

Training Best Practices – “Fostering A Skilled Workforce”



www.beaumontinc.com

www.bapmolding.com

www.aim.institute

info@beaumontinc.com

814-899-6390

The Beaumont Family of Companies



MeltFlipp®

Moldflow Software

MoldingGenius



Moldflow® Services

Consulting



American Injection
Molding Institute

Education + Training



The Beaumont Family of Companies



Eric Bowersox:

Director of Beaumont Advanced Processing

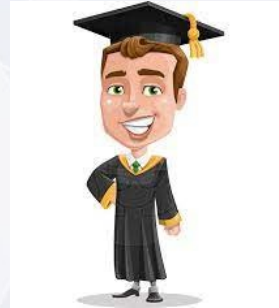


Alex Beaumont:

VP of Beaumont Family of Companies



My Background



What Was the Issue



Skilled Labor
High Value
A Career

Apprenticeship Program



Unskilled Labor
Entry Level
A Job

No Apprenticeship Program

**What was the driving
force between these
differences?**

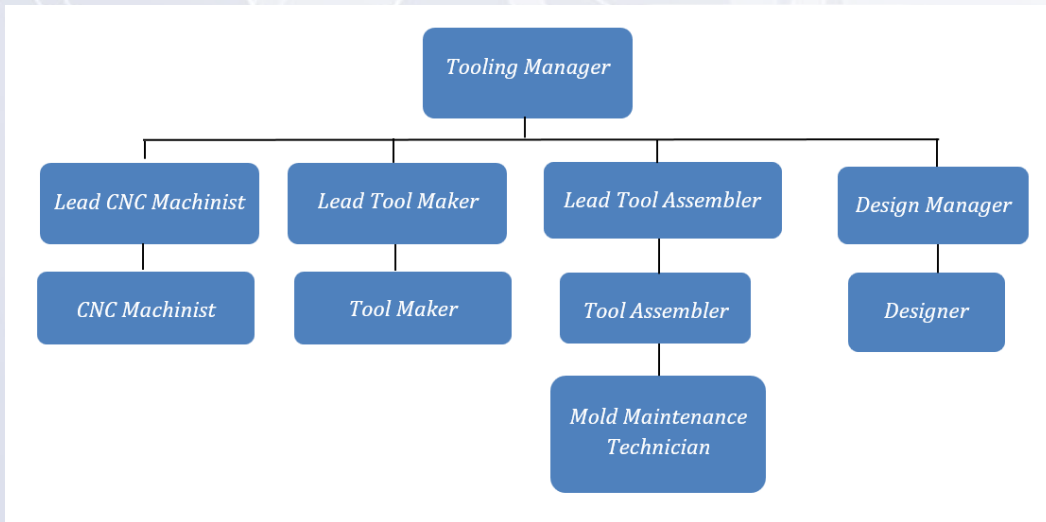
Tooling Apprenticeship Program

Apprenticeship Programs Offered:
Tool Maker
CNC Machinist
Mold Design

- 8,000 hours on the job training or equivalent NIMS (National Institute for Metalworking Skills) credentials
- A minimum of 576 related technical instruction hours

Where are Apprenticeship Programs Needed

Typical Tool Shop Org Chart



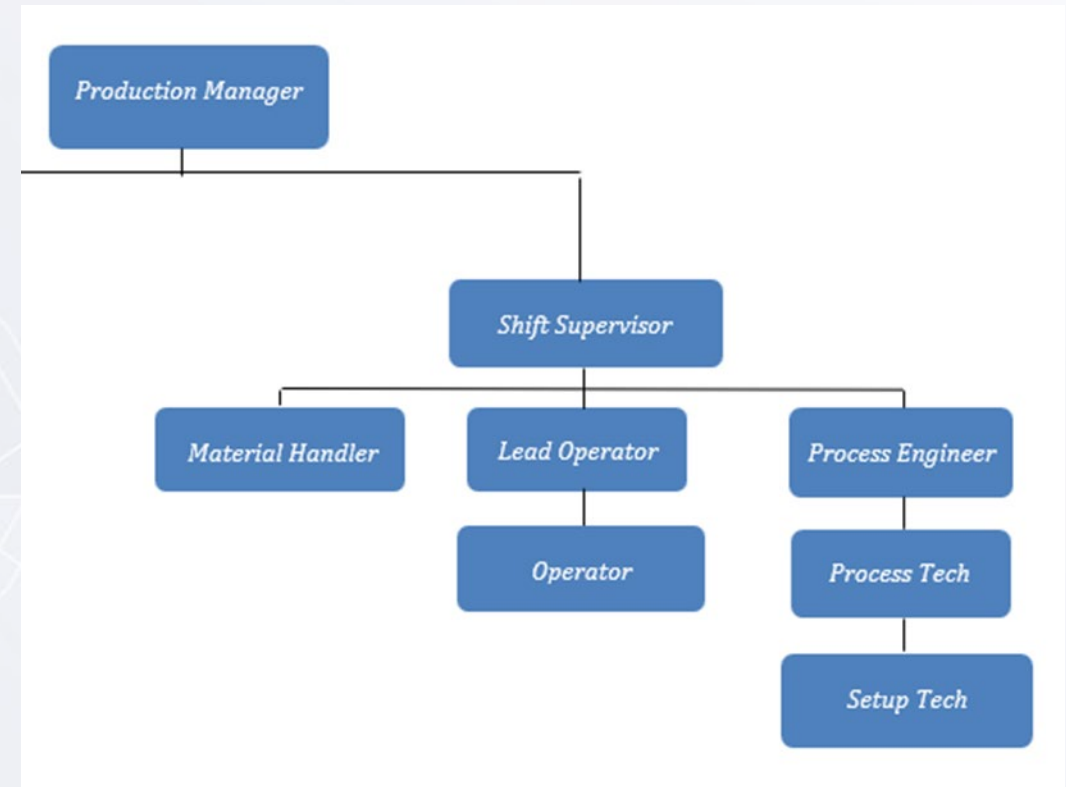
Typical Tool Shop Org Chart

- 1 Manager Position
- A Handful of Leadership Positions

Where are Apprenticeship Programs Needed

- Duplicated for Multiple Shifts
- Other Branches
 - Quality
 - Maintenance
 - Shipping and Receiving
 - Etc...

Typical Molding Shop Org Chart



Benefits of an Apprenticeship Program (Employer)

- Apprenticeship develops highly skilled employees suited to the unique requirements of your workplace;

If you buy, you may be casting a line into a shallow pond that's been mostly fished out. if you build—by developing talent through a modern apprenticeship program—you'll find yourself with a highly skilled and motivated workforce in just a few years. It may require more time and money upfront, but building can be the better strategy.

- Apprenticeship lowers long-term recruitment and training costs
- Only a small percentage of apprentices go elsewhere after they complete training.

Most employers that have apprenticeship programs find that they meet their skill requirements and 87% said that they would strongly recommend registered apprenticeship to others. Only one in four regarded “poaching” of apprentices as a serious concern. And even 85% of these would highly recommend apprenticeship to others.

Benefits of an Apprenticeship Program (Employee)

How has the apprenticeship program affected you?

- *It has given me the knowledge I need to do my job and has made me a better employee, understanding of what is happening around me at work*
- *Frankly, it helps with everything I do. I now understand way more about the details and why the managers are dealing with on a daily basis.*
- *It has strengthened my relationship with my employer because I feel valued as an employee that they chose me. It has taught me more about plastics in the 6 months I have into the apprenticeship then I even knew existed about plastics. Really changed my whole perspective on work. Glad I had this opportunity. Really changed my whole perspective on work. Makes coming to work enjoyable and easier then just at a company who doesn't have this opportunity. At other jobs I always felt like I was just there for them and not for myself. Like this before. Somebody investing time, money, and effort into bettering me.*
- *It showed me that someone is invested in me. It really helps make you feel more committed to the company. Makes you want to continue to grow with the company. I have personally never had an opportunity like this before. Somebody investing time, money, and effort into bettering me.*

Where are Apprenticeship Programs Needed

- 2020 MAPP Annual Meeting Minutes

Primary Concern

Primary Concern	Percentage
Workforce Development Concerns	37%
COVID-Related Issues	21%
Election/Government Changes	15%
Sales Forecasting & Orders	10%
Economic Uncertainty	8%
Material Supply & Cost	4%
Other	4%

Matching Philosophy's

The Beaumont Family of Companies exists with one mission: to revolutionize the plastic injection molding industry.

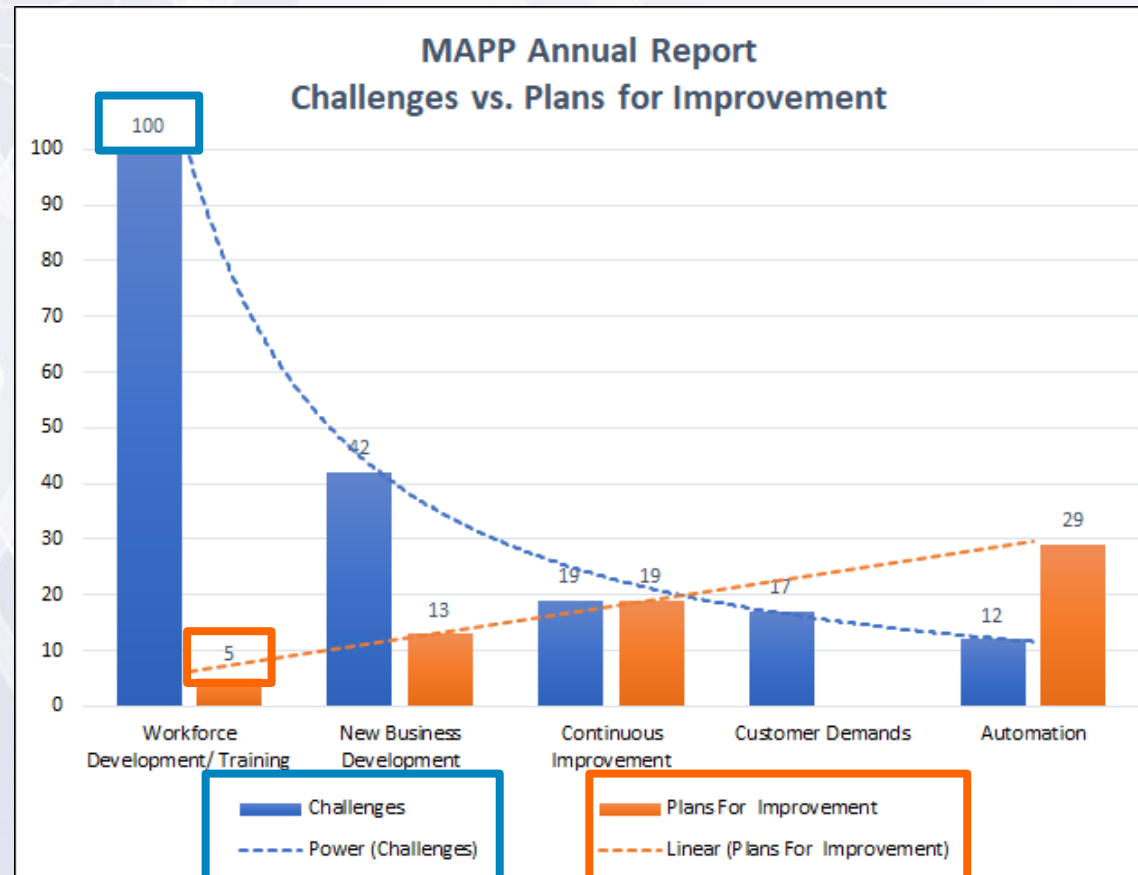


MAPP has a long history of helping plastic processors stay competitive in an ever-changing plastics marketplace.

MAPP's mission is to enable leaders within the plastics industry to achieve new levels of success.

The Need to Foster a Skilled Workforce

- The industry's top challenges are actively being ignored!



PPTA Program

Alex Beaumont, VP, Beaumont Family of Companies

Plastics Process
Technician Apprenticeship
Program

Where did it come from...?

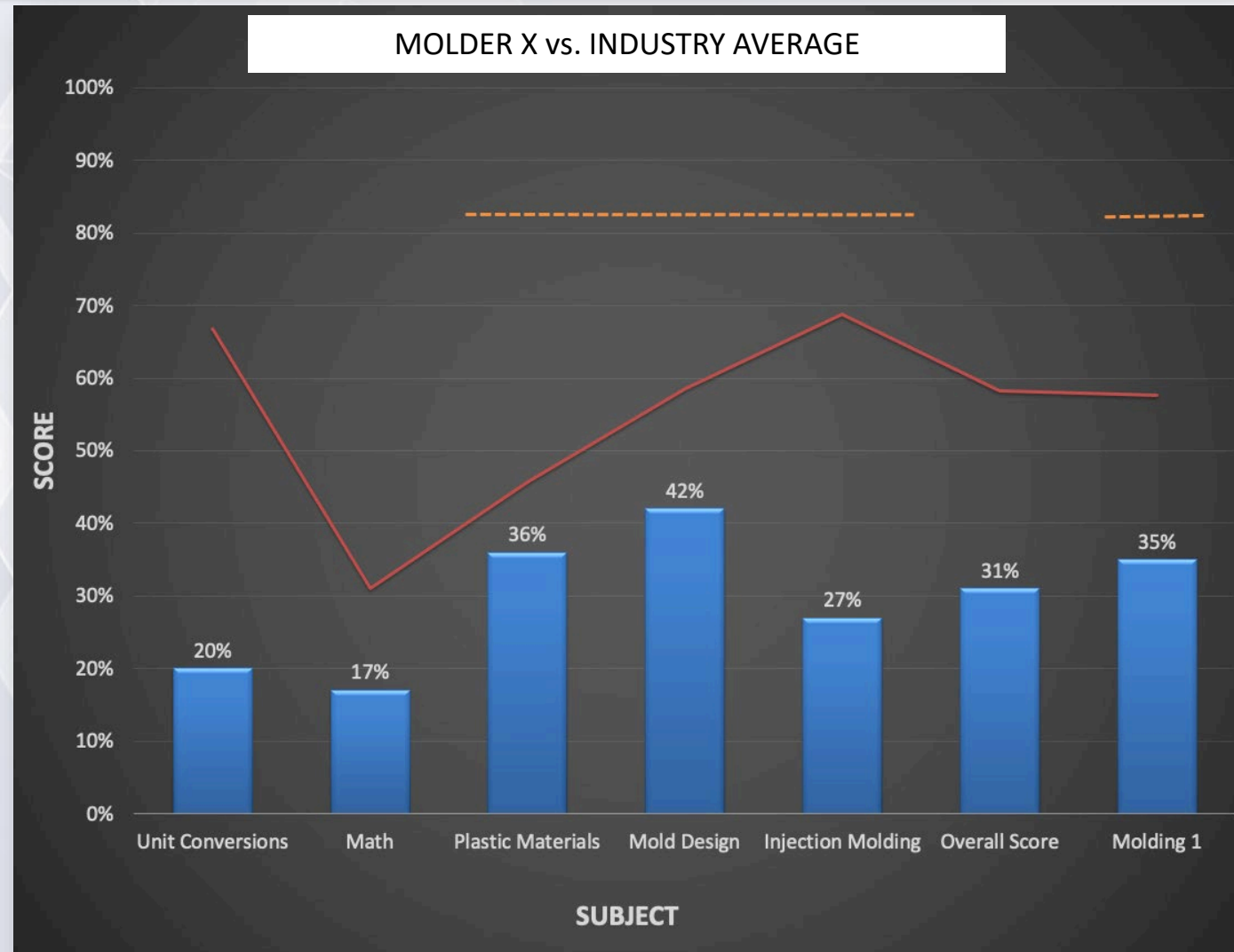
- Listened to the voice of the local industry
 - Pennsylvania State Recognized Apprenticeship
-
- “Outstanding Group Apprenticeship Program”



Plastics Process Technician Apprenticeship Program

Curriculum	Training Hours	On-The-Job Hours
OSHA30 + Teambuilding	40	500
Plastic Materials	32	500
Core Math	16	-
Mold Design	32	500
Maintenance	40	500
Molding 1: Process Start-up & Replication	40	500
Quality Systems	40	500
Molding Math	12	-
Molding 2: Process Development	89	500
Additional On-The-Job-Training	-	500
Total Hours	341	4,000

Individual Results & Recommendations



Plastics Process Technician Apprenticeship Program

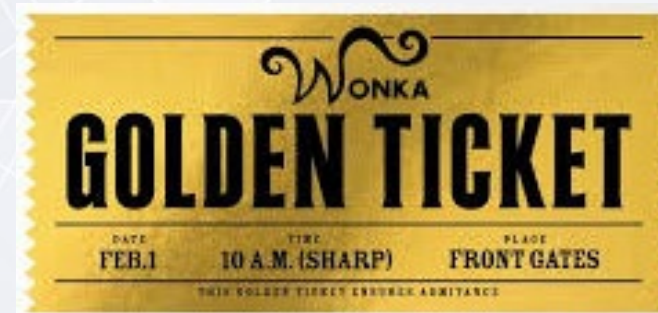


The House of Skittles

- Color vs. house feature
- Take charge vs. listen vs. eat the skittles
- Learn to interact and work with different personalities

Team building Exercise
'Myers-Briggs personality exam'

Ultimately it shows different people do things differently and we all need to be aware of that...



"...this is my opportunity to do better for me and my family."

Plastics Process Technician Apprenticeship Program



Maintenance Course

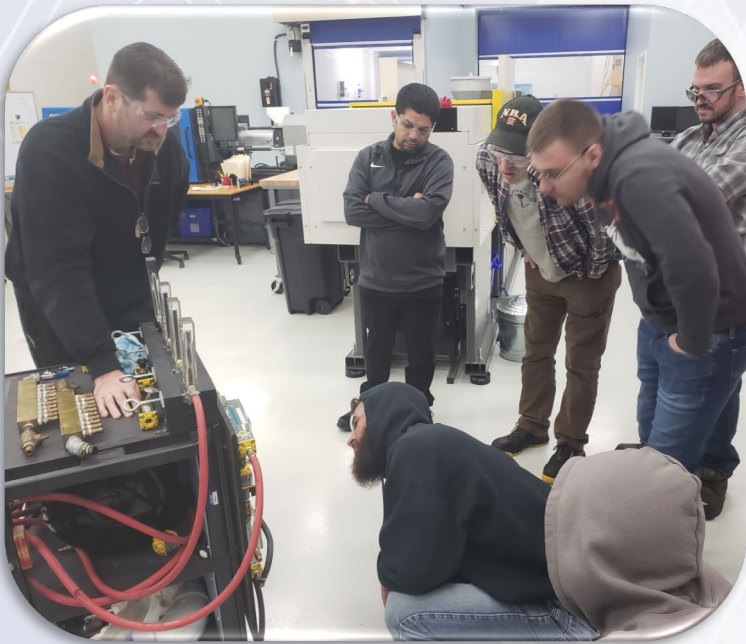
Not just for Processors...

Student from our maintenance department..?Why am I here?"

- Can now work seamlessly with our Processors
- Gain a new skill set that made him a bigger asset
- Exposed to OSHA30 and Leadership skills, which only makes for a better employee and company

Now running maintenance department and is the youngest in the group...

Plastics Process Technician Apprenticeship Program



Mold Cooling Demonstration



Molding Course



Online Review Session

Plastics Process Technician Apprenticeship Program

Funding

- PA it is available
- 10 - 50% funding available
- All depends on your state
- Program around \$11,000.

Starting 6th class Now....Original intent was to start new one every two years but halfway through the first one, companies liked it so much, so made it for every year instead.

Feedback From The Local Industry

- Heather Evans, Human Resources at Port Erie Plastics
 - “This program offers an education and skill set that is desperately needed in our industry”
 - “We are very proud to be able to promote from within”
- Elissa Reitz, Corporate Training Manager at the Plasteck Group
 - “We’ve now been able to “build” talent in-house”
 - “The skills and ambitions of our employees have surpassed our expectations, and have become closer in skill to engineers, with the added benefit of leadership skills”
 - “We now have a steady stream of qualified technical personnel being shaped right here at Plasteck”

Testimonial Given Last Week!

Corey Harned, C&J Industries

"I am so thankful for the opportunity to further my education with the AIM apprenticeship program. This is a highly sought after class at my workplace, so I was honored to represent our company and participate in one of the first cohorts. There aren't many courses like this out there, so I jumped on board immediately. I thought this would be a great chance to better myself, and my company overall. I wished I had taken plastics in college, but I didn't know I wanted to go this route when I was younger. AIM has presented as a second chance for people like me, who may have missed out on this career path early on and decided to go in this direction. It seems to me most of the learning in this field, at least in the last few years, has all just been passed down generationally and all learned on the job. This is a fairly new idea, and it's a great way to learn new techniques, apply real studies, and be able to perform various scientific molding techniques. This class really went deep, teaching the how and why things work how they do, not just because its how we do it. So, It really answered a lot of questions for me on why we do the things we do. "

"AIM also helped me really open up personally to new ideas and broaden my view of the plastics industry. It was interesting being in class with people from all over the state, with diverse backgrounds, and from all different companies. It was eye opening to me to see how many different ways other companies do things, and all the different styles people use, but at the same time seeing how much we had in common. I really enjoyed the social aspects of the class and bonding with my classmates. We became really close, which led to many deep discussions and helped us all see things from different perspectives. I had a lot of fun with the group and made a lot of new friends. Also, the teachers at AIM come from interesting backgrounds, and Beaumont is one of the leading companies in future technologies. The teachers all have so much real-life experience and knowledge, so it was nice to be able to pick their brains and ask them all the questions we had pertaining to plastics. By the end of the course it felt like the AIM teachers felt very much in our friend circle as well. They are some of the brightest people in the field, so it was an honor to be able to study under them and have role models to look up to. Graduating AIM was a huge steppingstone for me which opened many new doors for my future. It has honestly been a life changing experience and has pole vaulted me into a new career path that I really enjoy. After all the hard work and studying, I've even been fortunate enough to move up higher in my company and assume more responsibilities."

"I feel AIM taught a very diverse program, and it was well structured. It was fun looking forward to the next course every few months. I feel like the course was laid out very well, taking one step at a time and always tying the information into the next section. Many of the classes I had no knowledge or background in, so it was mostly all new learning experiences for me. In this field I've found it's very important to know a little bit in every field to be able to piece everything. One great piece of advice I was given was to try and be a master in my field and then have a minor in all the others that surround it. I'm now able to communicate and collaborate throughout every department at my workplace. I've enhanced my ability to think critically and contribute to discussions with quality or molding design to reach important conclusions. I feel like I've got a much better understanding of how everything comes together in my company overall and I can really see the big picture."

"Overall, I loved the classroom, the lab, the teaches, and free coffee and snacks. It was a perfect size class and lab to get that 1 on 1 time if I ever needed it. There were a few classes I liked more than others, but all of the main courses were outstanding. If I can, I'll try to add suggestions or feedback hoping to improve the program and help the future students. I would say I was at a perfect time in my young career to be enrolled in this class. I was still pretty new at this when I was enrolled, as I had done mold setups for a little over a year and been a process technician for maybe 2 years to that point. This being a process technician apprenticeship program, I was able to learn a lot of new ideas, but at the same time reinforce much of what I had already learned. I think this is a perfect course for someone like me, who had little or not much experience in the field. I would suggest this for companies to send employees who are just getting their feet wet, and who can benefit from learning more. I would also consider sending someone that is driven and wants to continue to grow. Someone that is going to put in a lot of effort by bettering themselves and their company. There is a lot of homework, reviewing, studying, and time dedication that goes into this. This is a big investment for the student, the company, and the program so it should be honored and treated as such. In my opinion, this class wouldn't be as beneficial for someone with say 10 years' experience where a lot of the tracks are already laid, and they have a strong foundation they've built on. Granted, there is always more knowledge to gain, and I feel anyone could learn new things by going here. Molding 1 and 2, or at least the final course does get you on the path to possibly becoming an engineer. The end feels like an introduction to engineering, which would be the next step in the program which is what I really liked about it."

"The only other thing I was disappointed in was that we never really got to do any real-life scenario processing on the machines. I think it's extremely beneficial, at least for me, to see problems firsthand that might appear in the real world. Even if it's just brainstorming the approach to fixing defects or press issues real time. It's one thing to be able to read down a list of possible fixes for burn, or bubbles, etc. but to actually encounter them and have to try to fix them is a whole different animal. Sometimes those things don't always work, so you need to be able to work through the problem-solving side of things. I think that would make for great discussion in the class and exercises the group can all experience together. I know here they teach you there to trust the process, and a lot of those things can be avoided if you prepare for it and avoid it in the beginning, but I've seen it many times that problems do rise up eventually. We were shown a lot of defective parts and told what to do or try to do in a lot of situations but that isn't the same. We did do a lot of studies, and worked on skills that can keep you from getting certain problems, but sometimes that's going to be out of your control. I just wish we had a course or could have spent time on doing that sort of thing to actually become better processors as that's a big part of the job, at least where I work."

"Overall, I truly enjoyed every minute of my time at AIM, it was something to look forward to every few months. I will truly miss it and everyone that I met and learned from there. The ability to be able to take time out of the everyday grind at work and learn new skills to better myself was so invaluable. I am very proud of how I did in the class, and I would consider it one of the greatest accomplishments in my life. I would highly recommend this course to anyone who is starting out in this field, as it will lead to great things, and a fulfilling life as a plastics process technician. The plastics industry is fun and exciting as every day is different and always presents new challenges. These opportunities are rare and hard to come by so I would suggest jumping at the chance to go to AIM if it ever presents itself. Thank You to everyone at AIM and involved in the Apprenticeship Program! "

Testimonial Given Last Week!

Corey Harned, C&J Industries

"I wished I had taken plastics in college, but I didn't know I wanted to go this route when I was younger. AIM has presented a second chance for people like me, who may have missed out on this career path early on and decided to go in this direction."

"AIM helped me really open up personally to new ideas and broaden my view of the plastics industry. It was interesting being in class with people from all over, with such diverse backgrounds. It was eye opening to me to see how many different ways other companies do things, and all the different styles people use, but at the same time seeing how much we had in common."

"Graduating from AIM was a huge steppingstone for me which opened many new doors for my future. It has honestly been a life changing experience and has pole vaulted me into a new career path that I really enjoy. After all the hard work and studying, I've even been fortunate enough to move up higher in my company and assume more responsibilities."

"I really enjoyed the social aspects of the class and bonding with my classmates. We became really close, which led to many deep discussions and helped us all see things from different perspectives...by the end of the course, it even felt like the AIM teachers were very much in our friend circle as well."

"I truly enjoyed every minute of my time at AIM, it was something to look forward to every few months. I will truly miss it and everyone that I met and learned from there. The ability to be able to take time out of the everyday grind at work and learn new skills to better myself was so invaluable. I am very proud of how I did in the class, and I would consider it one of the greatest accomplishments in my life. I would highly recommend this course to anyone who is starting out in this field, as it will lead to great things, and a fulfilling life as a plastics process technician. The plastics industry is fun and exciting as every day is different and always presents new challenges. These opportunities are rare and hard to come by so I would suggest jumping at the chance to go to AIM if it ever presents itself. Thank You to everyone at AIM and involved in the Apprenticeship Program! "

"I'm now able to communicate and collaborate throughout every department at my workplace. I've enhanced my ability to think critically and contribute to discussions with our quality or molding groups to reach important conclusions. I feel like I've got a much better understanding of how everything comes together in my company overall and I can really see the big picture."

Pre-Apprenticeship Program Model Now Available

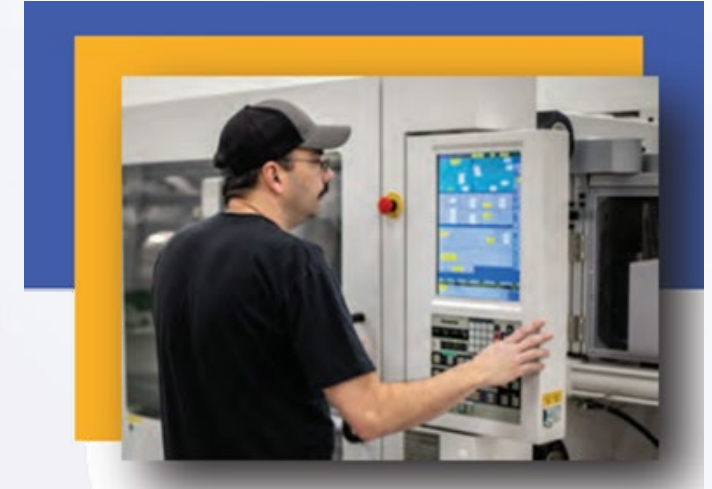
- Vernon Regional Adult Based Education (Vernon, CT)
- Secondary education opportunities for GED students and high school students
- Get more people interested in plastics manufacturing as a career
- Partnered with the AIM Institute
 - Plastics Bootcamp courses



Are there organizations in
your region that do similar
things?...we can help

How We Can Help You?

- The models are built, and they work!
- Copy/paste into your state or company
- Curriculum can be adjusted to fit your needs
- What's next?..expand into a 4-year apprenticeship
- In the future, courses taken in the apprenticeship program can be applied towards a 2 year AAS- AT (Associate of Applied Science – Applied Technology) Degree through Penn West



Feedback from BAP

- Experiences so far
- Finding the right person
- Bringing it full circle



Thank You!

