STATE OF NEW YORK
DEPARTMENT OF LABOR

APPENDIX A

PLASTICS MOLDER
D.O.T. CODE 556.382.014
O*NET CODE 51-4072.00
WORK PROCESSES

		Approximate Hours
A.	Theory of Plastics and Injection Molding	200

- Plastic properties
- Types of injection molding machines
- General mold design
- Molding machine controls
- Molding conditions
- Process control

B.	Tools and Measuring Devices	105

- Hand tools
- Cutting tools
- Measurements
- Precision and non-precision measuring instruments

C.	Electrics	105

- Basic electric, motors, circuits
- Use of a VOM meter
- Schematic symbols reading

D.	Hydraulics	105

- Fundamentals of hydraulics
- Hydraulic components and circuitry
- Pumps, valves
- Schematic symbol reading

E.	Good Housekeeping and Safety Practices	105

- Cleaning up work area
- Safety around machinery

		Approximate Hours
F.	Operation of Husky and Stokes Injection Molding Machines and C.G.W. Molds ➢ Stokes injection molding machines ➢ Husky T1525PH and H388PH injection molding machines ➢ Mold design ➢ Mold maintenance	1,400
G.	Change Molds ➢ Installation and removal ➢ Safety	680
H.	Theory of Operation and Set Up of Auxiliary Equipment ➢ Installation and removal ➢ Safety	1,960
I.	Troubleshooting ➢ Molding troubleshooting ➢ Electrical troubleshooting ➢ Hydraulic troubleshooting ➢ Pneumatic troubleshooting ➢ Basic troubleshooting skills ➢ Product quality ➢ Safety	1,040
J.	Maintenance ➢ Preventive maintenance ➢ All product maintenance ➢ Safety	260
K.	Process Management System	20
L.	Work Order Systems	20
	Total hours	6,000

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

PLASTICS MOLDER

RELATED INSTRUCTION

Safety (16 hours)
- Fundamentals (4 hours first year)
- Trade Safety (12 hours second year)

Industrial and Labor Relations (20 hours)
- History and Background (6 hours first year)
- Current Labor Laws (14 hours second year)

Blueprint Reading, Drawing and Sketching
- Sketching
- Blueprint Reading for Plastics

Mathematics
- Fundamentals
- Application to Plastics Trade

Trade Theory and Practice

A. Basic Theory of Plastics and Operation of Injection Molding Machines and Molds
- Solids and fluid properties pf plastic
- The injection molding machine
- The injection mold
- Molding machine controls and start up operation and shutdown
- Pre and Post molding factors
- Process measurement and analysis
- Process control and economics
- Optimizing the mold cycle

B. Tools/Measuring Devices, Basic Electric, Basic Hydraulics, and Good Housekeeping and Safety Practices
- How to use hand tools
- How to use cutting tools
- How to use basic measuring tools
- How to use non-precision measuring instruments
- How to use precision measuring instruments
- Basic Hydraulics
- Basic Electrics
- How to use read schematic symbols
- Good housekeeping
- Safety practices (8 hours)

Plastics Molder Related Instruction – continued

C. Theory and Operation of Husky and Stokes Injection Molding Machines and C.G.W. Molds (Safety – 16 hours)
- Stokes injection molding machines
- Husky T1525PH injection molding machines
- Husky T388PH injection molding machines
- C.G.W. injection molds

D. How to Change Mold Efficiently (Safety – 8 hours)

E. Theory of Operation and Set Up of Auxiliary Equipment
- All auxiliary equipment (Safety – 8 hours)

F. Equipment Maintenance
- Maintenance on All Equipment (Safety – 8 hours)
- Weekly, monthly, semi-yearly, yearly maintenance

G. Troubleshooting of Equipment and Product Defects
- Troubleshooting Skills
- Electrical Troubleshooting
- Hydraulic Troubleshooting
- Pneumatic Troubleshooting
- Product Quality

H. Understanding and Compliance with Process Management System

I. Understanding and Use of Work Order System

Trade Science
History of Trade
Physical Properties of Materials
Trade Applications of Physics & Chemistry

Other Related Courses as Necessary

Safety & 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.