

# Oxygen Rationing Device – AMLEX

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**In news-** To increase the life of medical oxygen cylinders three fold, the Indian Institute of Technology, Ropar has developed a first-of-its-kind Oxygen Rationing Device – AMLEX.

## **About AMLEX-**

- AMLEX supplies a required volume of oxygen to the patient during inhalation and trips when the patient exhales CO<sub>2</sub>.
- So far, during exhalation, the oxygen in the oxygen cylinder/pipe is pushed out along with the exhaled CO<sub>2</sub> by the user.
- This leads to wastage of a large volume of oxygen in the long run.
- In addition to this, a large volume of oxygen escapes from the openings of the mask to the environment in the resting period (between inhalation and exhalation) due to its continuous flow in the mask.
- The AMLEX can be easily connected between the oxygen supply line and the mask worn by the patient.
- The device can **operate on both portable power supply (battery) as well as line supply** (220V-50Hz).
- It uses a sensor which senses and successfully detects inhalation and exhalation of the user in any environmental condition.
- It works with any commercially available oxygen therapy masks having multiple openings for air flow.
- It can be easily connected between the oxygen supply line at its two input and output connectors.
- Standard sized connectors make the device handy and ready to use without the requirement of any additional

set-up.