THE WORLD'S FIRST OXYGEN CONSUMER BRAND

THE CHALLENGE

Cylinders

- Need specialised storage and transportation
- Need trained manpower
- Bulky & Transported after filling
- Very localised supply (within 25Kms) & concentrated
- **Delayed delivery by up to 24-72 hours**
- Complete breakdown of Supply chain after 100 Kms.

Concentrators

- Cannot be used in ICUs
- Need continuous power
- Expensive
- Need maintenance
- Purity is based on ambient environment

THE SOLUTION

- Oxygen Whenever – Wherever.

  Basic Access to emergency O2 where no O2 source is available

- Solution - Oxygen as a "CONSUMABLE" as against compressed gas in the form of CARTRIDGES

- O2- Matic has developed Products to facilitate availability of medical grade oxygen which are :-

  ✓ Ultra-Portable

  ✓ Easy to Use (Twist and Breathe)

  ✓ Requires No Power or Limited Power

  ✓ Doesn't require skilled healthcare resource

MARKET OPPORTUNITY

- Global Oxygen Therapy Market is expected to reach "US$ 18.2 Bn" by 2024
- Market lacks access to ultra portable, uninterrupted, easy to use and affordable medical grade oxygen
- Influenza viruses (such as COVID19, H1N1, H5N1, H7N9 and MERS) can cause severe pneumonia & acute respiratory distress syndrome, requiring oxygen treatment. ~14% of Covid19 patients need oxygen support
- CRDs—including asthma and chronic obstructive pulmonary disease (COPD) are a serious public health problem. Use of oxygen for COPD management is pervasive with ~79% of patients receiving long-term oxygen therapy
- SOM market estimated to be approximately $12 billion per annum currently being not served

PRODUCTS & REGULATORY CLEARANCES

KYRA

Launch: August 2021-

Regulatory Clearance Received from CDSCO

Patent Pending

O2-Mat-Coimb-TN/M/MD/002167

PORTIA

Launched: MARCH -2021

Registered with CDSCO
EU,US, India Patent granted

O2-Mat-Benga-KA/M/MD/001413

CRONUS

Launch: January - 2022

Ongoing Trials

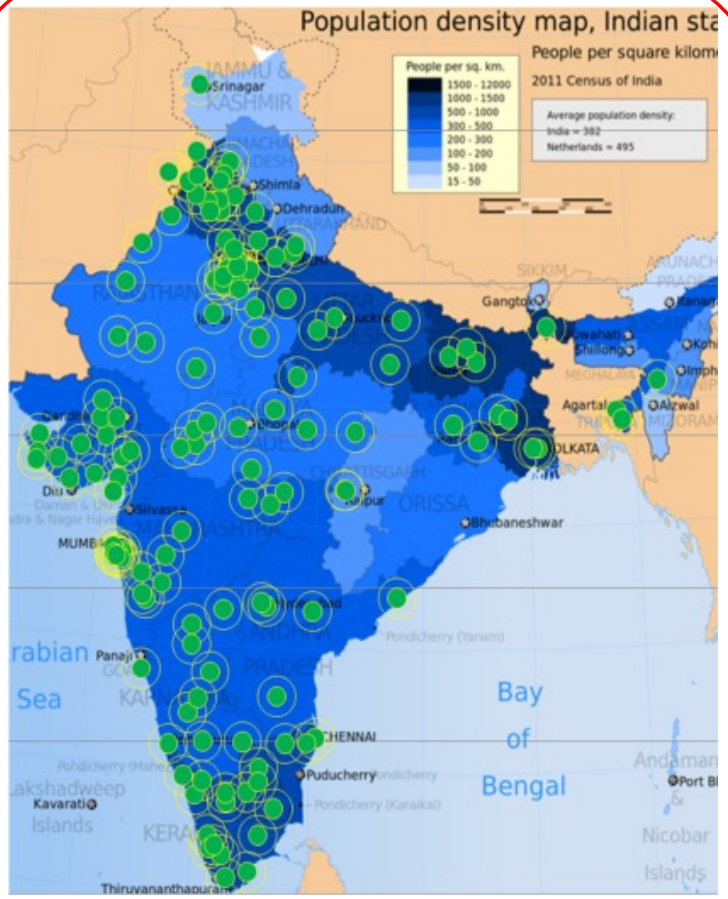
TARGET MARKET SEGMENTS

O2-Matic's products have universal application. The target markets would include

- Ambulance – First Response / Emergency care
- Private rural & Semi urban hospitals (10-20 Beds) and Nursing homes
- Home Healthcare players
- Rural and District Hospitals
- Pre- Hospital Care – Corporate Buildings, Societies, Educational Institutes
- Defence and Police forces
- Public spaces (e.g. Hotels, Malls, Airports)
- Risky businesses like Mining, Oil & Gas etc
- Adventure sports like Trekking / Mountaineering / Scuba Diving

The Problem – Severe Shortage of Medical O2 in India & Globally

Oxygen Sourcing Centres



Plotted to scale.
Green Circle-50Km radius
Yellow Circle-100Km radius

The General Problem

Medical Oxygen is in short supply globally and in India

Legacy solutions don't work – logistics is a big barrier to large scale distribution

Even in normal times, Clinics and PHC Centers in India do not have enough O2 supplies

Need a paradigm shift in product and logistics models

For 1.3 Billion Population

Less than < 35,0000
Total Emergency Response Service Vehicles

350 Locations / Source of Oxygen
(Manufacturers & Dealers)

25 KM Radius around oxygen source
dealer can deliver Oxygen

50 KM Radius - Supply chain starts to break

100 KM Radius -Zero Supply Chain

The Problem – Severe Shortage of Medical O2

The Immediate Problem

An acute public health crisis in India; 2nd wave of Covid – 20 M cases in India; virulent variety

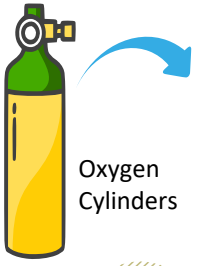
Lack of Oxygen is killing people

> 500 K people are dead

Economic Activity is severely impacted

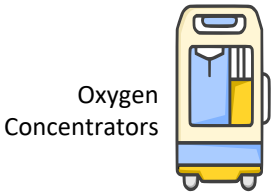
Need a solution that can deliver O2 like "Tylenol" to everyone.

Post Covid 19, the demand for medical O2 will soar



Oxygen Cylinders

Existing Products



Oxygen Concentrators

Unsolved Problems

- Need specialised storage and transportation
- Need trained manpower
- Bulky & Transported after filling
- Very localised (within 25Kms) & concentrated
- **Delayed delivery by up to 24-72 hours**
- Complete breakdown of Supply chain after 100 Kms.
- LOGISTICS IS COSTLY BEYOND 25 KMS

A 200-bed hospital needs at least 180 oxygen cylinders a day

- Cannot be used in ICUs
- Need continuous power
- Expensive
- Need maintenance
- Purity is based on ambient environment
- Not widely available in cases of emergencies district /
- rural regions / >50 bed Hospitals / Clinics

Data Source: Report by Grand View Research Inc

O2-MATIC
OXYGEN WHENEVER WHEREVER

The Solution: Innovative "Patented Oxygen Generators"

O2Matic's patented technology generates **instant medical grade Oxygen**. **99.7% pure** Oxygen produced ; has **replaceable cartridges**. Requires **Limited or No Power**; ensures continuous O_2 flow even during replacement of cartridges

KYRA

Launch: **August 2021**

Immediate application in India/ Registered with CDSCO / Global Patents filed – Pending Approval

PORTIA

Launched: **Mar-2021**

Commercialised / Registered with CDSCO / EU,US, India Patent granted

CRONUS

Launch: **October - 2021**

Working Prototype Ready

O2-Matic's Products are ……

….. Portable

Mobile & portable (150 kgs / 8kgs / 4 kgs) significant reduction in transportation costs.

Safe storage anywhere irrespective of temperature & pressure.

….. Infrastructure Independent

Oxygen is generated locally

Limited or No Dependence on power

Seamless distribution to any location. No special transportation or storage requirement.

No need to send back for refilling unlike Cylinders. Cartridges are always available

…… Easy to Use

No skilled manpower required

Instant 2 step process to produce O_2 under 40 secs – Locally produced

Safe disposal and ZERO maintenance

Requirement of Medical oxygen vis-à-vis availability

O2MATIC will make Oxygen an easily available CONSUMABLE in its pursuit to save lives

No Urban or Rural Divide – O2Matic's Solutions are required across the Board

Market Segment	Primary Source Device	Availability	O2Matic's product application & competitiveness
Ambulatory care	Cylinders		**Portia (Needed)** Most of the emergency response vehicles in India don't have reliable Oxygen supply 
Pulmonologists/ Primary Care Clinics / Rural Clinics	Cylinders Concentrators		**Kyra /Portia (Needed)** Most face cost constraints. Portia/Cronus will provide incremental revenue opportunities for primary care providers and reduce the burden and cost on Healthcare infrastructure 
Large Hospitals (500+ bed) / District Hospitals (Rural areas)	Cylinders		**Kyra (Needed)** Most large Rural hospitals are Government run and most of the time have insufficient supply of oxygen 
Small Hospitals (>50 beds), Nursing Homes	Cylinders		**Kyra (Needed)** Most small hospitals and nursing homes having an Operation Theatre need Oxygen supply but don't have it 
Home Care / Public Places like Malls, Parks / Commercial & Residential Buildings	Cylinders Concentrators		**Portia / Cronus (Needed)** Concentrators are forbiddingly expensive for these applications. At Rs. 10,000 O_2-Matic per device is making oxygen easily accessible 
Large Hospitals (200+ bed) / Hospital Chains (Urban & Semi Urban areas)	Central Medical Gas Supply System		**Kyra (Limited Application)** Limited application as a secondary source ; wherever portability is required and power supply is an issue 
Mid sized hospitals (50-200 beds) (Urban & Semi Urban areas)	Cylinders		**Kyra (Limited Application)** Some mid sized hospitals in semi urban areas have insufficient supply of oxygen 

White Denotes Potential for O2Matic's Products
Green Represents Existing Solutions

O2-MATIC
OXYGEN WHENEVER WHEREVER

Key features - Differentiation

Features	O_2-Matic 	Cylinder 	Oxygen Concentrator 
Electricity / Power	No power needed (Except KYRA- for 60 minutes to compress 1000 litres of Oxygen)	No power needed	Continuous power / Battery required
Weight	150 kgs/8kgs/4kgs	M60 Cylinders, >20Kg	30Kg (ultra portables are light weight but very expensive)
Purity	99.7% Minimum	100%	93% and below depending on the atmospheric conditions
Portability	Ultra Portable (PORTIA & CRONUS) / Can be wheeled like a suitcase (KYRA)	Requires external trolley	Wheels to move around
First response compatibility	Can be carried anywhere from ground level to higher floors in the building (except Kyra)	Lacks portability	Lacks portability and not used in emergency care
Mobility & convenience of Patients	Can go any where along with the patient	Limited patient mobility around the cylinder	Limited patient mobility around the power point
O_2 Gas	Produced locally, No compressed gas (except Kyra)	Highly compressed gas (150-250bars)	Produced locally. No compressed gas
Transportation	No special transportation protocols	Special transportation / installation protocol	No special transportation protocols
Supply chain issues	None. Refills shipped to customers as consumables	Yes, cylinders to be sent back to refill stations	No Refills / Requires to be sent for servicing in 2-3 years
Humidifier	In Built	External	External
Competition	WHITE SPACE PRODUCT WITH NO COMPETITION	Inox Air Products Ltd, Air Liquide, Bombay Oxygen Corp. Ltd., National Oxygen Ltd, West Coast Industrial Gases Ltd.	Chart Industries, DeVilbiss Healthcare GmbH, Inogen, Inova Labs, Invacare, Koninklijke Philips N.V. Philips Healthcare, NIDEK Medical Products, O2 Concepts

Product Development Journey of O2Matic

2018

POC1

POC2

2019

PORTIA

Emergency Kit

CRONUS

Prototype 2
COPD Kit

2020

KYRA

World's first product to generate and store oxygen locally **Covid-19 application**

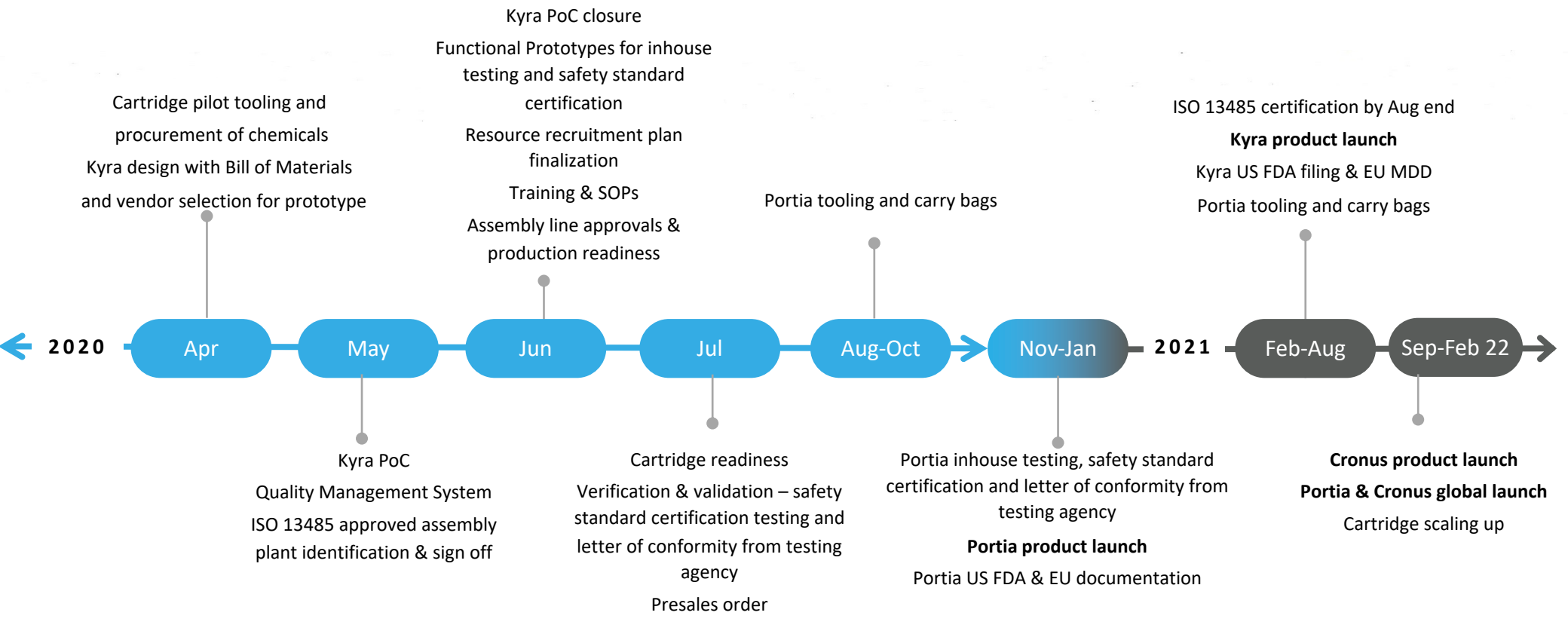
2021 Onwards…

Commercialize
CRONUS, PORTIA

New Product Development
Transportation

New Product Development
Mountaineering / Trekking

Product launch roadmap: 18 months



The Product – PORTIA Commercialised March 2021

PORTIA A46

PORTIA C123

Key Features

- Highly Mobile & Portable **(<8 Kgs)**
- **No power required**
- Instant 2 step process generating 99.7% pure oxygen within 40 seconds
- 510K clearance from USFDA, **CDSCO Registered,**
- **US, EU, India Patent granted**
- Designed for **Continuous** administration of Oxygen
- No storage and transport protocols; Easy to carry on a 2 wheeler

Product Description

Capacity

200 litres

Flow Rate

2-3 Litres per minute (LPM)
4-6 Litres per minute (LPM)

Consists of 2 replaceable cartridges – disrupting medical oxygen delivery market

Ideal for Ambulances / Home care / Rural & Semi-urban primary healthcare centres / Accident Response team / Private Clinics / First Aid

O2-MATiC
OXYGEN WHENEVER WHEREVER

KYRA: 1st Global product locally "generating & storing oxygen" Commercialised August 2021

Key Features

Low pressure localised Generation & Storage of Medical Oxygen - Oxygen stored at **1/10th pressure** of the existing solutions

Ease of Use

Mobile & Highly Portable (**150 Kgs**) (Caster Wheeled)

Power Required – for 60 minutes to compress 1000 litres of Oxygen

Continuous Administration of O_2 possible

Standard compressors / batteries / LCD Panels / Sensors used – availability of parts is never an issue

Product Description

Capacity

1000 litres Storage +
400 litres on tap

Flow Rate

0 to 15 Litres per minute (LPM)

Consists of 4 replaceable cartridges – disrupting medical oxygen delivery market

Ideal for Field Hospitals / Emergency Wards / Homes / Trains / Hotels / Site Clinics / District & Rural Hospitals / Nursing Homes & <50 bed hospitals

O2-MATIC
OXYGEN WHENEVER WHEREVER

IP / Patents & Trademark Status

Patent Application No.	Date of Filing	Country	Title of Invention	Status
201780003421.1	Jun 8, 2018	CHINA	Modular portable oxygen generator	Granted
15/763,665	Mar 27, 2018	USA	Modular portable oxygen generator	Granted
170752812.2	Dec 26, 2018	EUROPE	Modular portable oxygen generator	Granted
201941016754	Apr 26, 2019	INDIA	An Oxygen Generator	Granted

TM Application No.	Class	Country	Date of Filing	Type	Status
3247885	99	INDIA	Apr 29, 2016	Wordmark "O_2-MATIC"	Registered
3247886	99	INDIA	Apr 29, 2016	O_2-MATIC	Registered
018107366	5 &10	EUROPE	Aug 12, 2019	Wordmark "O_2-MATIC"	Registered
88584289	5 & 10	USA	Aug 19, 2019	Wordmark "O_2-MATIC"	Registered

** Another 4 global patents are pending publication

Thank You