



BELT CONVEYOR PROTECTION



CONTINUOUS LEVEL MEASUREMENT



Matsushima

Matsushima Measure Tech

POSITION TRANSMITTER



POWDER MEASUREMENT



POINT LEVEL DETECTION



ACTUATOR



MATSUSHIMA Measure Tech Co., Ltd.



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【Overseas sales】
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【Affiliated company】
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【Main products】
•Bulk solid and liquid level measurement •Powder measurement •Belt conveyor protective device
•Electric Actuator •System equipment •Control device

【Establishment】 1946

【Capital】 JPY3,500,000.-

【C.E.O.】 Toru Matsushima

■Main Customers

- NIPPON STEEL & SUMITOMO METAL CORPORATION
- JFE STEEL CORPORATION
- KOBE STEEL, LTD.
- NISSHIN STEEL CO., LTD.
- TAIHEIYO CEMENT CORPORATION
- SUMITOMO OSAKA CEMENT CO., LTD.
- MITSUBISHI MATERIALS CORPORATION
- ASO CEMENT CO., LTD.
- TOKUYAMA CORPORATION
- SUMITOMO METAL MINING CO., LTD.
- MITSUI MINING & SMELTING CO., LTD.
- NITTETSU MINING CO., LTD.
- TODAKA MINING CO., LTD.
- ASAHI KASEI CORPORATION
- NIPPON STEEL & SUMIKIN CHEMICAL CO., LTD.
- MITSUI CHEMICALS, INC.
- MITSUBISHI CHEMICAL CORPORATION
- DENKA CO., LTD.
- TOSOH CORPORATION
- MITSUBISHI RAYON CO., LTD.
- JXTG HOLDINGS, INC.
- BRIDGESTONE CORPORATION
- THE YOKOHAMA RUBBER CO., LTD.
- IDEMITSU KOSAN CO., LTD.
- TOA OIL CO., LTD.
- TONENGENERAL SEKIYU K. K.
- KURARAY CO., LTD.
- TORAY INDUSTRIES, INC.
- SHOWA DENKO K.K.
- MITSUBISHI PLASTICS, INC.
- TOHO ZINC CO., LTD.
- NIPPON LIGHT METAL CO., LTD.
- NIPPON DENKO CO., LTD.
- DAIDO STEEL CO., LTD.
- KYUSHU ELECTRIC POWER CO., INC.
- SHIKOKU ELECTRIC POWER CO., INC.
- THE CHUGOKU ELECTRIC POWER CO., INC.
- THE KANSAI ELECTRIC POWER CO., INC.
- CHUBU ELECTRIC POWER CO., INC.
- ELECTRIC POWER DEVELOPMENT CO., LTD.
- TOKYO ELECTRIC POWER COMPANY HOLDINGS, INC.
- TOHOKU ELECTRIC POWER CO., INC.
- HOKURIKU ELECTRIC POWER CO.
- HOKKAIDO ELECTRIC POWER CO., INC.
- OSAKA GAS CO., LTD.
- TOKYO GAS CO., LTD.
- ASAHI GLASS CO., LTD.
- CENTRAL GLASS CO., LTD.
- NIPPON SHEET GLASS CO. LTD.
- HITACHI ZOSEN CORPORATION
- MITSUI ENGINEERING & SHIPBUILDING CO., LTD.
- MITSUBISHI HEAVY INDUSTRIES, LTD.
- EBARA CORPORATION
- EBARA HAMADA BLOWER CO., LTD.
- KUBOTA CORPORATION
- KURIMOTO, LTD.
- SHINWA CORPORATION
- TOYO ENGINEERING CORPORATION
- HITACHI PLANT TECHNOLOGIES, LTD.
- JGC CORPORATION
- CHIYODA CORPORATION
- SANKI ENGINEERING CO., LTD.
- NIPPON CONVEYOR CO., LTD.
- FURUKAWA CO., LTD.
- MATSUI MFG. CO., LTD.
- KURITA WATER INDUSTRIES LTD.
- TAKUMA CO., LTD.
- MITSUI MIIKE MACHINERY CO., LTD.
- SUMITOMO HEAVY INDUSTRIES, LTD.
- NGK INSULATORS, LTD.
- UBE INDUSTRIES, LTD.
- IHI CORPORATION
- KAWASAKI HEAVY INDUSTRIES, LTD.
- MEIDENSHA CORPORATION
- TOSHIBA CORPORATION
- HITACHI, LTD.
- FUJI ELECTRIC CO., LTD.
- MITSUBISHI ELECTRIC CORPORATION
- AMANO CORPORATION
- YASKAWA ELECTRIC CORPORATION
- AZBIL CORPORATION
- YOKOGAWA ELECTRIC CORPORATION
- HOSOKAWA MICRON CORPORATION
- AKATAKE ENGINEERING CO., LTD.
- OJI PAPER CO., LTD.
- NIPPON PAPER INDUSTRIES CO., LTD.
- DAIO PAPER CORPORATION
- CHUETSU PULP & PAPER CO., LTD.
- MARUSUMI PAPER CO., LTD.
- AJINOMOTO CO., INC.
- KIRIN BREWERY COMPANY, LIMITED
- ASAHI BREWERIES, LTD.
- DAIWA CAN COMPANY
- NOSAN CORPORATION
- NISSHIN FLOUR MILLING INC.
- SHOWA SANGYO CO., LTD.
- ITOCHU FEED MILLS CO., LTD.
- TOYOTA MOTOR CORPORATION
- NISSAN MOTOR CO., LTD.
- POSCO
- BAOSHAN IRON & STEEL CO., LTD.
- CHINA STEEL CORPORATION
- NATIONAL POWER CORPORATION
- THE SIAM CEMENT PUBLIC CO., LTD.
- TAIWAN CEMENT CO., LTD.
- THE TAIWAN POWER COMPANY
- FORMOSA PLASTICS CORPORATION

1 Pull Cord Switch
Emergency stop switch when any accident occurs at belt conveyor.

2 Motor-operated Adjusting Carrier
Automatically detects the belt misalignment and aligns it.

3 Speed Relay (No power required)
Actuates when the revolving speed of shaft becomes the setting value.

4 Conveyor Starting Indicator (No power required)
Indicates conveyor started.

5 Speed Switch
Non-contact type revolution sensor for detecting the revolving speed of mechanical shaft.

6 Belt Sway Switch
Protective switch which detects the conveyor belt misalignment and outputs Alarm signal and Emergency stop signal.

7 Ultrasonic Level Transmitter
Continuously measures the material level in hopper based on distance calculated by ultrasonic pulse roundtrip transmission.

8 Ultrasonic Level Transmitter
Detects load or no load on conveyor belt based on distance calculated by ultrasonic pulse roundtrip transmission.

9 Belt Tear Detector
Detects when any unwanted material tears belt conveyor and stops belt conveyor.

10 Chute Switch
Emergency switch which stops conveyor when chute is clogged.

11 Conductive Level Switch
Detects by weak current making circuit when probe comes in contact with material. Widely used from adhesive powder to dry powder.

12 Full Detector
Detects by tilting of Detector when material increases. Not influenced by variation of material environment. Robust Detector suitable for bulk solid.

13 Damper Actuator
Changes over chute of belt conveyor.

14 Microwave Barrier Switch
Detects upper or lower limit of silo, hopper and clogging of chute.

15 Wire-rope type Emergency Stop Switch
Emergency Stop Switch complied with international standard.

16 Microwave Flow Switch
Detects flow or no flow of powder / particle. Used for detection of clogging inside pipe.

17 Radar Level Transmitter
26GHz world top class non-contact type. Stable measurement in hard conditions of high temperature, high pressure and high dust. Complied with Radio Law, FCC standards.

18 Sounding Level Transmitter
Detects the level by variation of load when the weight suspended with wire rope reaches the material surface and outputs the level based on the wire rope length discharged until then.

19 Admittance Level Switch
Detects by capacitance variation due to material between probe and tank sidewall. Applicable for wide variety of materials

20 Rotary Paddle Level Switch
Detects by the paddle revolving at low speed being buried and got stuck in the material. Mostly used in grain and feedstuff silo.

21 Dust Monitor
When dust hits or passes near the probe, the triboelectric charge generates in proportion to the dust concentration level. Dust Monitor outputs it as dust concentration level. Detects the breakage of bag filter and continuously monitors the dust level of Dust collector.

22 Vibration Level Switch
Detects when the vibrating probe comes in contact with powder, then vibration frequency changes. Suitable for fine and lightweight powder.

23 Limit Switch (Heavy-duty type)
Emergency stop switch when any accident occurs at belt conveyor.

24 Belt Cleaner
Cleans the conveyor belt transporting material.

Belt Conveyor Protection

Application



Motor-operated Adjusting Carrier for adjusting belt misalignment



Pull Cord Switch for emergency conveyor stop



Conveyor Starting Indicator for indicating conveyor started




Speed Relay for conveyor slip detection



Belt Sway Switch for belt misalignment detection

1 Radar Level Transmitter

26GHz world top class non-contact type. Stable measurement in hard conditions of high temperature, high pressure and high dust. Complied with Radio Law, FCC standards.




2 Ultrasonic Level Transmitter

Non-contact type Ultrasonic transmitter. Easy setting. Easy maintenance.




3 Sounding Level Meter

Detects the level by variation of load when the weight suspended with wire rope reaches the material surface and outputs the level based on the wire rope length discharged until then.




4 Rotary Paddle Level Switch

Detects by the paddle revolving at low speed being buried and got stuck in the material. Mostly used in grain and feedstuff silo.




5 Vibration Level Switch

Detects when the vibrating fork-shaped probe comes in contact with powder, then vibration frequency changes. Applicable for low specific gravity powder. (toner etc.)




6 Admittance Level Switch

Detects by capacitance variation due to material between probe and tank sidewall. Applicable for wide variety of materials.




7 Conductive Level Switch

Detects by weak current making circuit when probe comes in contact with material. Widely used from adhesive powder to dry powder.

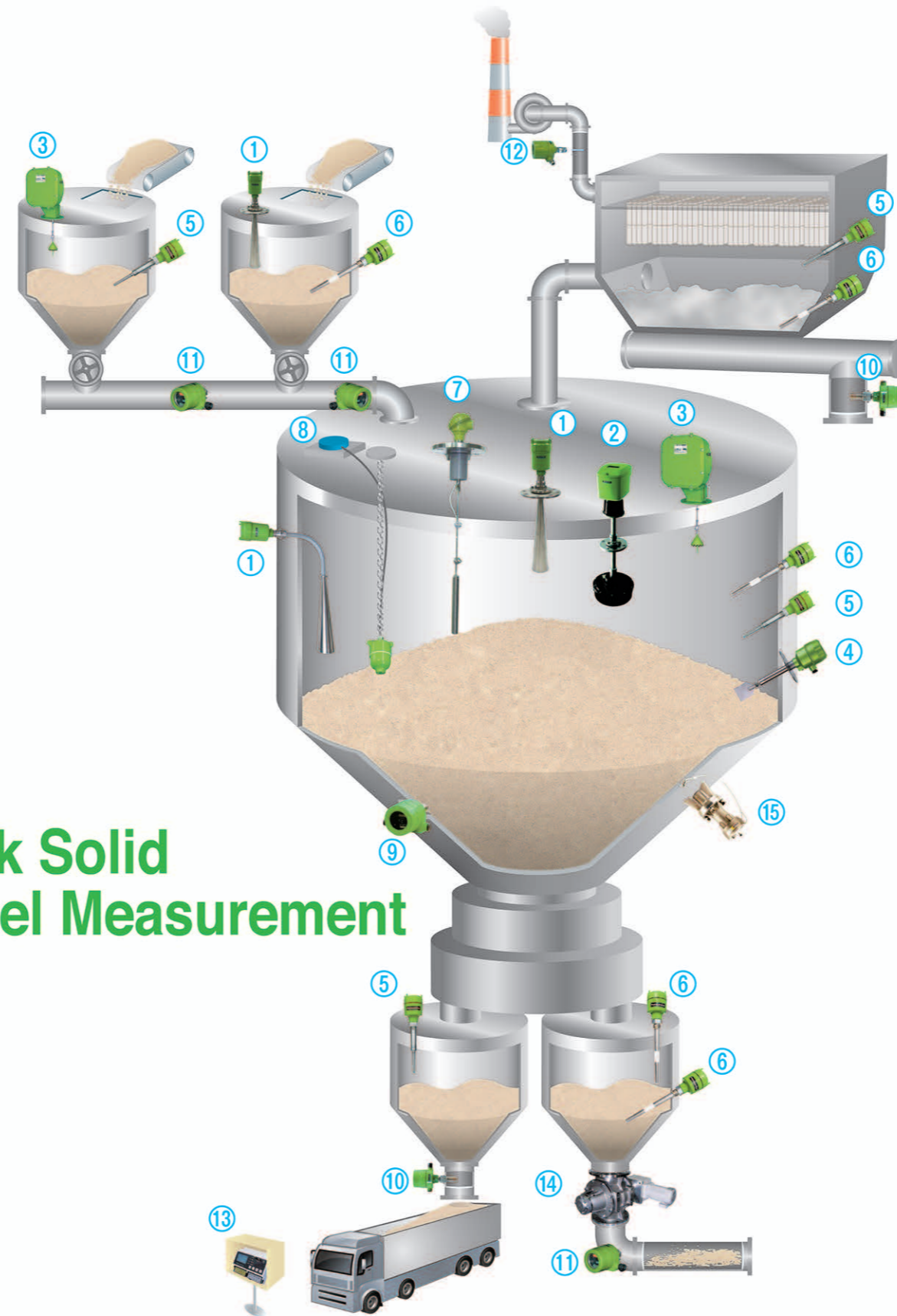


8 Full Detector

Detects by tilting of Detector when material increases. Not influenced by variation of material environment. Robust Detector suitable for bulk solid.



Bulk Solid Level Measurement




9 Microwave Barrier Switch

The microwave emitted from Transmitter is received by Receiver. When there is material between Receiver and Transmitter, the microwave is blocked and cannot be received. Barrier Switch detects it and makes output contact.




10 Microwave Flow Switch

Detects flow or no flow of powder by variation of reflecting frequency based on Doppler Effect when emitting the microwave to the powder flowing inside pipe.



11 Microwave Flow Monitor

The reflecting frequency varies based on Doppler Effect when emitting the microwave to the powder flowing inside pipe. Flow Monitor analyzes the velocity and density from the varied frequency and outputs the relative flow rate.




12 Dust Monitor

When dust hits or passes near the probe, the triboelectric charge generates in proportion to the dust concentration level. Dust Monitor outputs it as dust concentration level. Detects the breakage of bag filter and continuously monitors the dust level of Dust collector.




13 Signal Conditioner

Can be paired & used for 2 line transmitting devices or output devices. Outputs instrumentation signal 4-20mA or DC1-5V and contact signal for an input current signal. LCD digital display is included, so level indication can also be monitored at the local control panel.




14 Rotary Valve

It is various product lineup for rotary valves. It is good performance for steady supply, and it is good durability due to robust structure.



15 Air type knocker

It hits the wall strongly by compressed air, and the impact removes the adhesion and clogging of the powder material.



Application



Radar Level Transmitter for Cement silo



Microwave Barrier Switch for lower limit detection of Dust hopper



Sounding V Level Meter for Storage silo



Microwave Flow Switch for Powder coating facility

Dust Monitor for Bag filter outlet



Ultrasonic Level Transmitter for Stacker reclaimer