

# Indian Railways develops low-cost ventilator 'Jeevan'

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In a positive development, the Indian Railways has developed a low-cost ventilator 'Jeevan' at its Kapurthala Rail Coach Factory (RCF), the prototype of which is now awaiting the final clearance from the Indian Council of Medical Research (ICMR).

Upon clearance from ICMR, the prototype would be set to undergo mass production. As per Kapurthala RCF's general manager Ravinder Gupta, upon clearance, given the access to all needed materials, the RCF will be able to produce 100 such devices every day.

## **Key Highlights**

- The low-cost ventilator will only cost around Rs 10,000 without the compressor, and will add might to the nation's might in the fight to save lives as Novel Coronavirus (COVID-19) continues to spread in different parts of India. It should be noted that the cost of RCF built ventilators is likely to be a fraction of what regular ventilators cost.
- The RCF has built the ventilator from materials which were already available in the factory. The portable compressor has been made from an air cooling machine, the body from coach components, the argon flow has been taken from a laser welding machine, while the microprocessor has been taken from the coach information system.

## **What is a Ventilator?**

A ventilator is a machine that provides mechanical ventilation by moving breathable air into and out of the lungs, to deliver breaths to a patient who is physically unable to breathe, or breathing insufficiently. Modern ventilators are computerized microprocessor controlled machines, but

patients can also be ventilated with a simple, hand-operated [bag](#) valve mask. Ventilators are chiefly used in [intensive](#) care medicine, home care and [emergency](#) medicine (as standalone units) and in anesthesiology (as a component of an [anesthesia](#) machine).

Ventilators are sometimes called respirators, a term commonly used for them in the 1950s (particularly the “Bird Respirator”). However, in contemporary hospital and medical terminology, a respirator is a protective face mask.

**SOURCE:** *The Indian Express, Wikipedia*