

# HDL-15A

## 多功能坡口机操作手册 Portable Plate Beveling Machine



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### **1. 使用范围 Scope of use**

HDL-15A 多功能坡口机是一款手动操作的电动机器。

- 可用于钢铁，铬铁，细晶粒钢，铝制品，铝合金，铜及塑料的加工。
- 可由熟练人员操作于工业设备上。
- 可加工成 K, V, X 或 Y 型坡口。
- 可对机械工程实施坡口作业。

The HDL-15A Multi-Function Beveler is a manually operated electric machine.

- Can be used for steel, ferrochrome, fine grain steel, aluminum products, aluminum alloys, copper and plastics.
- Can be operated by skilled personnel on industrial equipment.
- Can be machined into K, V, X or Y bevels.
- Can be used for beveling mechanical work.



警告

注意!

该机器只能被使用于上述所提及的材料。  
请勿在包含有石棉材料的物质上使用本机器。

Attention!

The machine can only be used on the materials mentioned above. Do not use the machine on materials containing asbestos.

## 2. 技术参数( Technical parameters)

| 技术参数/型号 Technical Parameters/Models |         | ATS-18  |
|-------------------------------------|---------|---|
| 坡口宽 Bevel width                     | [mm]    | 1- 15   |
| 直径 Diameter                         | [mm]    | 200 (以上 that amount or more)                      |
| 坡口角度 Bevel Angle                    | [deg]   | 30 度或 45 度,60 度 (订购时说明 Instructions for ordering) |
| 功率 Power                            | [W]     | 2400W   |
| 转速 Rotation speed                   | [1/min] | 8 500   |
| 机重 Machine weight                   | [kg]    | 7   |
| 电压/频率 Voltage/Frequency             | [V/Hz]  | 220V/50Hz   |
| 配坡口刀数量 Number of blades             |         | 4   |

本公司保留对技术数据的变更权。

上述切割功率表中所列数据全部基于 ATS-18 测试结果，所有上述相关数据仅供参考，对于有出入数据，我司不承担任何相关责任。

The data listed in the above cutting power table are all based on ATS-18 test results, all the above data are for reference only, we do not assume any responsibility for any discrepancies in the data.

### 3. 注意事项 Cautions

- 在使用前请认真阅读操作手册及注意事项，并完全参照说明书操作规范执行。
- 诸如 DIN, VDE, CEE, AFNOR 及国家规定的相关安全操作规范应认真执行。
- Before use, please read the operating instructions and precautions carefully and refer to the operating instructions in full.
- Relevant safety regulations such as DIN, VDE, CEE, AFNOR and national regulations should be implemented.

#### 危险!Danger!



危险

- 维修机器前请断开电源！
  - 每次使用前请检查插座，电线及机器是否有损坏迹象！
  - 请保持机器的干燥，不要在潮湿环境中使用机器！
  - 如在户外使用本机，请使用跳闸电流为 30mA 的断流器保护本机！
- Disconnect power before servicing machine!
  - Please check the socket, cord and machine for signs of damage before each use!
  - Please keep the machine dry and do not use the machine in a humid environment!
  - If you use the machine outdoors, please use a current breaker with a tripping current of 30mA to protect the machine!

#### 不正确使用将导致伤害!Improper use will result in injury!



敬告

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- 使用本机时请务必戴上防护眼镜，护耳器，手套及穿上防护鞋！
- 请在关机状态下插电源，并在使用后拔掉电源！

- Be sure to wear protective glasses, ear protection, gloves and shoes when using this machine!
- Please plug in the power supply in the off state and unplug the power supply after use!

**不正确使用将导致设备设施损坏！**

**Improper use will result in damage to the equipment and facilities!**



**注意**

- 请勿用电源线将本机提起！
- 请将电源线始终放置于本机机体后，请勿将电源线放置于尖锐物上！
- 必须由专业技术人员进行检测及维修！
- 请使用 HDL-15A 原装零配件！
- Do not lift the unit by the power cord!
- Always place the power cord behind the body of the machine and do not place the power cord on sharp objects!
- Must be tested and serviced by a professional technician!
- Please use original HDL-15A spare parts!

## 4. 操作说明 Operating instructions

### 4.1. 检测电压 Detection Voltage



警告

- 操作本机前检测电压是否与本机铭牌上显示一致！  
Test that the voltage is the same as shown on the nameplate of the unit before operating the unit!

### 4.2. 检查刀具 Inspection of knives



注意

钝刀具将损坏本机并使本机超负荷！

- 定期检测刀具避免过度磨损！
- 确定刀具锋利以保证本机使用良好并避免因使用钝刀具所造成本机的损害！
- 在刀具变钝时请注意变换刀向或替换可转位刀具！

Dull cutters will damage the machine and overload it!

- Check the knives regularly to avoid excessive wear!
- Make sure the knives are sharp to ensure good use of the machine and to avoid damage to the machine caused by the use of dull knives!
- Be careful to change the direction of the tool or replace the indexable tool when the tool becomes dull!

### 4.3. 调整坡口高度 Adjustment of bevel height

- 1) 旋转锁紧环到您所想要坡口的高度。
- 2) 将锁紧环锁定在该位置。
- 3) 使用月牙扳手扭紧导向板装置(1)，请勿拧得过紧。

1) Rotate the locking ring to the height you want the bevel to be.

2) Lock the locking ring in this position.

3) Use a crescent wrench to torque the guide plate unit (1), do not over tighten.

**请注意:**

因全部铣刀头并不一样长，通常调整坡口高度，需多次调试以达到所需要的坡口大小！

Please note that.

Due to the different lengths of all the milling cutter heads, the bevel height is usually adjusted and requires several adjustments to achieve the desired bevel size!

#### 4.4. 如何使用多功能坡口机 **How to use multifunctional beveling machine**



注意

- 在使用前请务必固定好本机并在平坦地方使用。
  - 勿在使用本机时触碰铣刀头。
  - 使用本机时请尽量远离机器。
  - 切勿将本机举高过头使用。
- 务必使用两只手控制机器！

- 使用本机时请务必将手尽量远离正在运行的机器！  
Be sure to secure the machine before use and use it on a flat area.
- Do not touch the milling head while using the machine.
- Stay as far away from the machine as possible when using it.
- Do not lift the machine over your head.
- Always use two hands to control the machine!

Always keep your hands as far away as possible from the running machine when using the machine!

电磁

干扰 (230 V)

Electromagnetic  
interference.

Interference (230 V)  
disappears.

当本机受到长时间电磁干扰时请关闭本机。

当电磁干扰消失时才可以重新使用。

Turn off the unit when it is subjected to prolonged electromagnetic

It can be reused only when the electromagnetic interference

发动机超负荷  
保护 (230 V)

Engine overload  
Protection (230 V)

当温度过高时发电机将自动关闭。

○ 发生上述情况时请让机器冷却后再开机使用。

○ 正常温度下机器将会正常使用。

The generator will automatically shut down when the temperature is too high.

- When this happens, let the machine cool down before turning it on.
- The machine will operate normally at normal temperature.



注意

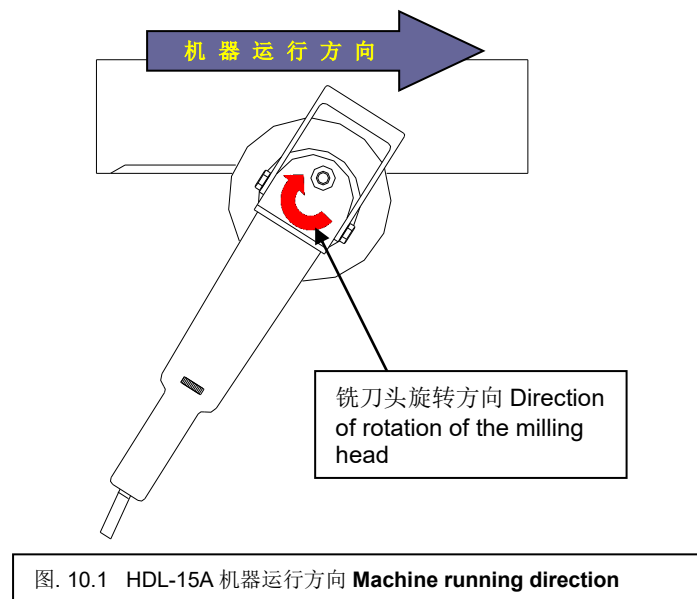
为更清楚地了解本机使用特性，我们建议您开始使用时坡口高度不超过 2mm 并缓慢操作本机！

**For a better understanding of the machine's characteristics, we recommend that you start using the machine with a bevel height of no more than 2mm and operate the machine slowly!**

**HDL-15A 操作步骤: HDL-15A Operating Procedure:**

1. 将本机置于被加工物上。
2. 将本机置于加工物前务必将定向轴承与加工物对准。
3. 开始使用本机时, 请务必从左往右移动操作。在使用本机前请先确定铣刀头的转向。本机只适用于常规坡口操作。
4. 本机在钻孔操作时只能顺时针使用。

1. Place the machine on the object to be processed.
2. Be sure to align the directional bearing with the workpiece before placing the machine on the workpiece.
3. Be sure to move the machine from left to right when you start using it. Determine the direction of the cutter head before using the machine. This machine is only suitable for regular beveling operations.
4. The machine can only be used clockwise during drilling operations.

**HDL-15A 的关闭 Shut down the machine.**

1. 将本机移开操作对象后再关机。
2. 发动机将随之停止运行。

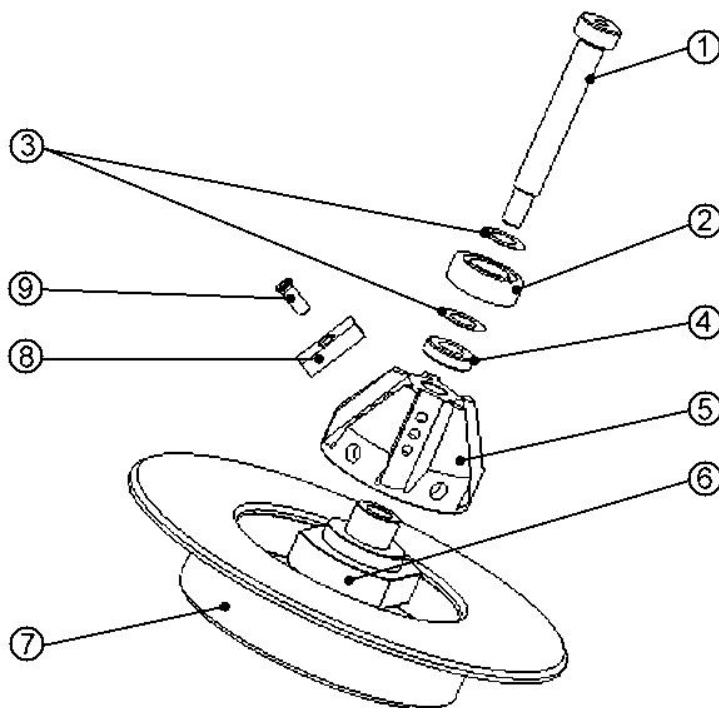
1. Move the machine away from the object to be operated and then turn it off.
2. The engine will then stop running.



## 5. 坡口头结构构造 **Slope head structure construction**



- 1 定位装置 centering device
- 2 锁紧环 retaining ring
- 3 导向板架 Guide plate holder
- 4 导向板 guide plate
- 5 可转位刀具 Indexable tools
- 6 刀具装置 Cutting tool unit
- 7 导移头 guidewheel



- 1 中心定位螺栓 Center Positioning Bolt
- 2 导向轴承隔离圈 Guide bearing isolation rings
- 3 垫片 gaskets
- 4 隔离垫圈 Isolation washers
- 5 铣刀头 cutter head
- 6 转轴 axis of rotation
- 7 导向板 guide plate
- 8 可转位刀具 Indexable tools
- 9 固定螺丝 set screw

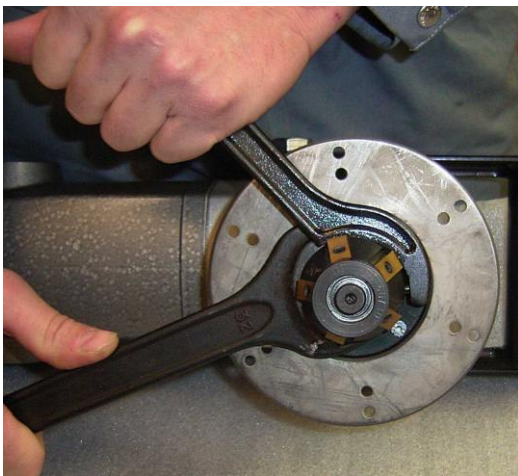
## **6. 如何替换铣刀头 How to replace the milling cutter head**

### **常规保护措施 Routine protection measures**

- 首先要在关机情况下操作。
- 把插头从插座上取下。
- 请注意避免偶然开机或其他不了解本机性能的人员使用本机。
- First operate with the power off.
- Remove the plug from the socket.
- Please take care to avoid accidental switching on of the machine or use of the machine by other persons who are not aware of the machine's capabilities.

### **如何取下 HDL-15A 铣刀头 How to remove the HDL-15A milling cutter head .**

- 旋转导向板组件(导向板 + 导向板架)时尽量远离机器 。
- 使用 44-52 mm 的扳手拧传动轴。
- 再用六角扳手卸下导移头。
- 用钩型扳手将铣刀头从转轴上卸下，同时把导移头一起卸下（包括螺栓，定向轴承，导套，垫片及隔离垫圈）。
- 请将铣刀头与导移头放在一起。



Rotate the guide plate assembly (guide plate + guide plate holder) as far away from the machine as possible .

Use a 44-52 mm wrench to unscrew the rotating shaft.

Remove the guide head again with a hex wrench.

Remove the milling cutter head from the shaft with a hook wrench and remove the guide head together (including bolts, directional bearings, guide bushings, spacers and isolation washers).

Please put the milling cutter head together with the guide head.

## 替换 HDL-15A 正确的铣刀头 Replacement of HDL-15A correct milling cutter head

- 旋转导向板组件(2) (导向板 + 导向板架)时尽量远离机器。
- Rotate the guide plate assembly (2) (guide plate + guide plate holder) as far away from the machine as possible.

- 如图 11.2 所示组装包括螺栓，定向轴承，导套，垫片，隔离垫圈及铣刀头

The assembly shown in Figure 11.2 includes bolts, directional bearings, guide bushings, spacers, isolation washers and milling cutter heads.

- 将锁杆轴(3015R / 3018R)或 44-52 mm 的扳手(3020R)置于传动轴上，再用钩型扳手铣刀头拧紧在转动轴上。

Place the locking lever shaft (3015R / 3018R) or a 44-52 mm wrench (3020R) on the drive shaft and tighten it on the rotating shaft with the hook wrench milling bit.

- 使用六角扳手将导移头完全固定在转动轴上，如图 11.2 所示。  
Use a hex wrench to fully secure the guide head to the rotating shaft as shown in Figure 11.2.

- 如果导移头位置尚未完全与坡口刀对齐，可调垫片环数量或调节导套以使两者达到最佳位置。 If the guide transfer head position is not yet fully aligned with the beveling knife, adjust the number of shim rings or adjust the guide bushing to optimize the position of both.



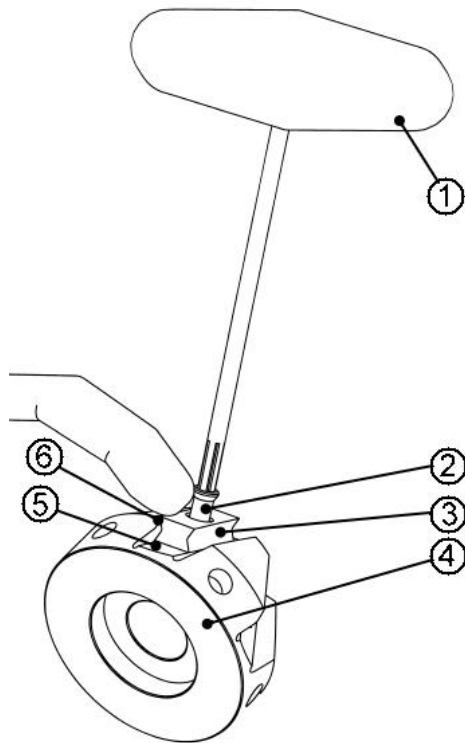
注意

**注意!**

为避免损坏螺孔，将螺钉用手拧紧即可，勿需拧得过度！**Attention!**

**To avoid damaging the screw holes, hand-tighten the screws just enough, do not over-tighten!**

## 7. 安装新的可转位刀具 Installation of new indexable tools



- 1 六角扳手 hexagonal wrench
- 2 锁定螺丝 locking screw
- 3 可转位刀具 Indexable tools
- 4 铣刀头 cutter head
- 5 导向板架表面 Guide Plate Rack Surface
- 6 导向板后背 Guide plate back

### 操作步骤:

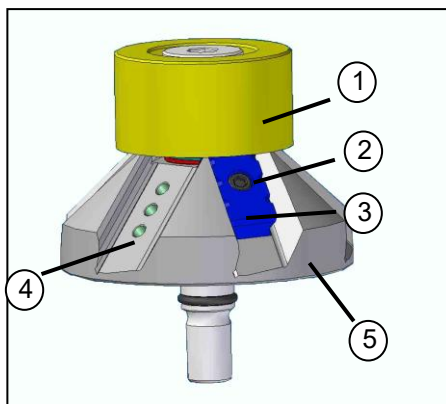
- 关掉机器；
- 拔掉插座；
- 按下传动装置外的安全按钮；
- 松掉螺钉并将刀具卸下；
- 清洁铣刀头装置处（导向板架及后背）并检查是否有损坏；
- 务必将所有的铣刀头一并旋转并同时更换；
- 确定所有更换的铣刀头都为统一型号；
- 将所要更换的铣刀头平整放置于导向板架表面(5)凹下处；
- 将更换铣刀头置于相应位置后用六角扳手（1）锁紧；
- 在所有的铣刀头都拧紧后再检查并将未拧紧的铣刀头拧紧。
- 检查是否所有的可换位铣刀头都为同一型号，是否都相应地固定在导向板架表面，同时确定所有的螺钉都已拧紧。
- 装后开始使用时务必缓慢操作本机，如果本机忽然向后反冲请立即关闭机器，同时检查是否所有的铣刀头都为同一型号，是否全部安

装方式如上所说，在检查后如仍然发现操作时机器反冲现象，请更换所有铣刀头。

#### Operating Procedure:

- turn off the machine; .
- unplug the socket;
- Press the safety button outside the drive;
- Loosen the screws and remove the cutter;
- Clean at the milling cutter head unit (guide plate holder and back) and check for damage;
- Be sure to rotate all milling cutter heads together and replace them at the same time;
- Make sure that all milling cutter heads to be replaced are of uniform type;
- Place the milling cutter head to be replaced flat on the recessed surface (5) of the guide plate holder;
- Lock the replacement milling cutterheads with a hexagonal wrench (1) after placing them in the corresponding position;
- Check and tighten the untightened milling cutter heads after all of them have been tightened.
- Check to make sure that all interchangeable milling heads are of the same type and that they are all fixed accordingly to the surface of the guide plate holder and also make sure that all screws are tightened.
- Be sure to operate the machine slowly when you start to use it after installation. If the machine suddenly recoils backward, please turn off the machine immediately, and at the same time, check whether all the milling cutter heads are of the same type, and whether all of them are installed in the way as mentioned above. After checking, if you still find that the machine recoils backward when you operate it, please replace all the milling cutter heads.

**未及时更换铣刀头将损坏机器 Failure to replace the cutter head in time will damage the machine**



- 1 定向轴承 Directional Bearings
- 2 紧固螺钉 fastening screw
- 3 刀具 cutters
- 4 接触面 / 槽 Contact surfaces / grooves
- 5 铣刀头 cutter head

安装好的刀片应紧贴定向轴承，即铣刀头应装在定向轴承下的顶槽，长刀片应装在中部槽线中。The mounted insert should fit snugly in the directional bearing, i.e., the milling



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head should be mounted in the top groove under the directional bearing, and the long insert should be mounted in the center groove line.

## 8. 保养与维修 Maintenance and repair

| 保养部位  | 维修方法    | 保养材料 | 保养时间 |
|-------|---------|------|------|
| 高度调节器 | 清洁及加润滑油 | 特氟隆  | 每周   |
| 通风孔   | 清洁      |      | 必要时  |

| Maintenance parts | Maintenance methods | Maintenance materials | Maintenance time |
|-------------------|---------------------|-----------------------|------------------|
| Height adjuster   | Clean and lubricate | Teflon                | Weekly           |
| Ventilation holes | Clean               |                       | if necessary     |

所以其他保养均须制造商或其他授权单位操作

**So all other maintenance must be operated by the manufacturer or other authorized units**



注意

| 保养部分 | 保养方法                     | 保养时间        |
|------|--------------------------|-------------|
| 齿轮   | 更换齿轮润滑剂                  | 操作 1000 小时后 |
| 碳刷   | 替换碳刷<br>(碳刷过度磨损时本机会自动停机) | 必要时         |

| Maintenance section | Maintenance method  | Maintenance time              |
|---------------------|---|-------------------------------|
| Gears               | Replacement of Gear Lubricant   | After 1000 hours of operation |
| Carbon Brushes      | Replacement of carbon brushes (the unit stops automatically if the carbon brushes are excessively worn) | If necessary                  |





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## Ordering Information

**To order Kadeshine products or for more information, please call our sales team.**

**86+19166278852**

**Ordering or replacing parts:**

**Use the parts list in the manual to indicate the name and number of the replacement part for quick and accurate ordering of parts**

**Caller's letter or shipment address:**

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