#### WARNING PIPE THREADER SAFETY

Any piece of equipment can be dangerous if not operated properly. <u>YOU</u> are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface, or render inoperable any of the safety devices or warnings on this equipment. <u>IF</u> any safety devices or warnings have been removed, defeated, defaced, or rendered inoperable, <u>DO NOT USE THIS EQUIPMENT!!!</u>

WARNING: This threader can expose you to chemicals including naphthalene and sulfur from cutting oil products which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="https://www.P65warnings.ca.gov">www.P65warnings.ca.gov</a>

Definitions of **WARNING** and **CAUTION**: In this operation manual, warnings are divided into **WARNING** and **CAUTION**. **WARNING**: indicates actions which could possibly result in death or severe injury to the user if the machine is used incorrectly. **CAUTION**: indicates actions which could possibly result in injury to the user, or physical damage, if the machine is used incorrectly.

Even items described as **CAUTION** could have serious results under certain conditions.

Be sure to observe these warnings carefully as they greatly affect safety.

# **SAFETY CONSIDERATIONS**

# **AWARNING**

#### 1. Ensure you use the correct voltage.

- Be sure to use the voltage indicated on the name plate of the main unit or in the operation manual. If the voltage is different from the voltage indicated, overheating, smoke or fire may occur.

#### 2. Check the switch is OFF before inserting the plug into the power supply socket.

- If the plug is inserted into the power supply when the switch is ON, the machine may start operating abruptly and is liable to cause accidents. Be sure to check the switch is **OFF**.

#### 3. Be sure to avoid electric shock.

- Do not touch the plug with wet hands.
- Do not use the machine in rain or in places where moisture can easily get into the machine.
- Be sure to ground the machine to avoid electric shock.

#### 4. Take notice of conditions at the work site.

- Do not use the machine in rain, humid or damp places, or places where moisture can easily get into the machine.

Humidity will lower insulation of the motor and cause electric shock.

- Do not use close to flammable fluids or gases, such as gasoline and thinner. Fire or explosion might occur.

#### 5. Use designated accessories and attachments.

- Do not use accessories and attachments other than those designated in the operation manual or our catalogues. Accidents or injuries might result.

#### 6. In the following cases, turn the main unit OFF and pull the plug out of the power supply socket.

- When the machine is not in use or parts are changed, repaired, cleaned or inspected.
- When accessories are changed.
- When hazards are expected (including electric power failure).

If the machine is plugged in, it may start operation unexpectedly, causing accidents.

#### 7. If any abnormality is noticed, stop operation immediately.

- If the machine does not operate smoothly, or abnormalities such as unusual odors, vibration or noise are detected, stop operating the machine immediately.
- Check symptoms against the items in the section entitled, "Troubleshooting" at the end of this manual and observe the corresponding instructions. If the machine is used continuously, overheating, smoke or fire might occur, causing accident or injury.
- If overheating or smoke from the unit occurs, do not attempt an overhaul yourself but ask for an inspection and repair.

#### 8. Keep the work site clean.

- Ensure you keep the work table and the work site in good order and well lit.
- A cluttered site and work table are liable to cause accidents.

#### 9. Do not let unauthorized personnel near the machine.

- Do not let anyone other than authorized personnel touch the main unit or the power cord, or operate the machine.
- Do not let anyone other than authorized personnel enter the work site, especially children. Injuries might occur.
- To ensure safe and efficient operation, use within the capacity of the main unit. Applying force may not only cause damage to the product but could also result in accident or injury.
- Do not use the machine in any way that could cause the motor to lock, or cause smoke or fire.

# 10. Do not use the machine with excessive force.

- Do not use the machine on pipe not specified in this manual. Using the machine for any purpose other than threading pipes, such as fastening the pipe to a joint etc. will not only damage the machine and/or motor but could also lead to accident or injury.

#### 11. Use the machine only for its designated purpose.

#### 12. No loose clothing.

- Do not wear neckties, clothes with unbuttoned sleeves, loose clothing, accessories such as necklaces, etc.
- When working outdoors, it is recommended that you wear rubber gloves and non-slip shoes. Slippery gloves and shoes are liable to cause injuries. Wear safety caps, safety shoes, etc. according to the working environment.

- 13. Keep a firm footing and balance to avoid falling over and injuring yourself.
- **14. Remove tools such as wrenches.** Before turning the switch ON, check that tools used for inspection and adjustment have been removed.

If you use the machine when tools are left inside it, accidents and injuries may occur.

#### 15. Operate the unit with great care.

- Always work with great attention to how you handle and operate the machine and to the surrounding conditions. Carelessness may result in accident or injury.

#### 16. Do not handle the power cord carelessly.

- Do not carry the product by the cord, or pull the plug out of the socket with the cord.
- Do not place the cord near heated objects, fats & oils, cutters and objects with sharp edges.
- Take care not to tread on the cord, pull the cord or apply unnecessary force resulting in damage to the cord.

#### 17. Perform careful maintenance daily.

- When changing accessories and parts, follow the instruction manual.

Periodically inspect the power supply cord and plug. If damaged, ask your distributor or our sales department for repairs.

- If an extension cord is used, inspect the cord periodically and, if damaged, replace it.
- If extension cords are used outdoors, use extension cords designed for outdoor use to prevent electric shock, short-circuit or fire.
- Keep parts used for gripping dry and clean, and free of oil and grease. If your hands slip, you may be injured.

### 18. Check for damaged parts.

- Before using the machine, carefully check for damage to the protective cover and other parts, and check both normal operation and specified functions.
- Check for any abnormalities such as in adjustment of movable parts, tightening, damage to and installation of parts and all parts affecting operation.
- Do not use machines with a damaged power cord or plug. Doing so may cause electric shock or a short, circuit leading to fire.
- Do not use machines if the stop and start switches do not work properly.

In replacing or repairing a broken protective cover and other parts, follow the operation manual.

If no instructions are specified in the operation manual, ask your distributor or our sales department for repairs.

#### 19. Store carefully when the machine is not in use.

- Store in a dry place away from children and locked with a key.

#### 20. For overhaul and repair of the machine, ask an appointed REX agent.

- Our products comply with corresponding safety standards. Do not remodel.

# **PRECAUTIONS**

# **Threading**

#### **A WARNING**

- **1. Take care when handling the blades.** To prevent accidents and injuries, take special care when handling blades such as dies, reamers, pipe cutters and carbide cutters.
- 2. Do not put your hands or face near rotating parts when the machine is in use. You could get caught in rotating parts or hit by scrap, resulting in accident or injury.
- **3. Do not wear gloves when operating the machine.** Gloves may get caught in rotating parts or blades, resulting in accident or injury.
- **4. Do not leave the machine while it is still rotating.** Others may be injured.
- 5. If you accidentally drop or hit the machine, carefully check for damage, cracks, deformities or any abnormalities.
- If abnormalities are found, ask your distributor or our sales department for an inspection and/or repair.
- Continuing to use the machine when damaged will likely lead to mechanical problems, accident or injury.
- **6. Do not touch the dies or scrap just after threading.** The dies and scrap can become very hot just after threading; touching them could burn or injure you.

#### 7. Die head and dies

- Use the die head and dies that are appropriate for the type and diameter of pipe to be processed.
- When threading stainless steel pipes use pipes with a wall thickness equivalent to Schedule 40 or more.
- Make sure the die head is mounted correctly on the carriage. Be careful not to get your fingers caught.
- Before you start threading, set the die head in the threading position, switch ON, and check that the oil is flowing correctly over the dies. Failing to do so could result in an imperfect thread, damage to the machine, accident or injury.

#### 8. Be sure to check the starting position before threading.

- When threading, start with the carriage to the right of the red line on the front support bar (as viewed from the working position). If the carriage is not in the correct starting position, the die head will bang into the main unit while threading, causing mechanical problems, accident or injury.

#### 9. Use the pipe support when threading long pipes.

- When threading long pipes, use a pipe support to prevent both vibration due to warping while the pipe is rotating and instability of the machine due to the weight of the workpiece.

If a pipe support is not used, threading cannot be performed correctly and problems with the machine, accident or injury may occur.

**10. Be sure to attach accessories according to the operation manual.** - Attaching accessories incorrectly may cause the machine to topple over resulting in accident or injury.

# Reaming

# **AWARNING**

The reamer blade is very sharp; to prevent injury, avoid touching it with bare hands.

#### **PRECAUTIONS**

# **Cutting**

- Using the Pipe Cutter

#### A CAUTION

When cutting pipes, turn the cutter handle no faster than 1/2 rotation per rotation of the pipe.

- If the cutter handle is turned too quickly when engaging the pipe, it can distort the shape of the pipe and may not make a proper thread.

# Handling pipe threading oil

# **AWARNING**

- 1. Wear goggles
  - Touching the eyes with oil may cause inflammation.
  - Emergency treatment: Wash eyes with clean water for about 15 minutes and seek medical attention.
- 2. Wear protective gloves.
  - If oil comes into contact with the skin, it may cause inflammation.
- Emergency treatment: Carefully wash the affected part with soap and water.
- 3. Take care not to breathe in oil mist or steam.
- Breathing in oil mist or steam may cause nausea.

Emergency treatment: Carry the person out into the fresh air, cover them with a blanket, keep them warm and relaxed, and seek medical attention.

- 4. Do not thin the oil or mix it with threading oil produced by other companies.
- 5. If water gets mixed in with the threading oil and the color changes to a milky white or the oil deteriorates excessively resulting in a poor finish, change to fresh oil promptly.
- 6. Do not drink the oil
- Drinking the oil may cause diarrhea or vomiting
- Emergency treatment: Seek medical attention immediately, without forcing the person to vomit.
- 7. Do not place the oil where it is easily reached by small children.
- 8. Be especially careful of fire.
- 9. Storage
- Always close the lid after use to prevent the oil from being contaminated by dust, water or other foreign bodies.
- Store in a dark place away from direct sunlight.

# When using threading oil for water mains pipes and water-immiscible cutting fluid for threading

#### **A** CAUTION

- 1. Handling waste oil and waste cans
- Handle materials according to local laws and regulations regarding waste disposal and cleaning.
- If uncertain, consult your distributor.
- 2. Drums (50gallons)
- To prevent them from bursting, do not apply pressure to empty drums.
- Do not weld, heat, drill or cut the drums or they may burst into fire from the residue they contain.

# When using threading oil for stainless steel pipes

# **AWARNING**

- 1. Do not burn off the oil.
- Oil contains chlorine compounds and generates toxic gas when burnt.

In the case of an emergency in which someone has inhaled such toxic gases, carry the affected person out into the fresh air and seek medical attention.

- 2. Disposal of waste oil and cans.
- Follow all laws and regulations related to the disposal and cleaning of waste materials. When uncertain, consult your distributor.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **IF** there is any doubt as to the operation or safety of the equipment, **DO NOT USE!! CALLA TOOL SHED IMMEDIATELY!!!** 

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH

#### **Operating the Die Head**

#### Manual-open die head

(There is no need to remove the die head from the machine)

#### Removing the dies

- Knock the eccentric handle to the right, loosen the lever nut and push the eccentric handle over to the far left. (Fig. 6) In this position, dies No. 3 and No. 4 can then be removed.
- Raise the die head and you can remove dies No. 1 and No. 2.

# Knock to the right Loosen Lever nut Fig. 6

# Replacing the dies

- Ensure the number on the dies corresponds with the number of the slot on the die head. Insert each die until the notch is engaged. (Fig. 7)
- Pull the eccentric handle back in the opposite direction, left of the arrow; (Fig. 6) The dies will move towards the centre of die head.
- \* If the eccentric handle does not move into position properly, move the dies up and down a little while pushing and pulling the eccentric handle gently and try again .
- \* Dies are made as a matched set of four, so be sure to use them as such and replace them all at the same time. Do not attempt to replace just one or two of the set, as cutting will be adversely affected.

