Public Invention Oxygen Concentrator (PIOC)

www.pubinv.org

https://github.com/PubInv/pioc

Technical
Deliver medical grade oxygen >90% O2 at scalable, customer required target flow rates - 5, 20, 50LPM+

Regulatory
Documented sufficiently to achieve regulatory approval by local governing bodies.

User Centric
Safe design, user friendly, easy servicing, multi-lingual touch screen.

Environment
Operate in remote field hospitals that are high temperature, high humidity and dusty.

Manufacturing
Can be locally made by leveraging existing industries and skills.

Servicing
Can be serviced using local skillsets and basic tools. Long service periods (annual); sealed-for-life, all metal sieves.

Collaboration
Working together with Helpful Engineering Project Apollo, Enaccess OpenO2, COSMIC, OxiKit and New Zealand experts to share knowledge and reduce time to market.

Supply Chain
Leverages existing light engineering industry supply chain for parts and materials. Established relationship with SMC for reliable, quality pneumatics component supply.

Electrical
Low voltage, high efficiency valves. Compatible with Helpful Engineering Project Apollo control system.

Mechanical
Wall-mounted rail hold metal sieves that connect to expandable air and oxygen manifolds. Biocompatible materials.

Future
Medium pressure oxygen storage (70psi) for overnight storage at remote clinics.