



Vendor  	<b>ABT 360 KT/Y PP PLANT</b>		Owner   سراج گستران رجال SERAJ GOSTARAN REJAL (سهامی خاص)
	FAT procedure		
	Vendor's Doc. No.: 23249-14	Rev.: 00	
PPEC Doc. No.: L03-RE037-QC-PCJ-001			



**PPEC REQ. NO. : L03-RE037-QC-PCJ-001**

**ITEM NO. :**



**TOTAL PAGES : 12**

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00	18-04-2025	Issue for Engineering	S.K.	S.K.	J.J.	
REV.	DATE	Description	Prepared by	Checked by	Approved by	Authorized by



Vendor 	<b>ABT 360 KT/Y PP PLANT</b>		Contractor (DEC)	Owner  سراج گستاران رجال SERAJ GOSTARAN REJAL (سهامی خاص)
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PAGE NO.	CHANGE INDEX DURING FORMAL ISSUE						REASON OF LATEST CHANGE
	FIRST ISSUE	SECOND ISSUE	THIRTH ISSUE	FOURTH ISSUE	FIFTH ISSUE	SIXTH ISSUE	
	REV.00	REV.01	REV.02	REV.03	REV.04	REV.05	
1	X						
2	X						
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4	X						
5	X						
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## Purpose

Checking the performance and functioning of the package against the approved documents and specifications.

Separate test reports for each test will be generated; however, this FAT procedure covers only the procedure to be performed on all skids.

## Reference documents

### Vendor documents



Please find below the reference vendor documents that will be used during this FAT.

L03-RE037-PR-PID-001	23249-03	P&ID
L03-RE037-ME-GAD-001	23249-04	General Arrangement Drawing
L03-RE037-EL-DIG-001	23249-05	Wiring Diagram
L03-RE037-EL-GAD-003	23249-07	Panel lay-out
L03-RE037-QC-ITP-001	23249-08	Inspection & Test Plan (ITP)
L03-RE037-IN-PHY-001	23249-21	Control Philosophy

### Manufacturing data book

The manufacturing data book will also be available for review during the FAT. The MDB will be checked according to the approved MDB index and ITP.

The client or client TPI will sign the relevant pages as well as all relevant point of the ITP.

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	Vendor's Doc. No.: 23249-14 PPEC Doc. No.: L03-RE037-QC-PCJ-001	Rev.: 00		

## Scope

One (1) gas booster compressor (PK-6801), horizontal piston compressor with motor driver (M-PK-6801-1), capacity 1100-1200 kg/h, 21 bar(g). 1 duty (1x100%). The compressor is water cooled.

The compressor is equipped with:

- One (1) LPS (Local Push Button Station) with tag number LCP-PK6801-001.
- One (1) JB (Junction Box) with tag number JIAP-PK6801-01.

Also included is:

- One (1) external UCP (Unit Control Panel) with tag number UCP-PK6801-01 and an integrated PLC control system (communications, CPU, power and IO signals).

## HSE

Standard safety precautions have to be taken since we are working with pressurised air.

- Proper PPE has to be worn when working / testing the package
- All visitors for the FAT will be instructed before the FAT, about Airpack safety precautions, by Airpack Safety movie.
- All visitors will be asked to sign a disclaimer to be able to enter the hazardous area during the test.
- The test area is cordoned off to make sure non-authorized personnel does not enter this area.



## FAT kick off meeting

Before starting the FAT there will be a short kick off meeting, where Airpack will explain the safety rules and regulations as well as what activities and planning will be performed during the FAT.

Kick-Off Meeting (KOM) Agenda.

- Introduction/Sign in (along with the name, role/designation)
- HSE Induction
- FAT organization, roles and responsibilities of the personnel involved.
- Briefing on duration and sequence of tests planned, timing etc.

Also proper PPE will be distributed as required.

<p>Vendor</p> 	<p style="text-align: center;"><b>ABT 360 KT/Y PP PLANT</b></p> <hr/> <p style="text-align: center;">FAT procedure</p> <hr/> <p>Vendor's Doc. No.: 2 3 2 4 9 - 1 4</p> <hr/> <p>PPEC Doc. No.: L03-RE037-QC-PCJ-001</p>	<p>Contractor (DEC)</p>	<p>Owner</p>  <p style="text-align: center;">سراج گستاران رجال SERAJ GOSTARAN REJAL (سهایی خاص)</p>
		Rev.: 00	

## Roles and responsibilities

The project manager is responsible for the complete FAT. The project manager will arrange the persons who are required for each part of the FAT.

A qualified AIRPACK Technician who is familiar with the operational parameters of the Package will perform all FAT tasks

## Problem resolution

If there are any problems during the FAT, they will be rectified immediately if possible, if not possible they will be recorded in the FAT punch list and resolved before shipment /commissioning of the package.

Please find attachment 1: Punch list format.

## Test instruments



The following test instruments will be used during the FAT, all instruments will have a valid calibration certificate which will be supplied as part of the FAT test results for checking and signing.

- Paint thickness meter
- Multi meter (voltage check)

## Utilities

The utilities that are available during FAT are:

- 1x 110V, 50Hz, 1ph
- 1x 400V, 50Hz, 1ph

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## Test procedures

Test may not be done in below order; it is subject to availability of personnel and equipment.

### Mechanical checks

The Following will be tested / checked and recorded as part of the FAT:

#### Quality

- 1 Verify all equipment are installed in accordance with approved P&ID and GAD.
- 2 Visual inspection of the complete package for quality.
- 3 Verify piping, tubing location, orientation in accordance with approved GA Drawing.

#### P&ID review

- 1 Verify all components are installed as per the GA Drawing.
- 2 Check that all components are tagged according to the P&ID.
- 3 Check that the location is of the components is as per the GAD.

#### Dimensions

- 1 Dimensional check of the complete package for compliance to approved GA Drawing.
- 2 Verification and dimensional check of Tie-in Point, lifting points
- 3 Verification and dimensional check of foundation holes.

#### Painting

- 1 Check the overall paint for damages and overall quality.
- 2 Randomly check the thickness as per the approved paint procedure.
- 3 Check the paint color as per the paint procedure.



#### Control Panel

- 1 Check for any loose connection in the control panel
- 2 Verify all control panel BOM, GA, wiring, I/O etc., matches approved drawings.
- 3 Check the installation and type of cable glands
- 4 Check the installation of the cable trays
- 5 Check the cable type

#### Instruments

- 1 Check for any loose connection of cables or wires in the instruments
- 2 Check the installation of the instruments as per approved drawings
- 3 Check if all instruments are tagged
- 4 Check the quantity of the instruments

All checks are mentioned in attachment 2: Equipment checklist

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## Functional test control system

A functional test will be executed on local control panels.

The functional test will be performed as per attachment 3: Functional test results

Following items are functionally tested / checked:

- Power up checks
- grounding check (instruments will be earthed externally)
- I/O checks (10% signals random are individually tested)
- Alarms (10% random alarms are individually dry tested)
- Trips (10% random trips are individually dry tested)
- Check functionality of panel displays (HMI)
- Operation check (start, stop, etc.)

## Performance test (two hours)

Test set-up for the package is as follows:

- The power from the package will come from internal power supply
- 400V / 50Hz / 3ph and 230V / 50Hz / 1ph
- Power is ON

The following measurements will be taken during the performance test.

- Sound level at 1 metre distance from skid (max. 85 dB(A))
- Refer to Attachment 4 for an example of the performance test results sheet, which will be filled in during FAT.
- Data is extracted from all the transmitters to check the performance. Gauges can be checked during running and will not be listed in the performance test sheet.

All in house instruments required / used during the test will have recent calibration certificated, which will be attached to the FAT test report.

The FAT recordings can be found in attachment 4: Performance test results

The outlet flow and discharge pressure of the compressor will be recalculated to run with ATM pressure and ambient air.



**Punch List Gas Booster Compressor**

**Project: 23249-COM**

<b>Revision</b>	<b>00</b>
Dry Test	
Inhouse Test	
FAT	
I-FAT	
F. Inspection	
Shipment	
Commissioning	

Item	Description	Point raised by	Action by	Completion before	Closed [date] [name]
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## FAT TEST PROCEDURE

Equipment	Gas booster compressor package
Customer	Seraj Gostaran Rejal
Serial number	T-2025-00821
Project name	ABT 360 KT/Y PP PLANT Project
Airpack reference number	23249-COM
Date	DD-MM-YYYY
Revision	00
Document number	23249-14
Handled by	SK
Number of pages	01

INSPECTION	DOCUMENT	COMPLETED	REMARKS
<b>Quality</b>			
1. Installation of main equipment	GAD / PID		
2. Visual inspection of overall quality	GAD / PID		
3. piping, tubing location / orientation	GAD / PID		
<b>P&amp;ID review</b>			
1. Component check	P&ID		
2. Tagging of all components	P&ID		
3. Component location	P&ID		
<b>Dimensions</b>			
1. Overall skid dimensions	GAD		
2. Tie-in point dimensions	GAD		
3. Foundation bolt holes	GAD		
<b>Painting</b>			
1. Overall Paint quality	Paint procedure		
2. Paint DFT measurement	Paint procedure		
3. Paint color	Paint procedure		
<b>Control Panel</b>			
1. Loose connections	Wiring diagram / Panel lay-out		
2. BOM	Wiring diagram / Panel lay-out		
3. Cable glands	Wiring diagram / Panel lay-out		
4. Cable trays	Wiring diagram / Panel lay-out		
<b>Instruments</b>			
1. Loose connections	Wiring diagram		
2. Installation	P&ID		
3. Tagging	P&ID		
4. quantity	P&ID		

Airpack Test Engineer	Client Inspector

Notes:



