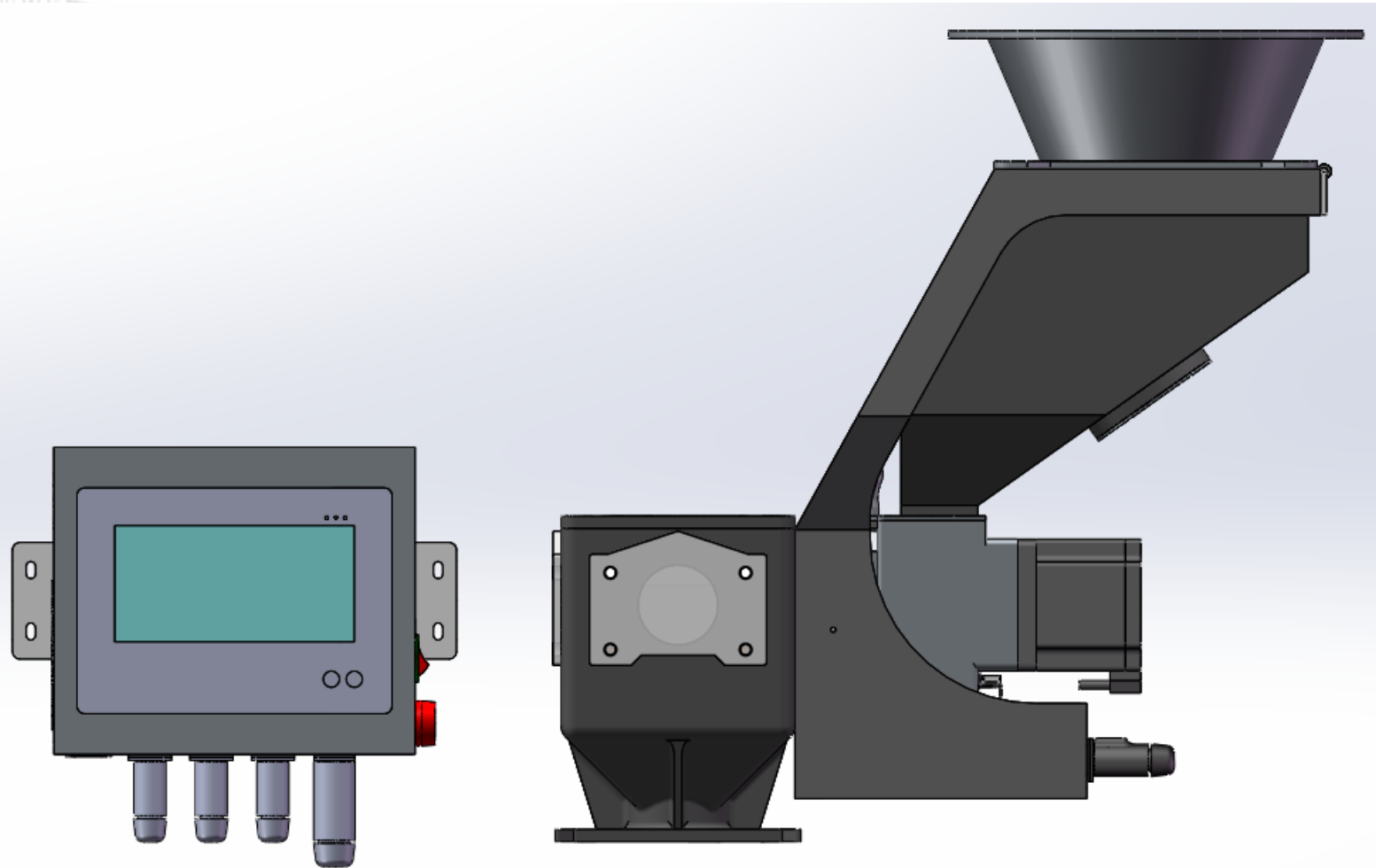


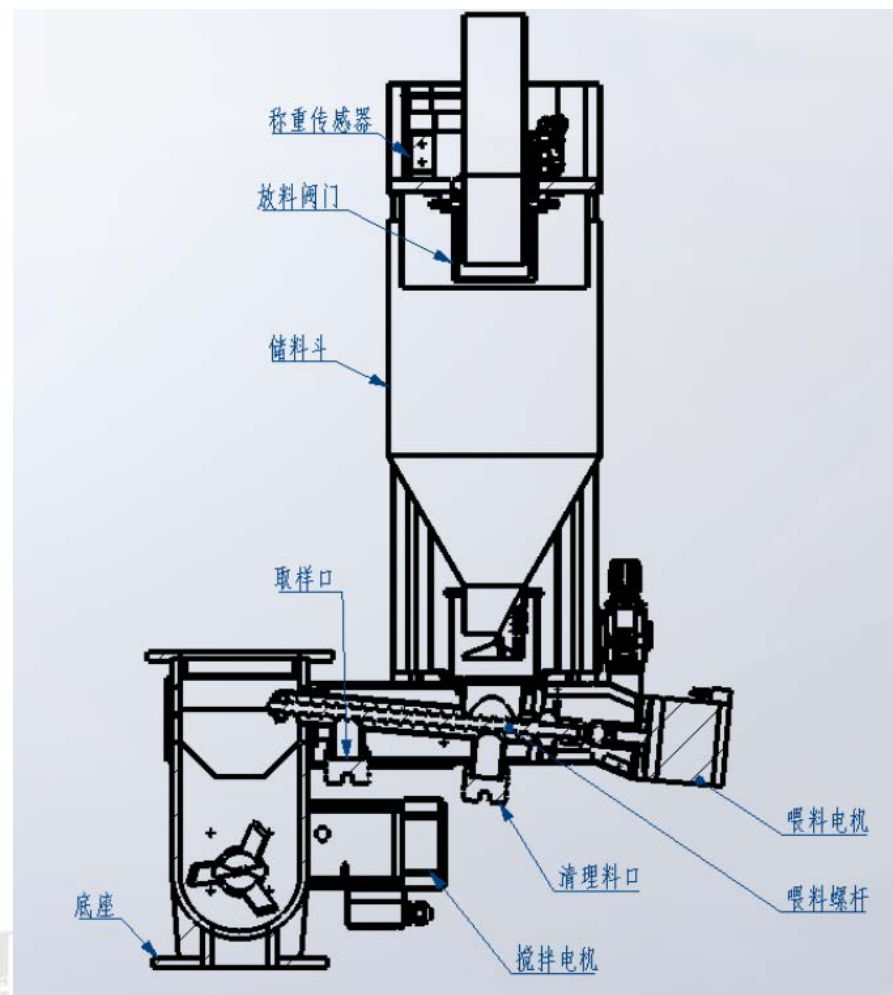


Gravimetric Doser Introduction and Application



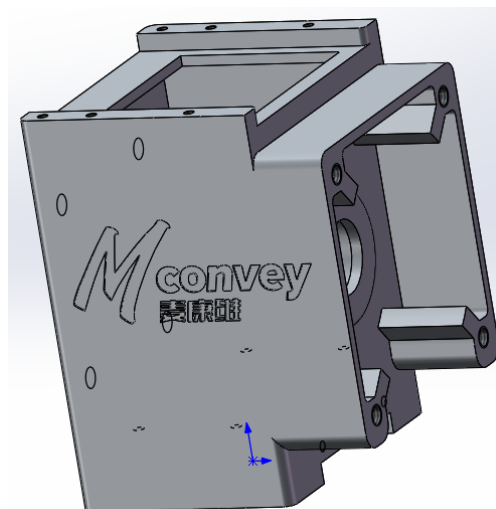
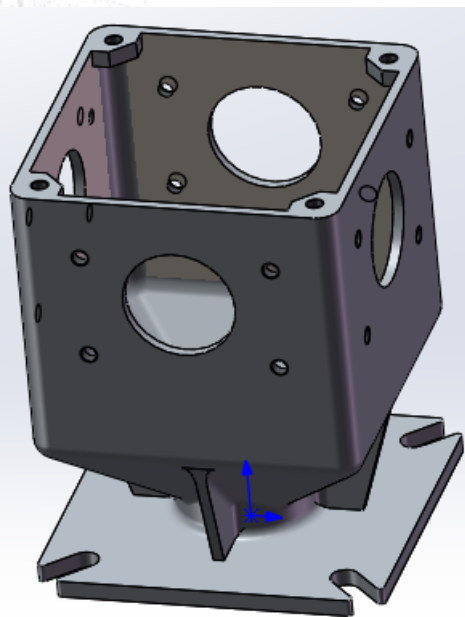
Weighing color masterbatch mixer is a high precision automatic masterbatch feeder. This machine is further developed on the basis of 'metering masterbatch mixer'. Feeding control system according to the dynamic change of the extruder weight-per-meter value, precise control of feeding screw rotation at all times to adjust the output of color masterbatch, the volume and density changing of color masterbatch will not affect the amount of color masterbatch, effectively improve product quality stability, reduce the loss which is caused by artificial mixing process and artificial mixing error, weighing type color masterbatch mixer (weight mode) accuracy is higher than volumetric doser (volume mode).

The gravimetric doser working principle is according to extruder main materials dosage synchronous work or extruder revolutions, main weighing doser reads the extruder output signal or the extruder main machine 0-10v signal connect to the outgoing line of the electric control tank. The signal was sent to electric cabinet then sent to the motor, the motor started running, through coupling drive screw, rotation, color masterbatch which is in the hopper will fall in to screw, by the screw extrusion, the screw is transported to the seat, so as to achieve the purpose of conveying color masterbatch. When the main material or the extruder revolution has changed, the weighing hopper according to the amount of material to control the color masterbatch screw revolution, accurate control the amount of material.

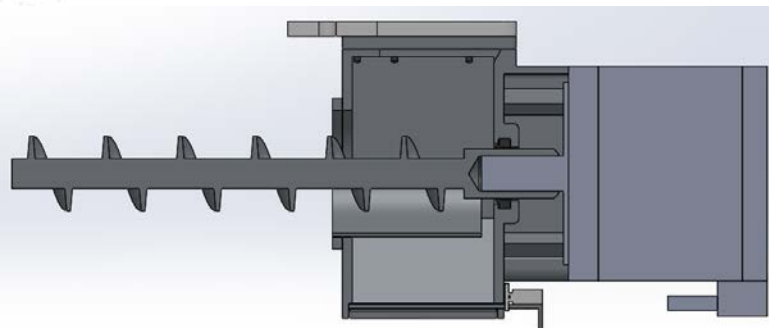


1. Modular structure, the whole series of main machine and spare parts is universal;
2. The key parts of the machine are tightly cast with simple and reliable structure;
3. Different output of the whole series, just replace the screw (hard chrome plating) ;
4. The components are all fast connected and the color changed only takes a few minutes;
5. Color change without tools, all hands operation;
6. The color masterbatch base has reserved interface, one base can expand 3 coulor materbatch machines;
7. The coulor master machine is equipped with a standard support frame to dacilitate automatic feeding and installation of the color master suction;
8. Drive by stepping motor direct drive, avoid reducer maintenance;
9. Electric control integrated box, hand-held design, a variety of fixing methods;
10. There are three modes: weighing mode, volume mode and single machine mode.

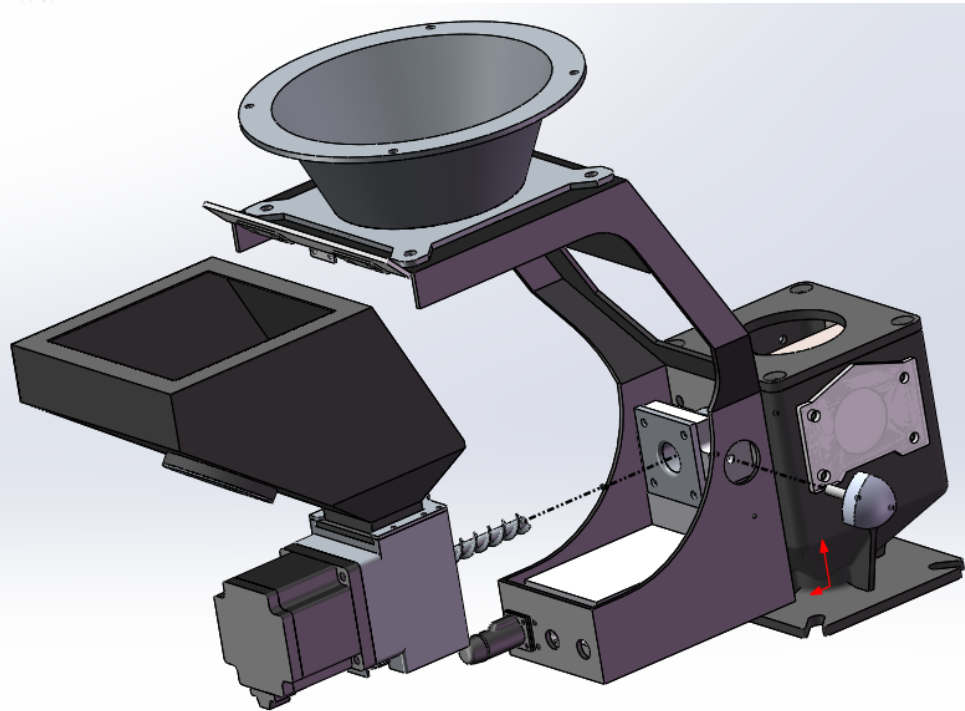
1. Modular structure, the whole series of main machine and spare parts is universal;
2. The key parts of the machine are tightly cast with simple and reliable structure;



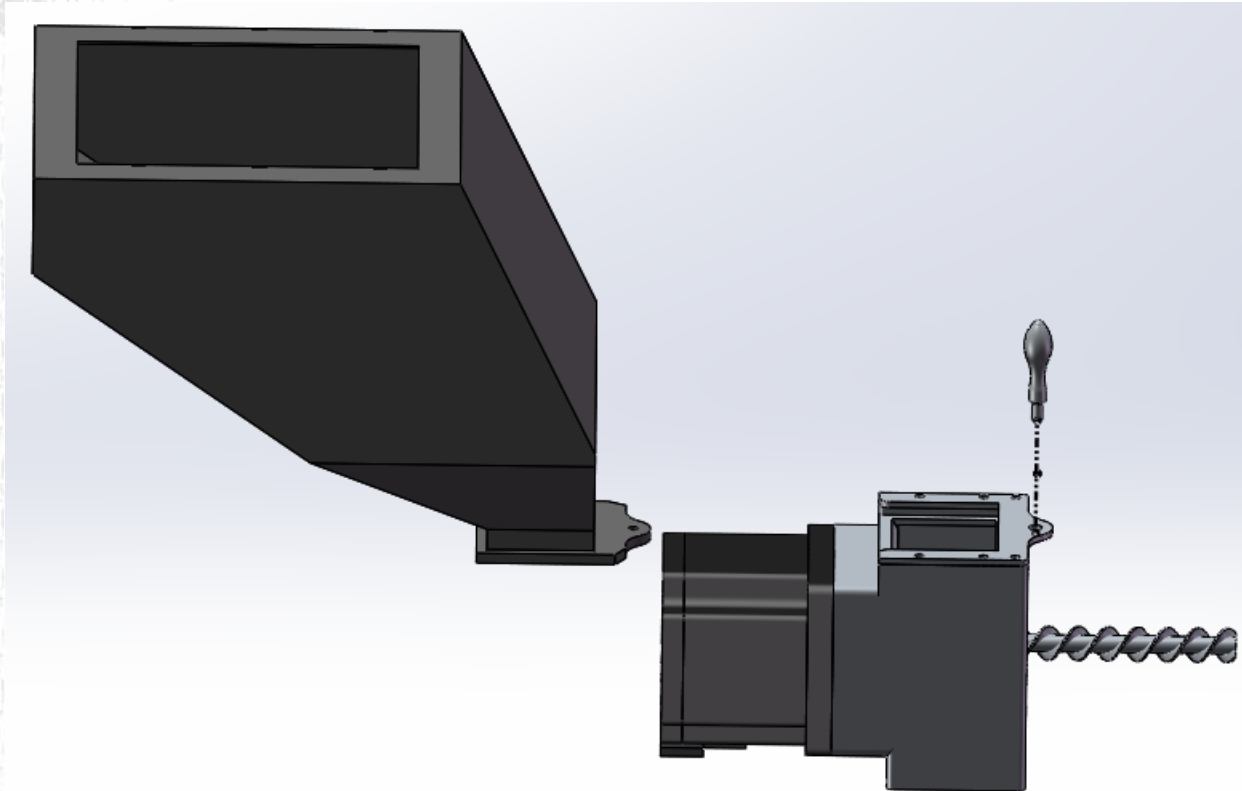
3. Different output of the whole series, just replace the screw (hard chrome plating);
4. Motor and screw directly connected, mechanical connecting is simple, high speed running smoothly without noise;
5. Small structure, high output, up to 60 kg/h;



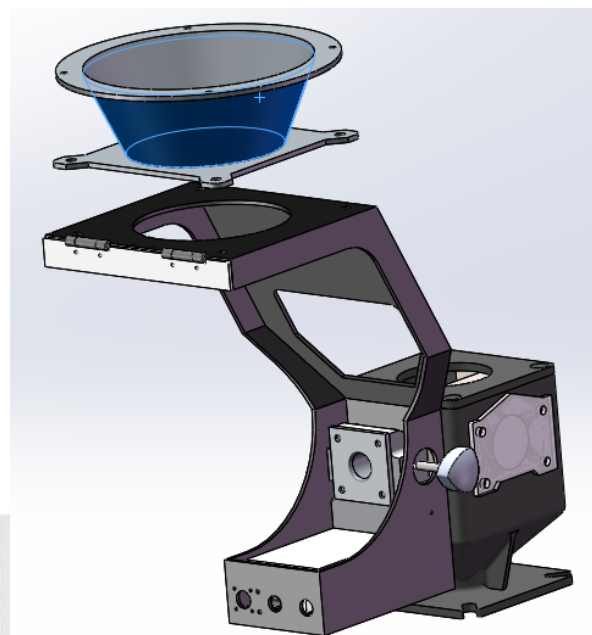
6. All components adopt fast connection, only need 1-2 minutes to change color;



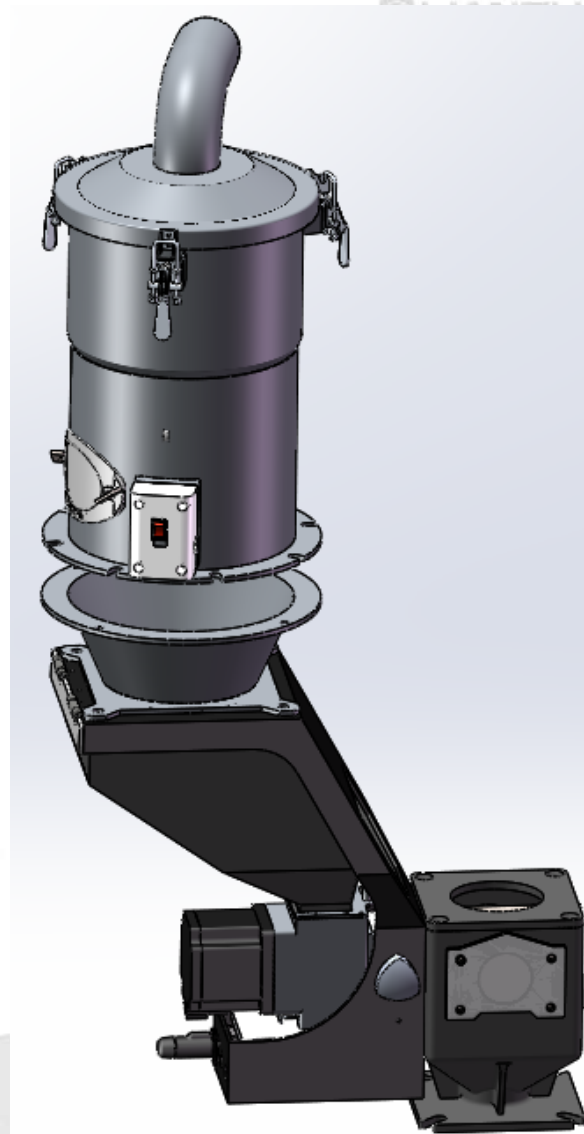
7. Color change without tools, all hands operation;



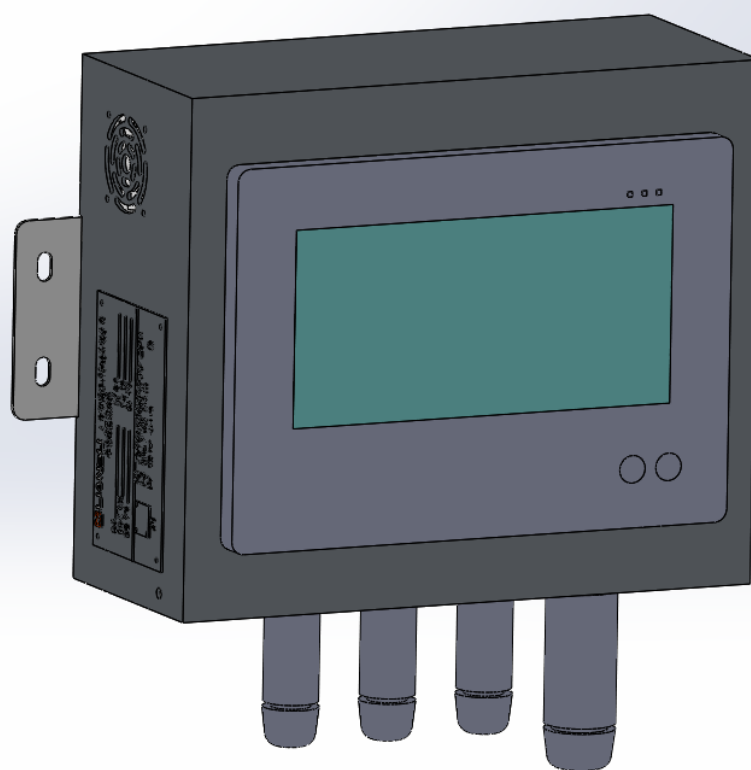
8. The color masterbatch base has reserved interface, one base can expand 3 color masterbatch machines;
9. The color master machine is equipped with a standard support frame to facilitate automatic feeding and installation of the color master suction;



10. The suction can be installed directly on the master machine without additional support and soft connection;



- 11. Electric control integrated box, volume is less than half of the domestic same industry;
- 12. 7" colorful touch screen (bigger than domestic same industry);
- 13. The design is can be hand-held, a variety of fixed ways;



14. There are three modes: weighing mode, volume mode and single machine mode.

In weighing mode: the automatic following of master color quantity is not affected by the change of the size and volume of color masterbatch particles, and the output of color masterbatch can be adjusted automatically with the change of the amount of the main material of the extruder. the accuracy is the highest in this mode : matching error $\leq 1\%$

In volume mode: color master batch and main machine are simulated by the screw speed of both, followed synchronously according to the volume mode.

In the single machine mode, is the color masterbatch machine HMI set independent certain speed, the output of color master does not change with the consumption of raw materials of the main machine.

It used in injection molding machine, pipe extrusion, sheet extrusion, cable extrusion, plastic blowing film and other plastic processing industries that need proportiong technology

1. Extruder maximum amount of kg/h, color masterbatch ratio %
2. Is there a dryer or transition hopper above the feed inlet of the extruder(take photos);
3. Extruder hopper connecting flange dimensions;
4. Extruder has reserved signal interface or not: is 0-10V;
5. Power supply voltage/frequency.

Example of selection :

According to the customer main machine is the extruder or not? provide the type of raw material, the maximum amount of the main raw material usage, color masterbatch accounts for the total usage . Such as the maximum amount of usage is 200kg, color masterbatch is 2%, $200 \times 0.02 = 4\text{kg}$ then choose LSCM-12

05 Special matters of doser selection:

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- 1、The color materbatch output table is based on the continuous operation of the granular materials with a bulk density of 0.65 kg/l and diameter 3-5 mm.
- 2、The doser can be used to add other irregular plastic particles, such as crushing materials, need provide the samples of raw materials at this time.

