Trial report

SEIWA GIKEN

Date	September 10th 2021	Weather	Fine	Temperature	19°	Humidity	41%

		Name of Powder	Calcium hydroxide	Bulk density	0.5
Type of raw material	Pellet	Image	Sprinkle	Genre	Chemistry

Details of raw material

Angle of repose	50°	Cohesiveness	High

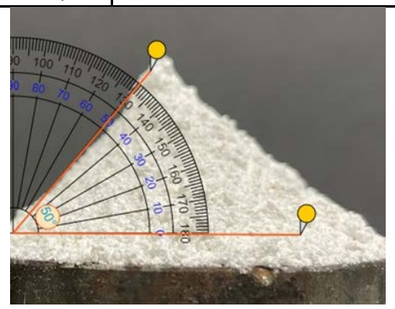

Fig.1 Angle of repose

50° Bridge measures is necessary

Fig.2 Feature

Finely and has high cohesiveness,and splashs powder dust.

Comments

This pellets are finely sprinkle and non-sticky, it was be able to discharged without using a bridge breaker (Fig.1, Fig.2). We weighed the amount of discharged pellet in multiples of 30second (Table 1). The varying quality of discharged amount was ±2%.

Weighing method	Volumetric	Timer	Unused	Aim value	3kg/hour

No.	Time	Integrated weight(g)	Discharged weight(g)
1	0	333.6	
2	30	362.9	29.3
3	60	391.2	28.3
4	90	420.7	29.5
5	120	449.1	28.4
6	150	478.4	29.3
7	180	508.6	30.2
8	210	537.2	28.6
9	240	566.3	29.1
10	270	595.9	29.6
11	300	625.0	29.1
12	330	654.1	29.1
13	360	682.3	28.2
14	390	710.4	28.1
15	420	739.2	28.8
16	450	766.6	27.4
17	480	794.1	27.5
18	510	820.7	26.6
19	540	846.4	25.7
20	570	871.9	25.5
21	600	898.4	26.5
22	630	925.6	27.2
23	660	949.9	24.3
24	690	975.0	25.1
25	720	1000.1	25.1

Averages ：27.7 g/30sec
Maximun value：30.2 g/30sec
Minimum value： 424.3 g/30sec
An hour conversion：3.21kg/hour

Test scene movie
https://youtu.be/YsEUUYUp19U

Company Profile movie
https://www.youtube.com/watch?v=1FRYOZq009c

Table 1 Discharged weight in multiples of 30 seconds

Machine's specification	
Type of machine	Screw feeder
Feeder size	φ25.4
Type of screw	Standard
Hopper	3L
Agitator	Installed
Special notes	
Ratio of reduction gear:1/18 <Method of control> Speed controller(keeping 100rpm)	

Appearance

Fig.3 Test equipments

Appearance of trial

Fig.6 Type of screw : Standard

Fig.4 Discharging scene