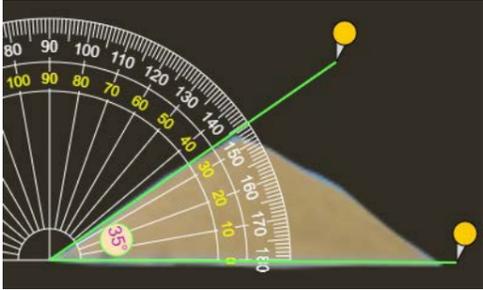


Trial report

Date	June 4,2022	Weather	Fine	Temperature	30.1	Humidity	64%
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Name of Powder	Iron powder	Bulk density	2.9
Type of raw material	Powder	Image	Smooth
		Genre	Metal
Details of raw material			
Angle of repose	35°	Cohesiveness	Normal
 <p>Fig.1 Angle of repose</p> <p>35° Bridge measures is unnecessary</p>		 <p>Fig.2 condition</p> <p>Fine-grained powder, does not harden if we grasps</p>	

Comments

This iron powder is finely smooth and non-sticky, it was be able to discharged without using a bridge breaker (Fig.1, Fig.2). We measured the amount of discharged powder in every 10 seconds (Table 1). The varying quality of discharged amount was $\pm 4\%$ in the range of 200~215g.

Weighing method	Volumetric	Timer	10sec	Aim value	210 g/10sec
No.	Discharged weight(g)	Timer (second)	<p>Averages : 208.7 g/10sec</p> <p>Maximun value : 215.4 g/10sec</p> <p>Minimum value : 200.3 g/10sec</p> <p>An hour conversion : 75.1 kg/hour</p> <p style="text-align: center;">Test scene movie</p> <p>https://www.youtube.com/watch?v=v61DXOdPxVs</p> <p style="text-align: center;">Company Profile Video</p> <p>https://www.youtube.com/watch?v=1FRYOZq009c</p>		
1	207.0	10.0			
2	211.4	10.0			
3	208.6	10.0			
4	207.1	10.0			
5	209.8	10.0			
6	207.2	10.0			
7	211.0	10.0			
8	207.3	10.0			
9	21.0	10.0			
10	212.3	10.0			
11	200.3	10.0			
12	215.4	10.0			
13	206.3	10.0			
14	206.4	10.0			
15	210.5	10.0			
16	210.3	10.0			
17	205.0	10.0			
18	209.9	10.0			
19	209.9	10.0			
20	208.3	10.0			

Table 1 Discharged weight in every 10 seconds

Machine's specification		Appearance
Type of machine	Screw feeder	 <p>Fig.3 Test equipments</p>
Feeder size	φ48.6	
Type of screw	Standard	
Hopper	20L	
Agitator	-	
Special notes		
Ratio of reduction gear:1/10		
<Method of control>		
Inverter(keeping 27rpm(9Hz)		
Timer(10second)		

Appearance of trial
 <p>Fig.6 Type of screw : Standard</p>
 <p>Fig.4 Discharging scene</p>