

LESSON PLAN

Date/Time: December 01, 2023/7:00AM-8:00AM

			Duration
1. OBJECTIVES			
At end of the session, the students are expected to:			
	1.1.	Identify tools used in reaming Rigid Steel Conduit	
	1.2.	Determine the procedures on how to ream RSC properly	
	1.3.	Recognize the importance of reaming rigid steel conduit	
2. CONTENT			
	2.1. Topic	Procedures on How to Ream Rigid Steel Conduit	
	2.2. Materials	Teacher’s laptop, projector, PowerPoint Presentation, Rigid Steel Conduit, Hacksaw, Reamer	
	2.3. Reference/s	<ul style="list-style-type: none">Electrical Installation and Maintenance Module 2https://www.theprocesspiping.com/reducers-in-processpiping/#:~:text=A%20reducer%20is%20a%20kind,piping%20of%20a%20different%20size.https://en.wikipedia.org/wiki/Reamer	
3. PROCEDURES			
	3.1. Preparatory Activity		
	3.1. Daily Routine		
	3.1.1. Classroom Management		1 min.
	3.1.2. Prayer/Greetings		1 min.
	3.1.3. Checking of attendance, ID’s & Uniform		1 min.
	3.2. Developmental Activity		
	3.2.1. Motivation		
	Title	Guess what	3 mins
	Mechanics	The teacher will show pictures of reaming tools, and the students will identify if it is hand reamer or a machine reamer.	
			30 mins.
	3.2.2. Lesson Proper		
	Teacher’s Activity		Student’s Activity
	Good morning class! Our topic for today is all about reaming.		
	Does anyone of you already know about reaming?		
Okay, what is reaming?		Yes, sir.	
		Reaming involves removing excess burrs in metallic conduit to prevent laceration of the conductor’s insulator.	

Excellent! Now, let's read about the tools used in reaming a Rigid Steel Conduit.		
Good. Now, let's focus on hand reamers. What are they designed for, and why do they have a longer taper?	(Reading)	
Hand reamers are for manual reaming, and they have a longer taper to compensate for the difficulty of starting a hole by hand power.	(Reading)	
Now, continue to the next section and read about machine reamers.	(Reading)	
Thank you. Let's focus on one type, the Straight-flute reamer. What is it suited for?	It's a general-purpose reamer suited for reaming most metals.	
Excellent. Keep going, read about the file.	(Reading)	
Great. Now, why would we use a file?	Sir, a file is used to remove fine amounts of material from a workpiece.	
Perfect! Now we proceed on how to ream a Rigid Steel Conduit properly.		
STEP 1: Prepare the necessary tools, materials, equipment, and PPE in performing the activity.		
What are the PPE we can use in performing this kind of activity?	Sir. We can use gloves, goggles, and safety shoes.	
Very good!		
STEP 2: Wear appropriate Personal Protective Equipment (PPE).		

<p>STEP 3: Measure and mark the location to be cut.</p> <p>What are the marking materials we can use?</p> <p>Correct!</p> <p>STEP 4: Place the pipe into a bench vise to hold it firmly and cut the conduit using cutting tools.</p> <p>STEP 5: Ream the newly cut conduit using a flute reamer or file.</p> <p>STEP 6: Check if the end of the pipe is smooth.</p> <p>STEP 7: Observe good housekeeping.</p> <p>After working, we need to clean our place.</p> <p>That is how to ream a Rigid Steel Conduit properly.</p> <p>Class, why is it important to ream a Rigid Steel Conduit?</p> <p>Very good!</p> <p>In addition the importance of reaming a rigid steel conduit is the following:</p> <ul style="list-style-type: none"> • To enlarge the diameter of a pipe • To smooth the interior of a pipe • To remove debris from a pipe <p>Any questions class? Clarification?</p> <p>Okay, class. Thank you for listening.</p>	<p>Sir. We can use a pencil or a marker.</p> <p>Amazing!</p> <p>Okay, sir.</p> <p>To make a metal pipe clean, sir.</p> <p>None.</p> <p>Thank you, sir!</p>	
--	--	--

	3.2.3. Application	10mins
	<p>Directions: Write T if the statement is true, and F if the statement is false. Write your answer on the space provided before the number</p> <p>_____ 1. File or reamer is the tool used to remove excess burrs in metallic pipe.</p> <p>_____ 2. The purpose of reaming is to make thread on the pipe.</p> <p>_____ 3. The first thing to do is cut the metal pipe before reaming.</p> <p>_____ 4. In performing reaming in metallic conduit, it is important to wear appropriate PPE.</p> <p>_____ 5. In holding conduit to be cut, it is safer to hold it using our hands.</p> <p>_____ 6. Wearing of gloves will prevent penetration of excess burrs in our eyes.</p> <p>_____ 7. Wearing of PPE cannot protect individual against risk at work.</p> <p>_____ 8. It is necessary to prepare all the materials and tools needed in certain task or job.</p> <p>_____ 9. It's important to measure also the desired length of conduit to be cut to prevent wasting of material.</p> <p>_____ 10. Reaming is a method of removing sharp edges in conduit being cut.</p>	
	3.2.4. Generalization	8mins
	<p>ARRANGE IT</p> <p>Direction: The statement below are the procedures in reaming metallic conduit. Arrange the procedures by putting numbers.</p> <p>1. _____ Check if the end of the pipe is smooth.</p> <p>2. _____ Place the pipe into bench vice to hold firmly and cut the conduit using cutting tools.</p> <p>3. _____ Measure and mark the location to be cut.</p> <p>4. _____ Observe good housekeeping.</p> <p>5. _____ Wear appropriate Personal Protective Equipment (PPE).</p> <p>6. _____ Ream the newly cut conduit using flute reamer or file.</p> <p>7. _____ Prepare the necessary tools, materials, equipment and PPE in performing the activity.</p>	
	3.2.5. Evaluation	5mins
	<p>ESSAY</p> <p>Direction: Explain briefly the following topics.</p> <p>1. Why you should know how to perform reaming in metallic conduit. And what are the possible effects when metallic conduit could not be ream?</p> <p>2. Why should you wear appropriate PPE in performing task? Relate this question in our present situation (Pandemic)</p>	

4. ASSIGNMENT		1min.
	4.1. Advanced Reading	
	Intermediate Metallic Tubing (IMT) <ul style="list-style-type: none">• What is Intermediate Metallic Tubing (IMT)?• What is Intermediate Metallic Tubing (IMT) used for?• What are the advantages of IMT?	

Prepared by:

Luigi Miguel S. Maravillas
Student Teacher

Checked by:

Ms. Maria Cedei L. Abawag
TLE Coordinator

Mr. Sunny Diche
Cooperating Teacher