



STATE OF NEW YORK
DEPARTMENT OF LABOR

APPENDIX A

MACHINE TOOL BUILDER
D.O.T. CODE 600.281.022

WORK PROCESSES

	<u>Approximate Hours</u>
A. <u>Mechanical Assembly</u>	1,500
1. Sub-assemblies	
a. Power unit (mechanical-hydraulic)	
b. Gear train	
2. Fitting Vari-Drive	
3. Index Head – Mechanical assembly	
4. Lube system	
5. Linear Housing Assembly – Installation	
6. Z-Actuator Assembly	
B. <u>Hydraulics Assembly</u>	1,200
1. Actuator component assemblies – all axes	
2. Cycling valve assembly	
3. Power component units	
4. Servovalve assembly	
5. Feed valve system	
6. Hydraulic (Ericcson) Indexes	
C. <u>Electrical Assembly</u>	1,200
1. Console	
a. Tape reader and winder assembly	
b. Trunk assembly	
c. Panel and chassis assembly	
2. Head Wiring	
3. NEMA Coding	
D. <u>Electronic Assembly</u>	1,000
1. Electronic Circuitry	
a. Digital gating & components	
1) transitions	

- D. Electronic Assembly – continued
 - 1. Electronic Circuitry – continued
 - a. Digital gating & components – continued
 - 2) decodes
 - 3) chip
 - 4) semi-conductor

- E. Inspection & Quality Control 900
 - 1. Basic inspection methods – piece part
 - 2. Assembly functional inspection
 - 3. Repeatability
 - a. Axes
 - b. Profile
 - 4. Axes-Alignment
 - a. Laser
 - b. Collimator

- F. Machining & Fabrication 2,000
 - 1. Drill Press
 - 2. Lathe – basic & tape
 - 3. Mill – basic & tape
 - 4. Grind

- G. Design Engineering & Service 1,480
 - 1. Drafting skills
 - a. Mechanical
 - b. Schematics – Electrical & Hydraulic
 - 2. Tool Design
 - 3. Programming
 - a. Point to point
 - b. Continuous path
 - 4. Cost control
 - 5. Troubleshooting for service
 - a. Mechanical
 - b. Electrical
 - c. Hydraulic
 - d. Inspection & Quality Control

Total hours 9,280

Apprenticeship work processes are applicable only to training curricula for apprentices in approved programs. Apprenticeship work processes have no impact on classification determinations under Article 8 or 9 of the Labor Law. For guidance regarding classification for purposes of Article 8 or 9 of the Labor Law, please refer to <http://www.labor.state.ny.us/workerprotection/publicwork/PDFs/Article8FAQS.pdf>.

APPENDIX B

MACHINE TOOL BUILDER

RELATED INSTRUCTION

Introduction to Apprenticeship

Communications

Human Relations

Industrial and Labor Relations

Economics

Personal Rights

Safety and First Aid

Trade Science and Related Theory

First Aid – 10 hours minimum per year

Sexual Harassment Prevention Training – minimum 3 hours

144 Hours of Related Instruction are Required for Each Apprentice for Each Year.