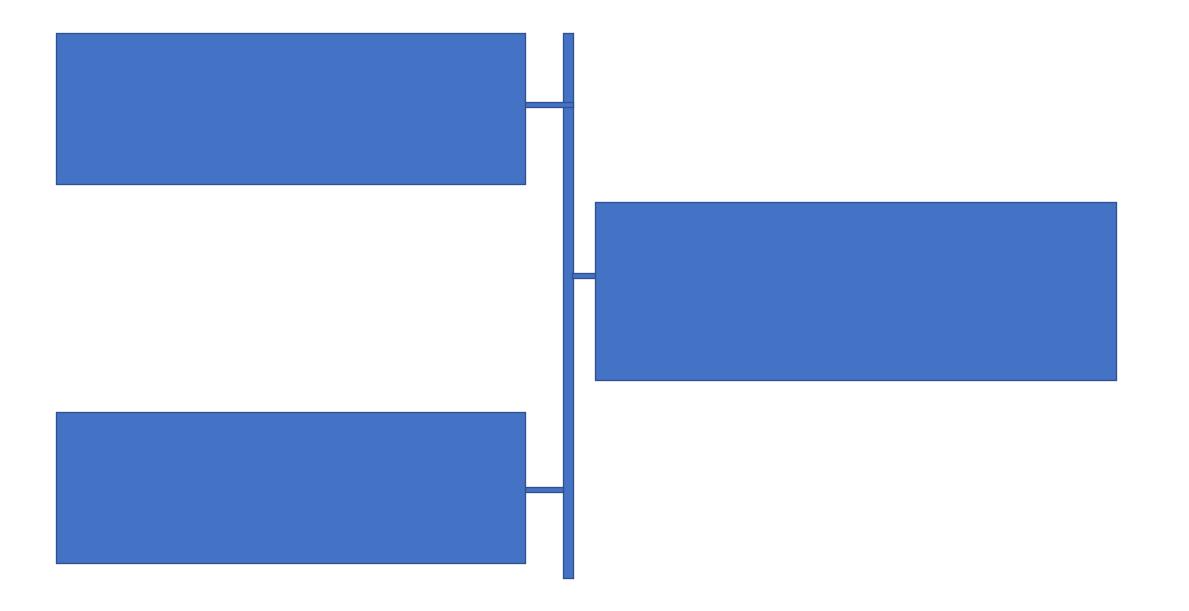
# **ART OF MANUFACTURING**

### Representation of Content in Time line format (Just for idea)



### A). Art of manufacturing

- Infographics of manufacturing plant, detailed information.
- Detailing of ISO class 8: Clean room plant
- Automation technology & Robotics manufacturing
- Environment, Economic & Social dimensions of manufacturing

Infographics of manufacturing plant, detailed information.

**ABDOSTBL:** Environment, Economic & Social dimensions

#Super20 Quality Certification



### 40000 sq. meter campus

Validated from ISO class 8 clean room facility

ABDOS 4.0 manufacturing





**ABDOS SMART & SUSTAINABLE** MANUFACTURING (A-SSM)

Robotics & Human Touch Free development

ABDOS 6R manufacturing principles

# An Expansion & New avatar in 2019

 Abdos Unveils its newly developed manufacturing unit in September 2019. We have increased the production capacity 2X & now our 40000 sq. meter modern campus supporting the Life Science industries across the globe.

## ABDOS TBL : Environment, Economic & Social dimensions

### **ABDOS Sustainability Dimension**

Environmental



ABDOS exclusive steps on carbon footprint rate, % of waste generated per thousand products units, % of reusable/recycled material, energy used per thousand of products, total consumption of water, sustainable water use has contributed significant result in the environment.

Social



Professional training & development for human resources have made progressive change in social dimension. Health and safety rate, diversity rate, equality rate, total expenses for social initiatives are making a change.

Economic



Abdos commitment on recycling programs, **investment in environment & human safety technology rate**, Current production sites with an environmental certificate empowers our vision.

# **ABDOS ISO class 8: Clean room plant**

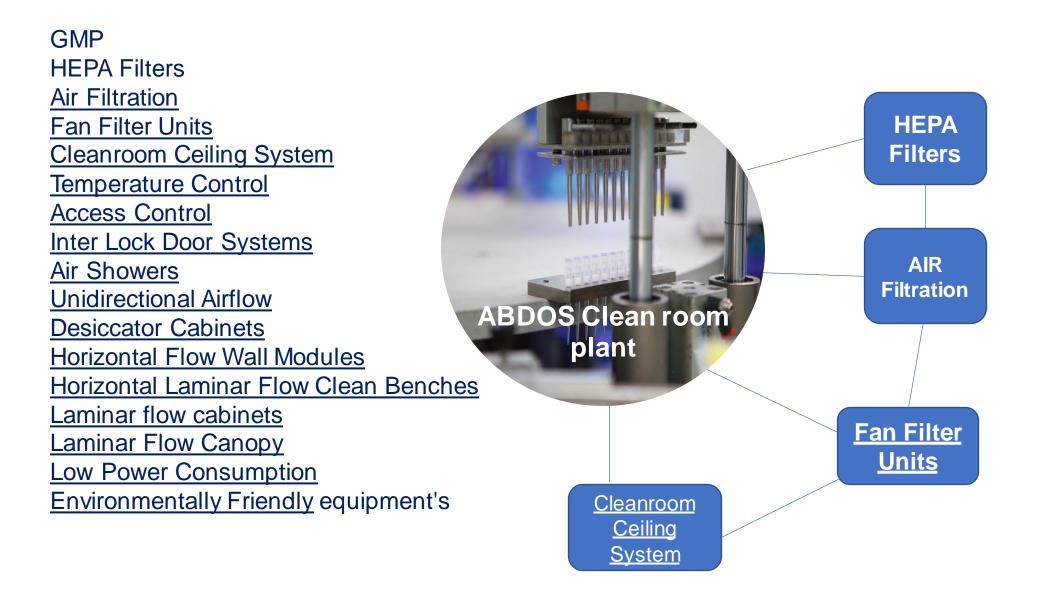


ISO Class 8 cleanroom is one of the most popular cleanroom applications used in Life Science & pharmaceutical and research products. ABDOS commitment to offer contamination free products are making a difference in global research.

### ABDOS Clean room facility quipped with

GMP **HEPA Filters** Air Filtration Fan Filter Units **Cleanroom Ceiling System Temperature Control** Access Control Inter Lock Door Systems Air Showers Unidirectional Airflow **Desiccator Cabinets** Horizontal Flow Wall Modules Horizontal Laminar Flow Clean Benches Laminar flow cabinets Laminar Flow Canopy Low Power Consumption Environmentally Friendly equipment's

### Can we represent the content as below ?



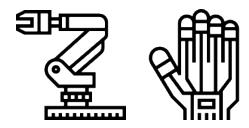


Image : Abdos products with robotic visuals



#### Use these icon & need to develop a great visual :

While our society is promoting exponential technology growth, human activities and many resources (e.g., energy, materials, water) are increasingly resulting in climate change. The modern abdos Facility has discover two significant changes

### 1. Abdos 4.0 : Robotic technology & Human touch free Products

- The fourth industrial revolution, and the implementation of the sustainable manufacturing approach. The fourth industrial revolution, also known as **abdos 4.0** is not only the industrial production but also the whole society. Historically, society has experienced four major industrial transformations.

### Abdos 4.0 discovers

- **1. Robotic Technology** : abdos equipped with latest generation robotic assembly line to enhance the quality of product & a vital contribution in sustainable manufacturing.
- Polymer granules demands precision and accuracy in mold engineering to produce error free products & efficient use of raw material to minimize the losses.

### 2. Human Touch Free & Assured quality :

- Human touch free advancement brought many in demand quality subjects for the life science industry. Abdos has achieved numerous certification to ensure the product quality in larger space of the science.
- Human DNA free, DNase RNase free, Pyrogen Free & Forensic DNA grade (<u>USE OF ICON</u> IAMGE)

### Free products are essential quality subject which ensure the right result for samples &

abdos products are suitable for molecular biology, genomic and forensic applications. Products are quality-assured & manufactured under controlled, automated cleanroom conditions. Products are designed for the safe handling of valuable or potentially hazardous samples, reducing the potential for contamination that could adversely affect analytical results.

For more information visit (Link): Quality certification landing page

# Forensic DNA grade (ISO 18385)



Forensic DNA Grade

Abdos recently achieved the Forensic DNA grade free Minimizing the risk of human DNA contamination in products used to collect, store and analyse biological material for forensic purposes

ABDOS specifies requirements for the production of products used in the sample collection, liquid handling & storage, and analysis of biological material for forensic DNA purposes. Fore more info :( Link) : Quality certification landing page



ABDOS quality standard has created another milestone on achieving Endotoxin level less than 0.005 EU/ml. It's commitment to our valuable customers to consistently provide quality products with continuous improvement, deliver quality solutions. Over the years researchers found a surge in cases in endotoxin level contamination with plastic products for life sciences application.

Contamination in Centrifuge ware and liquid handling has long been a serious problem for researchers as well as for manufacturers. In the past, most efforts for avoiding contamination-induced losses have focused on biological contaminants: bacteria, mycoplasmas, yeasts,

fungi, and even other cell lines. However, for companies producing life science based products to support the applications in molecular biology, Cell & tissue culture application, Food testing & pharmaceutical, endotoxin, a chemical contaminant produced by some bacteria, has also been a major concern. The presence of endotoxin in products can result in pyrogenic responses ranging from changing the results of samples etc. Our goals are to constantly improve the product, from 0.03 EU/ml to 0.005 EU/ml is impressive achievement ABDOS Labtech has listed in life science research.



Endotoxin is a Lipopoly-saccharide (LPS) found in the cell wall of Gram-negative bacteria, is a pyrogen which induces inflammation and fever as an immune response in higher organisms.

- Pyrogens can lead to anaphylactic shock and death of patients.
- Endotoxins are very fatal when the level of increases beyond safe level.
- It is very important for the pharma manufacturers and the other critical researchers that the levels of the Endotoxin should be maintained as per the FDA standards.

The only way to control the Endotoxin level is by adopting Endotoxin free (or least level) consumables and material in the process

ABDOS ensures the Endotoxin level < 0.005 EU/ml complies USP 161 Guidelines

ABDOS

ABDOS ensures the Pyrogen Free products complies USP 151 Guidelines

**Creating For Life Science** 

### Fore more info :( Link) : Quality certification landing page