 Discovery Labs	STANDARD OPERATING PROCEDURE			
	SOP No.:	SOP-ED-005-04	Effective Date:	17.08.2017
	Supersedes :	SOP-ED-005-03	Next Review Date:	16.08.2020
	Department:	Engineering	Page:	1 of 3
TITLE: PROCEDURE FOR PRESSURE TEST				

1.0 PURPOSE:

To describe a procedure for pressure test

2.0 SCOPE:

This Procedure is applicable to all equipments used at Discovery Laboratories Pvt. Ltd.

3.0 RESPONSIBILITY:

3.1 Technician

Is the responsible to follow the safety precautions during the pressure test.

3.2 Engineer:

Is responsible to monitor the activity

4.0 DEFINITIONS: NIL

5.0 PROCEDURE :

5.1 Schedule:

Pressure test conducted for equipments shall be done whenever required.

5.2 Pressure test to shells (Reactor, Heat exchanger and Receivers)

5.2.1 Before starting of activity wear the safety PPE (Personal Protective Equipment) like Helmet, Goggles, Safety Shoe, Hand gloves, etc.,

5.2.2 Arrange the pressure gauge to shell nozzle.


5.2.3 Close the bottom valve, manhole and other nozzles firmly.

5.2.4 Connect the compressed air line to one nozzle of the shell.

5.2.5 Check the seal or gland box bolt nuts of reactor, Heat exchanger and Receiver. If required tighten it.

5.2.6 Slowly open the compressed air line valve and allow pass into shell.

	Prepared by	Reviewed by	Approved by
Sign & Date			
Name	Ch. Shankar	M. Ramesh	Ch. Mahendar Reddy
Department	Engineering	Engineering	Quality Assurance

 Discovery Labs	STANDARD OPERATING PROCEDURE			
	SOP No.:	SOP-ED-005-04	Effective Date:	17.08.2017
	Supersedes :	SOP-ED-005-03	Next Review Date:	16.08.2020
	Department:	Engineering	Page:	2 of 3
TITLE: PROCEDURE FOR PRESSURE TEST				


- 5.2.7 Raise the pressure up to desired pressure then stop the air supply. Ensure that air pressure should be less than design pressure.
- 5.2.8 Apply soap solution to all welding joints, nozzles and keep the system with pressure for one hour.
- 5.2.9 For gland reactors if the pressure drop is more than 0.2 Kg / cm² in one hour, check the leakage and arrest it.
- 5.2.10 Repeat the above procedure and carry out the pressure test with a allowable pressure drop of 0.2 Kg / cm² in one hour in case of gland packing reactors.
- 5.2.11 In case of seal reactors no pressure drop should be allowed.

5.3 Hydraulic Pressure test to jackets (Reactor, Heat exchanger and Receivers)

- 5.3.1 Before starting of activity wear the safety Personal Protection Equipment (PPE) like Helmet, Goggles, Safety Shoe, Hand gloves, etc.,
- 5.3.2 Disconnect the inlet and outlet lines of the reactor jacket.
- 5.3.3 Arrange one nipple to jacket bottom nozzle.
- 5.3.4 Connect hydraulic pump hosepipe to reactor jacket nozzle.
- 5.3.5 Arrange one pressure gauge to reactor jacket nozzle
- 5.3.6 Fill the reactor jacket with water.
- 5.3.7 Raise the jacket pressure with hydraulic pump up to desired pressure. Ensure that jacket pressure should be less than design pressure.
- 5.3.8 Keep the pressure for one hour for leak test. No pressure drop should be found out. If any pressure drop occurs check the leakage and arrest the same.

6.0 FORMATS / ANNEXURE(S):

	Prepared by	Reviewed by	Approved by
Sign & Date			
Name	Ch. Shankar	M. Ramesh	Ch. Mahendar Reddy
Department	Engineering	Engineering	Quality Assurance

 Discovery Labs	STANDARD OPERATING PROCEDURE			
	SOP No.:	SOP-ED-005-04	Effective Date:	17.08.2017
	Supersedes :	SOP-ED-005-03	Next Review Date:	16.08.2020
	Department:	Engineering	Page:	3 of 3
TITLE: PROCEDURE FOR PRESSURE TEST				

6.1 Pressure Test Record

: ED005-FM043

7.0 CHANGE HISTORY:

Revision No.	Effective Date	Details of Revision	Ref. CCF No.	Remarks
00	01.08.2009	New SOP	---	---
01	17.07.2014	Include Schedule	---	---
02	10.09.2014	Included Format and record	---	---
03	01.01.2017	1. SOP format changed in line with SOP-QA-001-04 2. Title name changed in to “Procedure for pressure test”	ED-CRF-006/16	---
04	17.08.2017	1. SOP format changed in line with SOP-QA-001-05.	CCF/GEN/17007	--

	Prepared by	Reviewed by	Approved by
Sign & Date			
Name	Ch. Shankar	M. Ramesh	Ch. Mahendar Reddy
Department	Engineering	Engineering	Quality Assurance