



Applications Notes

Moisture in hydrated lime, Ca(OH)₂

Moisture measurement is made to ensure that moisture levels do not exceed the 3% maximum. If this level is exceeded the product will clump, be difficult to load and transport and cause blockages within the slaker.

Production of hydrated lime

Hydrated lime is obtained from hydrating calcium oxide or quick lime. The hydration process is referred to as “slaking”, the water and calcium oxide undergo a controlled exothermic reaction resulting in “dry” free-flowing calcium hydroxide (hydrated lime powder). Both temperature measurement within the reactor and moisture content are used to control the water addition to ensure moisture content is optimised but doesn't exceed the 3% limit.

Gauge location and Installation

The gauge is positioned at the exit of the slaker, 6-15” above the hydrated lime. Product flow should be continuous and of sufficient depth that the transporting medium isn't seen by the gauge. If flow is discontinuous a gating option can be used to enable measurement only when product is viewed.

Measurement Performance

Measurement	Location	Target Moisture	Typical accuracy
Hydrated lime	Exit of reactor(Slaker)	0-3%	0.2%