



T A B L E T   P R E S S E S

# LTP50 TABLET PRESS USER MANUAL

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# CONTENTS

Page 1. **Introduction**

Page 1. **Technical Specifications**

Page 2. **Insallation**

Page 2. **Operation**

Page 2. Tablet Weight Adjustment

Page 2. Adjusting The Pressure

Page 2. Feeder Adjustment

Page 3. **Maintenance**

Page 3. **Lubrication**

# Introduction

The LTP50 Tablet Press is a single punch, continuous operation tablet press that has the capacity to produce very large tablets, up to 5cm in diameter and 2cm thick, for use in the pharmaceutical, chemical, and food industries.

The LTP50 uses a drive belt mechanism to generate an exceptionally high maximum pressure of 100 Kn. Combined with the large maximum diameter and thickness, this makes it especially suitable for producing mineral or herbal supplement pills that require a large volume. As well as pharmaceutical tablets, it can also be used to produce health products, sugar tablets, fertilizer and pesticide tablets, and tablets for use in metallurgy and electronics applications.

All parameters such as thickness and diameter can be adjusted on the LTP50 Table Press, and it can produce both round and geometric shapes, as well as tablets stamped with a logo. It has a maximum production rate of 2760 tablets per hour.

The combination of features and cost efficiency make the LTP50 Tablet Press ideal for use in laboratories, hospitals, research institutes, and small batch production.

Note Please read these instructions carefully before first use.

## Technical Specifications

Max. Pressure (Kn)	100
Max. Dia. of Tablet (mm)	50
Max. Filling Depth (mm)	45
Thickness of largest tablet (mm)	20
Turret speed (r/min)	6-14
Production Capacity (pc/h)	2760
Motor Power (KW)	3.7
Overall dimensions (mm)	666x860x1824
Net weight (KG)	770

# Installation

The LTP50 Tablet Press should be installed in a clean, dry, well ventilated and well lit location with a suitable 380v power supply nearby. It needs a stable base on which to be installed, which must be sufficiently sturdy to withstand the machine's considerable weight.

Examine the machine carefully to ensure it is in good order. Ensure that the machine has been properly lubricated, according to the details set out below.

Switch the machine on and run the press to check that the motor is turning in the same direction as the arrow on the pulley casing. If the two are not consistent, the live wires in the distribution box need to be adjusted.

Installing the die

Install the upper die first by screwing it in place. Then place the lower die in position on the work platen. Ensure that the two come together cleanly. Then tighten the screw to lock the die in place.

# Operation

## **TABLET WEIGHT ADJUSTMENT**

Tablet weight is adjusted by turning the ejection lead screw. Clockwise rotation reduces the tablet weight, counterclockwise increases it.

## **ADJUSTING THE PRESSURE**

Pressure is adjusted using the small bevelled gear on the eccentric wheel. Unfasten the two screws on the eccentric wheel, then turn the small gear clockwise to increase pressure and reduce tablet thickness. Counterclockwise will reduce the pressure and increase tablet thickness. After adjusting, tighten the screw.

Set the pressure to a low setting to start, then run the machine to see whether the tablets produced are suitable. If not, adjust the pressure upwards.

## **FEEDER ADJUSTMENT**

Turn the belt gear by hand to raise the upper die to its maximum height. Release the nut, adjust the segmented mould, and bring the feeder closer to the die. Then tighten the nut. Run the machine by hand for a few revolutions to check that it feeds smoothly.

# Maintenance

The LTP50 Tablet Press should be checked every two weeks to ensure that all parts are in good working order. Any worn or damaged parts should be replaced immediately, before using the machine.

Pay special attention to the die, to check that it is in good condition without cracks or other deformities.

Ensure that the granules are flowing smoothly, and do not use the machine with too much fine powder, as this can damage it.

## **STORAGE**

If the machine is to lie unused for a lengthy period of time, the die must be removed and stored in a container filled with lubricating oil to protect it from rust. The machine itself must be thoroughly cleaned, and layered with grease.

# Lubrication

NOTE Establish a regular lubrication schedule. Proper lubrication is essential to prolonging the service life of the machine.

Add oil to the oil cups on a regular basis. Fill them before starting the machine, and refill them if the bearings show signs of excessive heat.