



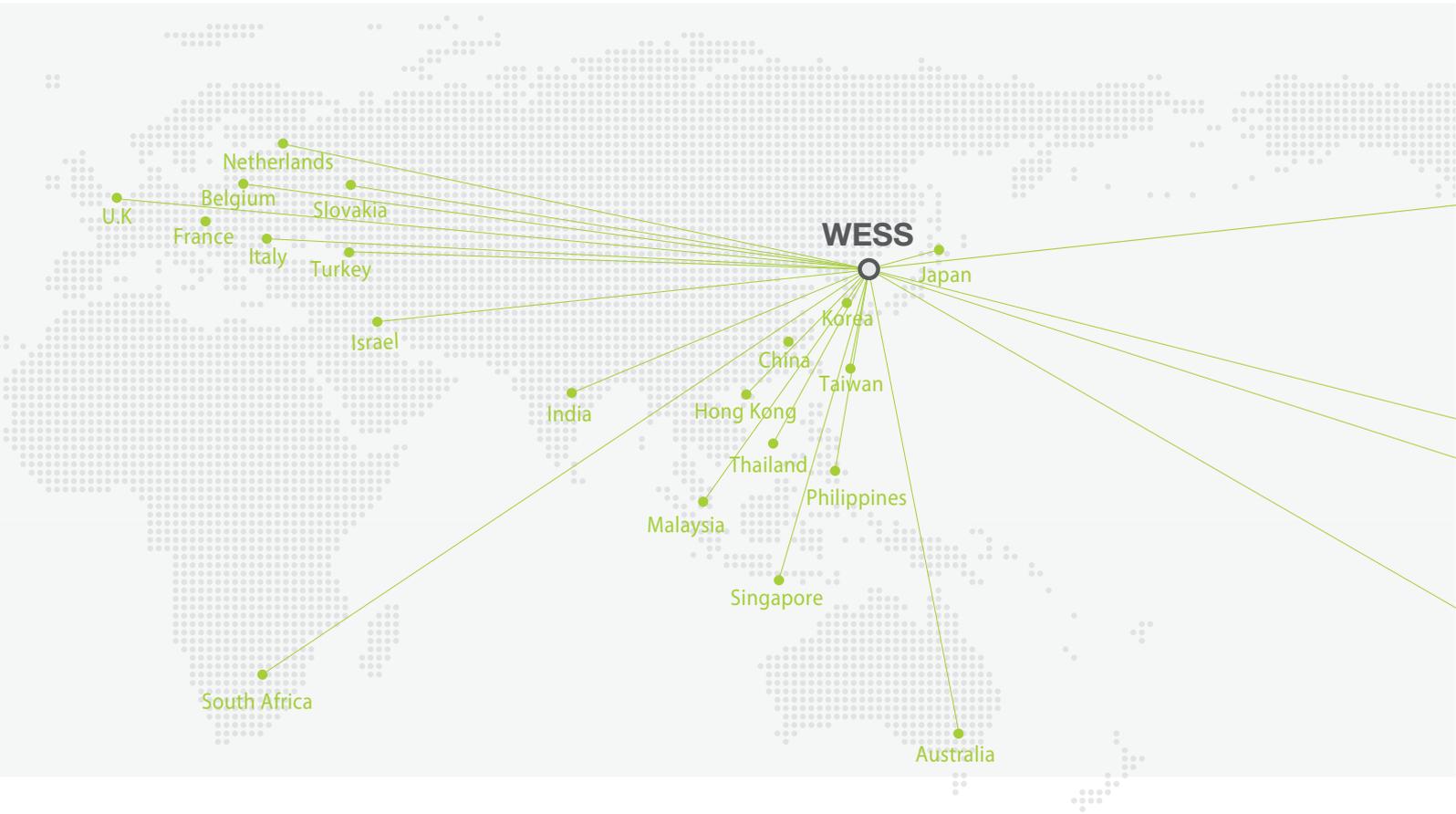
WESS GLOBAL, INC.



WESS GLOBAL, INC.



WESS Organization



The WESS Global, Inc. has been enjoying good reputation in its quality and warranty service since its establishment at level, flow, and environmental measuring instrument industries. It has various sales and R&D networks all over the world.

↳ WESS GLOBAL

↳ WESS KOREA

↳ WESS CHINA

↳ WESS KANSAI JAPAN

Sales networking countries

Australia, Belgium, Brazil, Brunei, Canada, Chile, China, Colombia, France, Hong Kong, India, Israel, Italy, Japan, Korea, Malaysia, Netherlands, Philippines, Singapore, Slovakia, South Africa, Taiwan, Thailand, Turkey, U.K, Etc.

Products line



products

Sludge Measurement

ENV Series

Ultrasonic Sludge Density Meter

Ultrasonic Sludge Density Meter

The ENV200 is an ultrasonic instrument that measures the density of suspended solid in liquid. It consists of sensors, a controller, and a junction box.

ENV200 with PCM (Process Condition Monitoring) algorithm measures not only the size of received signal which is often measured by conventional ultrasonic density meters but also observes changes in sound velocity and temperatures in the process.

As it monitors operational status and water status in pipe and then decides the validity of each measurement it contributes to increasing stability and reliability of the measurement.

The ENV-200 utilizes the EEA (Envelope Energy Average) method that saves reception signal envelop and then calculates its energy, rather than using the reception signal's amplitude change.

ENV-200 offers three types of sensors such as spool-piece, tank-mount and insertion type to accommodate all field demands at installation.



SLUDGE

Product Features

- Continuous measurement
- Process monitoring possible (run, stop, full, empty)
- 10,000 points Data Logging & Trend Mode
- EEAM (Envelope Energy Average Method)
- Various types of sensors

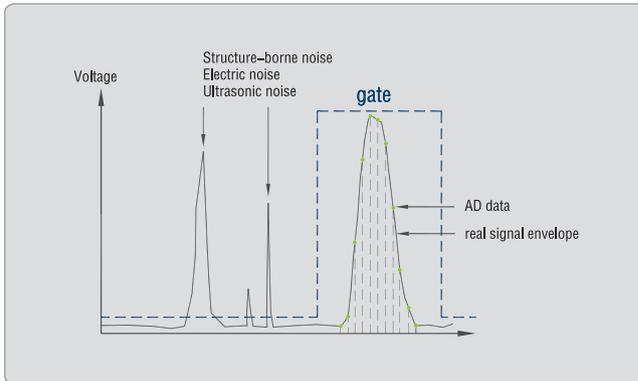
Application Industry

- Water, wastewater treatment
- Food and beverage
- Chemical
- Mining



Measuring Algorithm

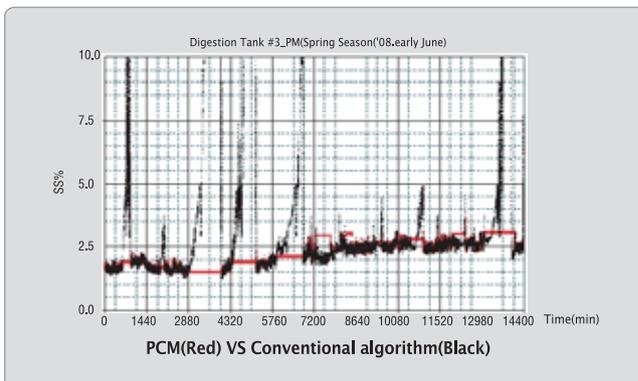
EEAM (Envelope Energy Averaging Method)



Conventional ultrasonic attenuation density meter just determines density with amplitude of received signals. Unlike this, ENV200 is able to measure changes of concentration in a more sophisticated manner by adopting the patented EEAM (envelope energy averaging method) which measures not only the amplitude of received signals but also observes the shape of signal.

It takes all energy as envelope and then convert it into density.

PCM (Process Condition Monitoring)



PCM algorithm consists of SOS filter that measures sound velocity of measuring fluid (S.S. mixed water); temp filter that measures temperature and signal filter that monitors quality of received signals.

Operational status (process run/stop, pipe full/empty) is determined by the combination of SOS filter and Temp filter. Signal filter helps to decide the valid S.S. distribution. Since the PCM algorithm assimilates many measurements identifying changes of process condition (water status in pipe and S.S. distribution pattern), its intelligence is designed to measure only valid S.S. concentration.

Consequently, the performance is much more reliable and accurate, compare to conventional measurement.

SLUDGE

Beyond Measurement



Specification

Controller



C2 - S

Specification	C2-S
Measuring Principle	Ultrasonic Attenuation and EEAM(Envelope Energy Average Method)
Measuring Range	2,000 ~ 200,000mg/l (0.2 ~ 20%)
Measuring Mode	Process Mode, Real-time Mode
Self - Diagnosis	Sensor strength, Flow running/stop, Pipe in full/empty
Display	Graphic LCD (Density, Time, Pipe condition, Flow condition, mA, etc.)
Resolution	100mg/l (0.01%)
Accuracy	± 1% of F.S. or ±2000mg/l
Repeatability	± 1% of reading
Operational Temp.	-20 ~ 60°C
Outputs	Current : 4~20mA, nom. Load 250Ω (load range : 100 ~ 750Ω) Relay : 3 SPDT(5A, 250VAC) Digital : RS232C(Standard) or RS485(OPTION)
Power Supply	Standard : 100 ~ 240V AC, 50~60Hz, ≤6W Option : 20~30V DC
Mounting	Hole center 153(W) x 273(H) mm(Ø 8.2 x 4ea)
IP Rating	IP67
Saving Memory	Data Logging and Trend (Max. 400 days)
Certificate	CE

Sensors



S2-S



S2-T



S2-I

Specification	Spool-piece (S2-S)	Insertion (S2-T)	Tank-mount(S2-I)
Material	S.S.316	S.S.316	S.S.316
Pipe size	50A ~ 600A	> 200A	N/A
Frequency	500kHz, 1MHz	500kHz, 1MHz	500kHz, 1MHz
Operational Temp.	-10 ~ 60°C	-10 ~ 60°C	-10 ~ 60°C
Cable Length	10m(standard)	10m(standard)	10m(standard)
IP Rating	IP68	IP68	IP68





WESS GLOBAL, INC.

www.wessglobal.com

