

OPERATING MANUAL HARD DRIVE SHREDDER



HSM[®]
Powerline HDS 230

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1 Proper use, warranty

The hard drive shredder is designed for shredding hard drives up to 3.5", CDs/DVDs, magnetic tapes up to 3.5", USB sticks and disks.

Our general business conditions are applicable. We provide a one year warranty for the hard drive shredder. The warranty period is 6 months when used in multiple shifts. This warranty excludes wear, damage due to improper handling, natural depreciation, and actions taken by third parties.

2 Safety instructions



Before using the machine for the first time, read the operating manual, and keep it for later use.

- Observe all safety instructions attached to the machine.
- Ensure that no unauthorised persons can access the hard disk shredder.
- Do not leave the hard disk shredder switched on when it is unattended. The shredder may not be operated by anyone under 16 years of age.



WARNING

Risk of injury

Do not reach into the feed opening.
Wear protective gloves when eliminating jam.



Danger of injury during intake

Do not go near the feed opening with long hair, loose clothing, ties, scarves, necklaces, bracelets etc.

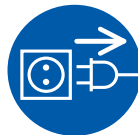


Do not destroy any material which might become tangled, such as tapes, binder ties or foil.



- When the machine is not in use, it must be shut down and secured against unauthorised use. To do so, you can secure the mains switch with a padlock when it is in the off position.
- Do not remove or modify safety devices which guarantee the safe operation of the machine.
- No platforms or other raised surfaces may be placed near the shredder if they encroach on the specified safety clearances.
- Carry out inspection and maintenance regularly.

- Switch off the shredder, disconnect the power plug and call customer service in the following circumstances:
 - Power cables or plugs are damaged
 - Liquid has entered the shredder
 - The shredder has been exposed to rain
 - The machine does not work properly despite the operating manual having been observed
 - The shredder has been damaged



Switch off the shredder and pull out the power plug before moving or cleaning the shredder, or any other task outside its normal scope of use.



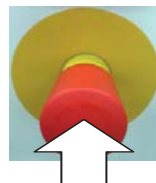
Maintenance and service tasks may only be performed by HSM customer service and service engineers of our dealers.

Notice **Danger from improper use**

Only operate this machine in accordance with the instructions outlined in "Proper use".

Operating controls for your safety

Emergency stop



In the event of danger, press the emergency stop button immediately. This switches off the shredder, and stops the cutting block and exit conveyor.

Main switch



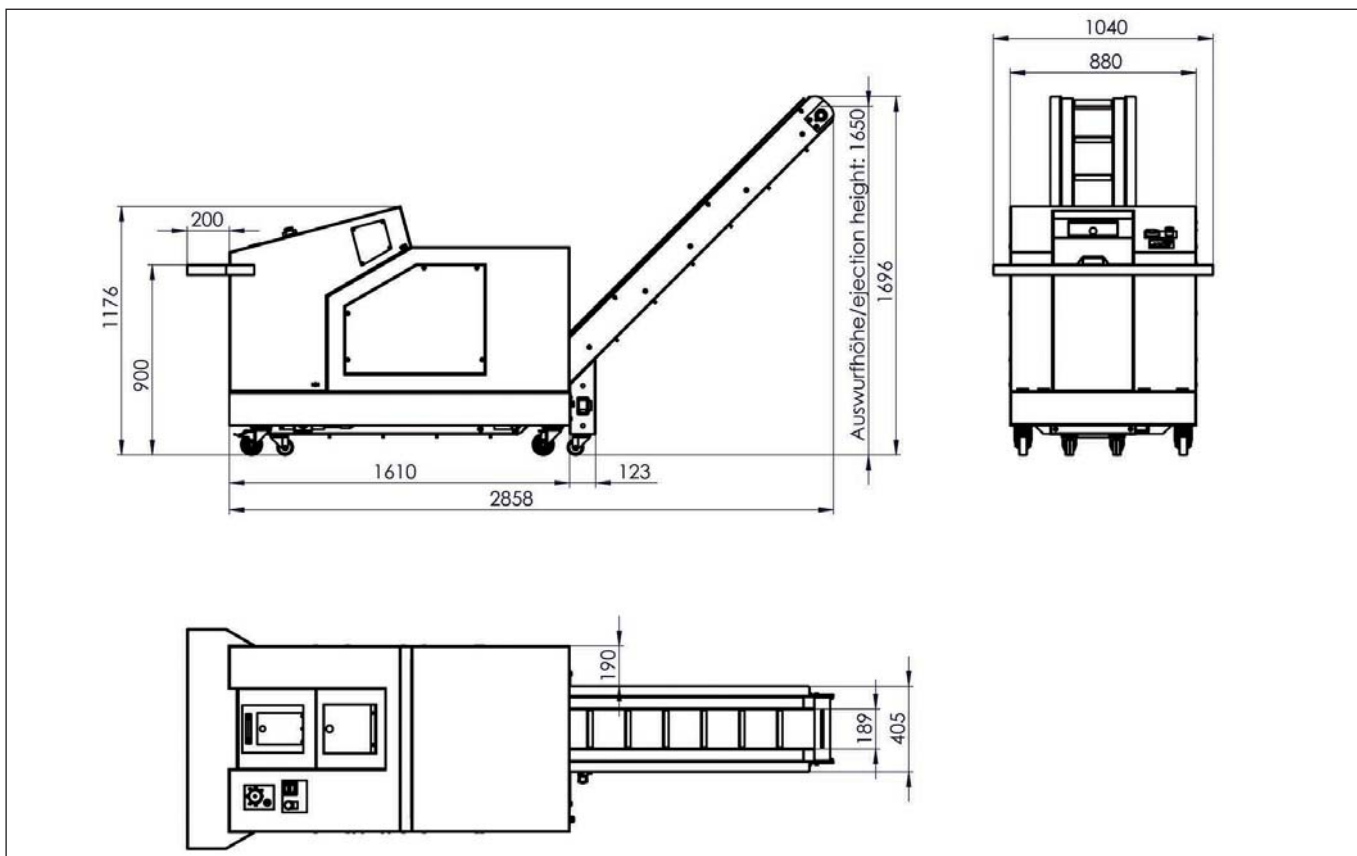
In the event of danger, turn the main switch to "0".
You can secure the main switch in this position with a padlock to prevent restarting.

3 Overview

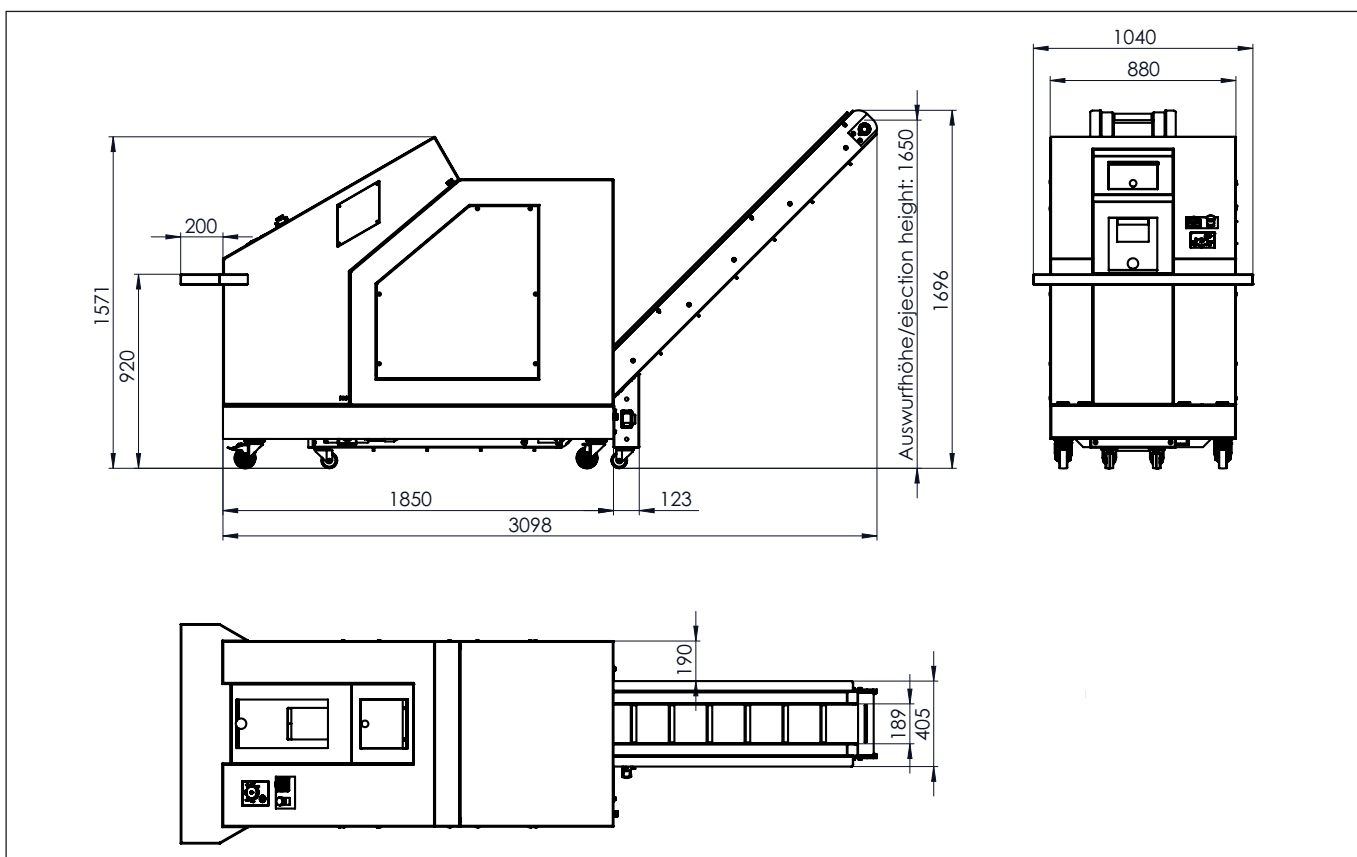


- 1 Main switch
- 2 Emergency stop button
- 3 Operating and display elements
- 4 Loading tray
- 5 Slider
- 6 Flap
- 7 Braking swivel castors
- 8 Conveyor

4 Dimensions



Machines with cut size 20 x 40–50 mm



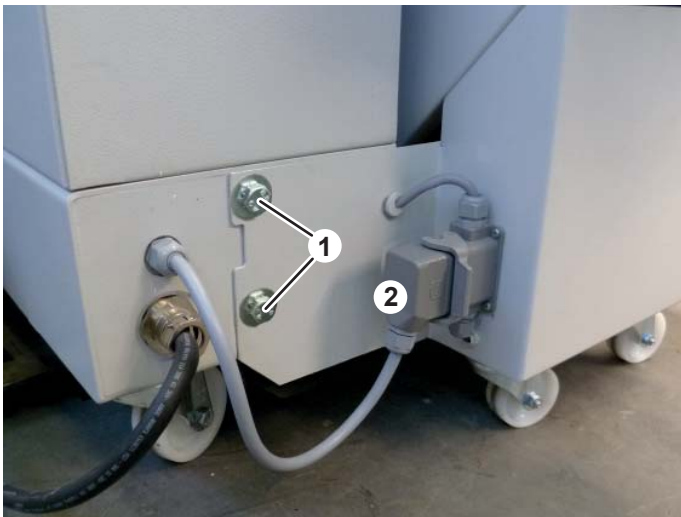
Machines with cut size 11,5 x 26 mm

5 Transportation, installation

- The transport device (e.g. hand pallet truck) must be correspondingly rated for the weight of the machine.
- Place the pallet with the shredder in its packaging on a smooth, level surface.
- The shredder may only be placed in dry rooms on a hard, level floor – not on carpets. The floor load on each roller is approximately 200 kg (single-stage machines) respectively 320 kg (double-stage machines).
- Place the machine in such a way that the power plug is easily accessible and the ventilation slots are free.



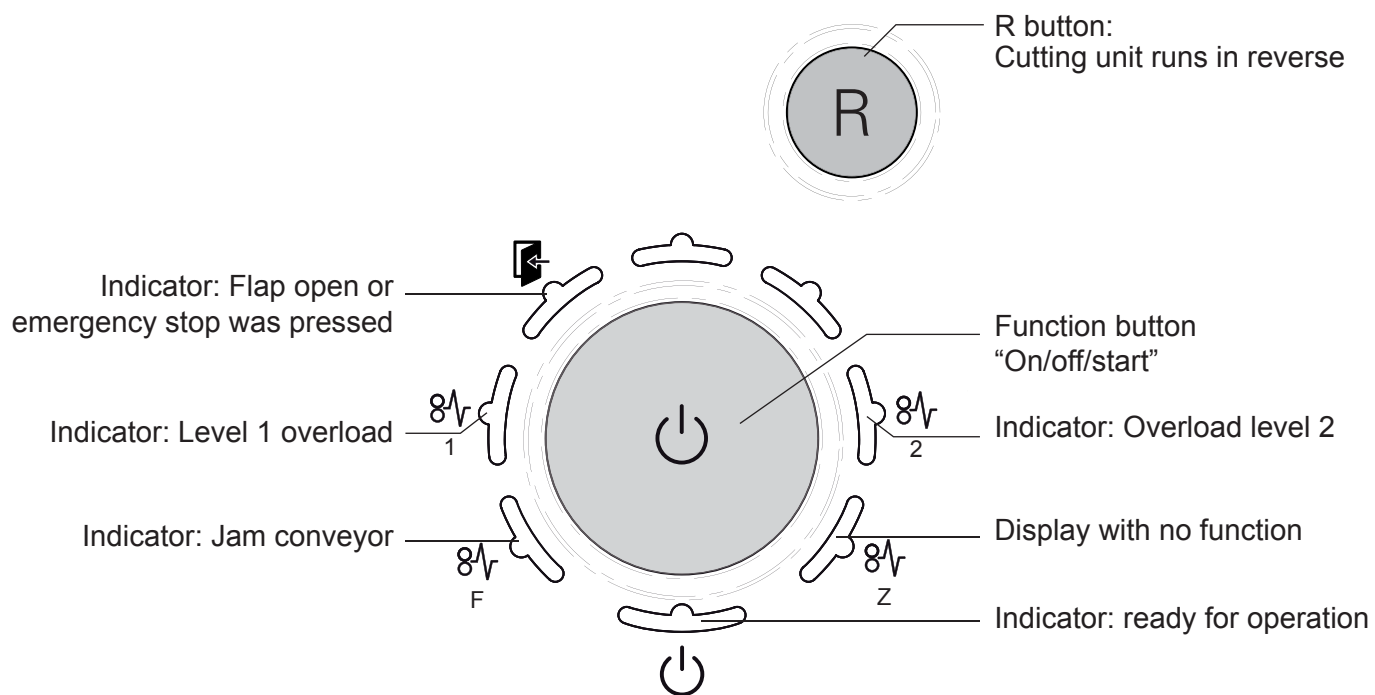
- Lock the front castors by pressing down the brake lever.



- Push the conveyor belt under the machine.
- Screw the machine and conveyor belt together using the 4 safety screws M 8x16 (1).
- Insert the plug (2) for the conveyor belt connector into the coupling and lock it into place.

- The machine must be connected to a power source which meets the specifications on the nameplate. Make sure the power cable is unobstructed and that nobody can tread on it. Connect the power plug of the machine into a properly installed socket.

6 Operating and display elements



7 Start-up

Inspecting the safety devices



Check that the safety devices are working properly:

- At the start of each shift
- After any maintenance or repair work

Do not start the machine until you have checked the safety devices and found them to be in perfect working order. If any defect arises during operation stop the machine immediately and make sure it is corrected.

Switching on the hard drive shredder



- Unlock the emergency stop button by turning it anticlockwise.



- Turn the main switch to the I position.



Caution!

The feed belt can run in reverse if the phase wires in the power plug are incorrectly connected.

Turn off the main switch immediately and pull out the power plug!

Have an electrician change two of the three phase wires.



- ▶ The green "Ready for operation" LED lights up.

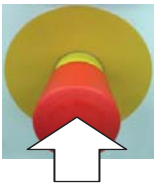
Note:

If the "Ready for operation" display flashes, the machine can only be switched on when the display has stopped flashing and lights up continuously.



- Press the start button.
- ▶ The cutting block and conveyor start up.

Checking the emergency stop button



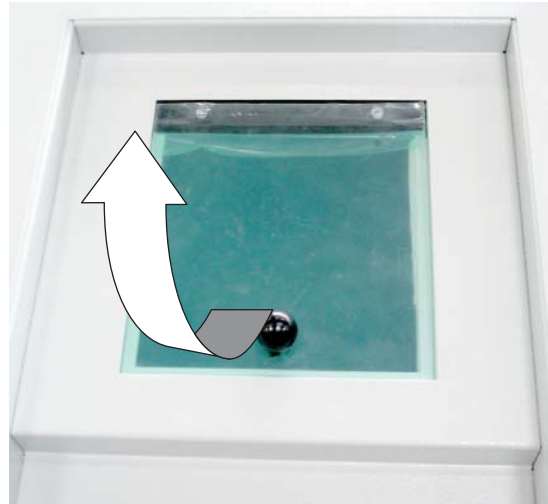
Press the emergency stop button while the machine is running.

The shredder must switch off immediately. The cutting block and the conveyor must stop.

The machine will only start again once you have pulled out the emergency stop button again.

Checking the flap switch

- Open the flap.



- ▶ The indicator "Flap open" must light up.
- ▶ The cutting block and conveyor must stop.

After you close the flap, the display should go out and you can start the machine again by pressing the start button.

Shredding hard drives

Place the hard drive in the recess (1) and push the slider up to the top (2).

- ▶ The disk is dropped into the cutting unit and is shredded.



Machines with cut size 20 x 40 - 50 mm



Machines with cut size 11,5 x 26 mm

Stopping cutting unit and conveyor



- Press the start button again.
- ▶ The cutting block and conveyor stop.
- ▶ The shredder switches to standby mode.

Switching off the shredder



- Turn the main switch to 0.
- You can secure the main switch in this position using a padlock.

8 Malfunctions

Check the following before calling customer service:

- Is the power plug connected?
- Is the shredder switched on?
- Is the flap closed?
- Is there a jam in the shredder?
- Has the motor been overloaded?

Overload due to jam



- ▶ “Overload” display (level 1 or level 2 – depending on the machine model) lights up.
- ▶ The cutting block automatically runs in reverse for several seconds. Then the cutting unit switches off.



Caution!

The blade rollers can still cause injuries even while they are not running. Do not reach into the cutting apparatus! Wear safety gloves!

Do not alternately press the “Forwards” and “Reverse” buttons to remove the blockage. This will damage the shredder.

- Take out the hard drives.
- Press the start button and feed the disks into the cutting unit one after the other.





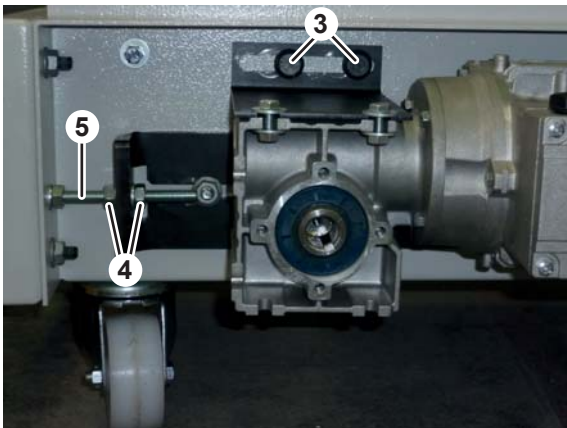
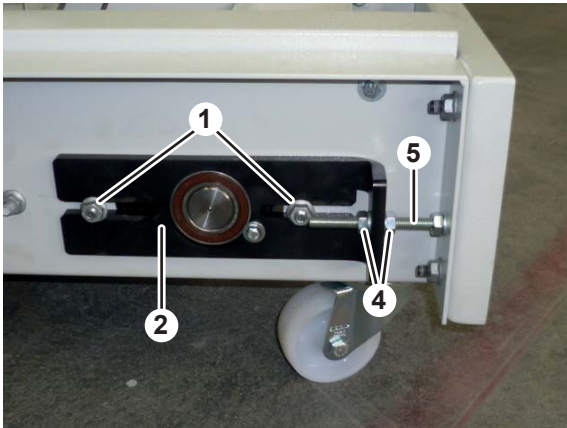
► “Conveyor belt jam” display lights up.

a) The conveyor belt is blocked.
Remove the cause of the blockage.

b) The conveyor belt slips and has to be re-tensioned.



- Switch the shredder off:
Turn the main switch to **0**.
- Pull the conveyor belt out of the machine and loosen the hex nuts (1) on the bearing flange (2) on the left-hand and right-hand sides, as well as the hex-head screws (3).



- Loosen the lock nuts (4) on the tensioning bolts (5).
- Use the tensioning bolts to tension the conveyor belt uniformly.

Note:

Only tighten the feed belt until it stops slipping. The feed belt bearing may be damaged if it is tightened too much.

- Tighten all nuts and screws. Install the conveyor belt under the machine.



- Switch the shredder on:
Turn the main switch to the **I** position.

Electric motor overheated



- “Overload” display (level 1 or level 2 or conveyor – depending on the machine model) flashes.
- The shredder switches off automatically.
- Let the motor cool down for 20–30 minutes.
- Press the start button.



Flap open or emergency stop was pressed



- The indicator lights up.
- The shredder switches off automatically.
- Close the flap and activate the emergency stop control by turning the stop button anticlockwise.
- Press the start button.



9 Cleaning

Cleaning the shredder:

- Switch off the shredder and disconnect the power plug.
- Only use a soft cloth and mild soapy water for cleaning. Never use scouring agent, cleaning fluid, petroleum or thinners.

10 Service

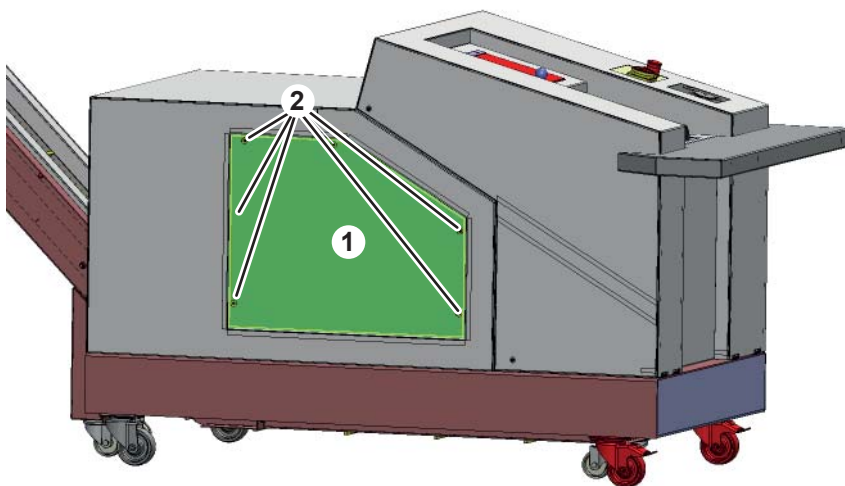


WARNING

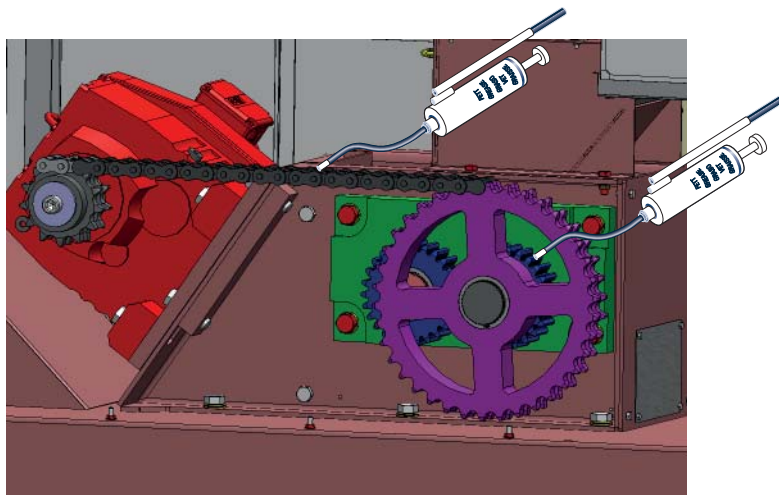
Maintenance and service tasks may only be performed by HSM customer service and service engineers of our dealers.

Greasing the drive chains and cogs (quarterly or after 170 working hours)

- Switch off the shredder.
- Pull out the power plug.



- Remove the inspection flap (1) in the left-hand side plate. To do this, remove the covers and take out the screws M 6X12 (2).



- Grease the motor-cutting unit drive chain and the synchronising wheels. Recommended lubricating grease: K2K in accordance with DIN 51502/DIN 51825

- Refit the inspection flap

Screw connections

Interval: 1000 working hours

Check firmness of all screw connections with a torque wrench every 6 months and retighten if necessary.

Employed screws:
Property class 8.8

Thread size	Tightening torque (Nm)		
	Property class 8.8	Property class 10.9	Property class 12.9
M 4	2,8	4,1	4,8
M 5	5,5	8,1	9,5
M 6	9,6	14	16
M 8	23	34	40
M 10	46	67	79
M 12	79	115	135
M 14	125	185	220
M 16	195	290	340
M 18	280	400	470
M 20	395	560	660
M 22	540	760	890
M 24	680	970	1150
M 27	1000	1450	1700
M 30	1350	1950	2300

BY F. GROSS SCHRAUBEN GMBH & CO. (Screw and nut zinc coated: $\mu=0,125$)

11 Disposal / Recycling

Dispose of the machine in an environmentally sound way at the end of its service life. Observe the current regulations when doing this. As legislation is subject to ongoing changes, we request that you contact your local authorities at the appropriate time. As the manufacturer, HSM would be glad to advise you on the disposal of your old machine.

12 Technical data

Cutting type	Cross cut	
Cut size (mm)	20 x 40–50	11.5 x 26
Security level DIN 66399	O - 1, T - 2, E - 2, H - 4	O - 3, T - 3, E - 2, H - 5
Throughput (hard drives / h)	360	200
Dimensions W x D x H (mm)	1,040 x 3,058 x 1,696	1,040 x 3,298 x 1,696
Weight	770 kg	1260 kg
Noise level (Idle running/load)	57 dB(A) / 68–69 dB(A)	57 dB(A) / 67–72 dB(A)
Ambient conditions in transport, storing and operation: Temperature Relative humidity Height above sea-level (MSL)	-10 °C to +25 °C max. 90 %, without condensation max. 2,000 m	

Cut size (mm)	20 x 40–50				
Power consumption	3.2 kW	3.2 kW	3.2 kW	5.5 kW	3.0 kW
Power supply	3 x 400 V, 50 Hz	3 x 380 V, 60 Hz	3 x 220 V, 50 Hz	3 x 208 V, 60 Hz	3 x 460 V, 60 Hz
Nominal current	7.3 A	7 A	12.7 A	11 A	6 A
Safety fuse	16 A gG/gI/C/K	16 A gG/gI/C/K	32 A gG/gI/C/K	30 A gG/gI/C/K	16 A gG/gI/C/K

Cut size (mm)	11.5 x 26				
Power consumption	6.2 kW	6.8 kW	6.8 kW	6.2 kW	7.8 kW
Power supply	3 x 400 V, 50 Hz	3 x 380 V, 60 Hz	3 x 480 V, 60 Hz	3 x 230 V, 50 Hz	3 x 208 V, 60 Hz
Nominal current	13.2 A	16.4 A	13 A	24 A	20 A
Safety fuse	25 A gG/gI/C/K	25 A gG/gI/C/K	25 A gG/gI/C/K	32 A gG/gI/C/K	30 A gG/gI/C/K

EU declaration of conformity

The manufacturer **HSM GmbH + Co. KG**, Austraße 1 - 9, 88699 Frickingen / Germany
hereby declares that the machine, referred to here as
hard drive shredder **HSM HDS 230**

corresponds to the health and safety requirements of the following EU directives listed below due to its conception
and design of the version in which it was put into circulation by us:

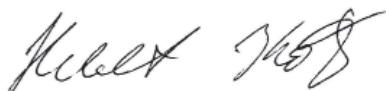
Machinery directive 2006 / 42 / EC EMC directive 2014 / 30 / EU

Applied standards and technical specifications:

EN 349	EN 953	EN 1037	EN 1088
EN ISO 12100	EN 13849-1	EN ISO 13850	EN ISO 13857
EN 60204-1	EN 61000-3-2	EN 61000-3-3	EN 61000-6-2
EN 61000-6-4	EN 62061		

Authorised representative for the compilation of technical documentation:
Hubert Kötzing, HSM GmbH + Co. KG

Frickingen, 21/04/2016



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