

# Guess the Picture



**A**



**B**



**C**

# REAMING

Procedures on How to Ream  
Rigid Steel Conduit

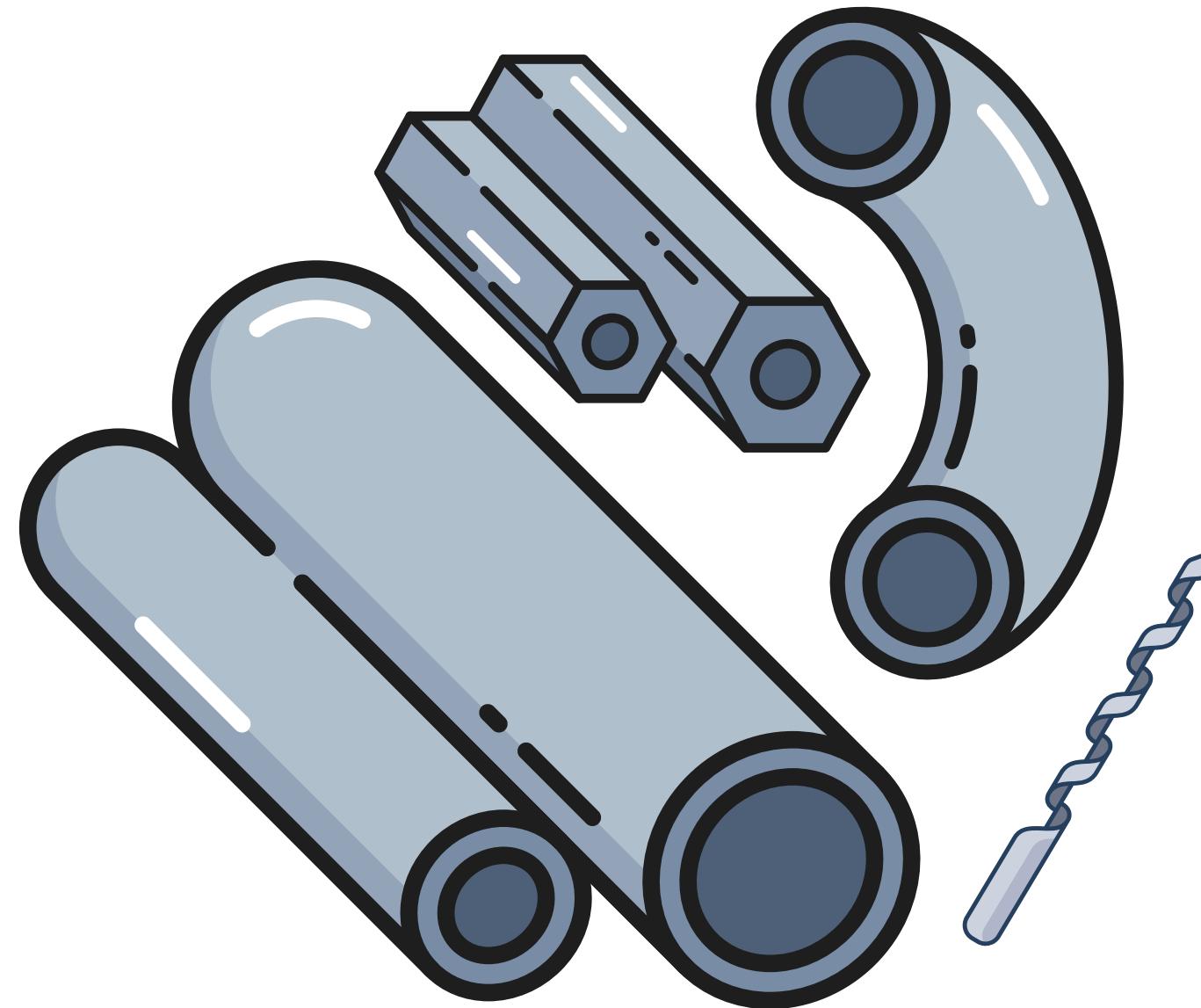


# Objectives:

- Identify tools used in reaming Rigid Steel Conduit
- Determine the procedures on how to ream RSC properly
- Recognize the importance of reaming rigid steel conduit

# What is Reaming?

**Reaming** – is the process of removing excess burrs in metallic conduit to prevent laceration of conductor's insulator.



# **What are the tools used in reaming a Rigid Steel Conduit?**

**HAND REAMER**

**A hand reamer is intended for manual reaming and is typically equipped with a handle.**

**MACHINE REAMER**

**Machine reamers have a small lead in and spiral flutes have an advantage of clearing the swarf automatically.**

# Types of Reamer

## STRAIGHT-FLUTE REAMER



General purpose, suited for reaming most metals

## TAPER REAMER



Tapered holes

## HELICAL-FLUTE SHELL REAMER



Harder materials, large diameter, and shallow depth

# Types of Reamer

**MULTIDIAMETER  
REAMER**



Multidiameter holes and  
hole alignment

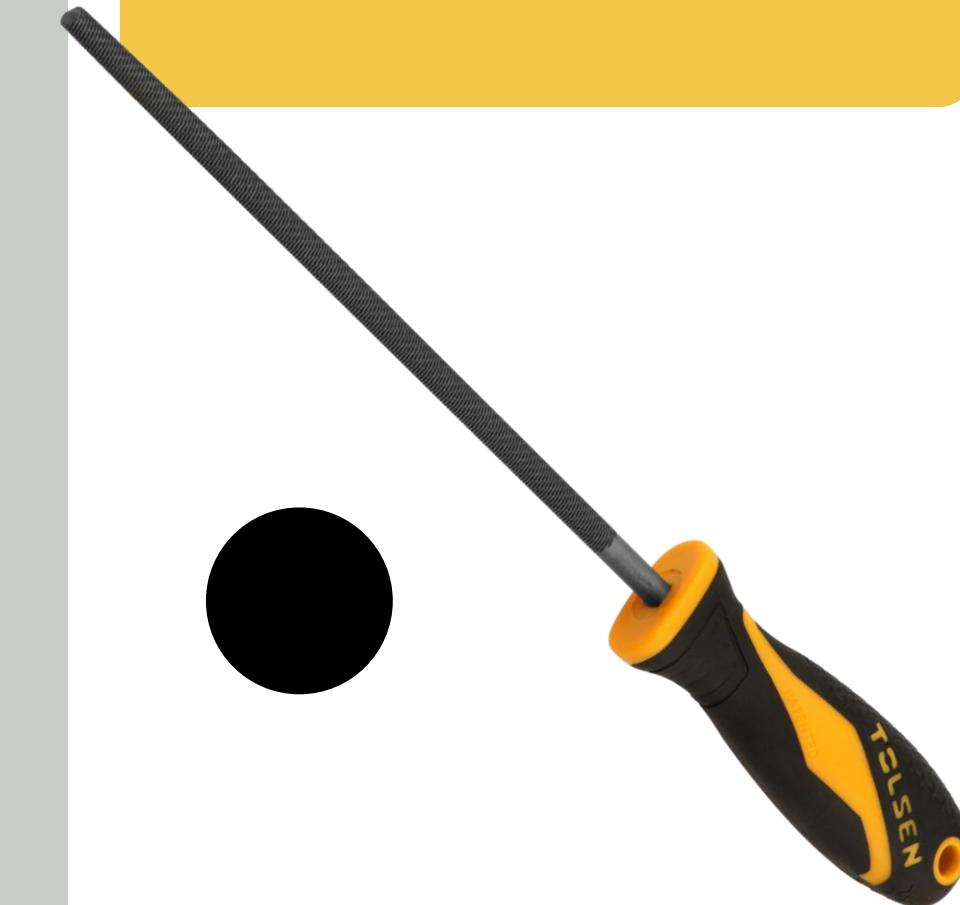
**INSERT-BLADE  
ADJUSTABLE  
REAMER**



Adjustable over large  
range of hole sized

# Types of File

**ROUND FILE**



**TRIANGLE FILE**



A file with a circular cross section; used to file the inside of holes.

Sharpening serrated edges and cleaning up angular corners.

# Types of File

**HALF ROUND FILE**



Rounding out or  
enlarging circular  
openings

**EQUALING FILE**



Used primarily for filing  
slots and corners



# **How to ream a Rigid Steel Conduit properly?**

# **STEP 1**

Prepare the necessary tools, materials, equipment, and PPE in performing the activity.



## **STEP 2**

**Wear appropriate  
Personal Protective  
Equipment (PPE).**



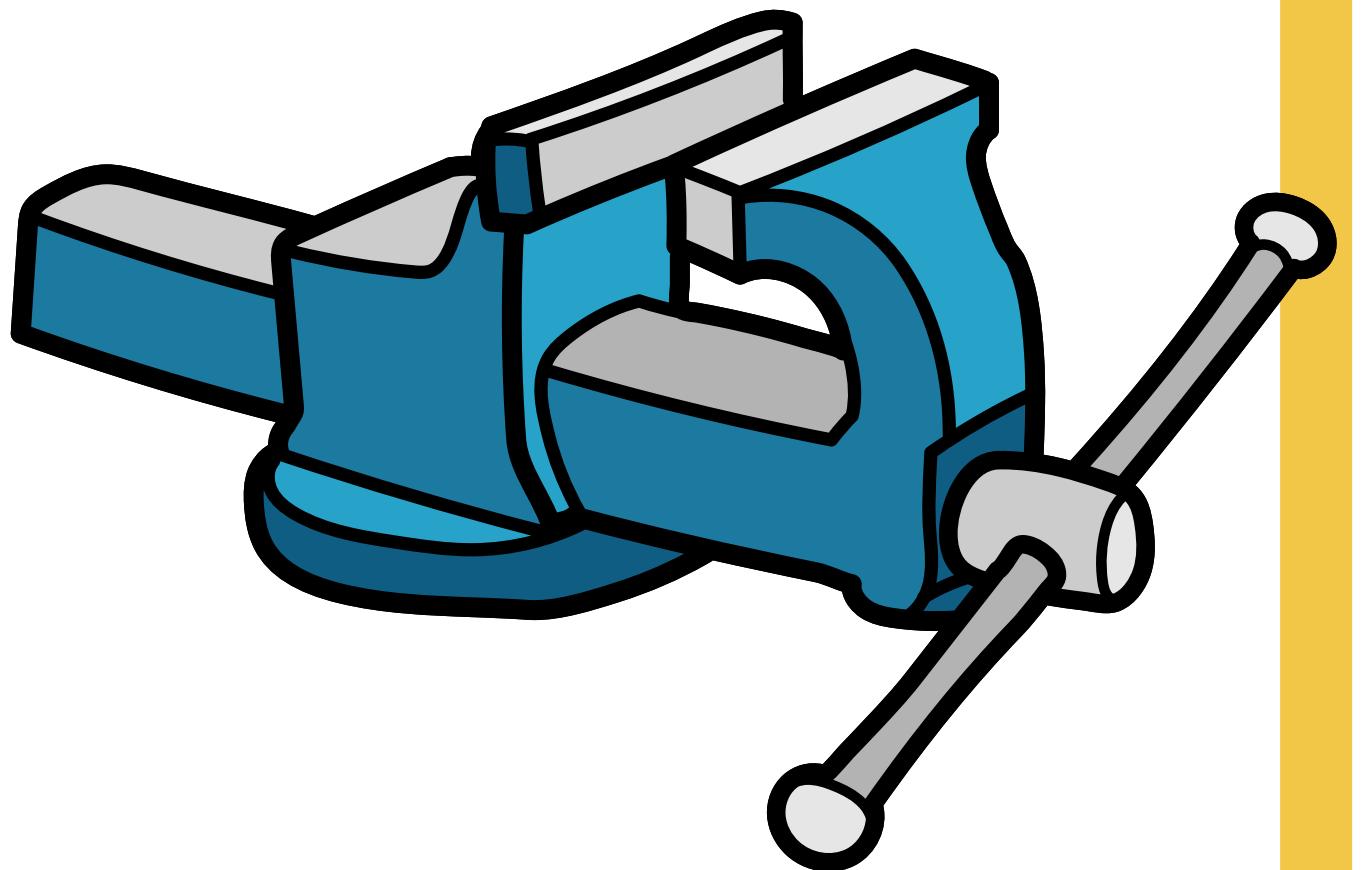
## **STEP 3**

**Measure and mark the  
location to be cut.**



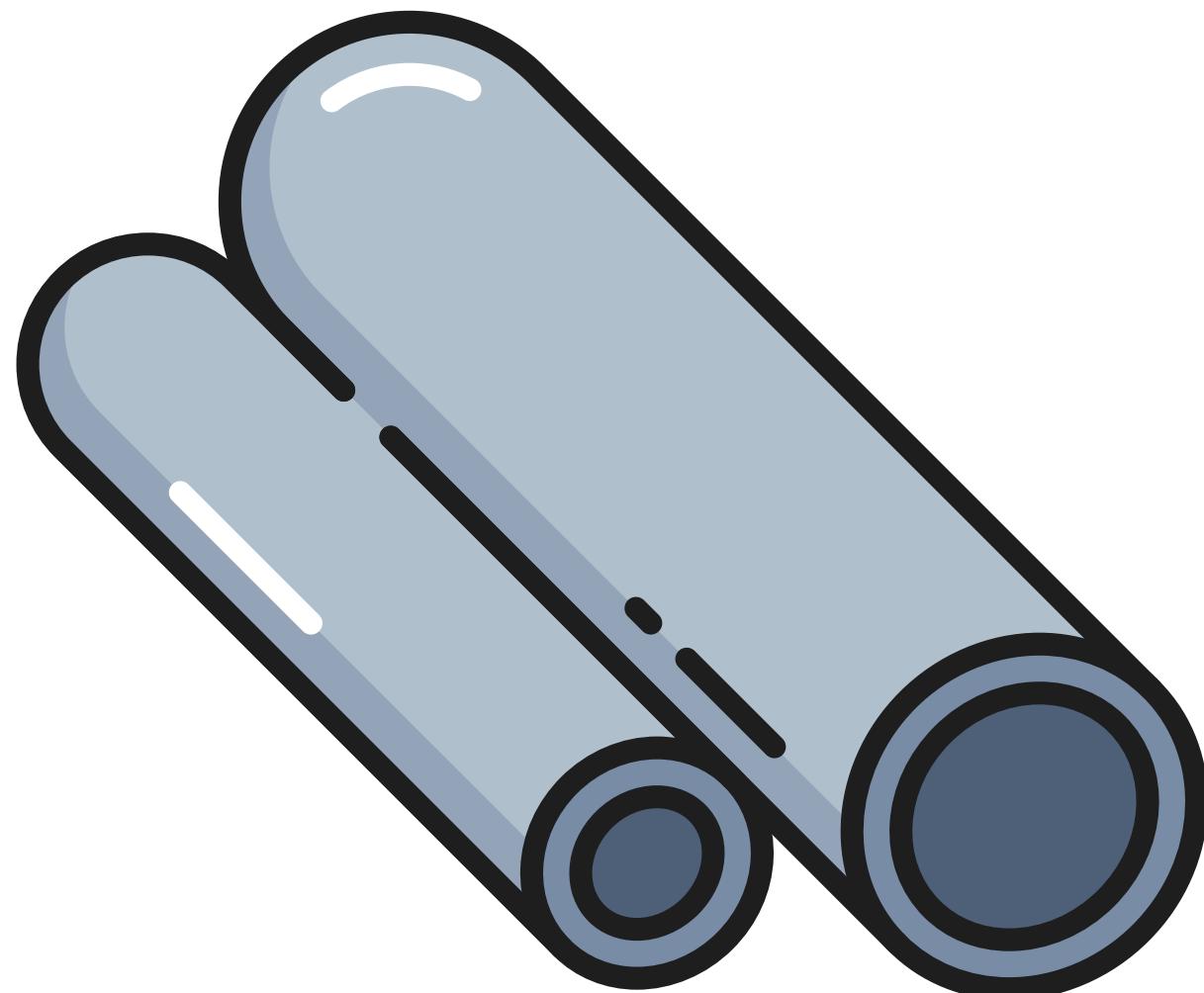
## STEP 4

Place the pipe into a bench vise to hold it firmly and cut the conduit using cutting tools.



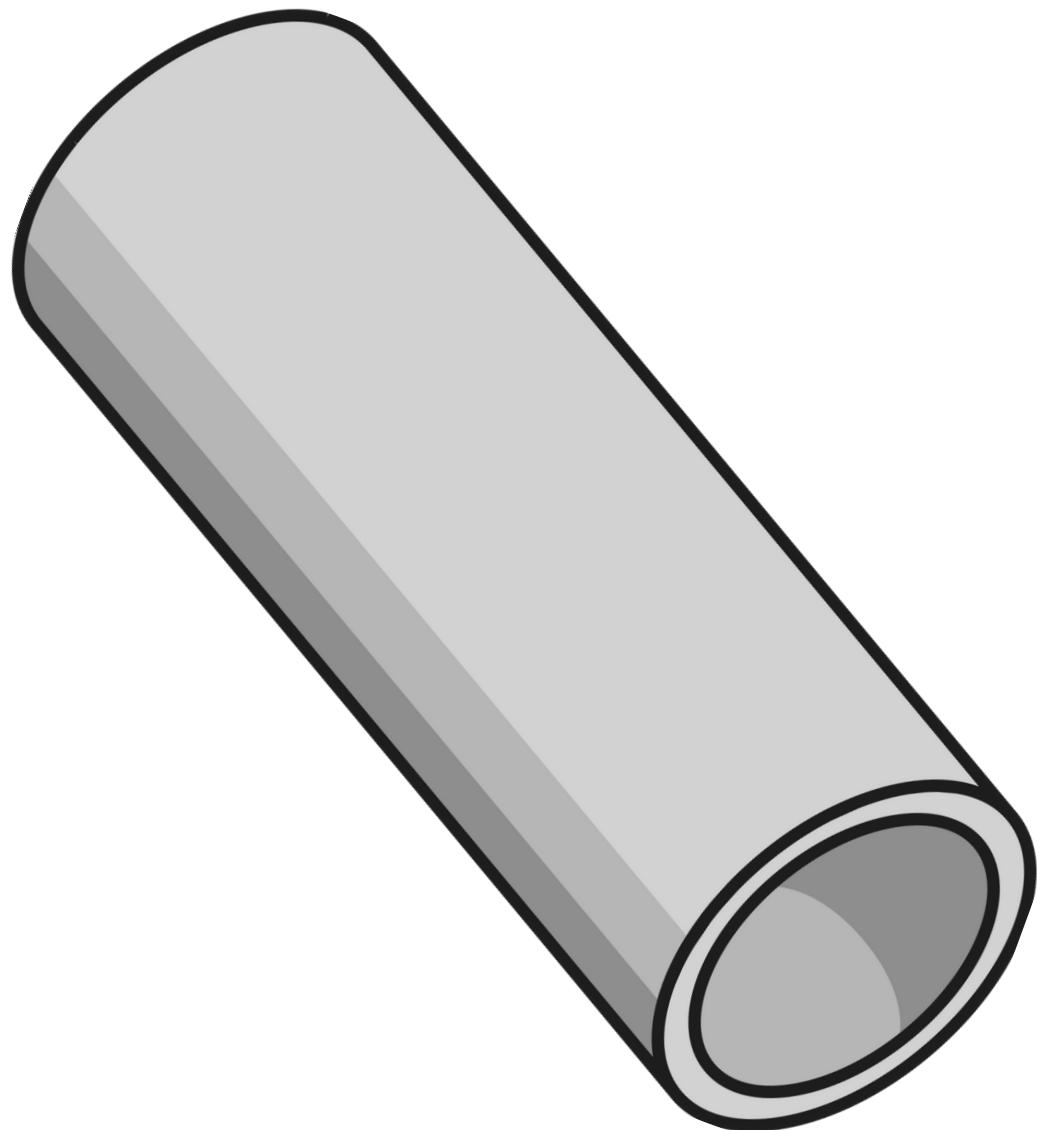
## **STEP 5**

Ream the newly cut conduit using a flute reamer or file.



# **STEP 6**

Check if the end of the pipe is smooth.



## **STEP 7**

Observe good housekeeping.



# **Why is it important to ream a Rigid Steel Conduit?**

**Pipe reamers are used for a variety of reasons, such as:**

- To enlarge the diameter of a pipe
- To smooth the interior of a pipe
- To remove debris from a pipe
- To clean a pipe

# QUIZ



# ACTIVITY

Prepare a 200CM conduit and ream it using the procedure.

CRITERIA	POINTS
Cleanliness	5
Measurement	4
Use of tool	3
Use of PPE	3
Speed	3
Housekeeping	2
<b>TOTAL</b>	<b>20</b>

# Assignment

## Advanced Reading

### Intermediate Metallic Tubing (IMT)

- What is Intermediate Metallic Tubing (IMT)?
- What is Intermediate Metallic Tubing (IMT) used for?
- What are the advantages of IMT?

