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ABOUT US

Welcome to

'See Automation & Engineers' - Your Partner for Valve Automation and Process Instrumentation

Since our inception in February 1998, At See Automation & Engineers, we are more than just an engineering firm; we are the driving force behind groundbreaking solutions that shape the future process of instrumentation.

Who We Are:
As a prominent engineering firm, we excel in the production of Pressure and Flow Level measuring Instruments, marketed under our trademark brand "See Believe" specifically designed for the process industry. In addition, AT SEE-AUTOMATION we proudly serve as the distributor for a renowned valve brand with a complete pneumatic range of products and are the designated valve automation center (VAC) to provide customized flow control solutions in the North Indian market. Our team of experienced engineers, designers, and experts collaborate seamlessly to create tailor-made solutions that address complex challenges. With a proven track record of success, we have established ourselves as a trusted partner for industrial engineering services since 1998.

Why Choose Us:
✓Expert Team for custom made Level, Flow, Pressure, and Valve/Pneumatic Automation Solution.
✓Custom made Pressure and Level measuring solutions: We understand that every project is unique. Our point and continuous level solutions are tailored to your specific needs, ensuring optimal performance, efficiency, and sustainability.
✓Technology: We leverage the latest tools and technologies to stay ahead of the curve, providing you with the most advanced engineering solutions available.
✓Client-Centric Approach: Your success is our priority. We maintain open communication, provide regular updates, and adapt to your evolving requirements throughout the project lifecycle.

Join us on a journey of innovation and excellence. Let's collaborate to bring your visions to life and shape a brighter future together. Contact us today to discuss your project and discover how See Automation & Engineers, can make a difference.

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Elevate your engineering aspirations with See Automation & Engineers - Your Partner in Progress.

Website:- seeautomation.com
- seebelieve.co.in

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Product Introduction

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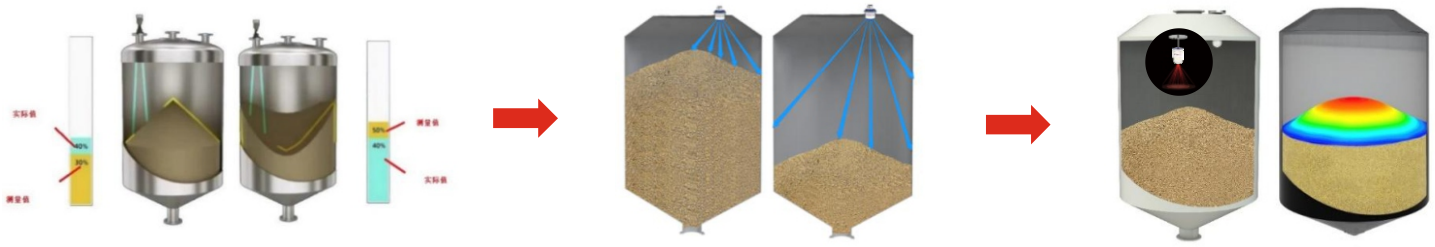
Industrial digitization leads to 3D scanners



With the continuous development of industrial technology, the trend of digital silos is gradually emerging in industries such as cement, metal metallurgy, mining, wood, power plants, coal, grains, feed, and food and beverage.

Users can detect silos, material yards, indoor stacking materials in real-time and dynamically through 3D images, and calculate relevant data such as coordinates, volume, and weight based on 3D information, providing optimization basis for the process flow. Accurate statistics of "purchase, sales, and inventory" data can provide closed-loop guidance and management for financial benefit analysis, procurement, inventory, and delivery plans, promoting enterprises to achieve cost reduction and efficiency increase while improving product quality.

The maturity of 3D detection technology have made material management intelligent and information-based, production data visualization, production process transparency, on-site operation unmanned and automated, and improved management ability, decision-making ability, and safety prevention ability to a new height.

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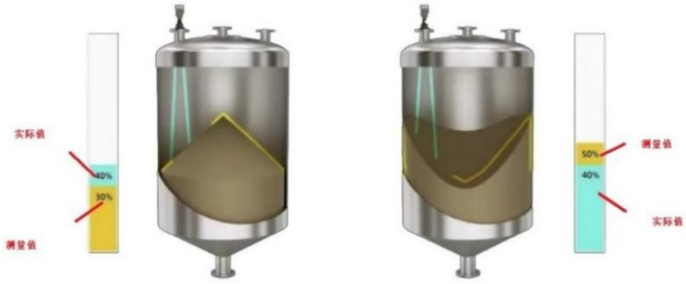
The development history of silo monitoring

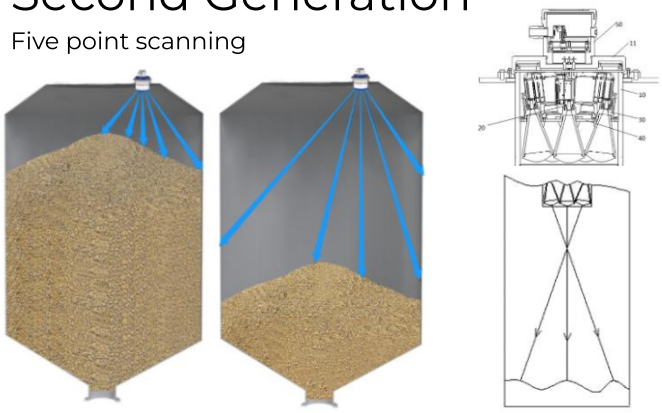
First Generation

One point scanning



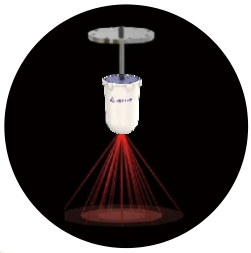
Second Generation

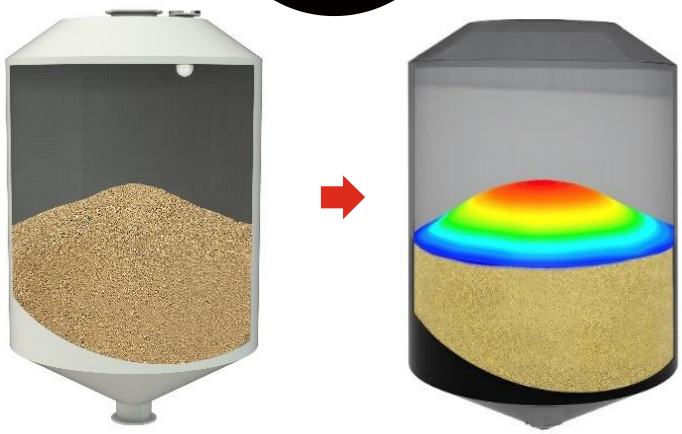
Five point scanning



See - Believe Solution (SEAL 3D)

360 degree scanning without dead angles





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SEAL-3D SCANNER

The first high-precision 3D radar scanning system in india

Which can solve all solid material silo management issues

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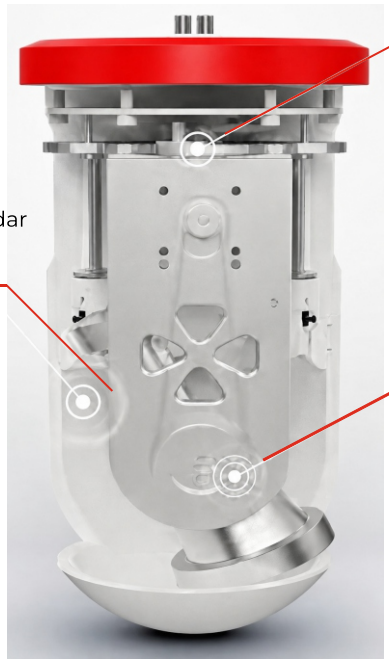
Core Technologies



Altitude ± 90 ° Horizontal 360 ° 16200 scanning points in a single scan

140GHz high-precision radar
Accuracy reaches ± 2mm

Microwave radar, dust-proof, 24*7 uninterrupted operation, completely unaffected by incoming and outgoing materials

1 The installation hole size can be as low as 190mm, and the status indicator light can display different working states

2 No blind area with warning function for ultra-high or ultra-low material levels

3 Equipped with self correction function for installation angle deviation
Install multiple machines at different positions to ensure unified measurement

4 Dual electric and dual network redundancy design ensures system operation
Desktop/laptop/mobile/tablet remote management

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Product Features

Easy to install

The automated management system can interface with various management software for data integration (such as ERP), and can remotely obtain 3D visualization images and data reports through mobile phones, enabling real-time grasp of material 3D information, inventory levels, usage data, etc.

Easy to operate

Realize automatic inventory of material silos, allowing users to configure container shapes and sizes based on actual on-site conditions. Support various shapes of material silos such as circular silos, square silos, and non-linear silos, helping customers obtain more accurate material inventory information.

Cost-effective

Information and intelligent management of material data, helping customers complete the entire process of benefit analysis, procurement, and inventory closed-loop management. Improve the inventory speed and accuracy of the silo, reduce labor costs, grasp material costs, and increase economic benefits.

Technical Parameters

Items	Value
Transmission frequency range	120-140GHZ
Material type	Particles, powders, and other blocky objects
Measurement range	20m 40m 80m 120m
Beam angle	1.5 °
Horizontal rotation angle range	0...360
Horizontal step angle	1 ° adjustable
Pitch measurement angle	One-way-90°~90° adjustable
Pitch step angle	1 ° adjustable
Shell material	6061 aluminum alloy, nylon
Power supply	24VDC,220VAC
Power	8W
weight	5KG
Communication methods	Fiber optic/Ethernet/Wireless
Working temperature	-40℃~75℃, Adapters can be selected for higher temperatures
Protection level	IP67
Measurement accuracy	± 2mm
3D volume modeling accuracy	± 0.5%FS... ± 2%FS
Installation method	≥DN200 flange

Product Patent

No.	Milestones	Type
1	3D radar level scanner	Appearance
2	A high-precision material quality measurement system based on 3D radar scanner	Invention
3	A high-precision material quality measurement system based on 3D radar scanner	Invention
4	Equivalent multi position and no dead angle electromagnetic wave 3D scanning radar and material measurement method	Invention
5	Equivalent multi position and no dead angle electromagnetic wave 3D scanning radar	New
6	A waterproof 3D scanning radar measurement device	New
7	A low-noise sealing cover for 3D scanning radar	New
8	A 3D scanning radar with installation angle error self correction function	Invention
9	A 3D multi-point radar detection device for expanding measurement range	New
10	A bidirectional locking installation angle adjustment device for 3D radar	New
11	A microwave synchronous follow-up long-life 3D scanning radar	New
12	Reflective continuous rotating radar scanning device and three-dimensional shape measurement of materials	New
13	Temperature resistant 3D scanning radar	New
14	3D scanning radar with working status, scanning angle, and speed indication functions	New

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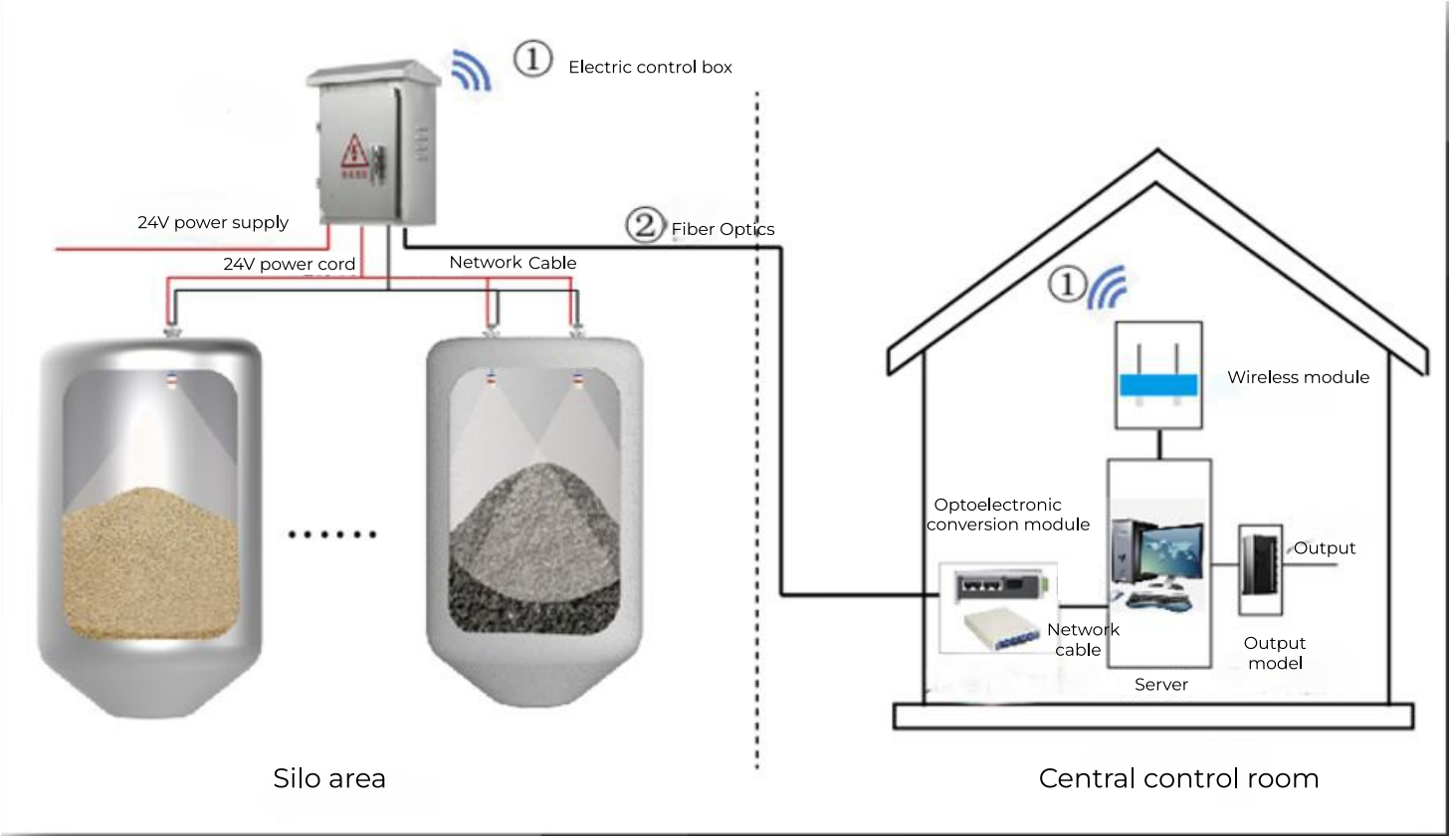
Architecture and Communication



The Seal-3D Radar Scannetransmits the measurement data to the host through fiber optic/4G/5G (wireless).

The data can be calculated, processed, analyzed, and modeled by the computing center in the host's local server in conjunction with the installation position of the 3D device to obtain three-dimensional point cloud coordinate information, material level, and volume.

Then, based on the volume and the density of the material, the quality information is calculated and presented on the upper computer interface.

In addition, measurement data can also be uploaded to the cloud, and real-time data from different locations can be collected, viewed, and summarized through mobile devices (such as mobile phones, PADs, etc.) to monitor the material situation in silos at any time and anywhere, and remotely control the 3DPro23Radar Scanner.

Multiple output mode optional: Output relevant information such as material height, quality, volume, point cloud, etc. to the customer control system through 4-20mA, RS485, serial port, network port, OPC form, and participate in chain control or integrated display.

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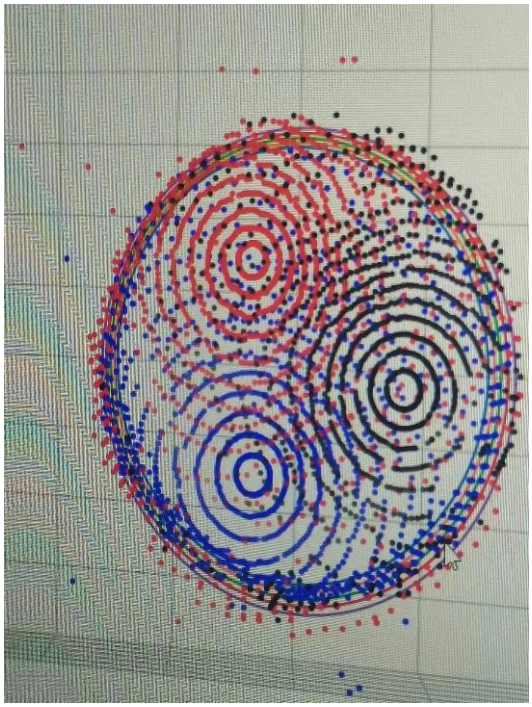
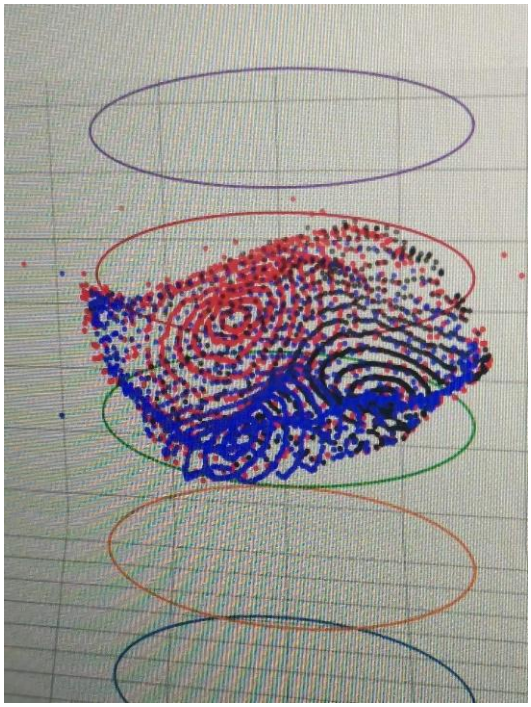
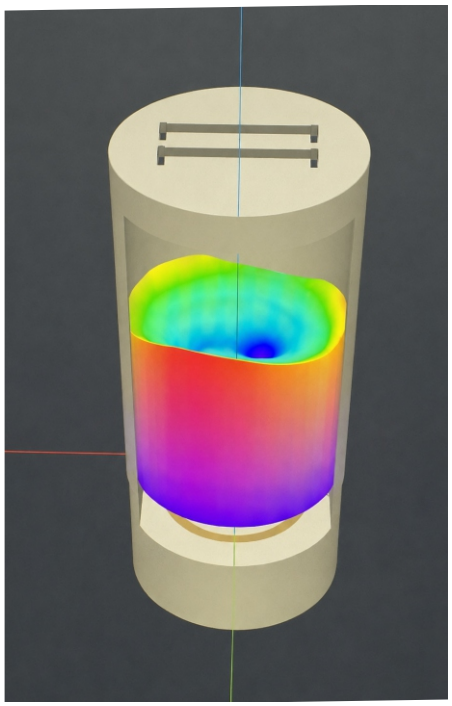
Image Algorithm: Splicing and Registration







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Software Operation Interface

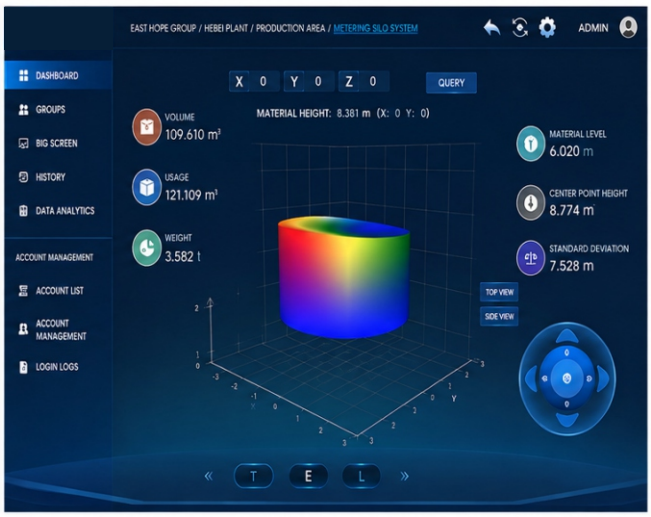
1 One click to login

2 Manage multiple silos

3 Good user interface

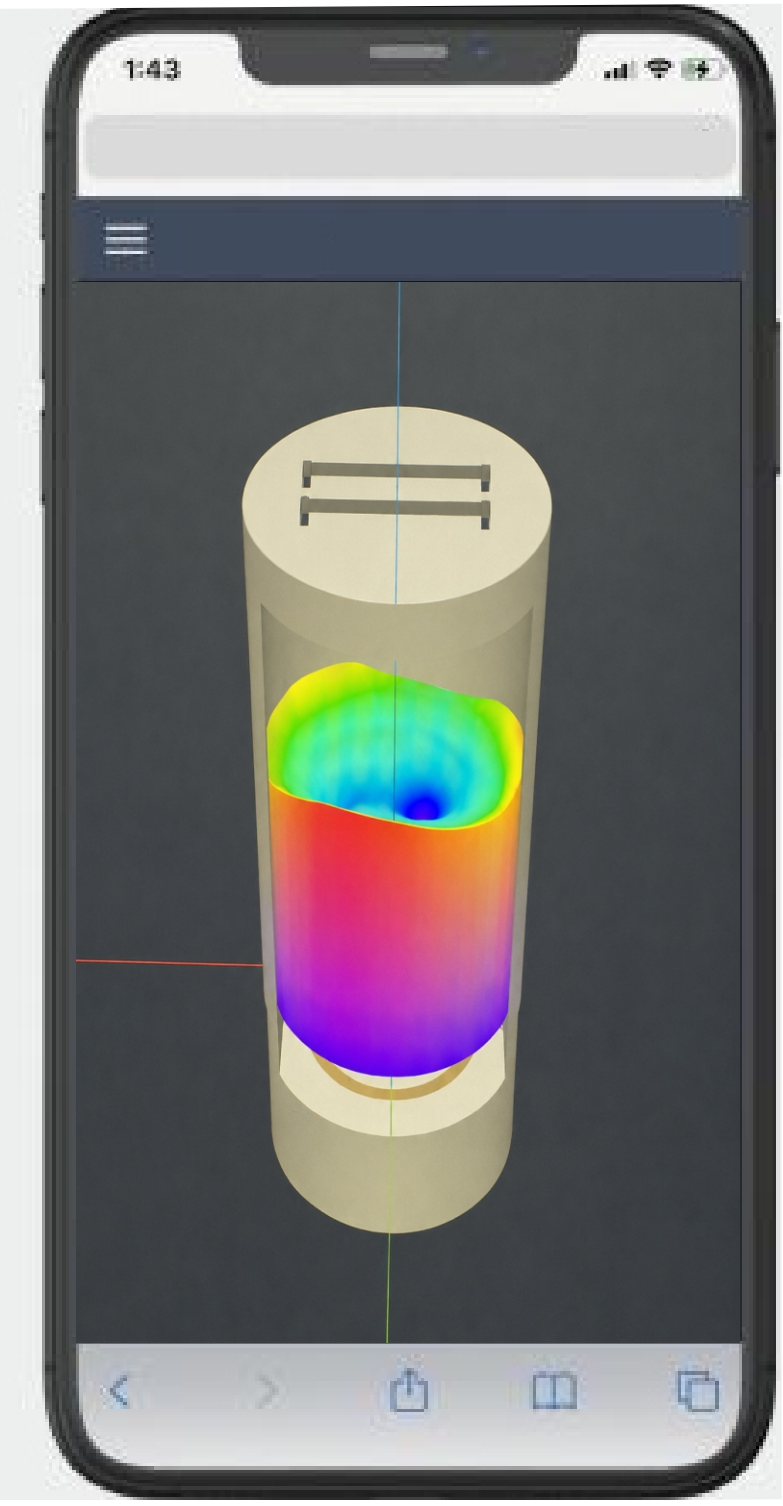
4 Permanent free upgrade

Software Operation Interface



Historical curve

Mobile interface



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Cost saving

COMPANY MANAGEMENT TOOL
SALES TARGETS

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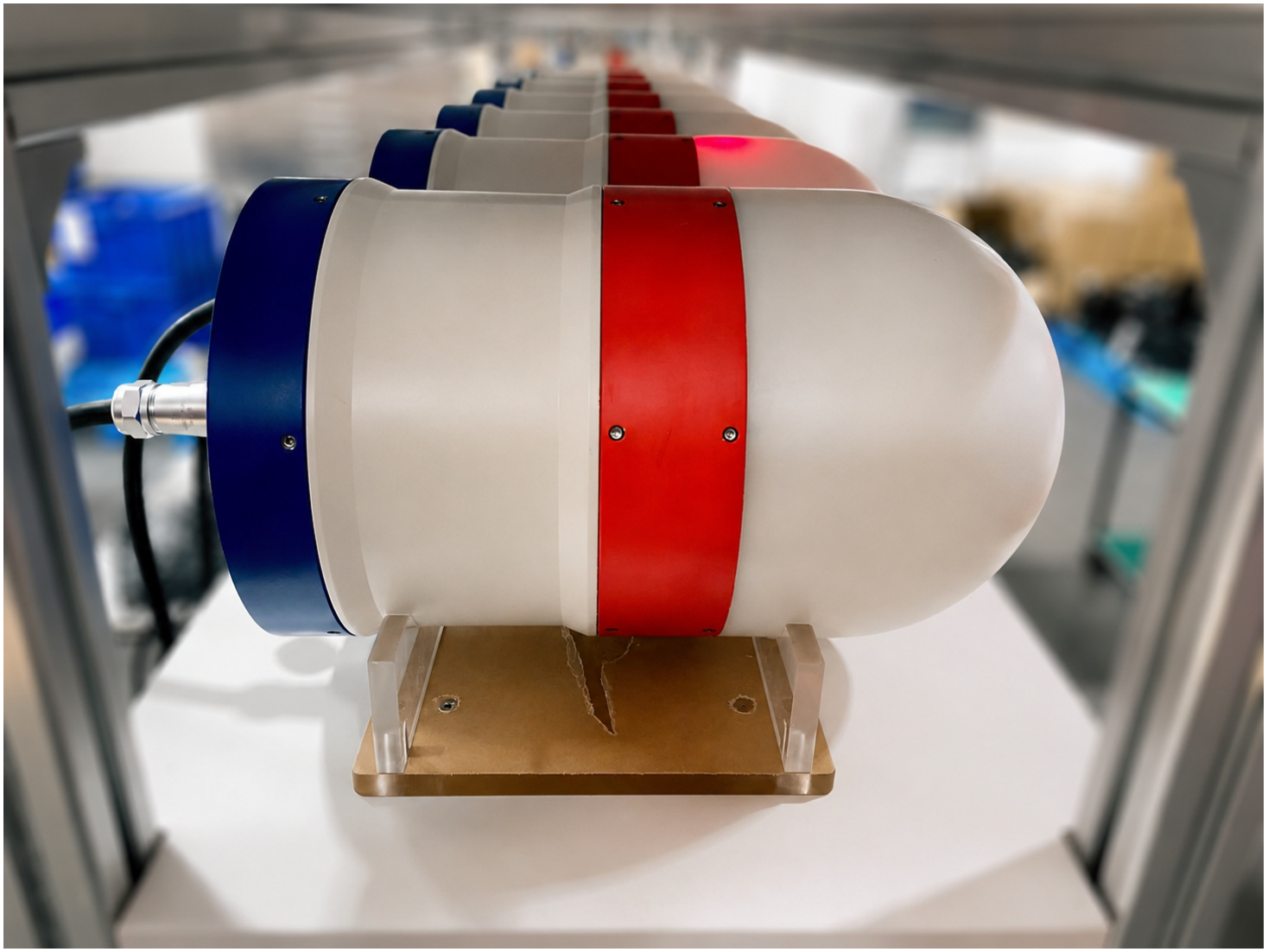
SALES TARGETS

Product Code - Name	Unit	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
297CB0150 - White Chocolate Drop 29,7%	Kg	1.900	2.500	3.100	4.000	3.400	3.700	4.000	4.300	4.600	4.900	5.200	5.500	5.800	6.100	6.400	6.700	7.000	7.300
360CL0150 - Milk Chocolate Drop 36%	Kg	350	450	550	1.000	600	650	700	750	800	850	900	950	1.000	1.050	1.100	1.150	1.200	1.250
560CN0150 - Bitter Chocolate Drop 56%	Kg	1.900	2.500	3.100	4.000	3.400	3.700	4.000	4.300	4.600	4.900	5.200	5.500	5.800	6.100	6.400	6.700	7.000	7.300
FP02266 - Silicon Mini Roving. Shuttle Mold	Pcs																		
K0320001 - Domino Rectangle	Pcs																		
K0320002 - Diablo Square	Pcs																		
K0320003 - Fan Patterned	Pcs																		
K0320004 - Non-White Chocolate	Pcs																		
K0320005 - Non Bitter Chocolate	Pcs																		
K0320006 - Twister	Pcs																		
K0320007 - Trump Corrugated White	Pcs																		
K0320008 - Trump Grooved Bitter	Pcs																		
K0320009 - Trump Corrugated Milk	Pcs																		
K0320010 - Flame	Pcs																		

- Guide the precise purchase of raw material and reduce procurement costs.
- Supervise inventory to avoid material loss.
- Guide the supply of raw materials, transportation planning, and path planning to reduce logistics costs.
- Optimize inventory and reduce the capital occupation of raw materials.

Adequate stocking and short delivery time

The delivery time of SEAL 3D SCANNER is generally within 4-6 weeks.



Application Scenarios

Applied to solid silos and yards, mainly for measuring small pellets, particles, powders, and other block like solids.

The applied industries include: raw material processing industries such as grains, seeds, and feed, food and beverage industry, energy and power raw material processing, cement industry, plastic processing industry, mining and smelting industry, metal processing industry, chemical industry, glass manufacturing and processing industry, pulp and paper, raw wood processing industry, etc.

Comparison between microwave and laser

Parameter	3D microwave radar	3D laser radar
Measurement signal	140GHz microwave	905nm infrared laser
Impact of dust	Almost no impact	Serious influence
Incoming and outgoing process	Work normally	Unable to work
Detection points	16200 points	Millions, millions of points
Level measurement accuracy	+2mm	1cm~3cm
3D detection accuracy	+0.5%~+2% FS	< ± 0.5%FS < ± 3%FS
3D form realism	Good	Better
Service life	longer	Shorter
Applicable areas and occasions	Silos and material yards, suitable for occasions with high measurement frequency	Material yard, suitable for occasions with low measurement frequency

Major Customers:

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SEE AUTOMATION & ENGINEERS SINCE 1998 SEE - BELIEVE™

In Business 26 YEARS

See Automation & Engineers

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