STARTUP SOLUTIONS FOR COVID-19 SUPPORTED BY COVID-19 TASKFORCE

PERSONNEL PROTECTIVE EQUIPMENT

MAY 2020
## COVID-19 STARTUP SOLUTIONS BY TASKFORCE

### PERSONNEL PROTECTIVE EQUIPMENT

**Details Of the Founders**
- **Name**: Amankhan Khajakhan Pathan
- **Website**: www.bubblebyteindia.com
- **Location**: Maharashtra

**Details Of the Product**
- **Product**: Dr. Sanitor
- **Target Audience**: Hotels, Government Offices, Police Stations, Hospitals, Banks, Shops, Malls, etc.

**Market Status**
- **Startup Stage**: Early Traction
- **Price**: INR 500
- **Production**: 500 per day

**Support Needed**
- **Deployment**: They need deployment support.

### Bubble Byte India

- **Hands touch many surfaces and can pick up viruses. The virus can survive for about 72 hours on different surfaces.**

- **Sanitizing every possible surface is one of the current devised ways in precautionary measures. What if we can do our daily chores without having to touch anything. The lesser you touch, the safer you are. Even while washing our hands we touch the surfaces of the cleaning agent or water tap, so there are chances of the virus being settled on the surfaces.**

- **Dr. Sanitor- A smart mechanical liquid disinfectant dispenser, which dispenses fluid without having to touch the bottle. It uses a pedal mechanism for its operation. Safer and cost-effective precautionary measures.**

- **Dr. Sanitor can be installed at public places with sanitizer bottles at toilets, washbasins, colleges, hospitals, etc. Every place where a hand wash is a must. There are two versions of the product portable and fixed place application.**

### Dr. Sanitor

- **How it works**: No hands touch any surfaces or bottles. No liquid or soap is wasted. No missed spots. No wastage of resources. It dispenses only when someone steps on it. It can be placed indoors or outdoors. It is easy to install and use.

- **Advantages**:
  1. **Cost-effective**: No wastage of resources.
  2. **Safe**: No liquid or soap is wasted.
  3. **Easy to use**: No missed spots.
  4. **Easy installation**: Can be placed indoors or outdoors.

- **Looking for**: Investors, distributors, and strategic partnerships.

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### PERSONNEL PROTECTIVE EQUIPMENT

#### INDIAN INSTITUTE OF TECHNOLOGY MADRAS

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<tbody>
<tr>
<td><strong>Name:</strong> Prof T Pradeep</td>
<td><strong>Product:</strong> Nasal Drop Technology for Deactivation of Covid-19</td>
<td><strong>Startup Stage:</strong> Scaling</td>
<td>NA</td>
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<tr>
<td><strong>Website:</strong> <a href="http://www.dstuns.iitm.ac.in">www.dstuns.iitm.ac.in</a></td>
<td><strong>Target Audience:</strong> Central and State Governments</td>
<td><strong>Price:</strong> INR 10</td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Chennai</td>
<td><strong>Production:</strong> 10 MT per day</td>
<td><strong>Support Needed:</strong> NA</td>
<td></td>
</tr>
</tbody>
</table>

- The proposal is for the application of their technology in nasal drop-based deactivation of the COVID-19 virus. They expect a significant decline in the virus infection, especially when the infection has affected the nose and throat. The formulation can also be applied for surface sanitization.

- They expect the product to be extremely effective for the prevention and treatment of nasal transmission virus infection initiates and progresses through the droplet route and their technology is extremely effective against high virus load in the water medium.

- This technology has been successfully tested against enteric viruses (such as Rotavirus, Poliovirus, Japanese Encephalitis), bacteria (such as E. Coli, Salmonella, S. Aureus).
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<tbody>
<tr>
<td><strong>Name:</strong> Shubham Ahluwalia</td>
<td><strong>Product:</strong> Covid-19 face shields</td>
<td><strong>Startup Stage:</strong> Scaling</td>
<td><strong>Logistics:</strong> They need support in the supply chain movement.</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="http://www.shapeysquare.com">www.shapeysquare.com</a></td>
<td><strong>Target Audience:</strong> Police department, workers, labor, etc.</td>
<td><strong>Price:</strong> INR 45</td>
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<td><strong>Production:</strong> 100 per day</td>
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- The company is providing 3-D printed Face shields and respirator valves.
- It is an extremely low-cost face shield that uses OHP sheets to provide a barrier to the face of the person from being in contact with affected people.
- OHP sheets are easily available and they do not need to be disinfected they can replace easily.
### SUNFOX TECHNOLOGIES PRIVATE LIMITED

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<tr>
<td><strong>Name:</strong> Rajat Jain</td>
<td><strong>Product:</strong> Polycarbonate face shield helmet</td>
<td><strong>Startup Stage:</strong> Early Traction</td>
<td><strong>Logistics:</strong> They need support in the supply chain movement.</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="https://sunfox.in">https://sunfox.in</a></td>
<td><strong>Target Audience:</strong> CMC, Aiims, health department</td>
<td><strong>Price:</strong> INR 100</td>
<td></td>
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<tr>
<td></td>
<td><strong>Production:</strong> 20,000 per day</td>
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- The startup has developed a polycarbonate face shield helmet.
- It is one piece, easy to carry, easy to wear, easy to clean, lightweight, and economical protective gear.
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<tr>
<td><strong>Name:</strong> Abhay Shendye</td>
<td><strong>Product:</strong> Coating fabric to make a mask that can adsorb and kill the virus</td>
<td><strong>Startup Stage:</strong> Early Traction</td>
<td><strong>Logistics:</strong> They need assistance in the transportation of raw material.</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="http://www.swastiagro.com">www.swastiagro.com</a></td>
<td><strong>Target Audience:</strong> CMC, AIIMs, health department</td>
<td><strong>Price:</strong> INR 300 per pack</td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Pune</td>
<td><strong>Production:</strong> 5,000 per day</td>
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</table>

- The company has a patented derivative of chitosan that is proposed to be re-purposed for coating on masks. These masks can adsorb and kill viruses.
- The derivatives of chitosan are otherwise safe to use and have been deployed in IV injections as well as carriers in the flu vaccine.
- The proposal is to make a concentrated solution of the derivative, which is stable at room temperature. This can be diluted (75 X) and use to dip any fabric on which the material will get coated.
- These can be used as low-cost masks.
**PERSONNEL PROTECTIVE EQUIPMENT**

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<th>TINKRBOT TECHNOLOGIES</th>
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<tr>
<td><strong>Name</strong>: Ishruthi</td>
</tr>
<tr>
<td><strong>Website</strong>: <a href="http://www.tinkrbot.com">www.tinkrbot.com</a></td>
</tr>
<tr>
<td><strong>Location</strong>: Trichy</td>
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- The startup has developed face shields made using 3D printing.
- The 3D Printed design is flexible, light-weighted, and simple to suit the comfort of doctors using the shield.
- Thereby it provides additional protection to doctors dealing with patients.
## PERSONNEL PROTECTIVE EQUIPMENT

### UNEAKO GREEN EARTH PVT. LTD.

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<tr>
<td><strong>Name:</strong> Ankit Tripathi</td>
<td><strong>Product:</strong> SN-19 Face Shield</td>
<td><strong>Startup Stage:</strong> Early Traction</td>
<td><strong>Logistics:</strong> They facing issues procuring raw material</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="http://uneako.com/">http://uneako.com/</a></td>
<td><strong>Target Audience:</strong> Government Hospitals, Police officers, Municipal workers</td>
<td><strong>Price:</strong> INR 70</td>
<td></td>
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<tr>
<td><strong>Location:</strong> Delhi</td>
<td><strong>Production:</strong> 200 per day</td>
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- SN-19 can help frontline medical responders taking care of the infected person. The ideal solution to avoid touching your face, eyes, mouth, and nose. Ultimately safeguarding you from the transmission of germs or viruses through infected patients.
  - **Features of the Face Shield:**
    - Lightweight and ideal to wear for a long period. The total weight is around 40gm.
    - The minimal volumetric weight which allows easy transportation of face mask in bulk.
    - Adjustable face mask. The person can adjust the face mask as per their face size and shape.
    - Crystal Clear transparent face mask for clear vision. Easy to clean and reusable.
    - SN19 is durable as well. People can use it easily.
    - They feel no difficulty to bend their head or neck while using this face mask.
### PERSONNEL PROTECTIVE EQUIPMENT

#### URTECHKLIKWORLD PRIVATE LIMITED

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<tr>
<td><strong>Name:</strong> Praveen Urmila</td>
<td><strong>Product:</strong> Masks</td>
<td><strong>Startup Stage:</strong> Early Traction</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="https://uralstech.in/">https://uralstech.in/</a></td>
<td><strong>Price:</strong> INR 40</td>
<td><strong>Production:</strong> 10,000 to 15,000 units per day</td>
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</tr>
<tr>
<td><strong>Location:</strong> Delhi</td>
<td><strong>Product:</strong> Masks</td>
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- The startup produces a protective mask to filter out dust, germs, smoke & pollen. Appended below are the features of the product suitable for children and adults:
  - For various treatment environments such as emergency room, operating theatre, etc
  - Unique invasive and non-invasive ventilation modes to meet the different patients’ needs
  - Inspiration halt, convenient for sucking phlegm
  - Oxygen mixing technique to adjust oxygen concentration and meet the oxygen therapy need
  - Alarm and monitoring system which meet the international safety standard
  - TFT screen, displaying various respiration parameters and waveforms
  - With a built-in battery and on-vehicle power connector for A/C and D/C power supply
## PERSONNEL PROTECTIVE EQUIPMENT

### JARIWALA ROBOTICS PRIVATE LIMITED

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</table>
| **Name:** Vishal Jariwala | **Product:** Face Shields  
**Target Audience:** Government Hospitals, Corona Testing Centres, Défense, Police, Home Guards & Security Guards working on fields | **Startup Stage:** Scaling  
**Price:** INR 300  
**Production:** 5,000 per day | NA |

**Face shields** offer an extra layer of protection for health workers, with space to wear a protective N9-5 mask underneath, and unlike masks, don’t need to go through quite the same rigorous testing or meet the same safety standards to be of immediate use, and can be easily cleaned for repeated wear.

**A 3D printer** essentially works by extruding molten plastic through a tiny nozzle that moves around precisely under computer control. It prints one layer, waits for it to dry, and then prints the next layer on top.
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| **Name:** Karan Garg   | **Product:** Home Made Face Masks Cotton  
**Target Audience:** Medical Stores, Administration, etc | **Startup Stage:** Scaling  
**Price:** INR 20  
**Production:** 10,000 per day | **Funding** |

- Most masks available are one-time use and hence unaffordable for masses. Mom Made Products’ home-made cotton face masks are reusable, washable protective masks that can be used for masks.
- At the same time, these are manufactured by women SHGs thereby earning them a supplemental income in these tough times.
## Personnel Protective Equipment

### MGH Labs Pvt Ltd

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<tr>
<td><strong>Name:</strong> Gokul Rajendran</td>
<td><strong>Product:</strong> Filter based air filtration&lt;br&gt;<strong>Target Audience:</strong> Hospitals staff, Health care workers, Frontline doctors, and common public</td>
<td><strong>Startup Stage:</strong> Validation&lt;br&gt;<strong>Price:</strong> INR 200&lt;br&gt;<strong>Production:</strong> 1,000 units</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="http://bogorchid.com/">http://bogorchid.com/</a>&lt;br&gt;<strong>Location:</strong> Chennai</td>
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- The Filter based wellness mask protects a healthy person from an infected person (& vice versa) by providing an effective physical barrier from aerosol-based virus contraction.
- It provides a protective mask for health care workers, physicians, and the common public.
- It effectively filters germs including bacteria, fungus, and dust particles like pollen, etc.
- It acts as a wellness tool by providing preventive health solutions.
- It provides smart filtration and protection at an affordable price. Indigenously manufactured with highly sterile conditions.
## VIEBEL CONCEPTS PLC

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<td><strong>Name:</strong> Mithun</td>
<td><strong>Product:</strong> Automated Integrated Hand Wash Station</td>
<td><strong>Startup Stage:</strong> Validation</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="http://www.viableconcepts.in">http://www.viableconcepts.in</a></td>
<td><strong>Target Audience:</strong> Hospitals and Health Care, Airports, Domestic Use, Schools and Educational Institutions, etc.</td>
<td><strong>Price:</strong> INR 3,000</td>
<td></td>
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<tr>
<td><strong>Location:</strong> Mysuru</td>
<td><strong>Production:</strong> 1,000 units</td>
<td><strong>Production:</strong> 1,000 units</td>
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- Integrated Hand wash liquid and water dispensing station. Applicable at places of hand wash and washbasins: Sensor-based Tap and Electronic Box.
- The device could be mounted on any existing washbasins or new washing stations can be manufactured. Operations are sensor-based.
- This suffices hand washing for containment of COVID-19 virus and importantly avoids the spread of the virus through touching of the tap lever or knob by multiple users.
- It’s a non-contact Hand Washing Station with Water and Handwashing liquid dispersion at the same point at prescribed frequencies.
## PERSONNEL PROTECTIVE EQUIPMENT

### PILTOVERTECH

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<td><strong>Name:</strong> Manan Issar</td>
<td><strong>Product:</strong> Bi-Directional One-Way Valve, Venturi Splitter, Headbands for masks and Bolstered Face Shields</td>
<td><strong>Startup Stage:</strong> Validation</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Website:</strong> <a href="https://idahand.in/">https://idahand.in/</a></td>
<td><strong>Target Audience:</strong> Hospitals, Govt. Offices, Police</td>
<td><strong>Price:</strong> Face Shield - 375, Valve - 350, Splitter - 350, Headband – 100</td>
<td></td>
</tr>
<tr>
<td><strong>Location:</strong> Jaipur</td>
<td><strong>Production:</strong> 1,000 per day</td>
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- **Bi-Directional One-Way Valve** – Unlike the reusable valves (used in Ambu bags - hand-held devices used hospitals run out of ventilators or during emergencies) their bi-directional one-way valves are modular.
- **Venturi Splitter** - Present splitters compromise with the air pressure as the air splits at the junction of the splitter.
- **Headbands** – Improved headbands designed for the front line make masks tolerable for longer periods. They have re-designed the headband to assume the form of a comb so that it does not slip down the back of the head.
- **Bolstered Face Shield** - Present designs leave the bottom end of the acrylic shield to wobble; they have re-designed the face shield to have additional support at the bottom.
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### PUPILMESH PRIVATE LIMITED

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| **Name:** Milind M Manoj | **Product:** Low-Cost Face Shields  
**Target Audience:** Bangalore Medical College, MS Ramaiah Medical College | **Startup Stage:** Prototype  
**Price:** INR 85 per unit  
**Production:** 10,000 per day | **Deployment:** They need financial support. |

- The startup has developed low-cost face shields.
- The face shield has got anti-scratch and anti-fogging capabilities and thus makes it easy and comfortable to use.