ZM600 Control Unit Easy User Manual

1. Before powering on

Connect the IO output line and the plug of the measuring device to the corresponding socket of the control instrument. After confirming the electrical connection between the output line and the grinder is correct, power on again.

2. Zero position adjustment

1) Select a standard component to install on the machine tool;

2) Adjust the position of the upper and lower measuring elements to ensure that the measuring device does not touch the surface of the workpiece after entering the measuring station;

3) On the main page, set the adjustment value to 0 by pressing the  ,  , or 

buttons;

The ZM620 series requires separate adjustment and zeroing of M1 and M2 measurement items.

4) On the main page, click 

to enter the adjustment interface.

ZM620 series (using two ZHD-1070BC outer diameter measuring devices as an example)

a. Confirm whether the G1 reset value is 0. If it is not 0 

, press the 

button once to reset the G1 value to 0 

and record the current G1 display value 

;

b. Adjust the position of the lower gauge so that the displayed value of G1 is about half of the original value 

and lock it tightly;

c. Adjust the position of the upper measuring element again so that the displayed value of G1 is around 0 

(Not exceeding ± 30 μm) and lock it tightly;

d. The operating device enters and exits several times, and finally stops at the measurement station. Press the button 

to set the G1 display value to 0 

, completing the zero position adjustment.

e. Adjust another measuring device according to the above a-d operation sequence to complete the zero position adjustment of G2.

ZM610 series

① When using a single channel measurement device (ZHD-1070BC \ 1090BC \ 1080BC), complete G1 zero position adjustment according to the a-d operation in the ZM620 series;

② When using dual channel measuring devices (ZHD, ZHF series, except ZHD-1070BC \ 1090BC \ 1080BC):

a. Confirm whether the reset values of G1 and G2 are 0 

. If they are not 0, press the buttons 

below G1 and G2 respectively to reset G1 and G2 

;

b. Adjust the position of the lower probe so that G1 displays a value near 0 (Not exceeding ±

30 μm) 

and locked tightly;

c. Adjust the position of the upper probe so that the displayed value of G2 is around 0 (Not exceeding ± 30 μm) 

and locked tightly;

d. The operating device repeatedly enters and exits several times, and finally stops at the measurement station. Then, perform a reset operation on G1 and G2 respectively, so that the displayed values of G1 and G2 are 0 

, completing the zero position adjustment.

3. Setting of signal points

After clicking the button 

, enter the signal point parameter setting interface:

P1 Brief grinding signal point;

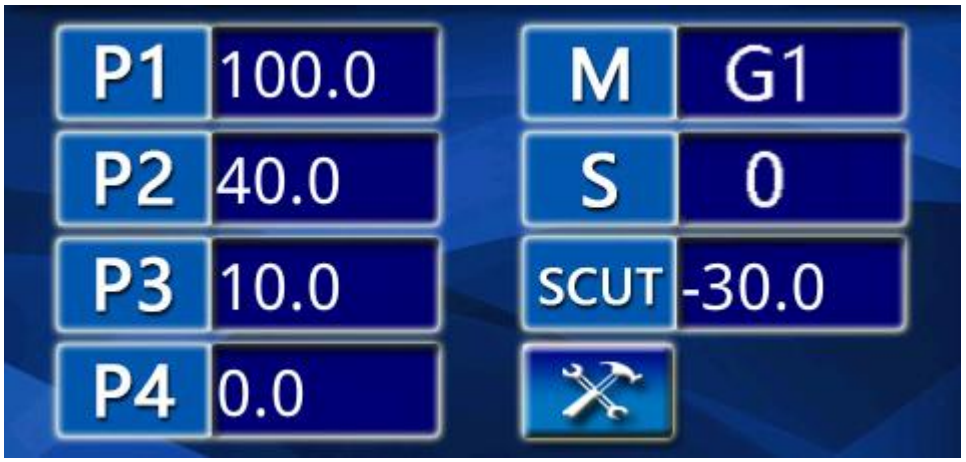
P2 Refined grinding signal point;

P3 Buffing grinding signal point;

P4 Knife retraction signal point;

SCUT Signal cutoff value (when the displayed value on the main page is less than the set cutoff value, all four signal points have no output);

The default factory values for each signal point are as follows:



Note: The signal point setting value needs to meet the following requirements: P1>P2>P3>P4.

Measurement type: G1, G2, G1+G2, G1-G2 can be selected (factory parameters have been set, please do not modify);

S filtering level: can be selected from 0, 1, 2, 3, 4, 5 (the filtering parameters are already set at the factory, please do not modify them).

Filter level setting method: Set to 0 during continuous surface machining measurement, When measuring the intermittent surface, it is set in sequence from high to low based on the workpiece speed or vibration frequency

From 1 to 5, increase or decrease according to the actual situation, and find the optimal gear.

4. Adjustment function

After completing the zero position adjustment and signal point parameter settings, click the button 

to enter the active measurement interface.

Click 

to manually input the adjustment value.

Click  to perform additional adjustment and operation to increase the grinding allowance.

Click  to perform adjustment operations to reduce grinding allowance.

Note: The default value for adding, subtracting, and adjusting equivalents is 1 μm.