

PROCESS INSTRUMENTATION

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LAB 1:

Aim - Characterize the given I to P convertor On Virtual Lab

1. Introduction –

Inbox (1,252) - vivek.rugale18@v... Virtual Labs

Not secure | vlabs.iitb.ac.in/vlabs-dev/labs/process-loop-components-coep/labs/current-pneumatic-converter-coep/simulation.html

COLLEGE OF ENGINEERING, PUNE

Calibration and Control System Questions

Select Application

Test Submitted Successfully
Correct Answers Are 6
 OK

Question No : 1

What will be the input and output of a I/P converter?

- ☐ Non-standard input and Non-standard output
- ☐ Standard input and Non-standard output
- ☒ Standard input standard output

Question No : 2

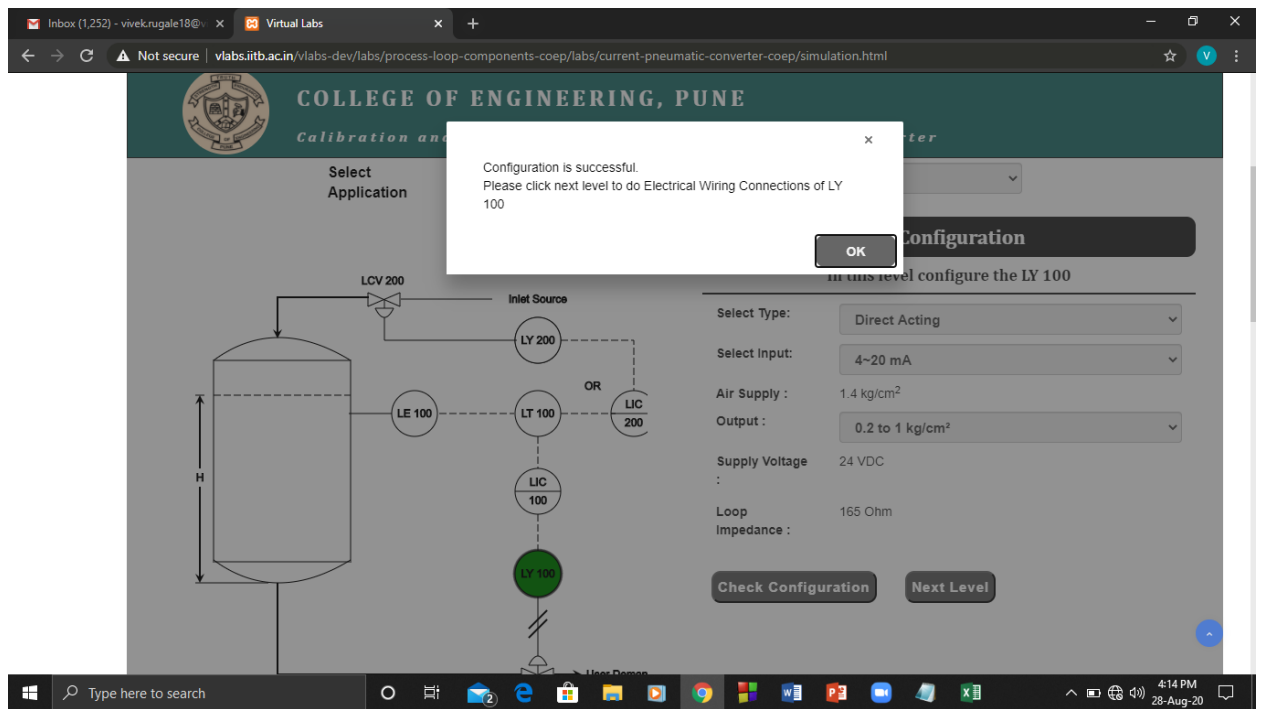
What is standard output of any I/P converter

- ☐ 4~20 mA
- ☒ 0.2 ~1.0 kg/cm²
- ☐ 0~20 mA
- ☐ 0~1.4 kg/cm²

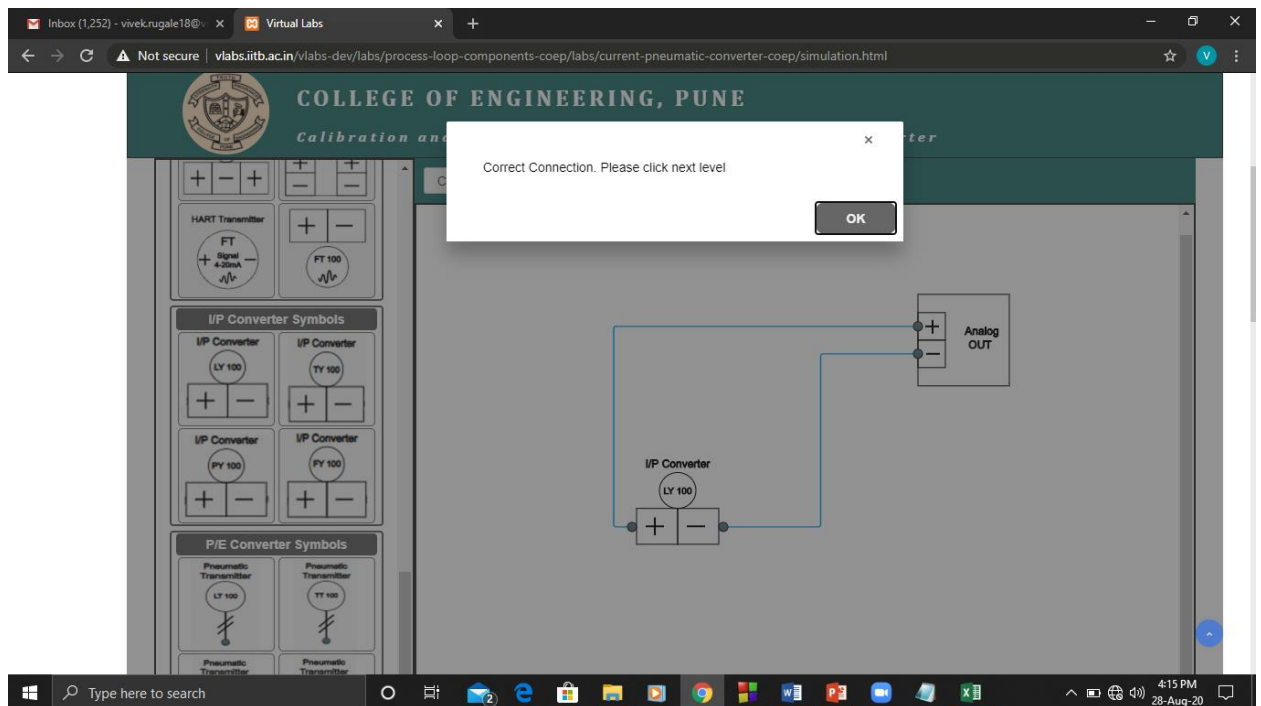
Question No : 3

What is the standard voltage of a power supply used in commonly used analog output card?

2. Configuration –



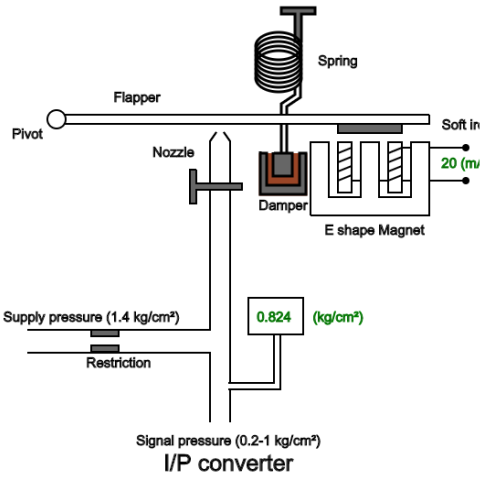
3. Connection –



4. Characterization –

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LY Characterisation

In this level characterize the LY 100

LIC 100 Output (Input 4-20 mA)

Value: 20

Submit Check Graph Next Level

Excel PDF

Reading No.	Input (in mA)	Output (in kg/cm ²)
1	4	0.402
2	8	0.601
3	12	0.810
4	16	0.616
5	20	0.824

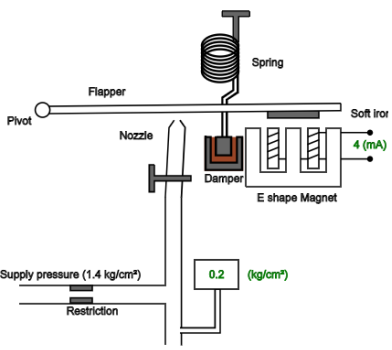
Showing 1 to 5 of 5 entries

Previous 1 Next

5. Calibration –

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Level Control System (LY 100)

Output (kg/cm²)

Input (mA)

Standard Output Observed Output

Zero, Span & Linearity Adjusted successfully!!!

Excel PDF

Reading No.	Input (in kg/cm ²)	Output (in mA)
1	4	0.2
2	8	0.401
3	12	0.6
4	16	0.796
5	20	1

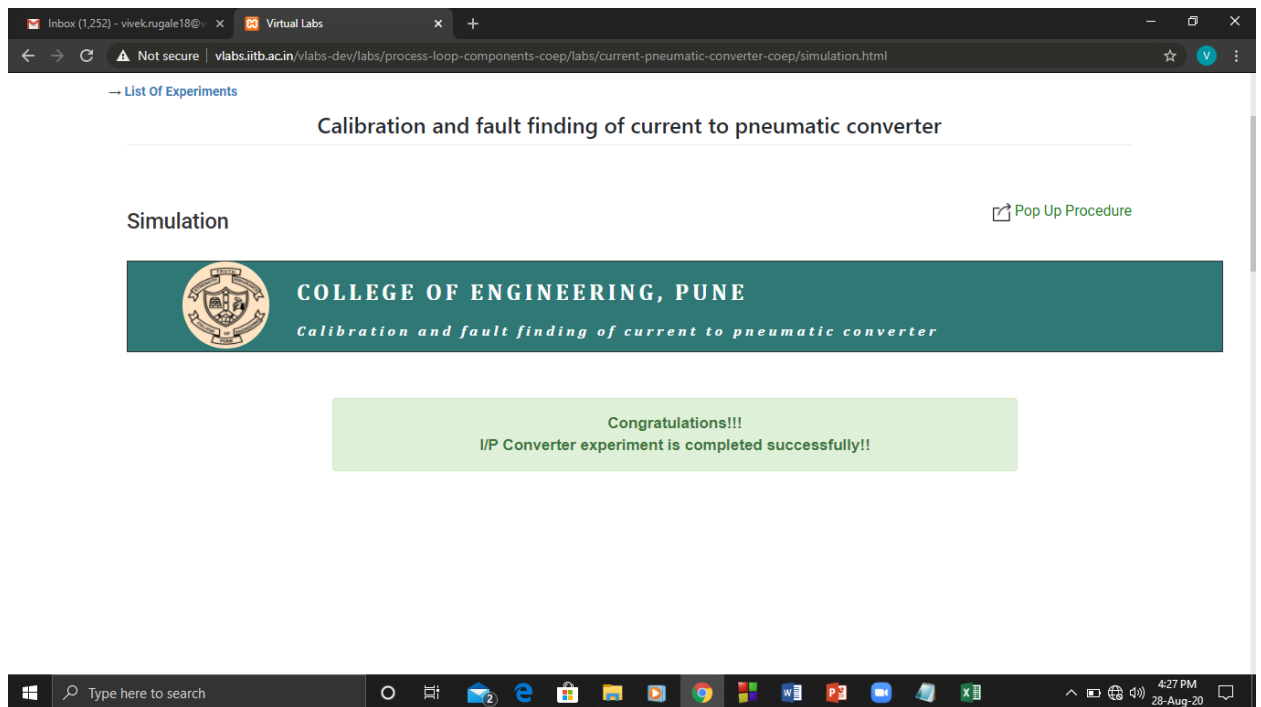
Showing 1 to 5 of 5 entries

Previous 1 Next

After few months I/P converter is not working properly. As a maintenance engineer, Please attend the fault

Next level

6. Fault Detection -



Conclusion: Experiment was performed on virtual labs platform. Output pressure readings taken through simulation. Calibrated the I to P converter and removed errors to get linearity.