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## Selecting and Configuring your Machine - VR Milling version 5

SELECTING THE CORRECT MACHINE

It is vital that you select the correct machine model after installing VR Milling version 5 !

Newer machines (2006 on) will just require the correct model name selecting from information on the serial plate. However, if you have upgraded from version 2 VR Milling, or DOS software, then there may be some setting changes required before you can use the machine.
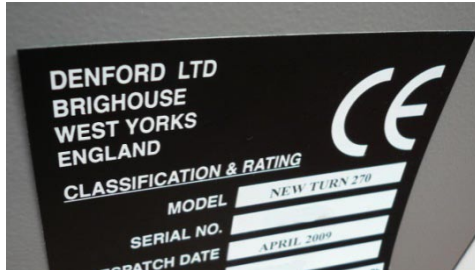
Make a note of the machine model exactly as it appears on the machine CE / Serial number plate.

If your machine is was despatched on or after 2006 then you should simply select the appropriate machine name from the list (eg, **Router 2600 Pro**)

If you have an earlier machine, or can't locate the correct model name, you will need to do some further checks...

USB UPGRADES

If your machine has been upgraded to USB interface with a new Baldor electronics card (NextMove/NextStep), then the serial plate name may differ to those in the software list.

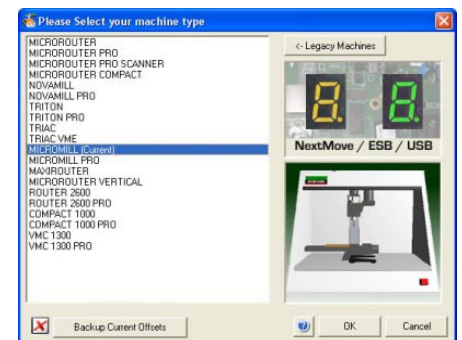If the name is suffixed **NS** then choose the closest match eg:

MICROROUTER V4 NS > MICROROUTER
MICROROUTER V5 PRO NS > MICROROUTER PRO
NOVAMILL NS > NOVAMILL
TRIAC PC NS > TRIAC*
MICROMILL 2000 > MICROMILL

Standard machine selection notes

MICROROUTER – *Supports early MicroRouter machines **without** MicroStepping drives*
MICROROUTER PRO – *Supports early MicroRouter Pro machine **with** MicroStepping drives*
MICROROUTER PRO SCANNER – *Supports MicroRouter Vx that have been retrofitted with a 3D scanning attachment*
MICROROUTER COMPACT – *All Compact machines (not to be confused with the later COMPACT 1000 series)*
NOVAMILL – *All previous NOVAMILL and in some cases, STARMILL machines.**
NOVAMILL PRO – *A very rare Novamill fitted with MicroStepping drives*
TRITON – *Similar to the Triac and fitted with MicroStepping drives*
TRITON PRO – *The Triton machine fitted with step/dir command input, closed loop AC servo drives*
TRIAC – *Newer Triac machines fitted with MicroStepping drives (mid 2002 > early 2004)*
TRIAC VME – *Original Triac machines upgraded with a Baldor Eurostep eurocard **
MICROMILL – *Supports previous and current Micromills.**
MICROMILL PRO – *A rare machine which had closed loop servo motors fitted (never released)*
MAXIROUTER – *Supports all MaxiRouter machines*
MICROROUTER VERTICAL – *Large format Servo USB machines using the Baldor ESB control which has had no upgrade path*
ROUTER 2600 – *Current Router which has had no upgrades. Fitted with Porter & Cable spindle motor and MicroStepping drives*
ROUTER 2600 PRO – *Current Router which has had no upgrades. Fitted with FIMEC 24000RPM spindle motor and MicroStepping drives*
COMPACT 1000 – *Current small Router. Fitted with Porter & Cable spindle motor*
COMPACT 1000 PRO – *Current small Router. Fitted with FIMEC 24000RPM spindle motor*
VMC 1300 – *Current Milling machine which has had no upgrades. MicroStepping drives*
VMC 1300 PRO - *Current Milling machine which has had no upgrades. MicroStepping drives and a high-speed Spindle motor & drive*

* Upgraded machines will need careful checking of parameter settings - see CONFIGURATION OPTIONS

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CONNECTING TO OLDER HARDWARE
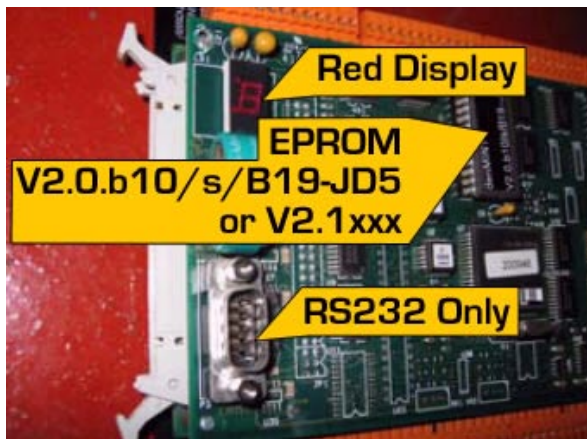
If the control card has a RED led display then it is a SmartStep or **DenStep** control. These older machines which have not upgraded to a USB connection *are* supported by version 5 VR Milling. You need to select the **Legacy Machines** option.
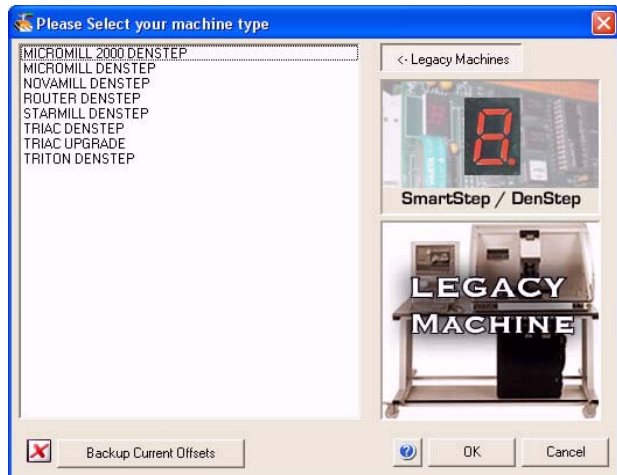

Most older machines will work by default in V5, however, some parameters may need altering in order to make the machine function correctly. If you have the older type, then you should check the options below are set correctly:

CONFIGURATION OPTIONS

Once you have selected the correct machine, you may need to alter parameters settings for the machine to work properly. Version 5 VR Milling has default settings for the majority of new machines, but it's worth checking first: To adjust parameters, run the V5 software and select the menu **Setup Machine Parameters.**
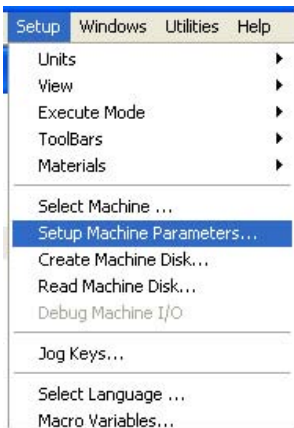
Enter the password **denny** Confirm that the parameters shown are underneath the correct machine.
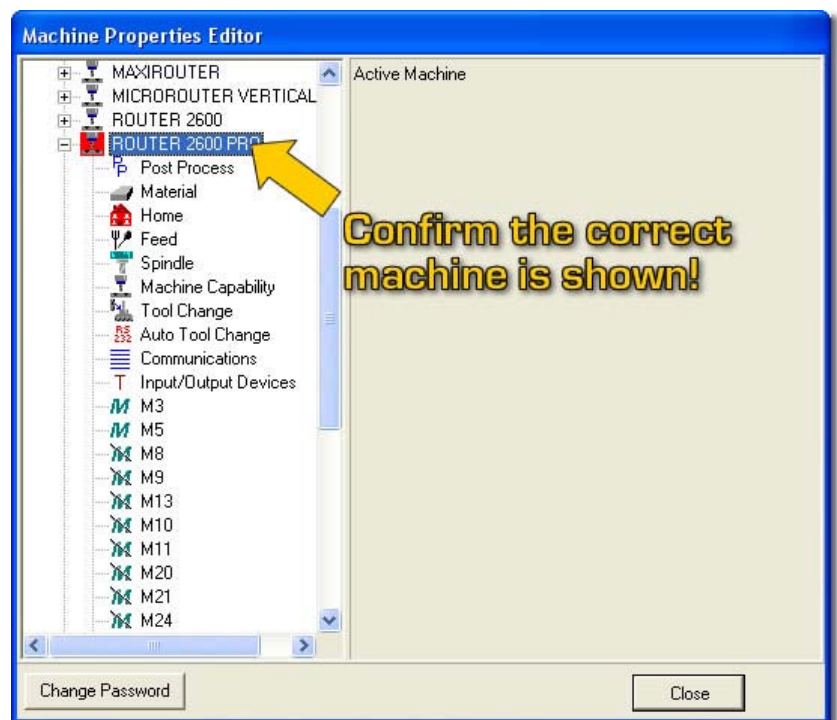
The section you pick will depend on which parameters that need changing...

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**The following questions should be addressed before trying to run the machine:**

1. Are speed or feed override pots (knobs) fitted to the machine?

Choose the **Machine Capability** section.
Tick **Feed Pot** if a real pot is fitted to the machine.
Un-tick if a Feedrate override pot is not fitted – in this case feedrate override will be available via an on-screen control in the software.
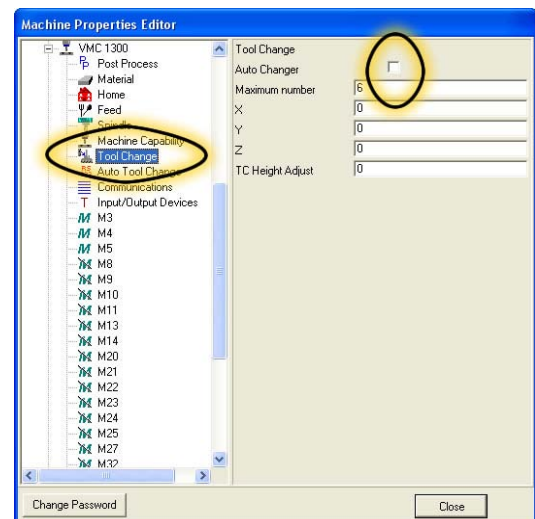Do the same for the Speed pot (Spindle override).
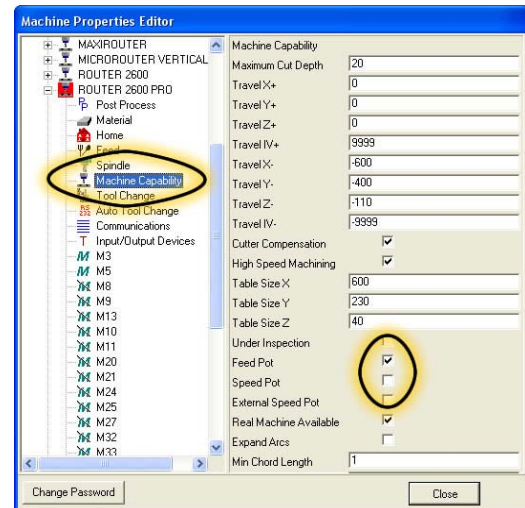
2. Automatic or Manual Tool-changer?

Choose the **Tool Change** section.
Tick **Auto Changer** if an automatic tool changer is fitted to the machine.
Un-tick if one is not fitted. An incorrect setting may cause a tool-change error message when running a CNC program:
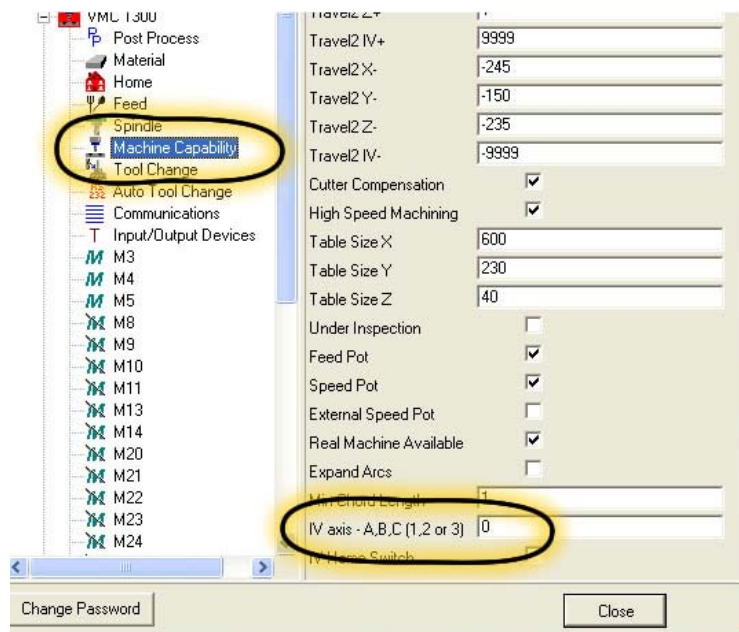
3. Is a 4th Axis Fitted?

Choose the **Machine Capability** section.
Expand the window in order to see all the options in this section.

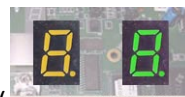If a 4th axis is fitted, enter **1** into the option:
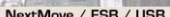**IV axis – A,B,C (1,2 or 3)**
If not fitted, then the parameter should be set to **0** (zero)

Starmill Upgrade Notes

If the StarMill has *not* been upgraded to a NextMove control (NextMove / ESB / USB) then the machine will be available from the Legacy Machines selection.
If it has been upgraded, however, then the NovaMill machine will need to be selected and these parameters changing:

HOME > **Home Style X** from 0 to 2

FEED > **Max Contour Feed** from 1000 to 300

SPINDLE > **Maximum Speed** from 5000 to 3000

MACHINE CAPABILITY > **Travel X+** from 225 to 0;

       Travel X- from 0 to -160;

       Travel Y- from -150 to -90;

       Feed Pot to un-ticked;

       Speed Pot to un-ticked.

TOOL CHANGE > **X** from 225 to 0