noztek

XCALIBUR USER MANUAL

1. **Safety**
2. **Power switch and startup**
3. **Control screen**
4. **Menu screen**
5. **Contact**

WARRANTY NOTE

Equipment manufactured by Noztek carries the standard machine tool guarantee of freedom from defects in workmanship and material for one year from date of shipment.
TO INSURE THAT YOUR WARRANTY IS HELD IN EFFECT, PROPER OPERATION PROCEDURES MUST BE OBSERVED.
NOTE: READ THE SAFETY PRECAUTIONS BEFORE OPERATING THIS MACHINE.

GENERAL SAFETY NOTES

Know your equipment
Carefully read the instruction manual.
Learn the use and limitations of the equipment.

DO NOT operate or use this equipment for any purpose other than its intended use.
DO NOT modify this equipment.
DO NOT perform adjustments or maintenance while system is operating or energize

Do not clean the equipment with flammable solvents.
Do not wash down the equipment with water. This could cause an electrical hazard.
Do not probe into extruder vent with the machine running. Never Use a metal probe in the vent area. The screw may shear the probe, causing extensive damage to the barrel and screw. A wooden probe is recommended.
A face shield, insulated gloves, etc. should be worn around the extruder during operation. They must be worn when adjusting the die, cleaning the screw, etc. The extruder temperatures are extremely hot.
The feed hopper must be installed on the extruder feed section at all times when in operation
Never put hands in the feed section or vent to remove material.
Do not switch on the motor until the recommended temperature has been reached

Power switch and startup

The Noztek Xcalibur comes complete with an illuminated on/off switch (right, fig.1) and an emergency shutdown (left, fig.2). In an emergency simply hit the button and the Noztek Xcalibur will completely switch off. To restart, simply untwist the button.

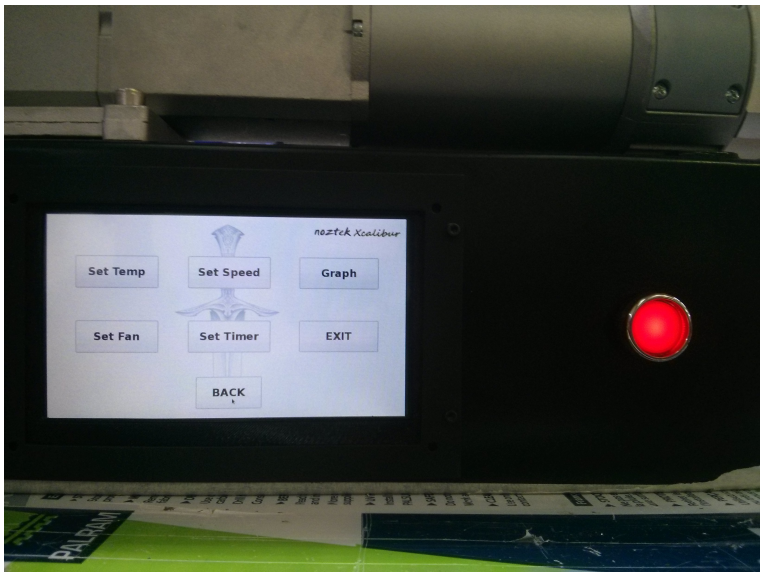

Fig.1: Touch screen and on/off switch

Fig. 2: Touch screen and emergency shutdown

Control screen
Once powered up, the Xcalibur will take a short period to boot into the control screen (fig.3). This screen shows the current temperature of the individual heating bands and the speed of the motor (top row), their set temperature and speed (second row), activation/status switches (third row), and access to the Menu screen (bottom).

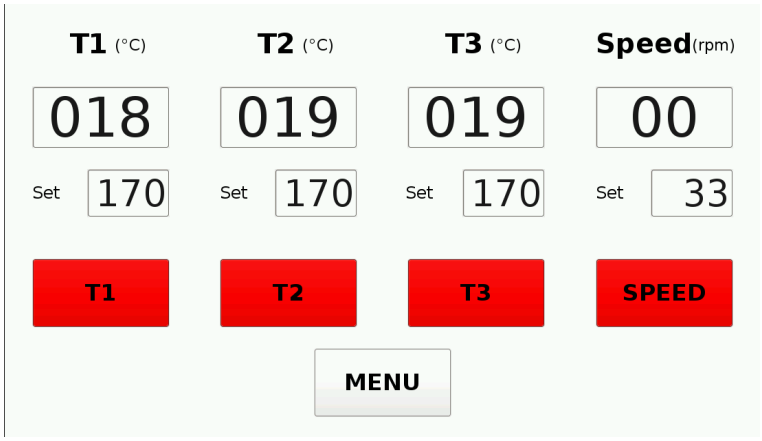

Fig. 3: The control screen.

To activate the heating bands, touch any of the temperature activation/status switches. The motor switch cannot be activated until the heating bands are switched on AND have arrived at the set temperature. Please note: You should turn on the cooling fan BEFORE activating the heating bands – see “Menu screen” section of this manual.

Upon activating the heating bands, the Xcalibur display will switch to the “warm up” screen (fig.4). The Xcalibur will not exit this screen until the heating bands are at set temperature, or the user aborts the heating process.

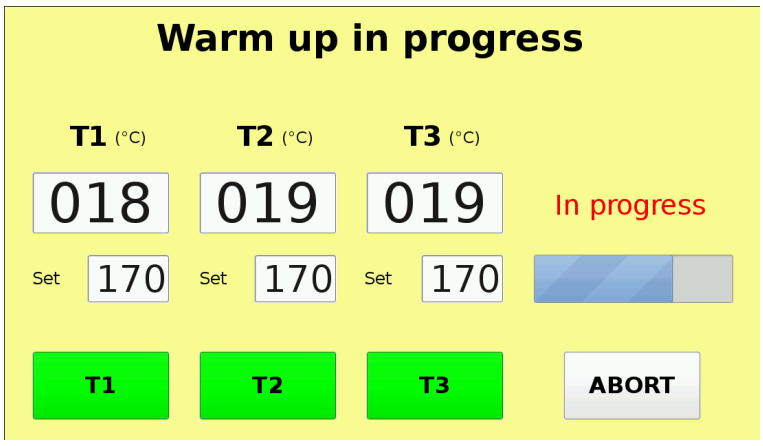

Fig. 4: The warm up screen.

Menu screen

The menu screen (fig. 5) gives the user access to all of the Xcalibur's settings and additional functionality.

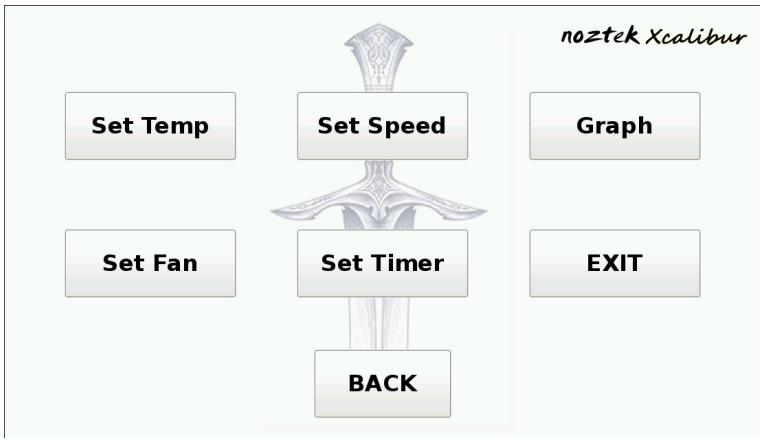

Fig. 5: The menu screen options

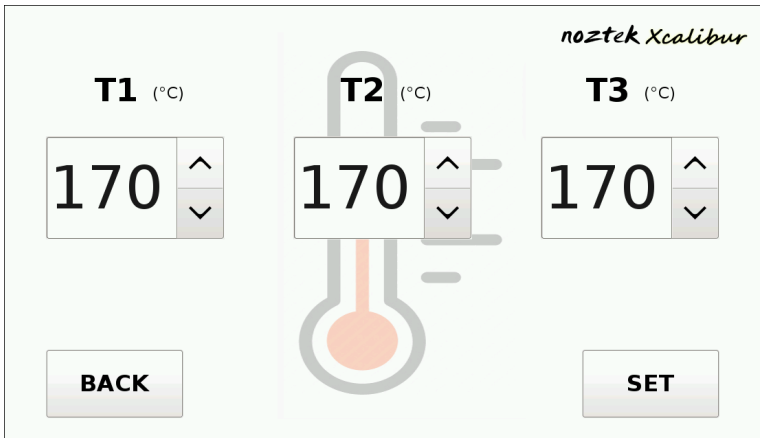

Fig. 5a: “Set Temp” sets the desired temperature of the individual heating bands.

Fig. 5b: “Set speed” Sets the desired revolutions per minuter (rpm) for the D.C. motor drive.

Fig 5c: “Set fan” Sets the desired duty cycle of the cooling fan (100% is fully on). The user can activate the fan by touching the FAN indicator

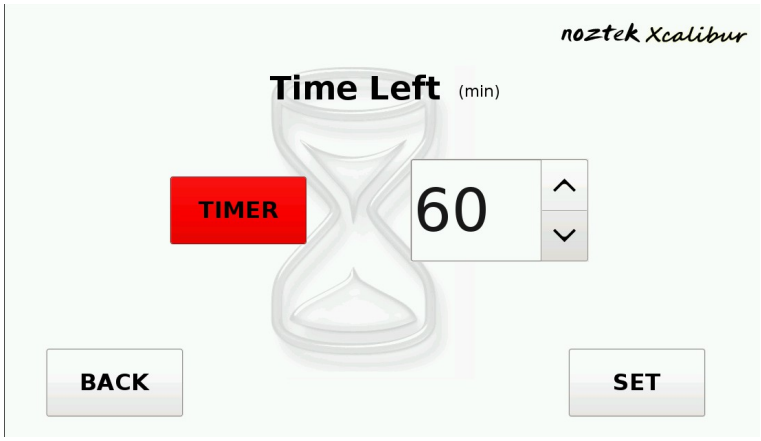

Fig 5d: “Set time” Sets a timer for automatically shutting down the DC motor drive and heating bands. Activate the timer by touching the TIMER indicator.

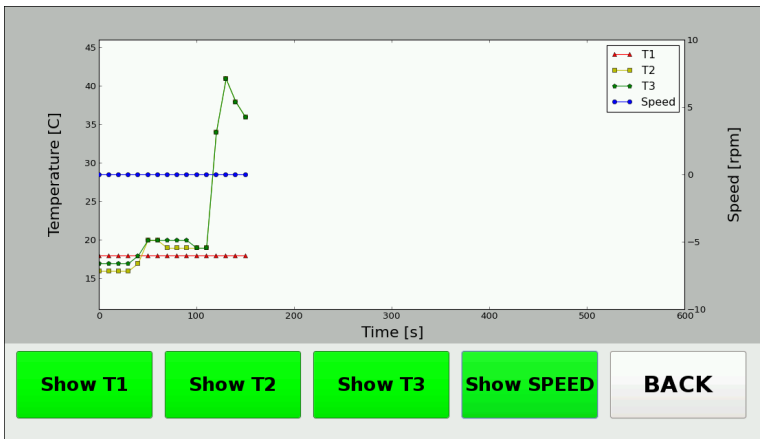

Fig. 5e: “Graph” Displays the actual temperatures and speed of the heating bands and DC motor drive as a function of time.

Fig. 5f: “Exit” Exports all graph data (actual temperatures and speeds vs. time) to a comma-separated values file “out.csv” and exits the application to a standard desktop. From there you can transfer out.csv using ethernet or a thumb drive.

Noztek UK
info@noztek.com
www.noztek.com

Unit D05, Riverside Business Centre, Haldane Place, Wandsworth., London SW18 4UQ

44 203 394 6208