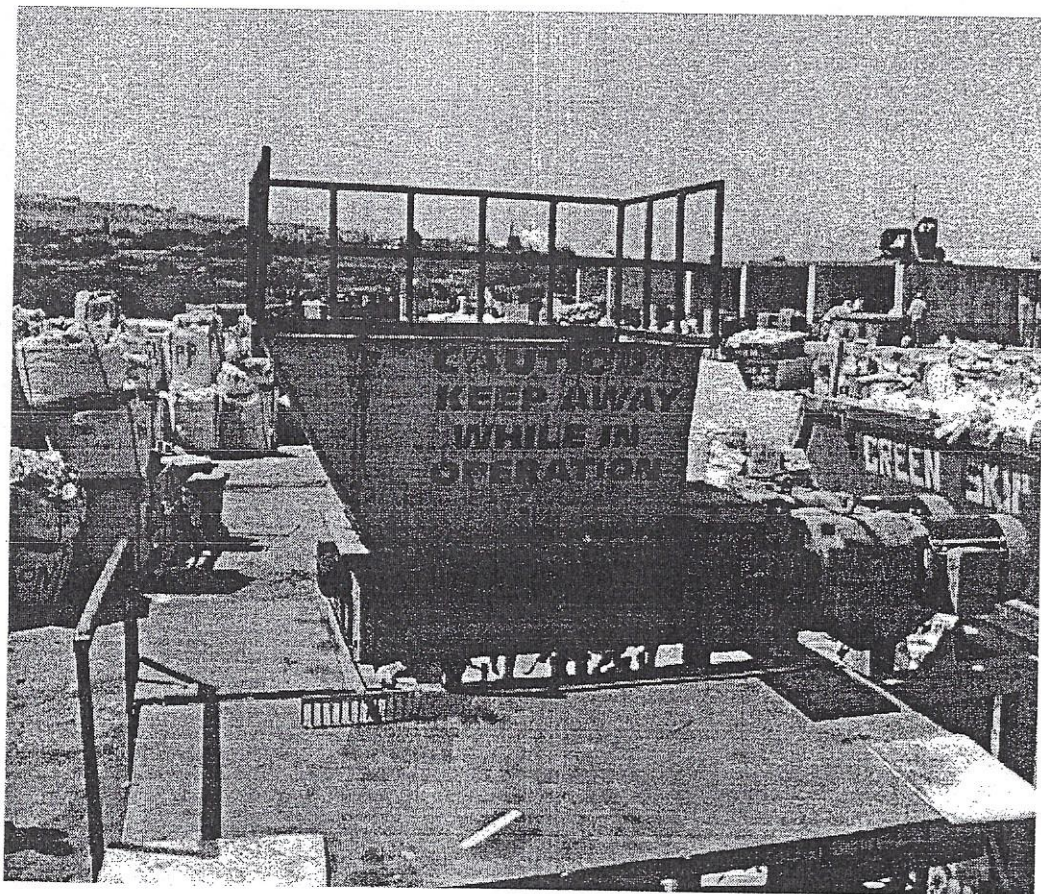
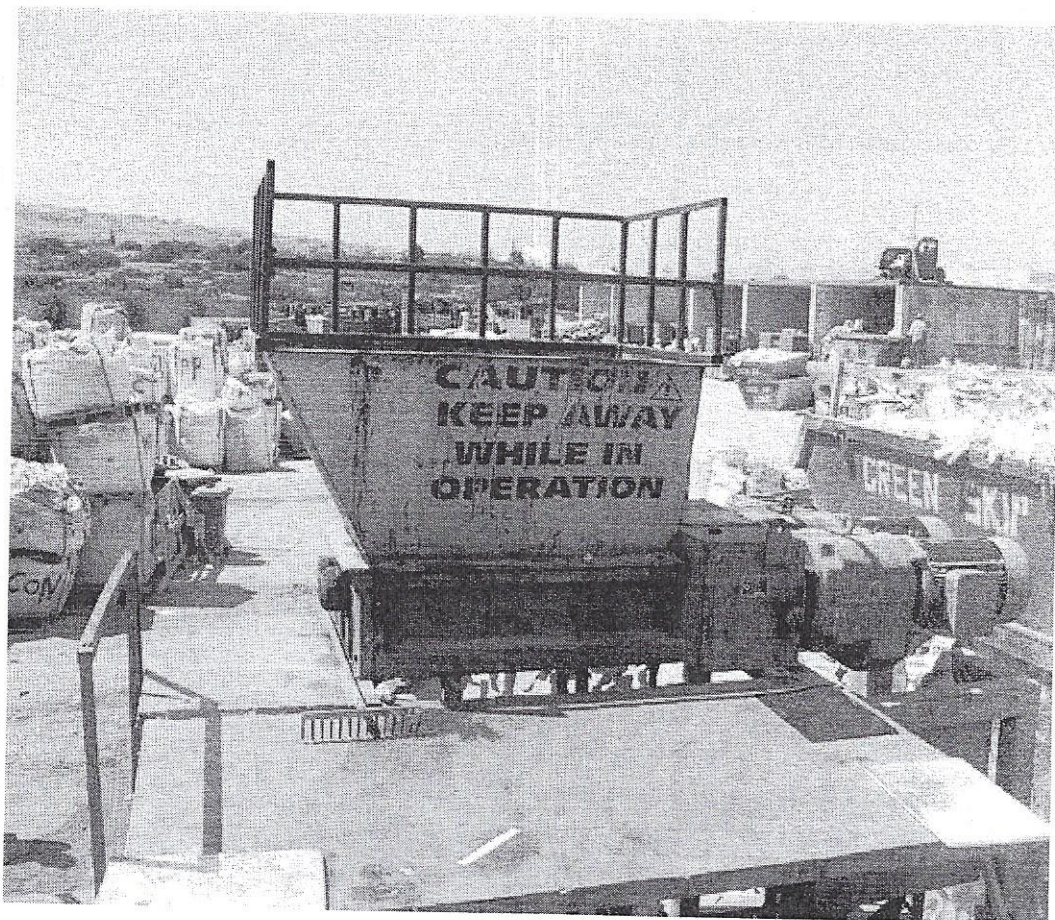


# Industrial Shredder



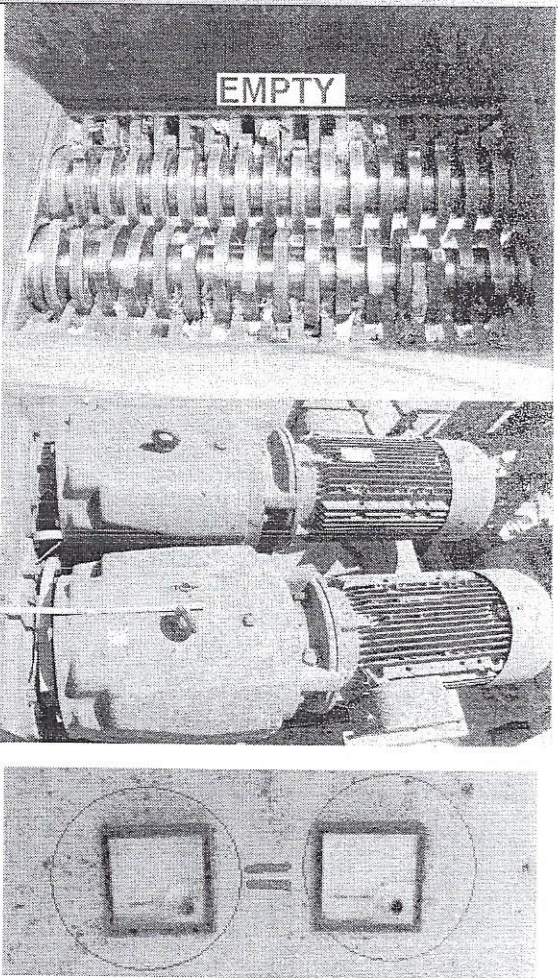
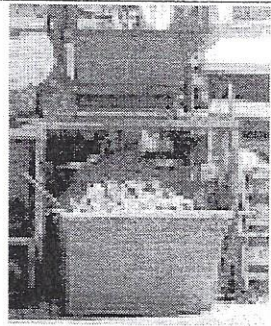


# INDUSTRIAL SHREDDER

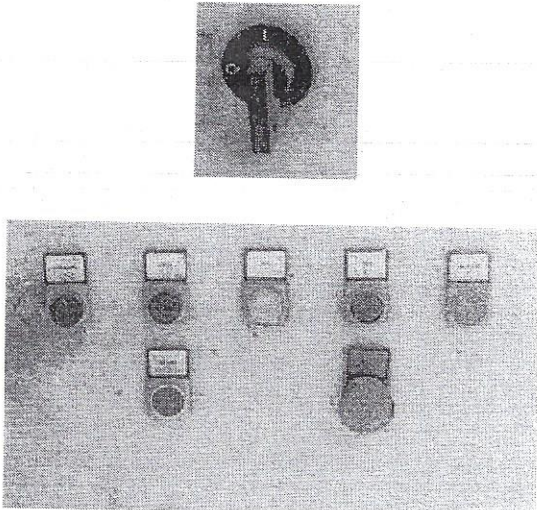
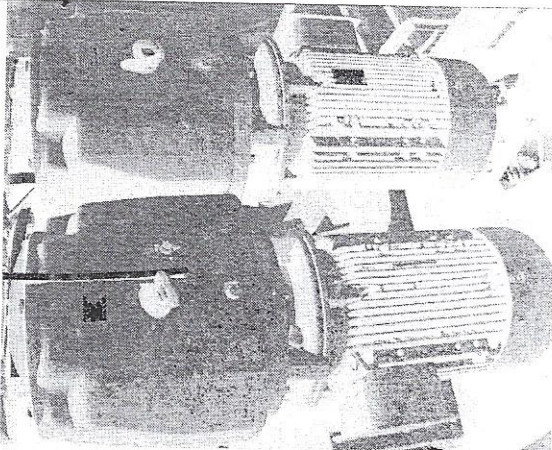
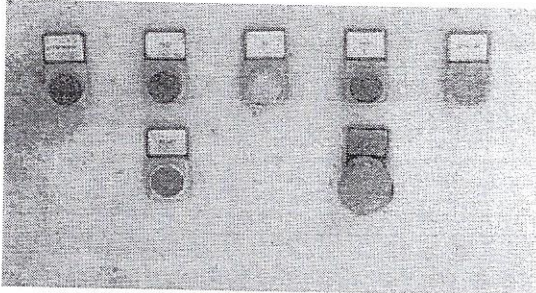




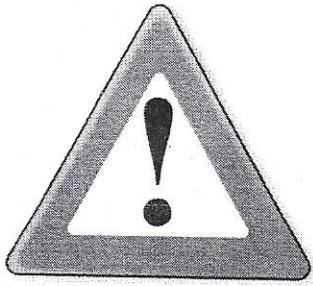
# Operating instruction

Tasks in order	Description	Picture
Checking	<ul style="list-style-type: none"> <li>• Be sure there are no foreign objects or materials in the cutting chamber, that could cause damage to the shredder on start-up</li> <li>• Check the lubricant level in the shredder gearbox, using the dip stick provided.</li> <li>• Check the oil level in the primary drive motor/gearboxes, via a removable socket set screw, located on the side of the gearbox.</li> <li>• <i>When connecting an infeed conveyor to the machine, it is recommended that the conveyor speed be variable, or only be selected after a suitable feed rate has been established. The conveyor starter should be interlocked with the shredder, through a timer, to ensure the conveyor only runs after the shredder is running forwards.</i></li> <li>• Ensure ammeters, on the panel door, are indicating equal amperage before shredding and monitor shredder under working conditions, to ensure satisfactory operation.</li> </ul>	 <p>The first photograph shows the interior of the shredder's cutting chamber, which is empty, with a label 'EMPTY' at the top. The second photograph shows the drive motor and gearbox assembly. The third photograph shows the control panel with two ammeters circled and an equals sign between them, indicating they should show equal amperage.</p>
Put a skip	Put a skip under the shredder to gather all the waste created by the machine.	 <p>The photograph shows a large metal skip or container placed directly beneath the output of the shredder to collect the shredded waste.</p>

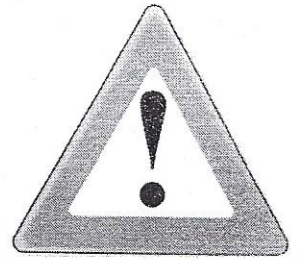


<p><b>Switch "ON"</b></p>	<ul style="list-style-type: none"> <li>• Turn isolator switch to the "ON" position. The mains "ON" indicator light should be lit. <i>If the 'on' light is not illuminated, check that no emergency stop circuit safety switches have been activated. All stop buttons are twist release. Press the start button: Start the shredder</i></li> <li>• <i>On start-up, the cam timer will cause the knives to run in reverse for a pre-set time, before stopping and going into forward when they are turning towards each other, into the center of the cutting chamber.</i></li> <li>• <i>Only begin feeding material into the hopper when the knives are rotating in the forward shredding mode.</i></li> </ul>	
<p><b>Overload protection</b></p>	<p>When the load increases on the knives, and the shredder encounters difficulty in forward rotation, it will cause reverse rotation to clear the obstruction in the cutting chamber. Then the forward rotation return. If it continues, that causes thermal overloads. If it occurs, isolate the power supply before manually clearing the cutting chamber. The contactor thermal overloads will need to be manually reset, after tripping out, by a qualified electrician.</p>	
<p><b>To Stop</b></p>	<p>To stop the Shredder use the stop push button. <i>The mains 'ON' indicator light will go out each time the panel stop button, or any external emergency stop circuit safety switches are activated.</i></p>	





## HEALTH & SAFETY



### HAVE TO BE WORN TO USE THIS MACHINE :



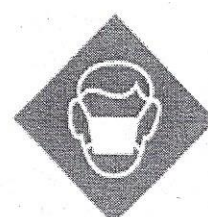
Protective  
clothing



Safety footwear



Eye protection



Dust mask



Gloves

Carry out the maintenance as mentioned in the manual's instructions.

### In case of accident or of a discovery of someone in difficulty:

- Contact Green Skip : **21422009** (from inside of the company : 111)
- In case of absence: 21422010/21422017

- 1) Call the emergency general number typing the number



**112** or for the ambulance 196.

- 2) Give the address of the place: **GREEN SKIP GROUP SERVICES LTD, Ta' I imriekeb, Ramla road, Maghtab-Naxxar, NXR 6540, MALTA**, explaining the entrance and the floor of the building where the people to save are.
- 3) Go to welcome the emergency services at the address you told them.

## **SAFETY INSTRUCTIONS :**

- **DO NOT ATTEMPT TO SHRED ANY MATERIALS OTHER THAN THOSE SPECIFIED AT THE TIME OF PURCHASE, WITHOUT FIRST CONSULTING ULSTER ENGINEERING LTD., HEREIN AFTER REFERRED TO AS UEL, OR A UEL AUTHORISED DISTRIBUTOR OR AGENT, TO PREVENT VOIDING YOUR WARRANTY AND DAMAGING THE EQUIPMENT.**
- Operating instructions should be adequately appreciated by staff, who have been trained and made aware of the proper and improper use of the machine. The authority for starting and stopping the machine should be clearly allocated and obvious.
- System layout should allow safe access and egress from the working area and adequate space should be provided to operate infeed and discharge systems safely. Suitable arrangements should be made for the safe removal of shredded materials from the machine and immediate floor area, depending on application.
- Safety devices (e.g. interlock switches) have been incorporated into the machine for the safety of operators and other personnel in the vicinity. At no time should any safety features be bypassed or rendered non-operational.
- The revolving cutters and shafts are dangerous. Never reach into any part of, or climb on, the machine while it is in operation.
- Before undertaking any repairs or maintenance work, the energy source to the machine must be cut off. Isolate the mains power supply, pull the fuses and lock the control panel isolator switch in the 'off' position. Warning signs should be displayed while the personnel are working in the risk area, to ensure the machine is not restarted unexpectedly.
- It is important that inspection and maintenance of the machine, including its electrical controls, is carried out regularly, to ensure safety standards are maintained. The electrical control panel door should only be opened by a qualified electrician.
- The shredder infeed hopper is a 'distance guard' which can contain objects ejected from the cutting chamber. The hopper must always be securely attached to the machine, so that its removal can only be facilitated by use of a tool. **THE MACHINE MUST ALWAYS BE ISOLATED IF THE HOPPER IS REMOVED.** Never use the machine unless all guards are in place, or if you have any doubt that safety devices are working properly.
- Operators should wear necessary protection equipment, suitable for the installation. Gloves should be worn if handling shredder knives, as these have sharp edges.

- The machine must not be used in a potentially explosive atmosphere, unless the necessary safety precautions have been implemented.

It should always be remembered that the machines contain moving parts and electrical components which can cause injury.

Therefore, all personnel involved in the operation of the machine must be familiar with, understand and observe these safety guidelines.

- Isolate the mains power supply, pull the fuses and lock the control panel isolator switch in the 'off' position, before carrying out any work on the shredder. Warning signs should be suitably displayed when personnel are working in the risk area.

→ <sup>GUARD</sup> Add a stick to allow an emergency stop when you touch it.

<sup>STRICTLY</sup>  
• ONLY COMPANY EMPLOYEES ARE ALLOWED  
TO RUN THE MACHINE.



# MAINTENANCE :

## 1) Daily Maintenance :

- Before start-up, check cutting chamber for foreign objects and for knife/spacer damage.
- Inspect underside of the cutting chamber for build-up of shredded residue, as large amounts of build up tend to reduce the life of cutting chamber components.
- Ensure ammeters, on the panel door, are indicating equal amperage before shredding and monitor shredder under working conditions, to ensure satisfactory operation.

## 2) Weekly Maintenance :

- Check the level and quality of the lubricant in the shredder gearbox. **Recommended Lubricant:** Q8 EREBUS MP320 GEAR OIL- 27 Ltr capacity.
- Check level and quality of the oil in the primary drive motor/gearboxes. **Recommended Lubricant:** Q8 EREBUS MP320 GEAR OIL
- Inject grease into the grease cups on the chamber black plate, as required. **Recommended Lubricant:** Q8 REMBRANDT EP2 LITHIUM GREASE
- Check the fasteners to ensure that none have worked loose, the most important being the motor mounting bolts, side finger bolts and chamber back plate bolts.

## 3) Monthly Maintenance :

- Check sharpness of knives. Refer to Section V of the instruction manual. Sharpening the Knives.



- Ensure cutting chamber assembly has not worked loose, by using a piece of brass or aluminium, to tap several knives, on each shaft, back and forth and check for movement. If slight movement is observed, tighten the assemblies using the shaft lock nuts. If excessive radial movement of any knives, about the shafts, is observed, remove several knives from the cutting chamber and check for undue wear to the shaft hexagons. Contact UEL if the shaft is excessively worn.(Knife removal and tightening is explained section V and VI of the instruction Manual of the Shredder).
- Check the electronical control panel, ensuring there are no damage/faulty components or loose wire connections. Never operate equipment with the panel door open.



**Schedule of Maintenance:**

Note down every time you use the machine and what kind of maintenance was carried out as mentioned in the manual's instructions.

[illegible]