



STATE OF NEW YORK
DEPARTMENT OF LABOR

APPENDIX A

MOLDBAKER, DIE-CASTING & PLASTIC MOLDING
D.O.T. CODE 601.280-030

This training outline is a minimum standard for Work Processes and Related Instruction. Changes in technology and regulations may result in the need for additional on-the-job or classroom training.

WORK PROCESSES

	<u>Approximate Hours</u>
A. <u>Safety</u> Use of personal protective equipment; safe use of hand tools, power tools and machinery.	100
B. <u>Drills</u> Kinds of drills, tapping, reaming, lapping, counter-boring, countersinking, grinding, lubricants to use, speeds and feeds, safety.	500
C. <u>Milling Machine</u> Use of dividing head, spline, milling, fluting spiral milling, rack cutting, cutter miling, set-up, speeds and feeds, safety. Basic programming if machine is NC or CNC.	1000
D. <u>Grinders</u> Selection of grinding wheels, mounting wheels, taper form, angle and hold grinding, grinding of mills, speeds, feeds, lubricants, safety. Basic programming if machine is NC or CNC.	1000
E. <u>Lathes (Engine and Bench)</u> Use of face plates, straight turning, facing, tapping, threading, set-up, speed, feeds, lubricants, safety. Basic programming if machine is NC or CNC.	950
F. <u>Bench and Die Work</u> Use of gauge blocks and measuring instruments, use of hand tools, assembly and finishing of dies, die repair.	2400

<u>Moldmaker, Die Casting & Plastic Molding – Continued</u>		<u>Approximate Hours</u>
G.	<u>Design and Layout</u> Take specifications, make design, use of drawing tools, make layouts.	950
H.	<u>Heat Treating</u>	200
I.	<u>Miscellaneous Machines</u> Machinery repair and such other work as may be considered adequate to complete the experience necessary to attain the skill and versatility required of journeyperson.	700
J.	<u>EDM Machine</u> Set up and operation.	200
Total Hours		8000

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
MOLDBAKER, DIE CASTING & PLASTIC MOLDING
RELATED INSTRUCTION

Safety (16 hours)

Fundamentals (4 hours, 1st year)

Trade Safety (12 hours, 2nd year)

Industrial and Labor Relations (20 hours)

History and Background (6 hours, 1st year)

Current Laws and Practices (14 hours, 2nd year)

Blueprint Reading, Sketching and Drawing

Elementary Blueprint Reading and Sketching

Advanced Blueprint Reading and Sketching

Specifications, Scales, etc.

Mathematics

Elementary Fundamentals

Elementary Foundry Mathematics

Advanced Foundry Mathematics

Estimating Quantities and Costs

Trade Theory

Tools, Machines and Equipment – Care and Maintenance

Materials of the Trade

Terminology

Technology of Jobs and Processes

Basic NC and CNC Programming

Inspection, Layout and Assembly Practices

Trade Science

Principles of Patterns

Properties of Materials

Principles of Punch and Die Design

Principles of Jig and Fixture Design

Principles of Gauge Design

Principles of Cutting Tool Design

First Aid (minimum 6.5 hours every 3 years)

Sexual Harassment Prevention Training (minimum 3 hours)

Other Related Courses as Necessary

A minimum of 144 hours of Related Instruction are required for each Apprentice for each year.

New York State Education Department