	<i>Quality Committee</i> Approved By: Jerry Babb Engineering Manager	Effective Date 12-05-13	W.I. No. EWI-013
		Revision No. 1	Page 1 of 4
<b>Work Center:</b>	INSPECTION		
<b>Procedure:</b>	Double Shoulder Refacing Tool Operation		

The following work instructions are used operate the Double-Shoulder Refacer:


The following tools are required to reface double shoulder connections using the Double-Shoulder Refacing Tool (Pin and Box).

1. Complete Double Shoulder Pin and Box Refacer tools
2. Adhesive backed sandpaper (36 GRIT)
3. Large Angle Grinder (9" - 4 H.P. - 5000RPM)
4. Degreaser
5. Wire Flue Brush (nylon or steel, to clean ID)



Assembled components

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	<b>Quality Committee</b> Approved By: Jerry Babb Engineering Manager	Effective Date 12-05-13	W.I. No. EWI-013
		Revision No. 1	Page 2 of 4
<b>Work Center:</b>	INSPECTION		
<b>Procedure:</b>	Double Shoulder Refacing Tool Operation		

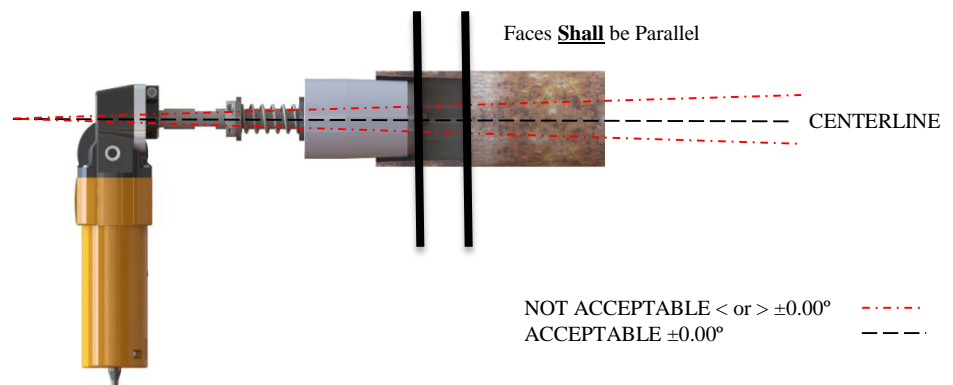
The connection must be cleaned and prepped before refacing can begin. The connection must also be inspected to specific connection requirements to ensure the refacing is required. If a connection is within tolerance, there may be no need for refacing.

### Refacing Procedure

- The connection to be refaced should be positioned on a stable rack
- Any thread defects should be removed
- The mandrel is inserted into the box connection until the tool bottoms out and is free of any excess movement/wobbling. The tool mandrel, when inserted, should not move, or rock, freely (if so, it should be reinserted) \*\*\***Do Not** Reface connection if mandrel is rocked to any one side\*\*\*
- Forward pressure is applied axially to the tool, to engage the sandpaper onto the internal face
- The pressure applied should be minimal and just slight enough to remove any excess material needed to meet inspection requirements.


Notes:

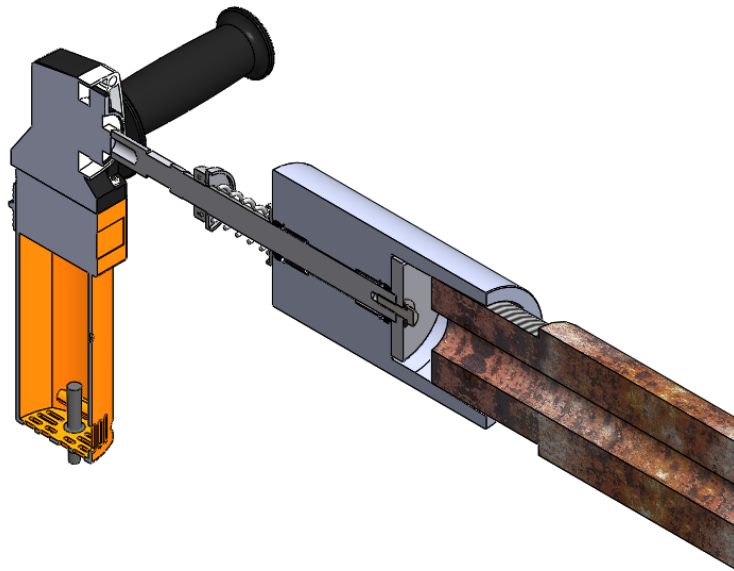
1. Engage tool lightly and briefly inspected often and repeated as necessary
2. Verify sanding surface wear area has no tears or extrusions
3. Ensure there is no trash/debris in or on connection/face
4. If tool is “wobbling” or has excessive vibration or noise, extract , inspect threads for debris, clean as necessary, and reinsert
5. Sanding surface and face shall be parallel
6. “Walking” the tool in the connection against the face while rolling across pipe rack is an acceptable practice and will assist with an evenly refaced surface



### SIDE VIEW (CONNECTION CUT AWAY)


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	<i>Quality Committee</i> Approved By: Jerry Babb Engineering Manager	Effective Date 12-05-13	W.I. No. EWI-013
		Revision No. 1	Page 3 of 4
<b>Work Center:</b>	INSPECTION		
<b>Procedure:</b>	Double Shoulder Refacing Tool Operation		



**Cut away view of pin side refacing**

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 <b>HUB CITY</b> <b>IRON WORKS</b>	<i>Quality Committee</i> Approved By: Jerry Babb Engineering Manager	Effective Date 12-05-13	W.I. No. EWI-013
		Revision No. 1	Page 4 of 4
<b>Work Center:</b>	INSPECTION		
<b>Procedure:</b>	Double Shoulder Refacing Tool Operation		

## TROUBLESHOOTING:

<u>ISSUE</u>	<u>POSSIBLE CAUSE</u>	<u>SOLUTION</u>
<b>Tool will not fit in/on connection</b>	Wrong tool	Check connection size against mandrel size
	Connection damage	Inspect and repair
<b>Excessive vibration/wobbling</b>	Tool not centered on axis	Extract tool and reinsert
	Wrong tool size	Check connection size against mandrel size
	Damaged Tool	Check for damage/excessive wear
	Connection damage	Inspect and repair
<b>Not engaging torque shoulder</b>	Not enough forward axial pressure applied	Apply additional axial (forward) pressure
<b>Not engaging pin face</b>	Not enough forward axial pressure applied	Apply additional axial (forward) pressure
<b>Gouging</b>	Tool off center axis	Extract tool, inspect and reinsert
<b>Damaging Threads</b>	Tool inserted incorrectly	Extract tool and reinsert
<b>Grinder inoperable</b>	Power tool power source out	Contact electrician
<b>Sandpaper not adhering</b>	Adhesive buildup	Use proper solvent and remove all residue
<b>Sandpaper excessive wear</b>	Excessive pressure applied	Apply slight, frequent, brief pressure
<b>Sanding disk not retracting</b>	Spring worn	Replace spring
<b>Sanding disk excessive wear</b>	Improper insertion	Ensure tool is inserted correctly
	Tool engaged inside connection	Ensure tool is inserted fully before operation

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