

## Ten Step Checklist

# Chapter 4

## OBJECTIVE

---

Set-up and operate an Okuma lathe using the "Ten Step Checklist".

## INTRODUCTION

---

Now that you have covered the necessary information to develop programs on a lathe, you need to learn how to prepare the machine for operation.

No matter how good the program is, if you have not performed the necessary machine set-up procedures it is a strong probability that your machine will either be unable to run the program, or that a wreck resulting in serious damage to the equipment and/or personnel injury will occur.

**IT WILL ALWAYS BE YOUR RESPONSIBILITY TO  
INSURE THAT THE MACHINE IS BEING OPERATED  
SAFELY!!!**

Because the Okuma lathe is a powerful piece of automated manufacturing equipment, it is imperative that you follow not only the warnings and cautions listed in this manual, but **ALL** precautions as directed by Okuma and the manufacturers of the other peripheral components installed on your Okuma.

On the following page, the staff of Joachim Machinery has developed a Ten Step Checklist. This checklist is not ment to provide you with the ultimate answers for Okuma operation safety. It is however, designed to touch on all of the major areas of importance.

## TEN STEP CHECKLIST

---

1. Ensure that the work holding device (chuck, collet, fixture, etc...) is functioning properly (see Chapter 5).
2. Install the correct tooling for the job you are preparing to run. This includes setting the tooling graphic representation (see Chapter 6).
3. Establish the program zero point for the Z-axis. The X-axis should be correct from program to program. However, if your machine has been involved in a wreck, the X-axis zero point may be wrong. For an index of information on setting Z and X-axis program zero see page 8-2.
4. Establish the correct offsets for each of the *new* tools you have installed (see page 9-1 through 9-7). You must also set the values for Tool Nose Radius Compensation (see pages 9-8 through 9-12).
5. Load the program for the job you are preparing to run into the OSP bubble memory if necessary. If you want to make edits to a program see the information in Chapter 10.
6. Select the program for the job you are preparing to run using P-SELECT (see Chapter 11).
7. Set the program travel (or soft) limits in the USER PARAMETER page of Parameter Data (see Chapter 12).
8. Place the Okuma in the DRY RUN **and** MACHINE LOCK condition then run your program to determine if there are any typographical errors in it (see pages 13-1 through 13-2).
9. Leave the machine in the MACHINE LOCK condition and turn OFF DRY RUN. Graphically run the program to determine if the shape required has been programmed (see pages 13-3 through 13-5).
10. Place the machine in the SINGLE BLOCK condition, turn OFF MACHINE LOCK and "block" through your program (see pages 13-5 through 13-7).

In the event that an error was encountered during steps 8 through 10, it will be necessary to edit the program and "re-test" starting back at step 8. Don't forget to do a new P-SELECT (step 6) after making edits.

Once you have successfully completed the checklist you will be ready to turn OFF SINGLE BLOCK and allow the machine to run the part in your normal production. Even though you have tested the program thoroughly, it is possible that the characteristics of your tooling could cause minor problems during automatic operation; stay close to the EMERGENCY STOP button for the first few production parts.