

Blending Module 混合模块



**NANO PHARM TECH
MACHINERY EQUIPMENT CO., LTD**



YouTube



Blending Module 混合模块



GTH Bin Blender
单立柱提升料斗混合机



KRH Bin Blender
单臂快夹混合机



SGTH Bin Blender
双立柱提升料斗混合机



SKRH Container Blender
双臂快夹混合机



SRH Lab Blender
实验混合机



HF Square Cone Blender
方锥混合机



GH 3 Dimensional Blender
三维混合机



QLH Air Mixer
气流混合机

GTH/KRH/SGTH
Single/Double Column Bin Blender
单/双立柱混合机



GTH/KRH/SGTH BIN BLENDER FEATURES

GTH/KRH/SGTH型立柱混合机特点

- Homogeneous blending
- Interchangeable bin design, one machine can be used for different sizes of bins
- Space saving, free standing or ceiling/floor installed design
- Lifting design and discharge to smaller bin online.
- 混合均匀
- 同一台可配套不同大小的料桶
- 节省空间，安装方便
- 具备提升功能，可在线出料到周转桶





GTH Single Column Bin blender Video单立柱提升料斗混合机视频

Blending Module混合模块



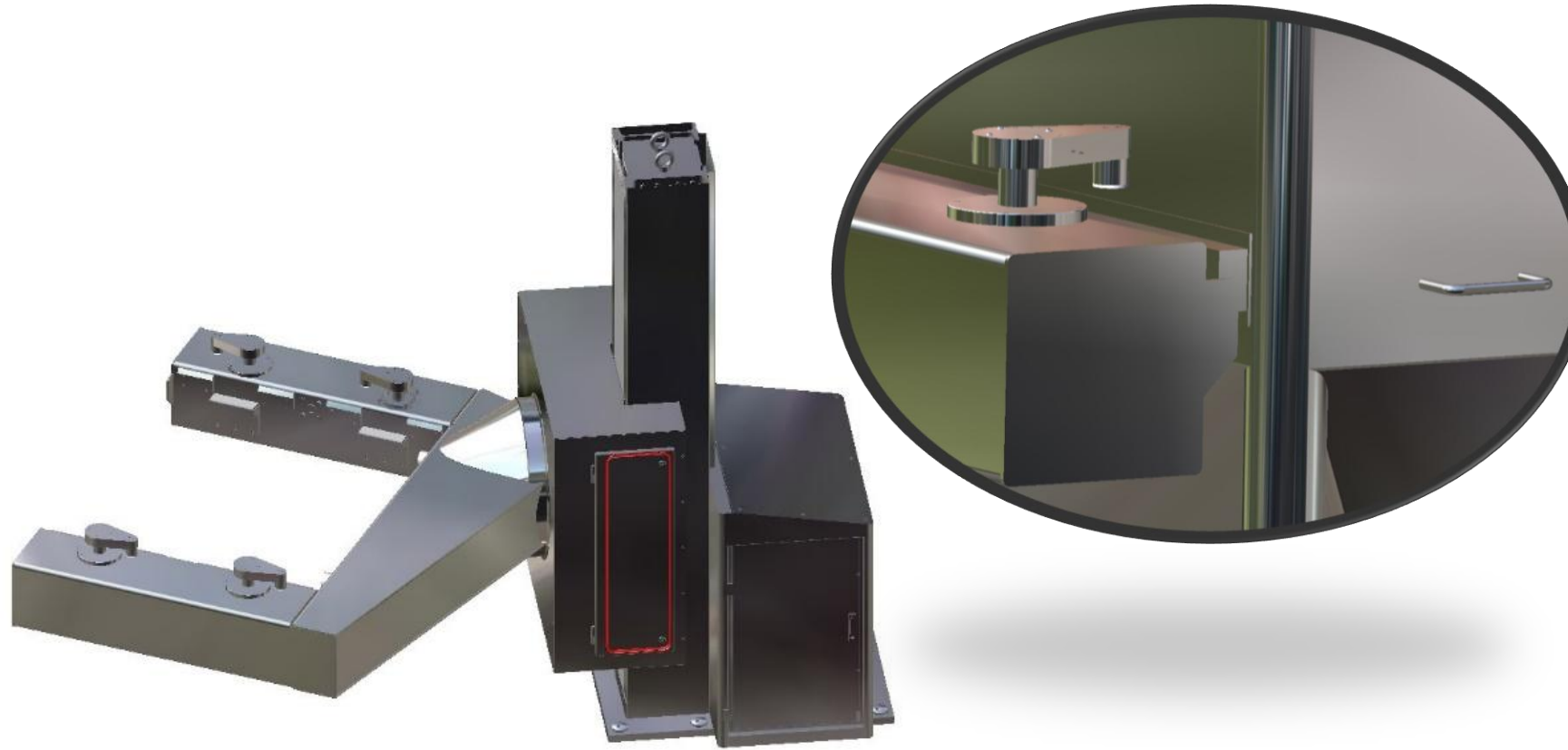
GTH Bin Blender with manual quick clamping system, easy to operate, suitable for bins smaller than 1500L
GTH混合机可快速拆卸料桶，手动夹紧方便操作，适用于1500L以下的料桶



KRH bin blender has automatic loading and clamping, lifting, mixing and unclamping functions. It can achieve smooth docking with AGV , thereby meeting automated and unmanned production requirement. KRH bin blender is used for bins of 2000L and below.

KRH系列全自动提升混合机拥有自动装夹料桶，提升混合及自动放松夹持的功能，能够和AGV无人小车实现顺畅对接，从而实现生产线自动化无人化。夹持混合桶范围2000L以下兼容。

KRH Bin blender Video
KRH混合机视频



KRH Bin blender:
The four automatic clamping mechanisms driven by the hydraulic system, together with grooves arranged on the rotating arm to ensure the safety and reliability of clamping and mixing process.

KRH混合机:
四个旋转自动压紧夹持机构由液压系统提供动力，加上转臂设置的凹槽双重安全装置，保证了夹持混合的安全可靠



SGTH Bin blender:

Automatic bin lifting, clamping, mixing, unclamping and lowering process. One machine equipped with different sizes of bins can meet the mixing requirements of different batches and varieties, which is beneficial for pharmaceutical enterprises to strictly implement batch management. It is mainly used for final blending process and also online discharging to small IBC bins . The commonly used range of mixing bins is below 2000L.

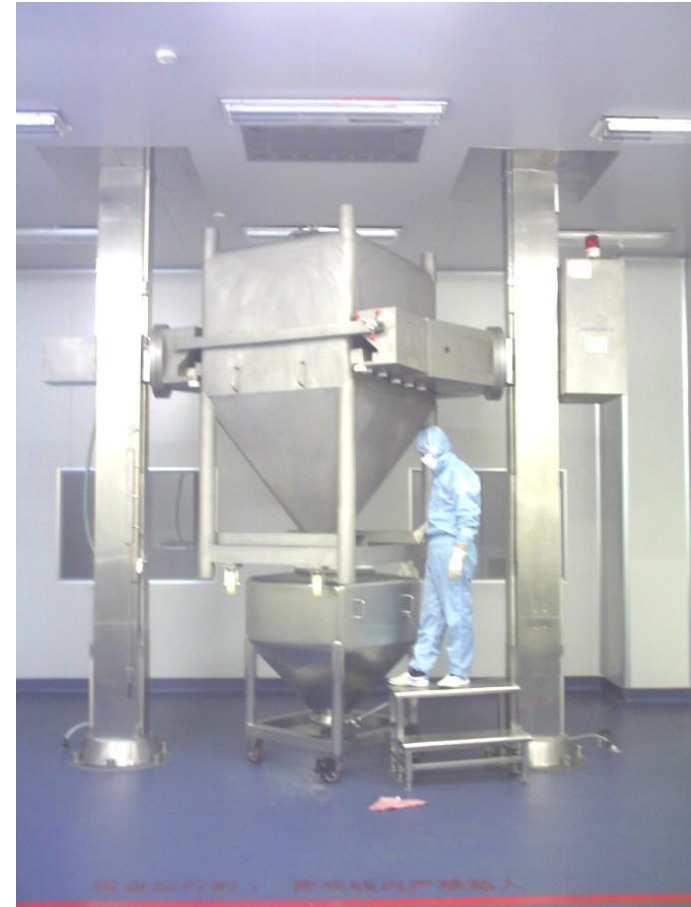
自动完成料斗提升、夹持、混合、松夹、下降等工序动作，配置一台自动料斗混合机及多个料斗，就能满足不同批量、多品种的混合要求，有利于制药企业严格执行批号管理。多用于总混后在线出料分装至小规格IBC料斗，为下序设备供料。混合桶常用范围2000L以下。



SGTH Bin Blender 双立柱提升混合机



Blending at low position 低位混合



Discharging at high position 高位卸料



Blending Module混合模块

SGTH Bin Blender



The main frame is equipped with a sensor, which is interlocked with the program to detect whether bin or bin cover in position inside the rotating frame. When there is no bin or bin cover, the lifting motor will not start to avoid damage to the ball screw and frame caused by misoperation.

主机回转框架内配有感知料斗传感器，程序互锁，可检测回转框架内有无料斗和料斗是否加盖，当主机框架内没有料斗或料斗未加盖时提升电机不启动，以避免出现误操作对丝杆及框架造成的损伤。

The mixing angle of this machine is 30 degrees, which intensifies the shear and diffusion motion of the material in the mixing bin, reduces the possibility of material stratification, and improves the mixing uniformity

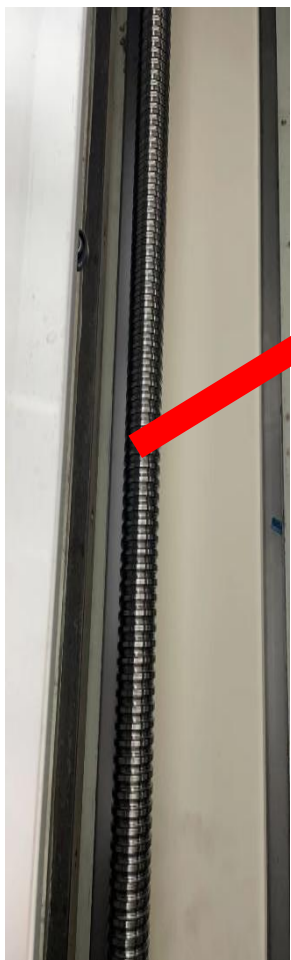
该机的混合角为30度,加剧了物料在混合桶内的剪切和扩散运动,降低了物料的分层可能,提高混合均匀度。

The bin clamping adopts hydraulic system, equipped with a pressure gauge, which can sense the clamping pressure of the bin. Mixing can only be carried out after reaching the clamping pressure. At the same time, the external arm frame is fixed for secondary safety protection.

料斗的夹紧采用液压四点顶持，配有压力表，可感知料斗夹紧压力，达到夹紧压力后才能进行混合。同时外部环臂框架固定进行二次安全保护。



For SGTH Bin Blender 双立柱提升混合机使用



The lifting mechanism adopts a honing ball screw, ensuring smooth and vibration free lifting. The ball screw and ball screw nut cooperate to prevent falling, improving safety.

提升机构采用磨丝杠，提升平稳无振动，滚珠丝杠与滚珠丝母配合具有防坠落的功能，提高了安全性。



The use of an elastic friction torque limiter ensures locking safety. When the clamping limit fails, the lifting motor and ball screw cannot be controlled, the elastic friction torque limiter will sense that the lifting torque is too large. At this time, the limiter will detach from the lifting motor, and the lifting motor will idle to protect the safety of the ball screw.

采用弹性磨擦式扭矩限制器确保锁紧安全，当夹紧限位失灵时提升电机与丝杠无法控制，弹性磨擦式扭矩限制会感知提升扭矩过大，此时限制器会与提升电机脱离，提升电机空转从而保护丝杠的安全。



SKRH Container Blender

双臂快夹混合机





SKRH Container Blender

The SKRH container blender has automatic clamping, lifting, mixing functions. One machine can be used with different sizes of bins, making it an ideal equipment for the final mixing process. Max mixing bin size is 3300L.

SKRH型双臂快夹混合机拥有自动夹持、升降、混合等动作。快卡装置可容纳多种规格的料桶，是总混车间的理想设备。规格可以涵盖3300L以下混合桶。

Blender Module 混合模块



Model Selection Based on Batch Requirement 按批次要求选型

GTH Single Column Bin Blender 单立柱混合机

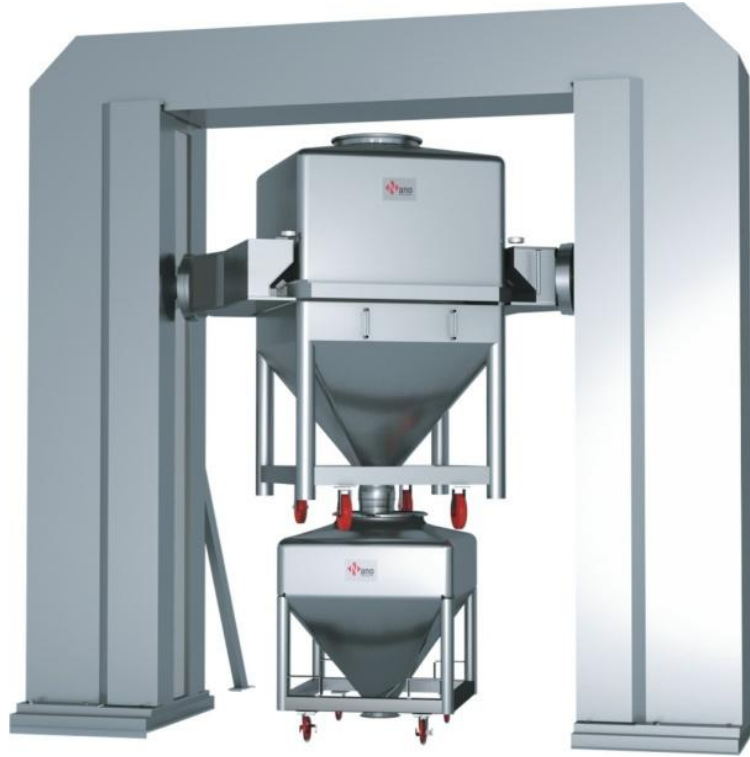
For small batch production 适用于小批量生产



HF Batch Blender 方锥混合机

For big batch production 适用于大批量生产





One blender can be equipped with different sizes of bins to meet different batch size needs. Automatic running for lifting, blending and lowering process
一个混合机可配置多个大小不同的混合机，以满足不同批次的要求。可自动提升、混合和下降

Blending in low position and discharging in high position, save cost and time.
低位混合，高位卸料，节约成本，节省时间。



GH 3-Dimensional Blender

Features:

Homogeneous blending

Low room height requirement

Vacuum charging/lifting machine

GH型三维运动混合机

特点:

混合均匀

占地面积小，高度要求低

真空上料/提升机上料





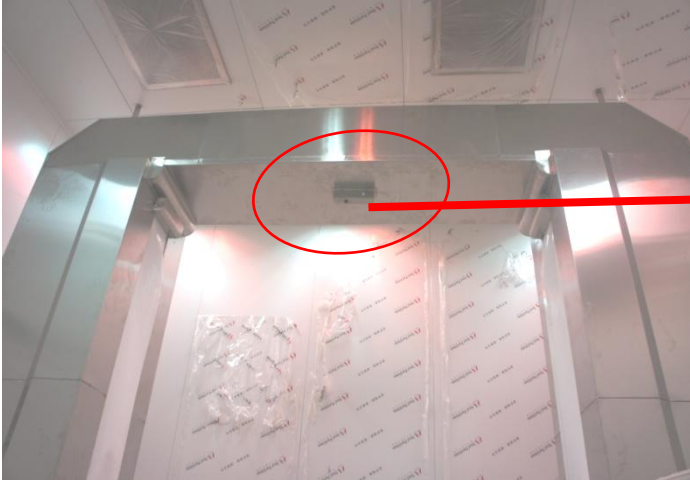
30° angle 30度角

SKRH Container Blender

双臂快夹混合机



Blender Module 混合模块



A sensor is equipped to detect the bin and bin cover. If no bin or no bin cover, the lifting motor can not be started so as to protect the machine.

已装配传感器来检测桶和桶盖。如果没有桶或没有桶盖，提升马达不能被启动，以保护机器。



Equipped with pressure sensor, the blending can be started after reaching the pressure and make sure the safety.

已装配压力传感器，达到压力值后开始混合，确保安全。



Equipped with Emergency-Stop, easy to access.

装配有急停按钮，容易够到。

The independent electric cabinet including HMI, PLC and other electric and pneumatic components such as indication lamp and buzzer.

单独的配电柜，包括人机界面（HMI）、可编程逻辑控制器（PLC）和其它电子、气动元件，如指示灯和消音器





Double safety sensor
两个安全传感器

One is for alarming,
the other is for stopping the
machine.

一个用于报警，另一个用于停机。



For big batch production; vacuum charging or lifting machine charging; If required, online weighing and discharging system can be provided as options; also CIP is available.

用于大批量生产；真空上料或提升机上料；如需要，可提供在线称量和卸料系统作为选配；也可配置在线清洗系统（CIP）。





Lifting machine charging
提升机上料



Vacuum charging & CIP cleaning
真空上料&在线清洗





Online Weighing System

在线称量系统