



Document Number

WI-2015

Revision

A

Date

10-Mar-15

ProTec Document Number: _____

DEFENDER INSTALATION

Tool Part Number: _____

Tool Serial Number: _____

Details:

Contract No.: _____

Client: _____

Onsite Coordinator: _____



**CORROSION
PREVENTION
SPECIALIST**

Document Number
WI-2015

Revision
A

Date
10-Mar-15

Point	Description	Checked OK
1	Pre-job preparation	
1.1	Ensure that a permit to work is raised to cover the scope of work to be carried out if required	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
1.2	Ensure that the client is aware of the scope of work to be carried out and ensure that any JSA that may be needed is performed.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
1.3	Ensure that the work space to be used for application is adequate size and covered from the weather.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
2	Initial inspection and documentation of tool (item)	
2.1	Ensure tool is dry and free of grease and oil residue. If tool is wet, dry using a shop cloth. The tool will have to be completely dry before it can be sealed.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
2.2	If tool has thread protectors, remove one completely. Using the humidity meter, check the humidity level in the tool. Record reading below.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments Humidity Level: _____	
3	Record Tool information	
3.1	Serial Number: _____ Part Number: _____ Thread type: _____ Tool OD: _____ PUPS: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
3.2	Photo Record: All photos are to be attached to this document. Photos are to have the <i>Document Number</i> as the suffix. 1) Photo of serial and part info. 2) Photo of tool with pups if installed. 3) Photo of threads, both ends.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	

Point	Description	Checked OK
4	Material Preperation	
1	<p>Measure tool to be protected. Length and OD. Use the Largest OD if multiple sizes. Calculate material required: Tool OD x 3.14 + 4 inches; round this up to nearest inch. This is the required width of material needed to cover the tool with the allowance of one re-seal. For tool length: Tool Length plus 18".</p> <p>OD _____ x 3.14 + 4 = _____ width Length of tool _____ + 1.5 = _____ Length.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
Point	Description	Checked OK
4	Cut Material	
1.1	On a flat clean surface, cut material using measurments aquired in step 4-1. Take every effort not to puncture material. Once cut measure material again to verify the corect cut.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
Point	Description	Checked OK
5	Seal Tool	
1	Lay material out on a long flat surface. Carfully lift tool onto material. NOTE: if tool has sharp or rough edges a buffer material will need to be installed prior to sealing tool.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
Point	Description	Checked OK
5	Seal Tool	
1.1	Lay out the nitrogen tub the entire lenth of the material, or until about 2 feet fom the end of the tool. Mkae sure that there are holes in the thread caps. If not, then using a drill make 3, holes in each cap at least 3/8 inch in diameter. This will allow the nitrogen to purge the inside of the tool.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
Point	Description	Checked OK
5	Seal Tool	
1.2	Fold material so that it is folded over the whole lenth of the tool. Make sure there are not creases in the material.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
Point	Description	Checked OK
5	Seal Tool	
1.3	Using the Flat hand sealer, seal one END of the folded material. Then seal 3/4 of the other end, leaving about a 4" opening.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	



Document Number

WI-2015

Revision

A

Date

10-Mar-15

Point	Description	Checked OK
5	Seal Tool	
1.4	Using the Flat hand sealer, start a small section of the long side of tool. This will give you the point at witch you can use the rolling sealer. The rolling sealer must be used on long runs to insure a continuous seal.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
5	Seal Tool	
1.5	Once all three sides are sealed with exception of the (4") gap left open on (1) end, we can prepare to purge the tool of humidity.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
6	Purge Tool	
1	Using the nitrogen guages slowly open the nitrogen. Using the Humidity meeter alow enough nitrogen to be released into the partially sealed bag until the humidity meeter reads 20% or less.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
6	Purge Tool	
1.1	Once the desired humuity level has been achieved begin removing the nitrogn hose slowly with nitrogen still evacuating humuity. once the hose has left the bag shut of nitrogen.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
6	Vaccum Seal of Tool	
1.2	At the instant the the hose is removed, insert the vacuum hose into the (4") gap left open in step 5-1.5. Holding the vaccum hose and the edge of the opeing in the bag, begin evacuating the air and nitrogen from the bag and the tool.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	
6	Vaccum Seal of Tool	
1.3	Take great care that the bag seals up as smoth as possible onto the tool. Once the vaccum has reached the apex of the seal, using the flat iron crimper seal the bag behind the vaccum hose over the bag and gap.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Comments	



Document Number

WI-2015

Revision

A

Date

10-Mar-15

Point	Description	Checked OK		
6	Vaccum Seal of Tool			
1.3	Take great care that the bag seals up as smooth as possible onto the tool. Once the vaccum has reached the apex of the seal, using the flat iron crimper seal the bag behind the vaccum hose over the bag and gap.	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Comments			
Point	Description	Checked OK		
7	Verification of Seal			
1	Using the leak detector, run detector along all seal edges. Verifying that there are no leaks in the vaccum. If leak is found Restart from section 6-1.	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Point	Description	Checked OK		
8	Client Approval			
1	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Signature of ProTec Engineer _____ Date: _____ </td> <td style="width: 50%; vertical-align: top;"> Signature of Client or Authorized Agent _____ Date: _____ </td> </tr> </table>		Signature of ProTec Engineer _____ Date: _____	Signature of Client or Authorized Agent _____ Date: _____
Signature of ProTec Engineer _____ Date: _____	Signature of Client or Authorized Agent _____ Date: _____			