

Version 2019 (Trial)

VTOPS MT-50/MT-50D Series

SEMI-AUTOMATIC ROUND BOTTLE LABELING MACHINE

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Operation Manual

郑州永特机械有限公司

ZHENGZHOU VTOPS MACHINERY CO., LTD.

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1 前言 Foreword

在使用本公司机械之前，请务必仔细阅读本《操作手册》之各项内容，它将帮您正确使用和维护机器。确保人机安全，并充分发挥其性能，减少故障，延长寿命。

Before using the machine, please read the *Operation Manual* carefully. The manual will help you to correctly use and maintain the machine, ensure safety for both man and machine and fully utilize the machine performance so as to reduce failures and prolong the service life.

安全注意事项 Safety precautions

- 1) 未清楚了解机器的操作方法和安全规定之前，禁止启动机器；
Do not start the machine until you have clearly understood its operating method and safety requirements;
- 2) 使用本机前，必须先详读本手册，并了解全部内容与提示；
Before using the machine, carefully read the Operation Manual first to understand all its content and tips;
- 3) 机器须确认完成安装及必要的调整工作后，才能操作；
The machine can be operated only after its installation and necessary adjustment have been completed and confirmed;
- 4) 电源未关闭，不得触摸机器内部或电气设备；
Do not touch the interior of the machine or its electric devices when the power is not turned off;
- 5) 机器在运转中操作者不得离开机器工作范围；
The operator shall not leave the working range of the machine during operation;
- 6) 检查、维修电气控制电路时须由专业人员完成；
Inspection and maintenance of the electric control circuit shall be conducted by professionals;
- 7) 未经本公司许可，不得任意改装机器或在机器上安装任何非本公司认可的装置或周边设备，以免发生不可控制的危险；
Without permission of our company, alteration to the machine is not allowed and devices or ancillary equipment unrecognized by our company shall not be installed on the machine so as to avoid uncontrollable dangers;
- 8) 本手册内容有任何不明之处，或遇无法解决的问题，请咨询本公司或授权经销商，切勿擅自处理；
For anything unclear in the current manual or problems cannot be solved, please consult our company or our authorized distributors instead of handling on your own;
- 9) 不要在指定环境之外的条件下使用机器；
Do not use the machine under the conditions other than the specified environment;

警告：为了您和他人及机器设备的安全，务必遵守以上安全事项，对于不按上述要求操作而产生的意外及事故，本公司概不负责；

Warning: For the safety of yourself and others as well as the machinery equipment, do observe the above safety precautions, and our company shall not be responsible for the accidents and casualties caused by operations not following the above requirements;

2 概述 Overview

2.1 应用范围 Rang of Application

2.1.1 MT-50 半自动圆瓶贴标机是适用于日用化学、食品饮料、医药、化工及其它轻工业中的圆瓶类产品包装上半自动贴标之理想设备。

MT-50 semi-automatic round bottle labeling machine is an ideal equipment for semi-automatic labeling of round bottle products in daily chemical, food and beverage, medicine, chemical and other light industries.

2.1.2 本机适用各种大小的圆瓶，适合小批量多品种生产。本机仅可单机贴标使用。

This machine is suitable for round bottles of various sizes and is suitable for small batch and multi-variety production. This machine can only be used for stand-alone labeling.

2.1.3 有关其它用途，请向厂家咨询，对于因不按规定使用而造成的任何损坏，生产商概不负责保修。此类风险由使用者独自承担。

For other uses, please consult the manufacturer. The manufacturer is not responsible for any damage caused by non-compliant use. Such risks are borne solely by the user.

2.1.4 严格遵守使用说明书是本机器使用要求的一部分。

Strict compliance with the instruction manual is part of the requirements for the use of this machine.

2.2 性能特点 Performance Characteristics

2.2.1 该机结构合理、性能可靠、操作简单。采用光电检测，贴标准确。

The machine has reasonable structure, reliable performance and simple operation. Using photoelectric detection, accurate labeling.

2.2.2 采用先进的贴标机构，确保贴标精度。

Adopt advanced labeling mechanism to ensure labeling accuracy.

2.2.3 能对多种规格瓶子贴标，适应性强。

It can label a variety of bottles with strong adaptability.

2.2.4 标签光眼灵敏度可调，对不同透光度的标签底纸，能做识别比较并可调整感光度，对长短不同的标签能作最佳调整，确保出标正常及贴标顺畅准确。

The sensitivity of the optical eye of the label is adjustable, and the label backing paper with different light transmittance can be identified and compared and the sensitivity can be adjusted. The labels of different lengths can be optimally adjusted to ensure normal labeling and smooth and accurate labeling.

2.2.5 所有机构包括机架、送标器、档杆至紧固件大部分采用不锈钢和铝型材材料制作，永不生锈，无污染之扰，确保 GMP 环境要求。

All mechanisms including the frame, the label feeder, the gear lever and the fasteners are mostly made of stainless steel and aluminum profiles, which will never rust and be free from pollution, ensuring the GMP environmental requirements.

2.2.6 系统控制元器件全部具有国际标准化认证，并经过严格的入厂考核试验，确保各项功能的可靠性。

All system control components have international standardization certification, and have undergone strict

inspection and testing to ensure the reliability of various functions.

3 主要技术参数 Main Technical Parameters

3.1 整机参数 Machine Parameters

- 1) 单张非定位贴标最大产量: 50 件/min (与瓶子标签尺寸有关) 。
The maximum output of a single non-positioning labeling: 50 pieces/min (related to the size of the bottle label).
- 2) 贴标瓶子外径: Φ 12- 150mm
The outer diameter of the labelled bottle: Φ 12- 150mm
- 3) 功率: 50W
Power: 50W
- 4) 电源: 220V \pm 5% 50Hz
Power supply: 220V \pm 5% 50Hz
- 5) 使用环境温度: 5-45°C
Operating environment temperature: 5-45°C
- 6) 使用相对湿度: 15-90%
Using relative humidity: 15-90%
- 7) 外形尺寸: 640*350*460mm
Dimensions: 640*350*460mm
- 8) 总重量: 30kg。
Total weight: 30kg.

3.2 送标器参数 Marker Parameters

- 1) 出标速度: 3-15m/min
Marking speed: 3-15m/min
- 2) 贴标准确度: \pm 0.5mm (不计包装件和标签误差)
Labeling accuracy: \pm 0.5mm (excluding package and label errors)
- 3) 贴标最小长度: 10mm
Minimum length of labeling: 10mm

3.3 标签参数 Label Parameters

- 1) 标签底纸采用格拉辛底纸(即可透光底纸或半透明底纸)
The label bottom paper uses Glassine bottom paper (that is, translucent bottom paper or translucent bottom paper)

- 2) 标签面纸厚度不少于 $5\mu\text{m}$

The thickness of the label surface paper is not less than $5\mu\text{m}$

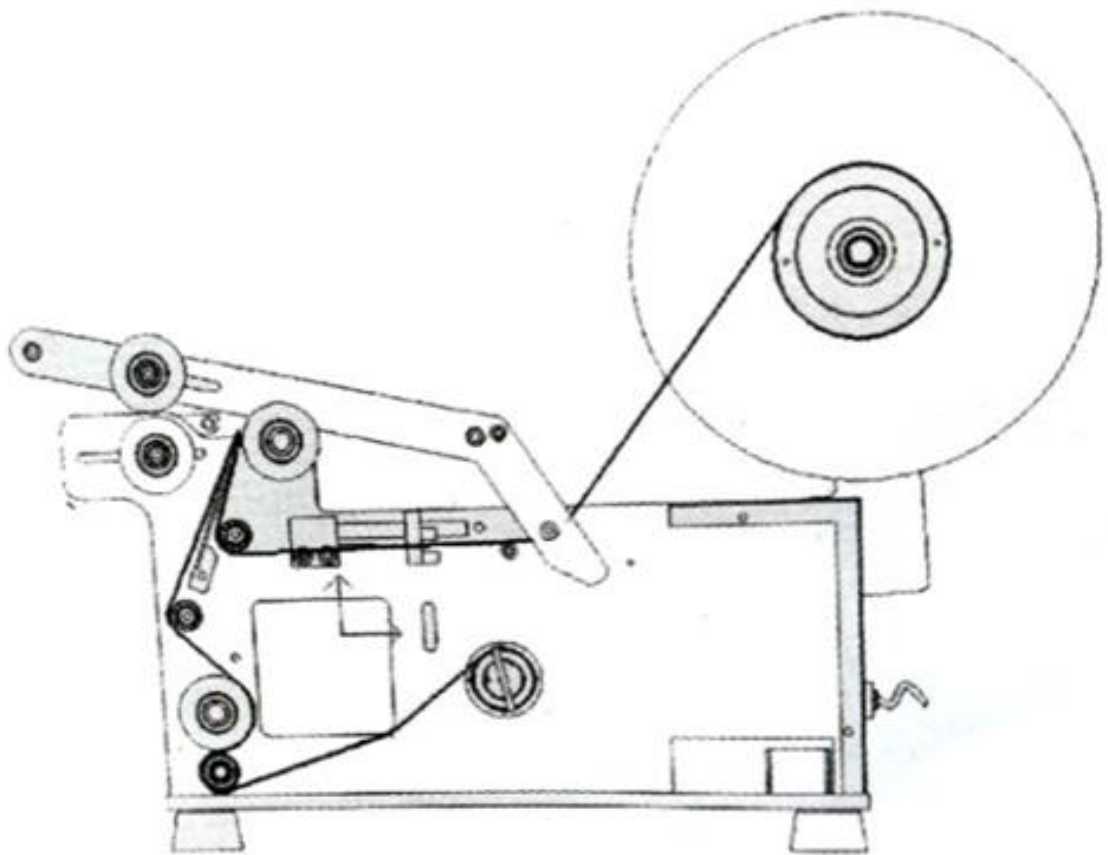
- 3) 标签外径 $\Phi 280\text{mm}$ ，标签内径为 $\Phi 76\text{mm}$

Label outer diameter $\Phi 280\text{mm}$, label inner diameter $\Phi 76\text{mm}$

4 构造和安装 Construction and Installation

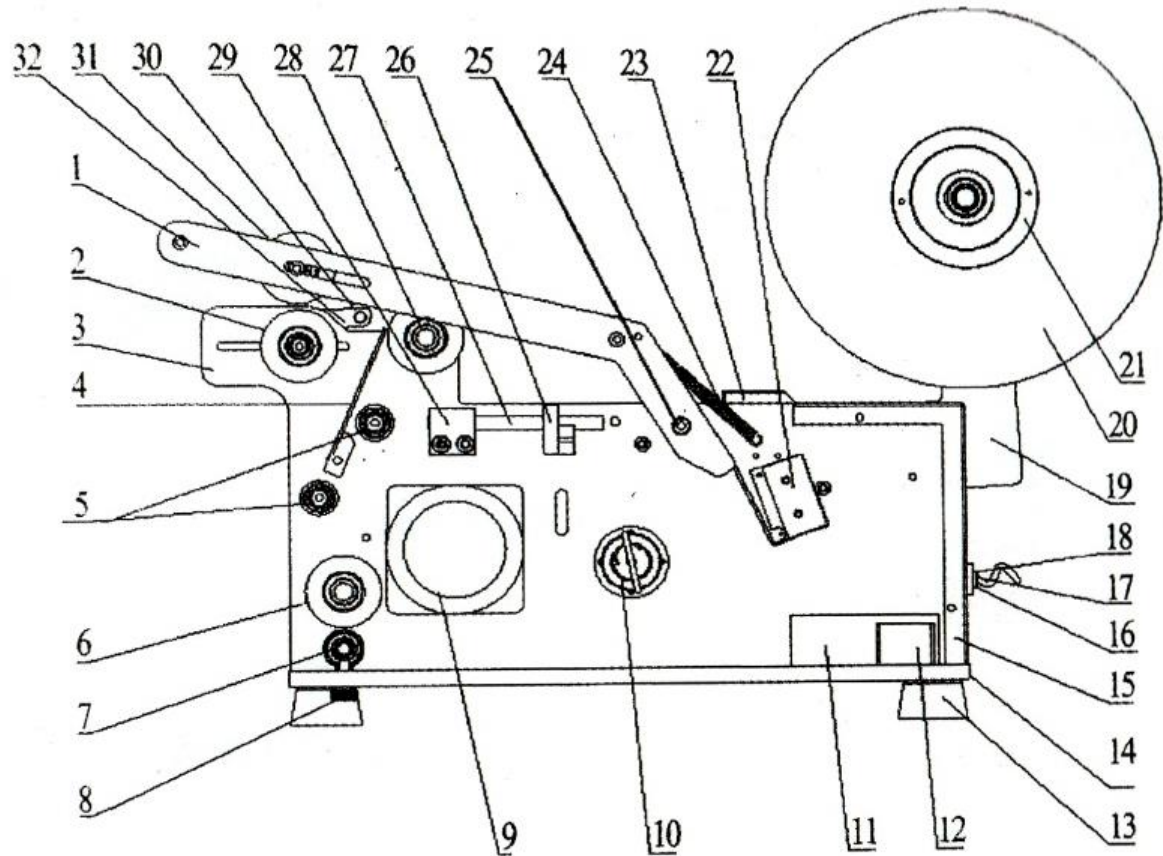
- 4.1 装标签卷 请按图 1 所示红线方向拉好标签纸

To install the label roll, please pull the label paper in the direction of the red line as shown in Figure 1



- 4.2 本机结构图如图 2 所示

The structure of this machine is shown in Figure 2



图二：整机示意图

1 压瓶摆臂
Bottle Pressure Swing Arm

2 撑瓶滚轮
Bottle Support Roller

7 拉标滚花轮
Pull Standard Knurled Wheel

10 收纸轮
Take-Up Wheel

13 底脚
Feet

16 电源开关
Power Switch

19 供纸盘支架
Tray Support

22 微动开关
Micro Switch

3 主板
Motherboard

4 剥离板
Peel Board

8 拉标调节螺钉
Pull Standard Adjustment Screw

11 控制模块
Control Module

14 底板
Base Plate

17 保险
Insurance

20 供纸盘
Paper Supply Tray

23 感应器
Sensor

5 过渡滚轮
Transition Roller

6 拉标软滚
Pull Standard Soft Roll

9 驱动电机
Drive Motor

12 电容
Capacitors

15 电器盒
Electrical Box

18 电源线
Power Cord

21 供纸盘座
Tray Holder

24 拉簧
Tension Spring

Free reading ends!

Please contact sales to get the official version!

<https://www.vtops.com/>