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Product Brochure

PRESS FORMING

Manual Tablet Press

JYP

Manual tablet press for compressing powders and granules into tablets. Ideal for labs, R&D, and small batches. Precise pressure control.

https://www.planetaryballmills.com/products/press-forming/manual-tablet-press.html

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TENCAN POWDER

Product Overview

Manual tablet press for compressing powders and granules into tablets. Ideal for labs, R&D, and small batches. Precise pressure control.

Product Introduction

A manual tablet press is a device that relies on manual operation to apply pressure to compress powder or granular materials into tablet products. Its core structure includes components such as frame, pressure wheel, mold, handle, etc. Some high-end models are also equipped with pressure display devices or transparent protective covers to improve operating accuracy and safety. It is mainly used in laboratory research and development, small batch trial production and small-scale production in specific industries. It is especially widely used in pharmaceutical, food, chemical and other fields.

JYP Series

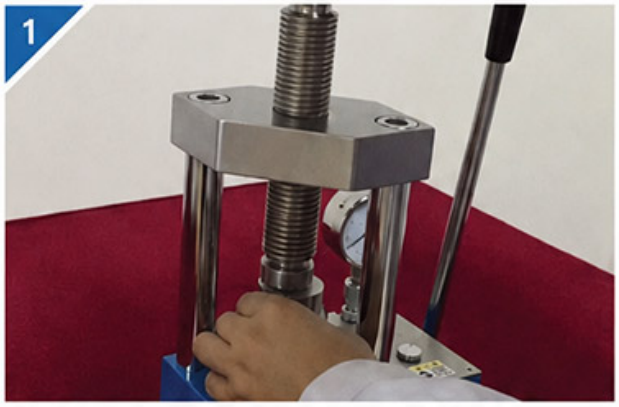
Product Details

JYP Series

Operating Steps

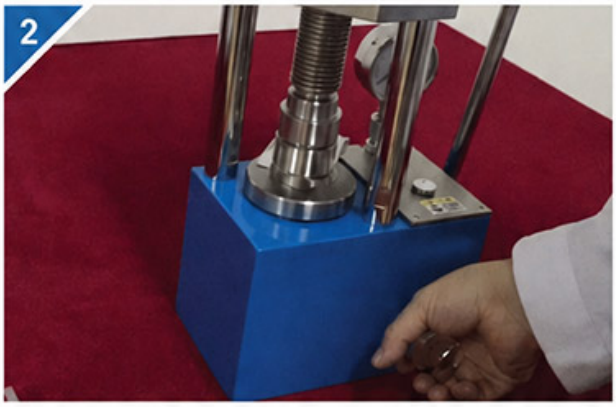
Operation Operating Steps

1



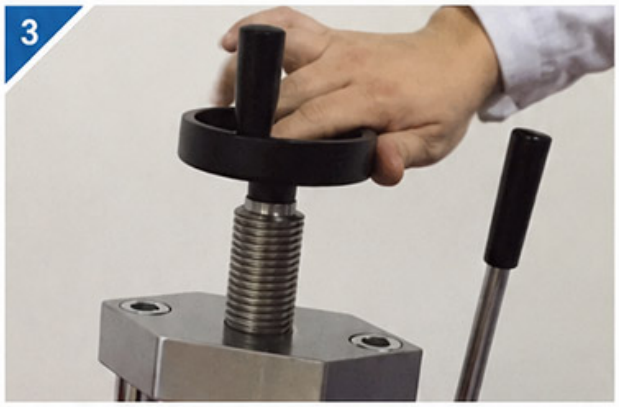
Place the mold in the center of the tablet press

2



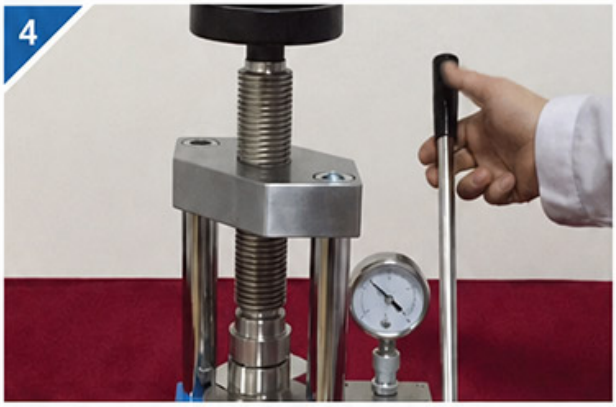
Tighten the oil release valve clockwise

3



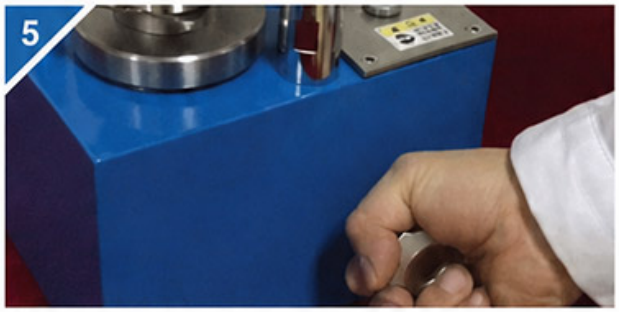
Tighten the screw rod to secure the mold

4



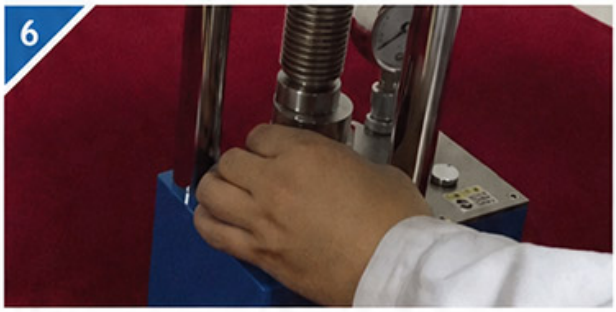
Move the handle back and forth until the desired pressure is reached

5



Loosen the oil release valve counterclockwise to release the pressure

6



Remove the pressed mold from the tablet press

The application scope of manual tablet press covers many industries:

1. **pharmaceutical industry** : Compression of Chinese and Western medicine tablets, nutritional tablets, veterinary tablets, etc., suitable for prescription screening and process optimization stages.
2. **food industry** : Make candy tablets, coffee tablets, milk powder tablets, etc.
3. **Chemical Engineering and Materials** : Pressed catalysts, metallurgical powders, ceramic particles, etc.
4. **laboratory research** : Used to quickly prepare samples to verify formulas or production processes.
5. **Other areas** : Such as electronic components (button batteries), daily chemical products (disinfectant tablets), etc.

Technical parameters

Pressure gauge selection	Pointer watch + protection	Digital display + protection
Pointer pressure gauge	Pointer type, dual-scale display of pressure and pressure	
digital pressure gauge	Digital display 0.00-40.00MPa, accuracy 0.01MPa (only with "S" type)	
pressure range	0-24T□0-34MPa□	
Piston diameter	Φ95mm chrome-plated cylinder	
Piston stroke	30mm	
Pressure method	Manual pressurization/manual slow pressurization	
pressure stability	≤1MPa/10min	
Workbench diameter	Φ105mm	
Number of columns	four pillars	
Protective function	With plexiglass protective cover	
workspace	80×130mm	
Overall dimensions	260×175×395mm	
Instrument weight	42kg	

Working Principle

The workflow of a manual tablet press can be divided into the following steps:

1. **Material preparation** : Sieve dry and uniform powder or granules and fill them into the mold silo.
2. **Mold installation** : Select the upper mold and lower mold according to the tablet shape to ensure that the raw materials are evenly distributed in the mold.
3. **Manual pressurization** : The handle drives the pressure wheel or lever device to close the mold and apply pressure to the material, squeezing out air and excess moisture to form high-density tablets.
4. **Tablet Forming and Removal** : After the pressure reaches the set value, reverse the handle to separate the mold and take out the complete tablet.
5. **Cleaning and maintenance** : Clean up residual materials and lubricate parts regularly to extend equipment life.

Product Features

1. Small size, light weight, easy to carry, suitable for use in the glove box;
2. The upper plate uses electroplated countersunk head six-point screws, which are beautiful, save space, and do not hurt your hands. ;
3. Chrome-plated cylinder has a smooth surface and does not rust, and the rubber ring has good sealing effect. ;
4. Integrated mainboard structure, the oil pool, mainboard, and oil cylinder are all on one mainboard without sealed connections, which reduces the chance of oil leakage from the tablet press. ;
5. The lengthened tension spring has good rebound effect and is not easy to deform. It can achieve a 30mm return stroke of the oil cylinder without deformation. ;
6. All-aluminum alloy handwheel, beautiful and practical, solid and not easy to be damaged ;
7. The oil pool is on the surface of the main engine for easy oil replacement, and a hydraulic oil filtering device is added to the oil line. ;
8. The plunger adopts a sealing structure and has good sealing effect. ;
9. The pressurizing device is placed at the lower corner of the main unit at a reasonable angle, saving effort when applying pressure without tilting forward. ;
10. Dual-scale pointer pressure gauge, dual display of [Pressure Tons] and [Cylinder Pressure Mpa], no need to convert when applying pressure, to avoid over-pressure in the mold ;

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.