

Level monitoring in waste incineration process

Monitoring of garbage chutes

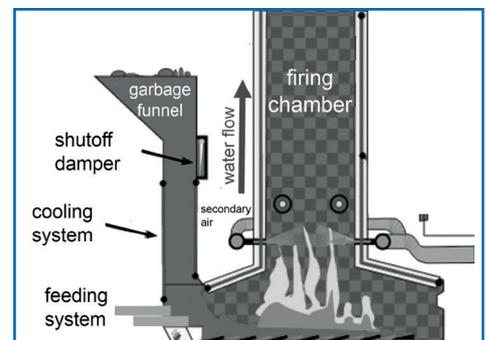
Application

Waste recycling in incineration plants starts with the delivery and incineration of waste. The waste reaches the combustion chamber via a falling chute, which is followed by a hydraulic feed device. To guarantee a constant incineration process, the falling chute has to be filled constantly. The „high“ and „low“ limit values should be detected and alarmed. The plant operator looks for a device, that measures the point level completely over the whole cross section. Vibration level detectors (Vibrating forks) are inappropriate, because they only measure at the shaft wall and ignore the material in the middle. Strong mechanical influences also do not allow the use of Rotary Paddle Switches. Thanks to the flush wall mounting the ProGap works without problems in harsh processes, where strong mechanical forces are at work.



Process data

Customer:	Waste incineration plant (Switzerland)
Material:	Household waste
Installation:	Garbage chute
Function:	Control of filling level



Solution

The ProGap is a universal and flexible sensor, consisting of a transmitter and receiver, based on the latest microwave technology. In the described application the ProGap measures limit levels in a falling chute through a plexiglas wall. The detection of the limit levels guarantees a constant filling of the combustion grate and thereby a continuous firing. Overfill levels are avoided to protect the installation in case of fire. In spite of measuring through non-conductive materials, a direct material contact of the ProGap is also possible, using special process adapters. Special High Temperature Process Adapters are available.



Customer benefit

- Early detection of over or underfilling
- Reliable point level monitoring even at very high process temperatures
- Easy commissioning

SWR engineering Messtechnik GmbH · www.swr-engineering.com · info@swr-engineering.com
 Gutedelstr. 31 · 79418 Schliengen (Germany) · Tel. +49(0)7635-8272-48-0 · Fax +49(0)7635-8272-48-48