8730101300	Left magnetic Frame	1
83	8770238006	Rubber Sealing magnetic Frame	2
85	8730102401	Side Bracket for Rubber	2
86	8730102402	Front Bracket For Rubber	1
91	8755140075	Motor 7,5 KW	1
93	8790240130	Pulley	1
95	8.79024161028	Taper Bush	1
97	8770243208	Poly-V Belt	1
99	8790240044	Pulley	1
101	8731171003	Plate Bearing Housing Belt Drive	1
103	8761206306	Bearing	1
105	8730171004	Turbine Axis	1
107	8761206305	Bearing	1
108	876325 4X24	Pin 4x24 mm	2
109	8730171001	Bearing Housing	1
111	8731171002	Plate Bearing Housing Blast Wheel	1
113	8731171005	Blast Wheel Socket	1
115	8730151900	Blast Wheel	1
116	8770231706	Gasket For Blast Whel Cover 3 mm	1
117	8730101700	Blast Wheel Cover	1
119	8730151702	Shot Cage	1
121	8730101704	Clamp for Shot Enter Pipe	2
123	8730101703	Shot Enter Pipe	1
125	8770257001	Shot Hose	1
127	8730141601	Shot Valve Alu-Pipe With Magnets	1
129	8730101603	Shot Valve Disc	1
131	8730101604	Shot Valve Lever	1
133	8730101602	Shot Valve Axis	1

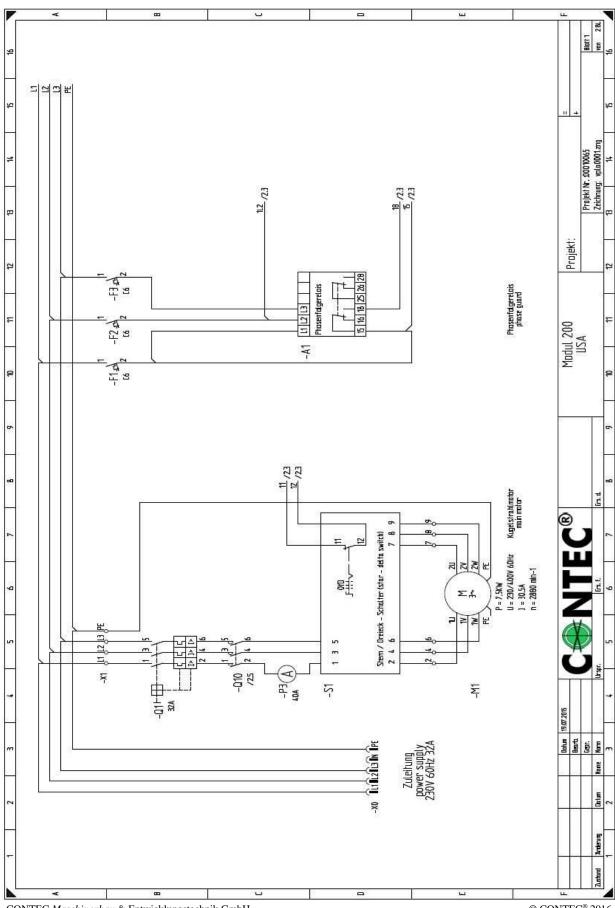




Item #	Part #	Description	QTY
20	875020304A	Fuse 4 A slow	1
21	8750203015WEG	Drive Circuit	1
23	8750202018	Potentiometer	1
25	8750202011	Speed Scale	1
27	8750202010	Potentiometer Speed Button only	1
29	8751203025	Ampmeter	1
30	8751203000	Cover for Ampmeter	1
31	8751202004	Star-Delta Switch	1
33	8750202303	Direction Switch	1
35	8750202302N	Start Button	1
37	8750203307	Contact Element	5
39	8750202309	Mounting Adapter	3
41	87502033061	LED Element	1
53	8751203032	Motor Protective	1
55	8751203104	Main Contactor	1
57	8750203005SA	Auxiliary Block	1
58	8750111115G	Terminal green/yellow	1
59	8750203013	Hour Counter	1
60	87502030PF	Phase Guard	1
61	8750111107	Terminal	4
62	8750111115	Terminal beige	6
63	8750111102	Terminal green/yellow	4
64	8750111104	Terminal beige	14
65	87502023M25	Cable Gland	5
66	8750101099M200	Control Panel with holes	1
67	87502023GMM25	Nut	5







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