## **Trial report**

Weighing method Volumetric

Date	April 13th 2021	Weather	Fine	Temperature	25	Humidity	62%



1000g/hour

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		Name of material	Magnesium Fluoride		Bulk density	0.86		
Type of materials	Powder	Image	Sn	nooth	Genre	Chemistry		
			Details of	f raw mater	ial			
Angle of repose		35°		Cohesiveness		Low		
Fig	.1 Angle	of repose			Fig.2 Fe	ature		
35° Bridge measures is unnecessary			Smooth and low cohesiveness					

## Comments

This materials 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 pellet in multiples of 30second (Table 1). The varying quality of discharged amount was  $\pm 1\%$ .

No.         Time         Integrated weight(g)         Discharged weight(g)           1         0         1.7           2         30         10.2         8.5           3         60         18.3         8.1           4         90         26.5         8.2           5         120         34.8         8.3           6         150         42.9         8.1           7         180         51.4         8.5           8         210         59.5         8.1           9         240         68.0         8.5           10         270         76.3         8.3           11         300         84.4         8.1           12         330         92.9         8.5           13         360         101.1         8.2           14         390         109.6         8.5           15         420         117.8         8.2           16         450         126.0         8.2           17         480         134.3         8.3           18         510         142.5         8.2           19         540         150.9         <					_
No.         Time         weight(g)         weight(g)           1         0         1.7           2         30         10.2         8.5           3         60         18.3         8.1           4         90         26.5         8.2           5         120         34.8         8.3           6         150         42.9         8.1           7         180         51.4         8.5           8         210         59.5         8.1           9         240         68.0         8.5           10         270         76.3         8.3           11         300         84.4         8.1           12         330         92.9         8.5           13         360         101.1         8.2           14         390         109.6         8.5           15         420         117.8         8.2           16         450         126.0         8.2           17         480         134.3         8.3           18         510         142.5         8.2           19         540         150.9         8.4					
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2       30       10.2       8.5         3       60       18.3       8.1         4       90       26.5       8.2         5       120       34.8       8.3         6       150       42.9       8.1         7       180       51.4       8.5         8       210       59.5       8.1         9       240       68.0       8.5         10       270       76.3       8.3         11       300       84.4       8.1         12       330       92.9       8.5         13       360       101.1       8.2         14       390       109.6       8.5         15       420       117.8       8.2         16       450       126.0       8.2         17       480       134.3       8.3         18       510       142.5       8.2         19       540       150.9       8.4         20       570       159.1       8.2         21       600       167.4       8.3         22       630       175.6       8.2         23       660	INO.	Time	weight(g)	) weight(g)	
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4       90       26.5       8.2         5       120       34.8       8.3         6       150       42.9       8.1         7       180       51.4       8.5         8       210       59.5       8.1         9       240       68.0       8.5         10       270       76.3       8.3         11       300       84.4       8.1         12       330       92.9       8.5         13       360       101.1       8.2         14       390       109.6       8.5         15       420       117.8       8.2         16       450       126.0       8.2         17       480       134.3       8.3         18       510       142.5       8.2         19       540       150.9       8.4         20       570       159.1       8.2         21       600       167.4       8.3         22       630       175.6       8.2         23       660       183.8       8.2         24       690       192.3       8.5	2	30	10.2	8.5	
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23     660     183.8     8.2       24     690     192.3     8.5	21	600	167.4		
24 690 192.3 8.5	22	630	175.6	8.2	
	23	660	183.8	8.2	
25 720 200.4 8.1	24	690	192.3	8.5	
	25	720	200.4	8.1	

Timer

Unused

Averages: 8.27 g/30sec

Maximun value: 8.6 g/30sec

Minimum value: 8.0 g/30sec

An hour conversion: 992g/hour

Aim value

Test scene movie https://youtu.be/cSZ0m3W1ssU

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

Table 1 Discharged weight in multiples of 30 seconds

Mad	chine's specification	Appearance		
Type of machine	Screw feeder			
Feeder size	φ25.4			
Type of screw	Standard			
Hopper	1L			
Agitator	-			
	Special notes			
	uction gear:1/18			
<method of<="" td=""><td>control&gt;</td></method>	control>			
Speed contr	oller( keeping 11.1rpm)	3.		
		Fig.3 Test equipments		

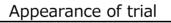




Fig.6 Type of screw: Standard



Fig.4 Discharging scene