 **CNC Lathe Control Worksheet** Page 1

**Gathering up the details needed for a budgetary quotation**

With some basic information and a few photos Machines in Motion, Inc. can quote your control upgrade project. Feel free to expand on your answers as needed. Type into this document or print it and write your answers. Then e-mail this worksheet along with your photos to Machines in Motion Inc. **centroid.controls@gmail.com**

Company :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Contact name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ City \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ State \_\_\_\_\_

Zip: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Machine Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Make: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Model: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Horizontal, Vertical, Slant, Turning center

**Photos:**

An overall view of your machine from 2 or more angles - **wide view**

The electrical enclosure with the doors open. Depending on space available, it is sometimes necessary to take photos of the upper half then the lower half. Don’t shoot too close (include the cabinet walls for reference). If needed we can zoom in for greater detail.

If visible, photos of the X,Y,Z servo motors. The motor label information is especially useful.

Good lighting or flash is important for taking detailed photos.

Today’s cell phones work well for this purpose. Be sure to hold it steady in low light conditions.

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**AXIS**

How many axis are moving?\_\_\_\_\_\_\_\_\_ If more than 2 explain how the others are used. \_\_\_\_\_\_\_

Is this lathe currently manual or CNC? \_\_\_\_\_\_\_

What sizes are the servo motors? List the information displayed on the motor label. \_\_\_\_\_\_\_

When was this machine last run? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

This machine: Ran at this location - or - Was purchased and moved here (circle one)

**Specifications:**

Power supplied to the machine? \_\_\_\_\_\_\_VAC single or three phase? \_\_\_\_\_\_\_\_

The limit switches are: in usable condition - or - Please install new axis limit switches. (circle one)

Length of travel for each axis. Axis 1 is \_ Z\_\_\_ axis. Travel \_\_\_\_\_\_\_\_\_

 Axis 2 is \_ X\_\_\_ axis. Travel \_\_\_\_\_\_\_\_\_

 Axis 3 is \_ \_\_\_\_ axis. Travel \_\_\_\_\_\_\_\_\_

 Axis 4 is \_ \_\_\_\_ axis. Travel \_\_\_\_\_\_\_\_\_

 Axis 5 is \_ \_\_\_\_ axis. Travel \_\_\_\_\_\_\_\_\_



 **CNC Lathe Control Worksheet** Page 2

Main Spindle motor H.P.: \_\_\_\_\_\_\_\_\_\_\_\_ AC – OR – DC Motor (circle one)

Total number of spindles? \_\_\_\_\_\_\_

Spindle control is: CW/CCW power only - OR - Variable frequency control (AC motor) - OR -

 DC speed controller (circle one)

Is there a spindle gearbox to be controlled? \_\_\_\_\_\_ If yes how many gear ranges are there? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is there a Hydraulic pump to be controlled? \_\_\_\_\_ If yes what devices are driven by hydraulic? \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List any other services that are to be controlled by the new CNC Controller. Automatic Tool Turret, Powered Cut Off Tool slide, Tail Stock, Live Tooling, etc. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Do you have a specific deadline for the completion of this project? \_\_\_\_\_\_\_\_\_\_\_\_\_

**Control installation**: Customer installed? Professionally installed? Some of both? (circle one)

**What is most valuable for your application**? 1 = not very important. 5 = very important.

Back in production ASAP \_\_\_\_\_\_\_\_\_\_\_

Every day machine reliability \_\_\_\_\_\_\_

Additional machine precision \_\_\_\_\_\_\_

Additional machine speed \_\_\_\_\_\_\_\_\_

Threading \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rigid Tapping \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lowest cost overall \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lowest price today \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

New features like: large program memory size, improved control and precision, USB or Ethernet

in place of floppy or RS232, simple to use, easy to program, quality support & service when you call.

**Machines in Motion Inc. includes these features with every CNC control upgrade installation.**

Complete this worksheet as best as you can then email back to us at **centroid.controls@gmail.com**

We will review your machine information, then prepare a budgetary quotation and list of control options for you to consider. CNC control replacement is what Machines in Motion Inc. does best. It is our goal that your machine perform reliably, accurately, and with new time saving features. Installation is quickly completed at your shop. Operator training is provided on-site before we leave.

Machines in Motion Inc.

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http://machinesinmotion.com

After sending, Please call our office to confirm that your email was received. If you do not receive a reply from us within 24 hours it’s very possible that we did not receive your worksheet.