

SLDL2500 Series

SonicSmart Split type ultrasonic liquid level gauge



■ Working principle

The SonicSmart ultrasonic level meter emits ultrasonic pulses, and the ultrasonic signal is reflected back when it encounters the surface of the measured medium, and part of the transmitted echo is received by the SonicSmart and converted into an electrical signal. Ultrasonic pulses propagate at the speed of sound waves, and the time interval required from transmitting to receiving ultrasonic pulses is proportional to the distance from the transducer to the surface of the measured medium. The relationship between this distance value S and the time T of sound velocity C transmission can be expressed by company: $S=CxT/2$.

■ Features

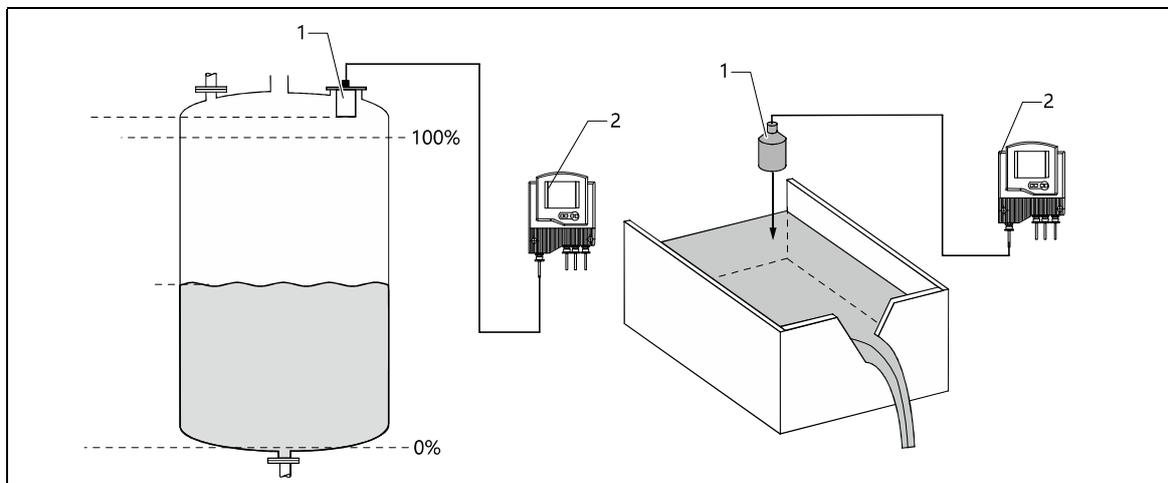
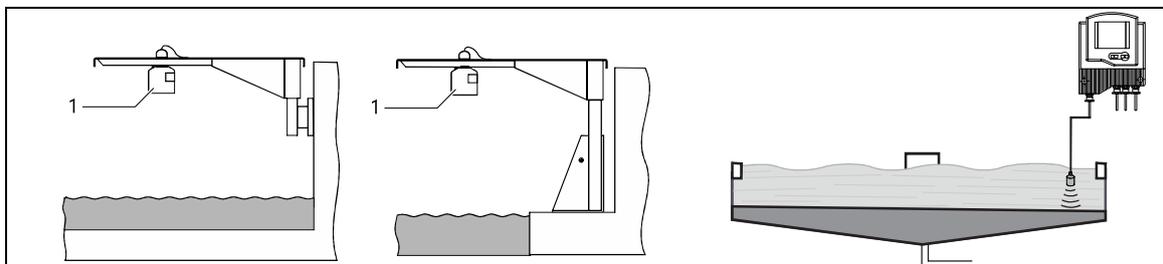
- Due to the advanced microprocessor and unique sonicSmart echo processing technology, the ultrasonic level gauge can be applied to various complex working conditions
- The transducer has a built-in temperature sensor, which can realize real-time temperature compensation of the measured value
- The ultrasonic transducer adopts the patented technology of the best acoustic matching, so that the transmission power can be radiated more effectively, and the signal strength can be improved, so as to realize accurate measurement
- The "false echo learning" function enables the instrument to correctly confirm the real echo and obtain accurate measurement results under the condition of multiple false echoes
- Multi-language support (including Chinese), echo, false echo display function, convenient for debugging personnel to analyze and maintain
- Ip68 protection level
- Support HART, Modbus, Profibus PA, Foundation Fieldbus, GPRS/CDMA remote, Bluetooth and other communication methods

■ Technical Parameters



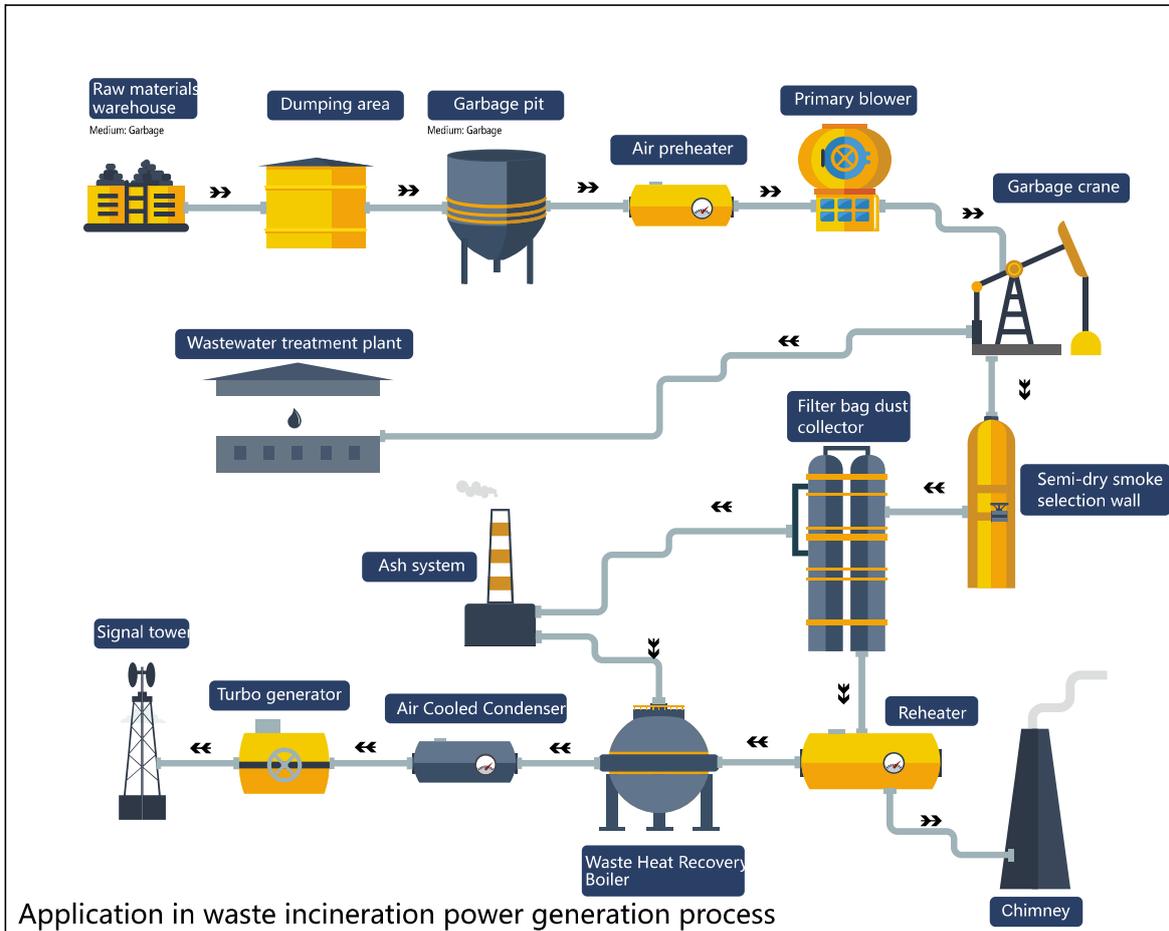
Model	SLDL2525	SLDL2550
Application	Liquid level, liquid level difference, average value measurement, open channel flow measurement in various industrial fields	
Process interface	G 1½A, NPT1½, Flange	G1" A, G 1½A, NPT1, NPT1½, Flange
Transducer housing material	PU/PC/PTFE	PU/PC/PTFE
Process temperature	(-40~90°C)	(-40~95°C)
Process pressure	(-0.7... 5) MPa	(-0.7...5) MPa
Measuring range	0.25...20m	Solid ≤60m Liquid ≤100m
Transmit frequency	50KHz	30KHz/15KHz/10KHz/5KHz/4KHz
Launch angle	5.5°	3°
Signal output	4...20mA HART two-wire system/four-wire system, Profibus PA, Foundation Fieldbus, Modbus protocol, 485 bus, GPRS/CDMA remote, Bluetooth communication, can support 5 relays	
Certified	CE, EMC, CE safety, FCC part 15, Seal rating	

■ Installation diagram



1. SLDL25XX
2. Controller

■ Typical application



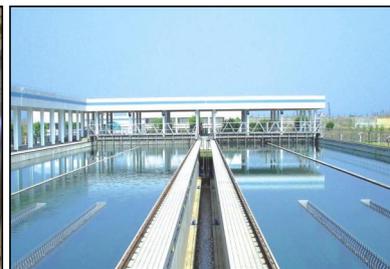
- In the garbage bin of the waste-to-energy plant, a separate ultrasonic liquid level gauge is used for measurement.
- Using sonicSmart echo processing technology, it is suitable for various complex working conditions.
- With strong anti-interference, false echo learning, can correctly confirm the real echo, and obtain accurate measurement results.
- The separate measurement method is convenient for debugging personnel to analyze and maintain.
- Light weight does not scale, does not pollute the medium.



Open channel



Garbage bin



Mine clear water pool