

# HP MO2 PSA Technology

## Technology for Medical Oxygen Production

Medical oxygen requirement has increased disproportionately all over the country due to the high incidence of Covid-19. Required purity of Medical oxygen is 93+/- 3 vol. %. The most common commercial method for producing Medical Oxygen is through separation of air using either a cryogenic distillation process or a pressure swing adsorption (PSA) process.

HPCL R&D has developed indigenous HP MO2 PSA technology for Medical Oxygen production. HP MO2 PSA technology uses adsorbents to carry out separation of oxygen and nitrogen in the air. Using this technology, high purity oxygen ( $93 \pm 3$  vol. %) can be obtained. The unit is designed as skid mounted modular unit which is simpler to operate and suitable for installation in hospitals.

HPGRDC has installed and commissioned 1 Ton/day HP MO2 PSA plant at Sir C.V. Raman Hospital in Bengaluru. HPGRDC is currently working on setting up 2 TPD HP MO2 PSA plant at Wardha, Maharashtra and is also providing Technology & services to HPCL Shapoorji Energy Pvt. Ltd. (HSEPL) for setting up 2 TPD plant at a hospital in Veraval, Gujarat.

