CAREER PROFILE

Anne-Marie Romanko

Mechanical Draftsperson

The last time you used a plastic fork, did you think about how it was made? Computer technology plays a huge role in creating many everyday objects. Anne-Marie Romanko is a mechanical draftsperson, and works behind the scenes to create plastic injection moulds. Plastic injection moulds are metal forms into which liquid plastic is injected to create an object, such as a plastic fork, a car part, or parts of your computer case.

When a company wants to create a plastic part or object, it begins with a design of what the finished product will be, including the size and dimensions. That data is then sent to someone like Anne-Marie, who uses a special type of ***mechanical software*** such as CADKEY to design a three-dimensional model on the computer of a mould of the object. The shaping of a mould can be difficult—remember that the mould must be the inverse (or opposite) shape of the part! The mechanical draftsperson also has to consider how the plastic object will be removed from the mould without damaging the object. This factor, too, is worked into the design. Next, the design for the mould is surfaced. In this step, the computer model shows exactly how the metal surface will be cut by a machine to make the mould. Once the mould design is finished, the mould is cut from metal by a machine. Plastic is then injected into the mould to test whether the mould design works properly. If it works, the company can start manufacturing the plastic object.

In order to be a mechanical draftsperson, Anne-Marie completed an apprenticeship course, including hours of on-the-job practise. She began her career by taking a 42-week course called "Women in Metal Machining." Next, she went to college to complete a certificate in CAD/CAM (short for Computer-Aided Design/Computer-Aided Manufacturing—specialized engineering software used to design and manufacture products). Finally, she took a series of additional courses at her local college that were required for her apprenticeship while she was working for a mould company.

"The nice thing about my job is that I'm always challenged, and always learning," says Anne-Marie. "No two jobs are the same, so it lets me be creative in solving problems unique to making each object."