德广数控锯床操作简介

Introduction of CNC sawing machine operation

一、 **基本工作原理：**DGSK 系列铜铝材数控锯床进刀、送料均采用伺服电机控制，夹料采用气缸夹紧。机床采用触摸屏+PLC 控制电路完成自动进料，自动进刀，无料报警停机等一系列程序。

DGSK series of copper and aluminum CNC sawing machine feed and feed are controlled by servo motor, clamping material used cylinder clamping. The machine tool adopts touch screen + PLC control circuit to complete a series of programs such as automatic feed, automatic feed, no-feed alarm shutdown, etc. .

二、 基本参数：Basic parameters:

机床型号	切割高度（mm）	单次送料长度（mm）	主电机功率（KW）	工作电压	工作气压（Mpa）	锯片直径（mm）	加工精度（mm）	尾料长度（mm）	机身尺寸（mm）
DGSK-150	150	10～650	5.5	380V	0.3 ～ 0.6	350 ～ 450	±0.1	约 100	1900*1350*1500
DGSK-180	180	10～650	7.5	380V	0.3 ～ 0.6	350 ～ 500	±0.1	约 100	1900*1350*1550

Model of machine tool	cutting height (mm)	single feed length (mm)	main motor power (KW)	operating voltage	working Pressure (Mpa)	saw blade diameter (mm)	machining accuracy (mm)	tail length (mm)	fuselage size (mm)
DGSK-150	150	10～650	5.5	380V	0.3 ～ 0.6	350 ～ 450	±0.1	约 100	1900*1350*1500
DGSK-180	180	10～650	7.5	380V	0.3 ～ 0.6	350 ～ 500	±0.1	约 100	1900*1350*1550

五、 **接线**：本机床为三相四线，请将机床电源线 L1、L2、L3、N 接入有短路、漏电保护的 380V 四线电源开关内，其中‘N’接电源零线，PE 接地线，机床外壳应可靠接地。（注意：本机床配有相序保护，如相序保护亮红灯，打开电源不通电，请将电源线 L1、L2 交换）。

5、Wiring: The Machine is three-phase four-wire, please connect the machine power line L1, L2, L3, N into the short-circuit, leakage protection of 380V four-wire power switch, which 'n' Power Supply Zero Wire, PE grounding wire, machine tool housing should be reliably grounded. Note: The Machine is equipped with phase sequence protection, such as phase sequence protection red light, power supply is not open, please switch the power lines L1, L2) .

四、 接气：将 8mm 气管接入机床油水分离器内，打开气源。

（注意：机器运行时请确保气源气压在 0.3～0.6Mpa 范围内，机器运行时严禁断气）

4. Air: connect the 8mm trachea into the oil-water separator of the machine tool and open the air source. -LRB-noPleaseease make sure that the air pressure is in the range of 0.3-0.6 mpa when the machine is runniDo. do not cut off the gas when the machine is running.)(noCheckheck the amount of oil in the tank every dlf. if the oil is insufficient, add it in time.)

三 、 **机械进场：**请将机器摆放好位置，调好机械水平，安装好送料架，调节好送料架高度与机器台面相平。（注意：机床横向安装空间最少 6 米，纵向安装空间最少 2 米。机床周围环境应保持清洁，周围空间无物理干扰。）

3, Mechanical Access: Please put the machine in a good position, adjust the mechanical level, install a good feed frame, adjust the feed frame height and machine table level. Note: The machine tool horizontal installation space at least 6 meters, vertical installation space at least 2 meters. Machine tool environment should be kept clean, surrounding space without physical interference

四、 油液添加：1、将润滑泵油箱加入 3 升 46 号导轨油。

2、将冷却泵油箱加入 4 升铝材专用切削油。

（注意：每天需检查油箱油量，如果油量不足，需及时添加。）

4. Adding oil: 1. Adding 3 liters of No. 46 rail oil to the lubricating pump oil tank.

2. Add 4 litre aluminum cutting oil to the cooling pump oil tank. Note: check the fuel tank daily. If the fuel is not enough, add it in time

Parameter setting:

1、产量设定：设定我们所需切割数量，到达产量后会自动停机。

1. Output setting: set the number of cuts we need and stop automatically when we reach the output.

2、放料单位：根据放入材料数量设定（如：我们放入 5 条材料，就在“产量设定”输入：数字“5”。这时我们每切一刀，当前产量会自动加 5.）

2. Unit of discharge: set the amount of material to be put in (for example, if we put in 5 pieces of material, just enter the number"5" in the"Output setting". This will automatically increase the current output by 5. For each cut we make)

3、当前产量：显示已经切割的数量，可以按“产量清零”健清零已切割的产量。

3、Current output: show the amount of cut, you can press"Output zero" clean zero cut output.

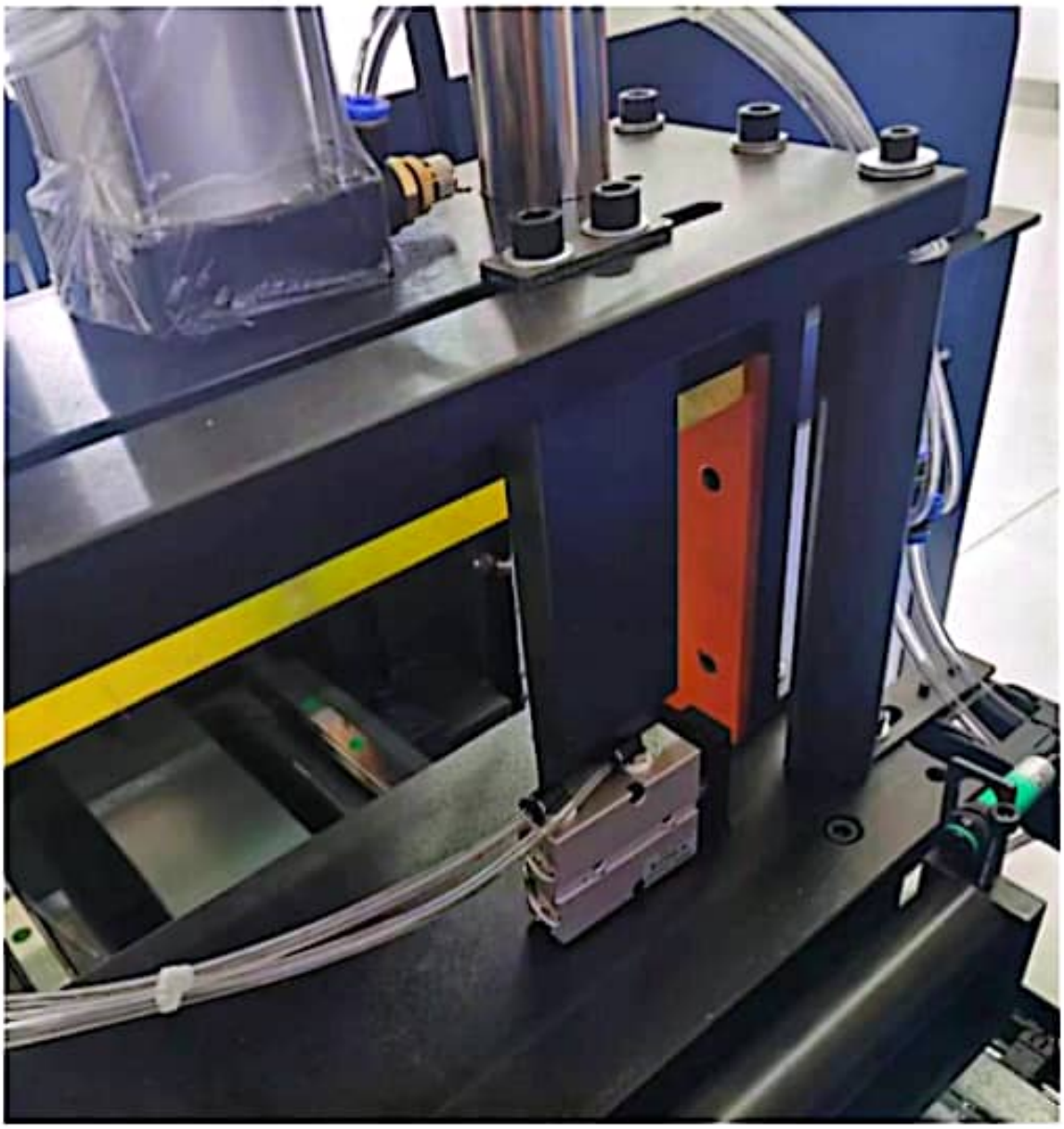
4、周期时间：显示每切割一个循环所需要的时间。（注意：周期时间只能观看，不能设定。）

4、Cycle time: shows the time required for each cut cycle. Note: Cycle time can only be viewed, not set

5、有效行程：指每一次送料器退回的位置。（如：所需切割的原材料很短，感应器检测不到材料，这时我们应该把“有效行程”设小一些。）

2、装料：将所要加工的材料放入送料器内，同时调节好侧夹气缸位置，侧夹与材料保持 10mm 为宜。（注意：第一次放入材料前应将料架调好高度与水平）

2. Charging: put the material to be processed into the feeder, and adjust the position of the cylinder of the side clamp. It is advisable to keep the side clamp 10mm with the material. Note: the first time before the material should be put into the rack to adjust the height and level



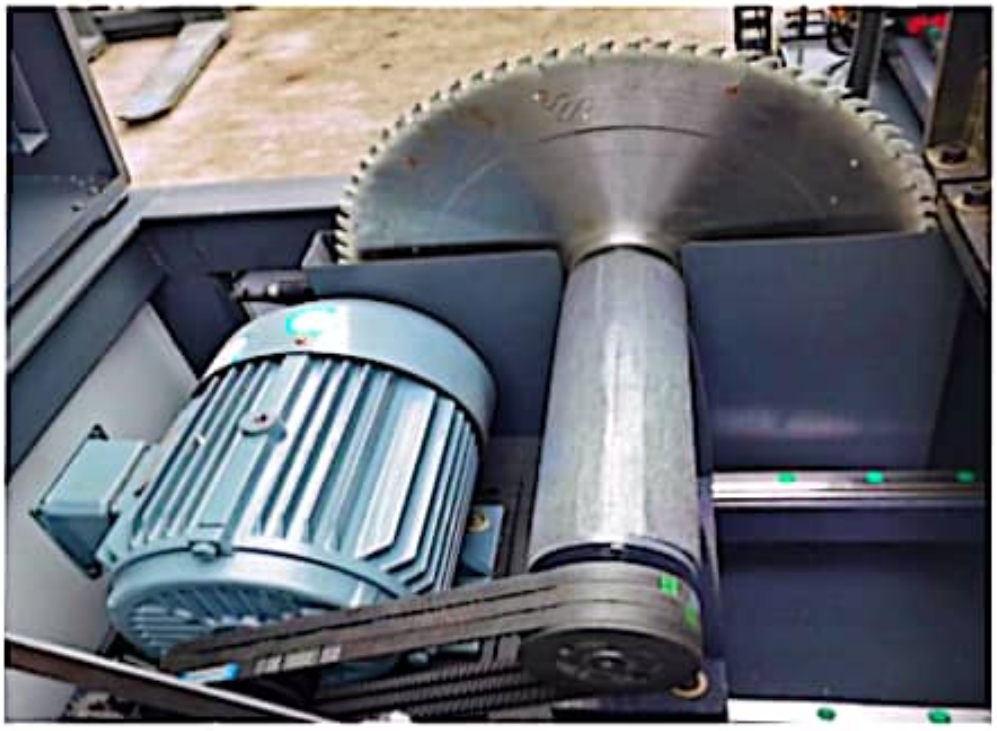
七、 参数设定：

六、 调机流程：

1、换刀：将合金锯片装至机床主轴之上，锁紧刀片压盖螺丝。（注意：锯片方向与主轴运转方向应保持一致，请勿装反。）

6、The adjustment process:

1, change the knife: the alloy saw blade installed on the machine tool spindle, locking the blade cap screw. Note: the direction of the saw blade and the direction of spindle operation should be consistent, do not install the wrong



14. Pause: press the pause button while the machine is running. When the machine is finished cutting, it will pause until it presses the pause button again, and the machine will continue.

15、报警复位：当报警提示栏有显示报警内容，就需要按“报警复位”健，直到报警消除才能作其他操作。

15, alarm reset: when the alarm bar has display alarm content, you need to press the"Alarm reset" health, until the alarm to eliminate other operations.

16、复位：打开电源、设定好参数、按下“复位”健，才可以自动运行。

16、Reset: turn on the power, set the parameters, press the"Reset" button, you can automatically run.

17、首刀定位：按下“首刀定位”健，这时 1 号夹具会下压，我们就可以把原材料推到压板处定位平头。

17, first knife positioning: press the"First knife positioning" key, then No. 1 fixture will press down, we can push the raw materials to the pressure plate location flat head.

18、夹紧：自动运行前需按下“夹紧”健才可以启动。

18、CLAMP: press the"Clamp" button before starting the automatic operation.

9, cutting end: refers to the width of the saw blade cut out, if the material cut off, then we should be"Cutting end" larger.

10、加工长度：指的是我们所需产品的长度。

10, processing length: refers to the length of the product we need.

11、工件补偿：指的是加工出来产品长度与设定的产品长度不相符，这时我们可以在这里修改（注意：此参数可以设负数）。

11. Workpiece compensation: this means that the manufactured product length does not match the set product length, which we can change here (note: This parameter can be set to a negative number) .

12、尾料返还：指的是感应器感应不到材料继续送料的长度。（一般设定为 170mm）

12, the tail material return: refers to the sensor can not sense the material continues to feed the length. (normally set at 170mm)

13、启动：按下“启动”健就开始运行。

13、Boot: press the “Boot” button to start running.

14、暂停：机器在运行时按下“暂停”健，机器切割完这一刀会暂时停机，直到再次按下“暂停”健，机器会继续运行。

5, effective travel: refers to each feeder back to the location. For example: the raw material to be cut is so short that the sensor can not detect the material, so we should set the"Effective trip" smaller

6、进刀速度：指的是锯片切割的速度，（如：设定“20”，进刀速度就会以 20mm/秒的速度切割。

6, feed speed: refers to the speed of the saw blade cutting. (such as: set the"20", feed speed will be cut at the speed of 20mm/second.

7、锯片厚度：输入我们所装锯片的厚度（如：我们换上的锯片厚度是 3.2mm 时，这时我们就应该在该栏输入 3.2）。

7. Blade thickness: enter the thickness of the blade we installed (for example: when we replaced the blade thickness is 3.2 mm, then we should enter 3.2 in this column) .

8、切割起点位置：指的是锯片退回去的位置（因为我们所装的锯片直径大小不一样，所以空走的行程会不一样。如果锯片直径比较小，这时锯片距离材料比较远，我们可以把“切割起点”适当设大一些，这样空走就不会那么久，达到节省时间。

8、The starting point of the cut: the point where the blade goes back. (because we have different sizes of blades, we have different paths to empty.) . If the diameter of the saw blade is small and the blade is far away from the material, we can set the"Cutting starting point" a little larger, so that the empty walk will not be so long, to save time.

9、切割终点：指的是锯片切割出来的宽度，如果材料切不断，这时我们应该把“切割终点”改大一些。