

GRIDBOTS
POWDERSORT
ULTRA HIGH SPEED POWDER SORTING SYSTEM

- **SORTING**
- **INSPECTION**
- **IMPURITY REMOVAL**

MICRON LEVEL SORTING INSPECTION

ABOUT GRIDBOTS

We are a Technology company from India and work in the field of Robotics - Artificial Intelligence and Machine Vision. Founded in August 2007 by young and passionate innovator Mr. Pulkit Gaur [TED Fellow and MIT Young Innovator of the year]. We today are a team of more than 50 people- Head quartered in Ahmedabad and having offices in Pune and Delhi.

We design and develop ultra high performance systems which are used in the industry for defect detection - dimension measurement - sorting applications - grading application and many other ways. With our machine vision and robotic solutions we are helping our clients achieve digital factory goals in a time bound manner.

We would be glad to hear about your industry 4.0 adaptation strategy and would love to get in touch with you to explore the synergies in working together !

NO.1

POWDERSORT Suplier from India

95+

Projects Completed

100+

Robots Delivered

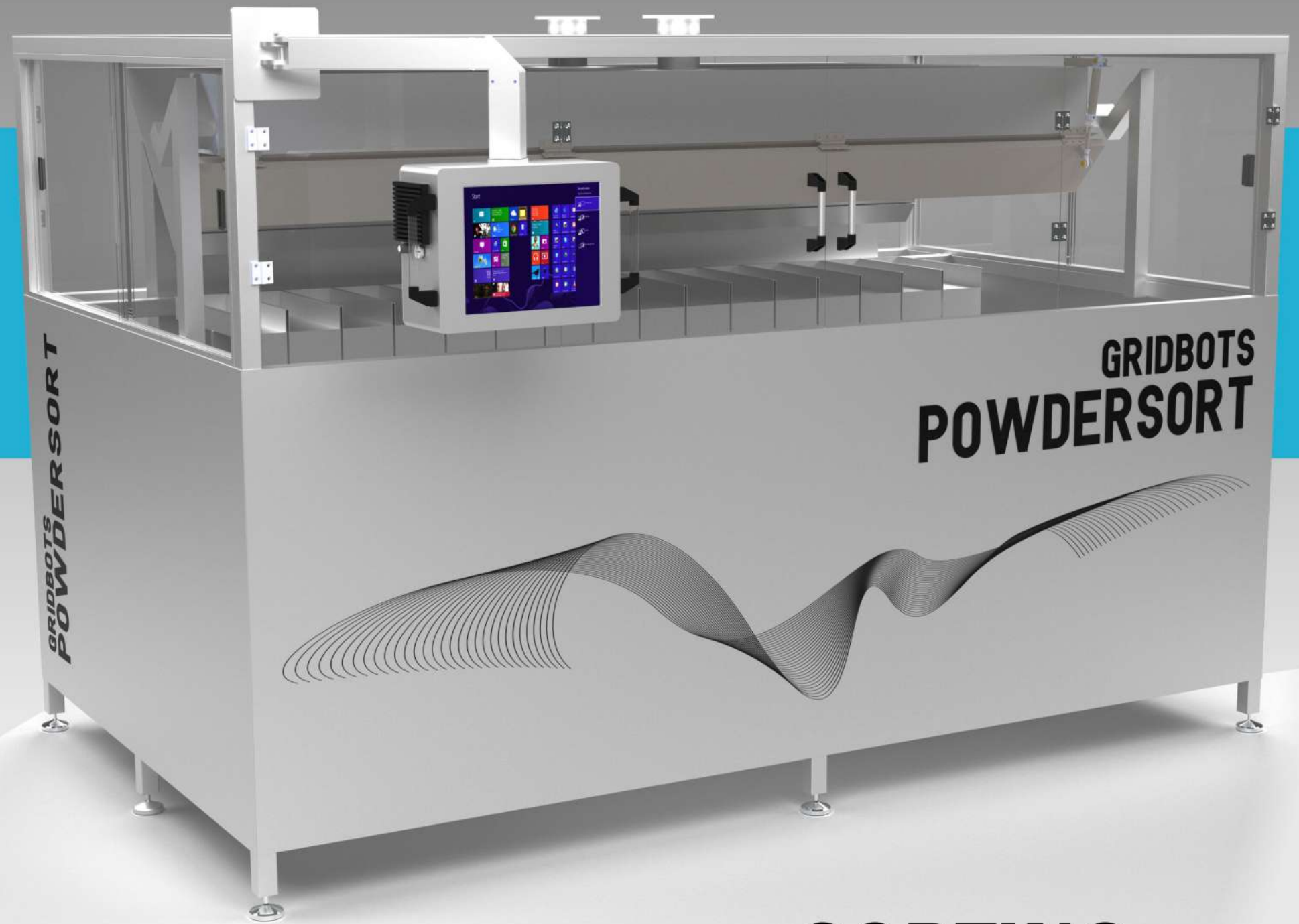
500+

Components Per Sorting



GRIDBOTS POWDERSORT

ULTRA HIGH SPEED POWDER SORTING SYSTEM



IOT



ULTRA HIGH
SPEED



IMPURITY
REMOVABLE



AUTOMATIC
BAGGING



SHAPE
ANALYSIS



IP-65

SORTING SOLUTIONS

Gridbots powderSORT is world's fastest powder sorting system that can detect variations in color, shape, size impurities above 50 microns. The machine inspects for impurities above 50 microns and removes them automatically. The system has inbuilt mesh separator and magnetic sieve to remove any unwanted material beforehand. The system works can sort upto 2 tonnes per hour of the powder/API and outputs the sorted and impurities in different bins. The complete machine is made up of SS304 which is pharma grade build material and the machine comes with automatic cleaning and purging mechanism which ensures there is no leftover of the material anywhere in the machine. There are multiple high speed cameras are used for powder inspection. The system supports from 50 to 2000 microns of material and impurities removal. The system comes with recipe builder to facilitate easy recipe creation as per the user requirements. The system has in built de-ionisers and suction mechanisms to ensure that during the operations no dust escapes the machine. The system operates silently and there is no moving part in the machine.

Throughput Capacity

2.0t/h

Machine Weight

400kg

Power Consumption

200w

Particle Size Supported

50-2000Microns

Impurity Detection Size

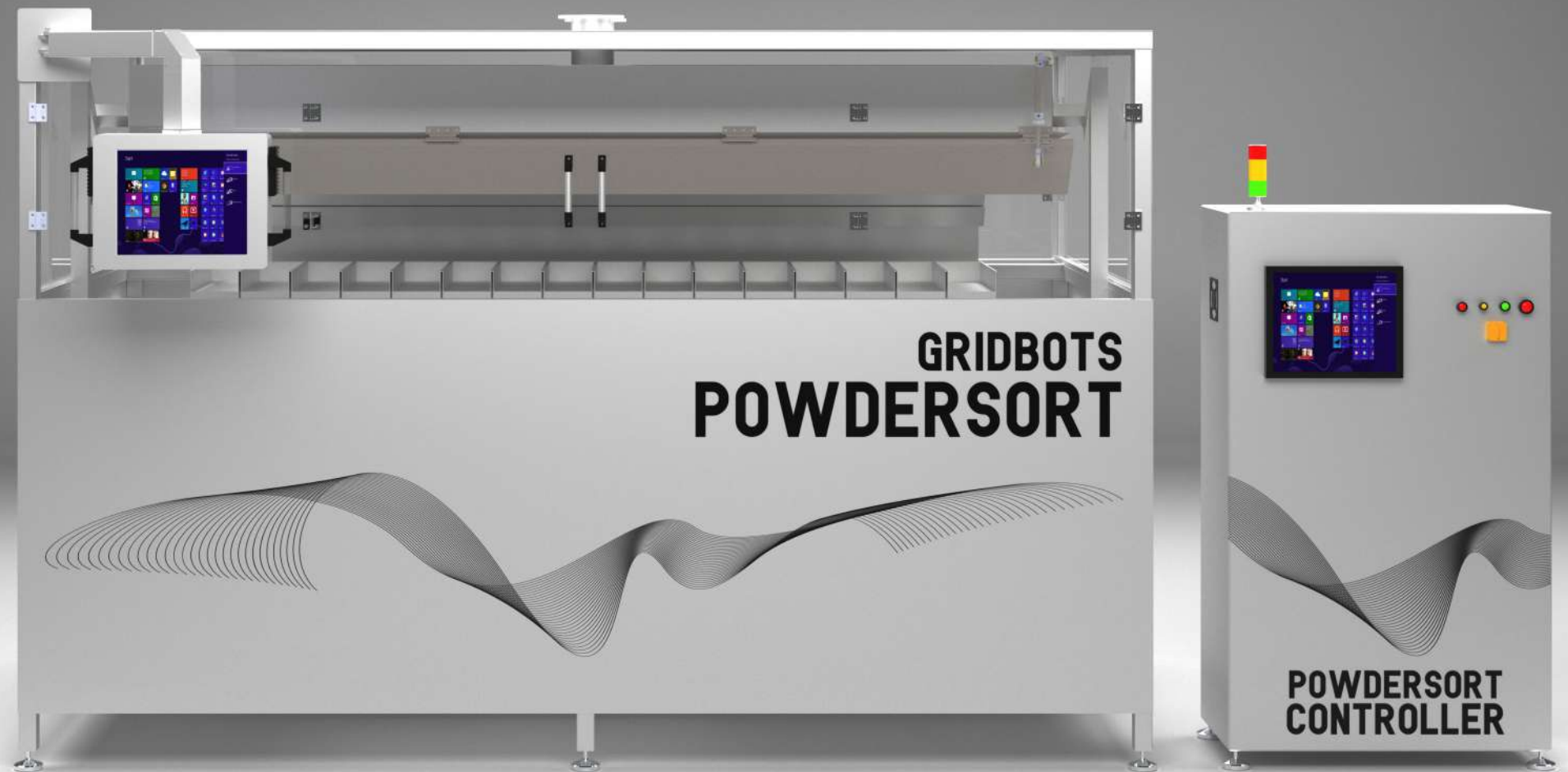
50Micros

Camera System

20Camera Inbuilt

Lighting

10Million Lumen Lights



TECHNICAL SPECIFICATIONS

The machine confirms to GMP. The structure is Food Grade SS 316. IP 65 Ingress protection is given to Camera and Controller units.

VIBRATORY HOPPER

The capacity of the feed hopper is 1000 kg and Sugar/API Powder will be conveyed using vacuum pump which will automatically start stop using level sensor. The hopper contains magnetic grill to remove any ferro magnetic items.

INSPECTION SYSTEM

The inspection system unit contains multiple cameras. These high speed line scan cameras are best in class inspection cameras which can inspect the particles at high speed. The impurities include particles other than powder color, hair, insects, black particles. Once an impurity is detected, the inspection system will give signal to rejection system to remove the particle before going into packaging.

REJECTION UNIT

The rejection unit contains multiple units of nozzles for high speed suction of impurities. The system comes with its own vacuum unit.

PACKAGING UNIT

The system comes with three channel output where bags or bins can be placed to collect the sorted API powder.

OUTPUT CAPACITY

Output capacity is variable which depends on the particle size and density. It can range from 100 KG / Hour to 5 Tonnes / Hour.

MACHINE FEATURES

- Self Cleaning and Purging system
- No Moving Part Inside
- Servo Driven Mechanism
- Ss304 Build
- Single User Interface HMI

CONTROL SYSTEM FEATURES

Material Flow Rate	: 4 M/S
Automatic Weighing	: Upto 100 Kg Bagging
Machine Weight	: 400 Kg
Power Consumption	: 200 W
Control System	: Decentralised

COMPUTER

On Board Computer	: i7 [11'th Gen]
GPU	: nvidia - 1080
RAM	: 16 GB
Aux Controller	: ARM-32 Bit



GRIDBOTS TECHNOLOGIES PVT. LTD.

Main Office Address

Office #306, Maharana Pratap Complex, Behind V.S. Hospital,
Ashram Road, Ahmedabad - 380006, Gujarat, India.

Factory Address

59, MahaGujarat Industrial Estate, Behind Surbhi Dining Hall,
Sarkhej Bavla Road, Moraiya, Ahmedabad - 382213, Gujarat, India.

Contact

M. :+919924826584

Email Id : contact@gridbots.com

Website : www.gridbots.com

