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Product Brochure

MIXED SERIES

Vacuum kneading machine

NHJ

Vacuum kneading machine for mixing, kneading, and compounding high-viscosity, elastoplastic materials. Used in chemicals, silicone rubber, CMC, batteries, and carbon industries.

https://www.planetaryballmills.com/products/mixed-series/vacuum-kneading-machine.html

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Product Overview

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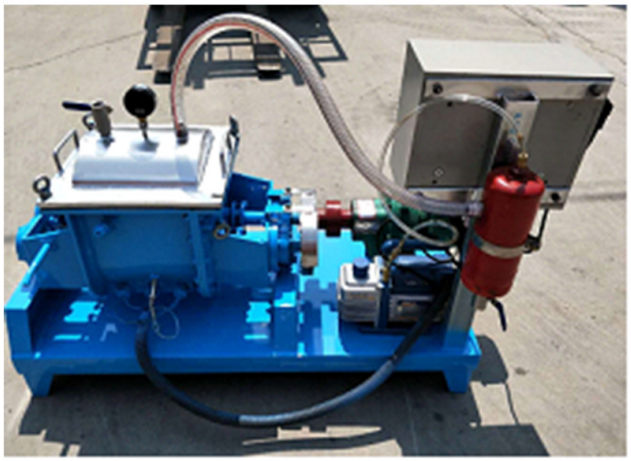
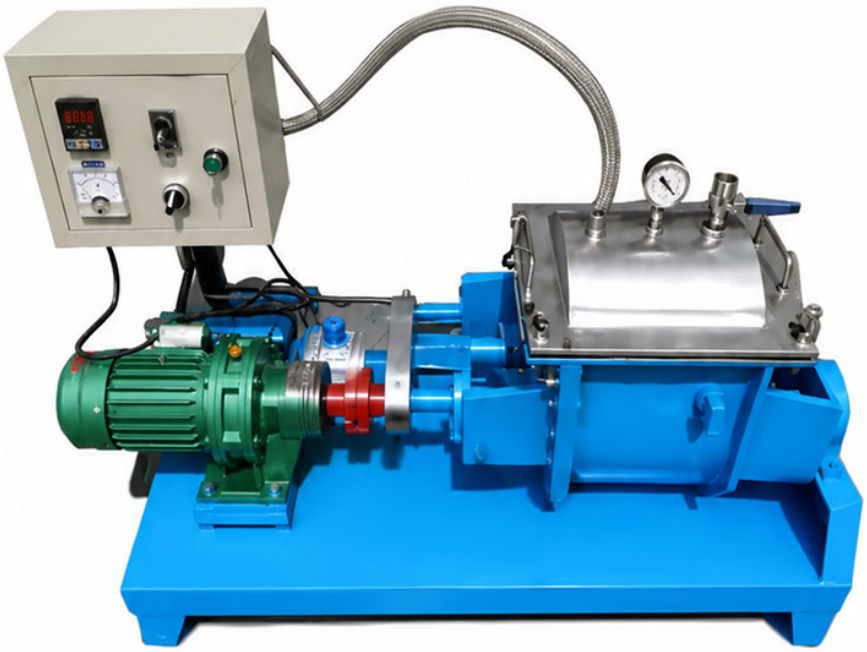


Product Introduction

Agitator Series

Product Details



Kneaders are widely used in the process of mixing, kneading, crushing, stirring, and repolymerization of high-viscosity, high-elasto-plastic materials such as chemicals, plastics, silicone rubber, food, starch, cellulose (CMC), pencils, carbon, dyes, and electric jade powder.

Vacuum kneader is mainly used to produce silicone sealant, silicone structural glue, neutral glass glue, neutral anti-mold glue, neutral weather-resistant glue, vulcanized silicone rubber, silicone rubber, silicone resin, butyl rubber, compound rubber, plastic, PP, PVC, PE, BMC, CMC cellulose, battery slurry, ink, pigment, dye, bubble gum, chewing gum, etc.

Technical parameters

Specification		NHJ-5L	NHJ-10L
Effective volume L		5	10
Feeding quantity L		3.5	7
Main motor power Kw		1.1-1.5	
Screw motor power Kw		none	
Discharging method	High temperature type	Manual cylinder turning	
	Other types	Manual turning over the cylinder to discharge material	
mix slurry	Speed r/min	33/23	
Way	High temperature type	none	
	Other types	electricity, steam	
Electric heating power Kw	high temperature	6-10	8-10
	other	1.8	1.8
Steam pressureMPA		0.3	
Vacuum type straight degree MPA		-0.09	
Pressure type pressure MPA		0.45	
Overall dimensions (MM)	long	1100	
	Width	1000	
	high	520	
Weightkg		210~300	250~340

Working Principle

The vacuum kneader is a horizontal double-shaft parallel type with a Z-shaped mixing shaft. The blades are deployed according to Archimedean spiral. The two blades are arranged horizontally and rotate in the machine direction with different speeds. When working, the motor is driven to the driving paddle through the reducer, and the driven paddle is driven through the gear. The spiral blade of the mixing paddle drives the material to be squeezed both axially and radially. ; Both high-speed and low-speed extrusion ; It performs both extrusion and separation movements to fully knead, knead, blend and mix the materials evenly and accelerate the physical and chemical reactions of the materials. In order to prevent the generation of large bubbles during the mixing and kneading process of the material and make the product dense, it is recommended that users use a vacuum kneader. ; That is, vacuuming is performed during the kneading process of materials, and the vacuum degree can reach 0.094mpa. The mixing tank of the kneader is W-shaped and is welded by two layers of steel plates. The inner layer is a stainless steel plate. The bottom is composed of two upper semi-cylindrical inner cavities with a transverse material distribution ridge in the middle. The outer shell is an ordinary low-carbon steel plate. Steam, hot water, and cold water can be injected into the cavity. To achieve the purpose of heating or cooling, electric heating can also be used, that is, adding an interlayer at the bottom of the mixing tank, with multiple electric heating tubes installed in the middle, and injecting a sufficient amount of heat-conducting oil into the interlayer. After the electricity is turned on, the heat is transferred to the material through the heat-conducting oil to achieve the purpose of heating.

Product Features

1. The vacuum kneader adopts a vacuum balance box structure, which allows black particles without filler wear to enter the cylinder, ensuring the purity of the material, and can achieve extremely high vacuum and achieve excellent dehydration effects.;

2. The discharging method of vacuum kneader generally adopts bottom discharging, and the optional high viscosity pump can effectively reduce labor and improve production efficiency.;

3. Motors, reducers, frequency converters and bearings all adopt international and domestic brands.;

4. The mixing shaft adopts a fully solid structure. The two mixing shafts have a fast and a slow mixing speed, so that they not only mix the materials but also have an efficient shearing effect.

Accessories & Customization

Accessories
Grinding jars, heating elements, sample holders, control modules and other matching accessories can be selected according to the product configuration.

Customization
For voltage, capacity, chamber size, process temperature or application requirements, please contact TENCAN for a suitable configuration.