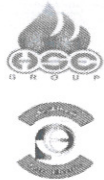






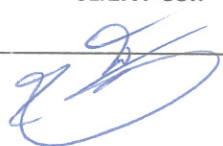



	Toase-eh Park Sanati Gohar Ofogh Petrochemical Co. CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE	
	Document Title: PLC FAT Procedure	
Document No.:		Page 13 of 21

A.1	Hardware Check	Validation: <i>OK</i>		
A.1.1	Cabinet Structure	Pass	Partially Pass	Fail
Purpose: The purpose of this test is to check the Cabinet Structure, dimension, protection, ventilation and painting.				
Reference: PANEL LAYOUT				
Procedures Visually inspect each cabinet based on above reference and the criteria.		✓		
Criteria Visual inspection and dimensional check of cabinet		✓		
Check of degree of mechanical protection		✓		
Visual check of panel ventilation		✓		
Visual check of the condition of painted surface		✓		
Check thickness of Painting		✓		
Mechanical Check of Doors and Locks		✓		
Remarks:				
Signs:				
CLIENT Co.: 		Inspector: 		VENDOR: <i>M-Osta HSE group</i>

 	Toase-eh Park Sanati Gohar Ofogh Petrochemical Co. CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE	 
	Document Title: PLC FAT Procedure	
Document No.:		Page 15 of 21

A.1	Hardware Check		
A.1.3	Panel Equipment		
Purpose: The purpose of this test is to check equipment inside the panel, order numbers, quantities and installation location.		Validation: <i>ok</i>	
Reference: PANEL LAYOUT ,		Pass	Partially Pass
Procedures Visually inspect each cabinet based on above reference and the criteria.		✓	
Criteria Check of equipment list and installed equipment.		✓	
Check if equipment that is installed in their location.		✓	
Remarks:			
Signs:			
CLIENT Co.:	Inspector:	VENDOR: <i>M. Osta</i> <i>HSE group</i>	



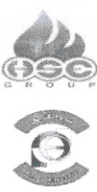





 	Toase-eh Park Sanati Gohar Ofogh Petrochemical Co. CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE		
	Document Title: PLC FAT Procedure		
	Document No.:		Rev. R0 Page 16 of 21



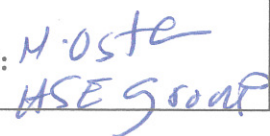
A.2	Functional Check		
A.2.1	<i>Panel electrical Devices Checking</i>		
Purpose:		Validation: <i>OK</i>	
The purpose of this test is to check Fans, Lamps, thermostat and socket		Pass	Partially Pass
Procedures			
For lamp test, open and close front and rear panel doors		✓	
For fan test, change the fan thermostat set point to a lower temperature than factory environment.		✓	
For socket test, connect a laptop to socket and see if it is charging		✓	
Criteria			
Lamps will turn on when doors are open and turn off when doors are closed			
Fans will turn on when temperature set point is lower than factory environment			
laptop will be charged from connected socket			
Remarks:			
Signs:			
CLIENT Co.:	Inspector:	VENDOR: <i>M.OSTA</i>	





 	Toase-eh Park Sanati Gohar Ofogh Petrochemical Co. CONCEPTUAL, BASIC and DETAIL DESIGN ENGINEERING OF STYRENE PARK OFFSITE		
	Document Title: PLC FAT Procedure		Document No.:
		Rev. R0	Page 17 of 21

A.2	Functional Check		
A.2.4	System Start Up		
Purpose: The purpose of this test is to check system start up after a shut down or error in the system.		Validation: <i>OK</i>	
Initial Conditions: System in normal operation		✓	
Procedure: Power off individual or all components on the system.		✓	
Power on each component.		✓	
Verify that each component boots up automatically without any stored image defection.		✓	
Criteria System will come back to normal operation without any failure			
Remarks:			
Signs:			
CLIENT Co.: 	Inspector: 	VENDOR: <i>M. O. S. J.</i> <i>HSE GROUP</i>	

A.2	Functional Check															
A.2.5	Loop Check															
<p>Purpose: The purpose of this test is to check wiring inside the panel and all I/O channels</p> <p>Initial Conditions: System in normal operation</p> <p>Procedure: For digital inputs jumper terminals one by one and check HMI the correct action.</p> <p>For digital outputs send commands from HMI for all channels and check output terminals. If signal is OK we have 24 or 48VDC (via multimeter) in output terminal.</p> <p>For analog inputs we will assign signal via calibrator in the range of 4-20mA. At first we assign 4mA then we increase it to 8mA to see different current level and also change effect. Then we assign 20mA signal to see full range and then we decrease current to 16mA to see change effect. All of test result we be shown in HMI pages analog objects.</p> <p>For analog output signals we will send data from HMI and we will check output terminals via multimeter</p> <p>Criteria Loop checking completely done and pass/fail table in I/O list shall be signed</p>																
<p>Validation: OK</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">Pass</th> <th style="width: 33%;">Partially Pass</th> <th style="width: 33%;">Fail</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">✓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">✓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">✓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">✓</td> <td></td> <td></td> </tr> </tbody> </table>		Pass	Partially Pass	Fail	✓			✓			✓			✓		
Pass	Partially Pass	Fail														
✓																
✓																
✓																
✓																
<p>Remarks:</p>																
<p>Signs:</p> <p style="display: flex; justify-content: space-between;"> CLIENT Co. :  Inspector:  VENDOR:  </p>																



Toase-eh Park Sanati Gohar Ofogh
Petrochemical Co.
**CONCEPTUAL, BASIC and DETAIL DESIGN
ENGINEERING OF STYRENE PARK OFFSITE**


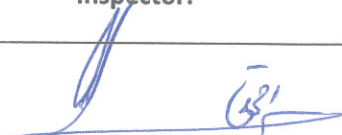


Document Title: PLC FAT Procedure

Document No.:

Rev. R0

Page 19 of 21

A.2	Functional Check																	
A.2.6	<i>Graphics Display</i>																	
<p>Purpose:</p> <p>The Graphic displays user defined graphics for the convenience of operation. The purpose of this test is to verify the correct display and functions of user-defined graphics and faceplate allocation as in the worksheets.</p> <p>Criteria</p> <p>Call up the Graphic Display Page.</p> <p>Check that displays are similar to P&IDs.</p> <p>Check that dynamics data are correct as defined according to the variable.</p>		<p>Validation: <i>OK</i></p> <table border="1"> <thead> <tr> <th data-bbox="1189 689 1278 797">Pass</th> <th data-bbox="1278 689 1406 797">Partially Pass</th> <th data-bbox="1406 689 1495 797">Fail</th> </tr> </thead> <tbody> <tr> <td data-bbox="1189 797 1278 1628" style="text-align: center;">✓</td> <td data-bbox="1278 797 1406 1628"></td> <td data-bbox="1406 797 1495 1628"></td> </tr> <tr> <td data-bbox="1189 1021 1278 1086" style="text-align: center;">✓</td> <td data-bbox="1278 1021 1406 1628"></td> <td data-bbox="1406 1021 1495 1628"></td> </tr> <tr> <td data-bbox="1189 1086 1278 1151" style="text-align: center;">✓</td> <td data-bbox="1278 1086 1406 1628"></td> <td data-bbox="1406 1086 1495 1628"></td> </tr> <tr> <td data-bbox="1189 1151 1278 1216" style="text-align: center;">✓</td> <td data-bbox="1278 1151 1406 1628"></td> <td data-bbox="1406 1151 1495 1628"></td> </tr> </tbody> </table>		Pass	Partially Pass	Fail	✓			✓			✓			✓		
Pass	Partially Pass	Fail																
✓																		
✓																		
✓																		
✓																		
Remarks:																		
<p>Signs:</p> <p>CLIENT Co. : </p> <p>Inspector: </p> <p>VENDOR: <i>MOSTA</i> <i>ASE GROUP</i></p>																		



Toase-eh Park Sanati Gohar Ofogh
Petrochemical Co.
**CONCEPTUAL, BASIC and DETAIL DESIGN
ENGINEERING OF STYRENE PARK OFFSITE**



Document Title: PLC FAT Procedure

Document No.:

Rev. R0

Page 20 of 21

A.2	Functional Check																	
A.2.7	Alarm / Event Display & Logging																	
<p>Purpose:</p> <p>This check is to verify that the system generates Alarm/ Event and logging display</p> <p>Criteria</p> <p>By wiring jumper any alarm-source input of Control System. One, or consequent alarms will be displayed</p> <p>Check the VDU display</p> <p>Check the logging display</p> <p>By operational manual command on the VDU, some event will be logged displayed</p>		<p>Validation: <i>OK</i></p> <table border="1"> <thead> <tr> <th data-bbox="1098 667 1193 779">Pass</th> <th data-bbox="1193 667 1337 779">Partially Pass</th> <th data-bbox="1337 667 1428 779">Fail</th> </tr> </thead> <tbody> <tr> <td data-bbox="1098 779 1193 846">✓</td> <td data-bbox="1193 779 1337 846"></td> <td data-bbox="1337 779 1428 846"></td> </tr> <tr> <td data-bbox="1098 846 1193 913">✓</td> <td data-bbox="1193 846 1337 913"></td> <td data-bbox="1337 846 1428 913"></td> </tr> <tr> <td data-bbox="1098 913 1193 981">✓</td> <td data-bbox="1193 913 1337 981"></td> <td data-bbox="1337 913 1428 981"></td> </tr> <tr> <td data-bbox="1098 981 1193 1048">✓</td> <td data-bbox="1193 981 1337 1048"></td> <td data-bbox="1337 981 1428 1048"></td> </tr> </tbody> </table>		Pass	Partially Pass	Fail	✓			✓			✓			✓		
Pass	Partially Pass	Fail																
✓																		
✓																		
✓																		
✓																		
Remarks:																		
Signs:																		
CLIENT Co.:	Inspector:	VENDOR: <i>M. Osta</i> <i>HSE group</i>																

VENDOR: *M. Osta*
HSE group