



Trial report

Date	Mar-22	Weather	Fine	Temperature	20°	Humidity	35%
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		Name of Powder	Carbon powder	Bulk density	0.16
Type of raw material	powder	Image	Smooth	Genre	Carbon
Details of raw material					
Angle of repose	35°		Cohesiveness	Low	
					
Fig.1 Angle of repose			Fig.2 Feature		
35° Bridge measures is not necessary			Smooth and highly fluid		

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




Machine's specification		Appearance
Type of machine	Screw feeder	
Feeder size	φ38	
Type of screw	Standard	
Hopper	-	
Agitator	-	
Special notes		
Ratio of reduction gear:1/20		
<Method of control> Speed controller(keeping 90rpm)		

Fig.3 Test equipments

Weighing method	Volumetric	Timer	Unused	Aim value	-																																																																														
<table><tr><td>No.</td><td>Time</td><td>Integrated weight(g)</td></tr><tr><td>1</td><td>30.0</td><td>33.7</td></tr><tr><td>2</td><td>30.0</td><td>33.6</td></tr><tr><td>3</td><td>30.0</td><td>32.8</td></tr><tr><td>4</td><td>30.0</td><td>33.2</td></tr><tr><td>5</td><td>30.0</td><td>33.4</td></tr><tr><td>6</td><td>30.0</td><td>33.7</td></tr><tr><td>7</td><td>30.0</td><td>32.6</td></tr><tr><td>8</td><td>30.0</td><td>33.3</td></tr><tr><td>9</td><td>30.0</td><td>33.6</td></tr><tr><td>10</td><td>30.0</td><td>33.2</td></tr></table> <table><tr><td>No.</td><td>Time</td><td>Integrated weight(g)</td></tr><tr><td>1</td><td>30.0</td><td>16.7</td></tr><tr><td>2</td><td>30.0</td><td>16.5</td></tr><tr><td>3</td><td>30.0</td><td>16.4</td></tr><tr><td>4</td><td>30.0</td><td>16.6</td></tr><tr><td>5</td><td>30.0</td><td>16.5</td></tr><tr><td>6</td><td>30.0</td><td>16.7</td></tr><tr><td>7</td><td>30.0</td><td>16.6</td></tr><tr><td>8</td><td>30.0</td><td>16.6</td></tr><tr><td>9</td><td>30.0</td><td>16.6</td></tr><tr><td>10</td><td>30.0</td><td>16.7</td></tr></table> <table><tr><td colspan="3">Table 1 Discharged weight (90rpm) in each 30 seconds</td><td colspan="3">Table 2 Discharged weight (45rpm) in each 30 seconds</td></tr><tr><td colspan="6"><div>Test scene movie https://youtu.be/OdCBuSbCmlg Company Profile movie https://www.youtube.com/watch?v=1FRYOZq009c</div></td></tr></table>						No.	Time	Integrated weight(g)	1	30.0	33.7	2	30.0	33.6	3	30.0	32.8	4	30.0	33.2	5	30.0	33.4	6	30.0	33.7	7	30.0	32.6	8	30.0	33.3	9	30.0	33.6	10	30.0	33.2	No.	Time	Integrated weight(g)	1	30.0	16.7	2	30.0	16.5	3	30.0	16.4	4	30.0	16.6	5	30.0	16.5	6	30.0	16.7	7	30.0	16.6	8	30.0	16.6	9	30.0	16.6	10	30.0	16.7	Table 1 Discharged weight (90rpm) in each 30 seconds			Table 2 Discharged weight (45rpm) in each 30 seconds			<div>Test scene movie https://youtu.be/OdCBuSbCmlg Company Profile movie https://www.youtube.com/watch?v=1FRYOZq009c</div>					
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Appearance of trial	
	
Fig.6 Type of screw : Standard	Fig.4 Discharging scene