



2017 REPORT

MANUFACTURING FIELD TRIPS



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Thanks to Student Success Action Plan, this winter semester, 24 first year Industrial Design students had the chance to visit 4 manufacturing facilities in and around Montreal.

Although students were previously lectured on the subjects of:

- Gravity die casting & Sand casting
- Rotomolding
- Sheet forming, laser cutting, enameling
- Injection molding and in-labeling molding

The student's trip reports reveal that they have learned more during these trips than they did in their previous Manufacturing 1 course from their 1st semester.

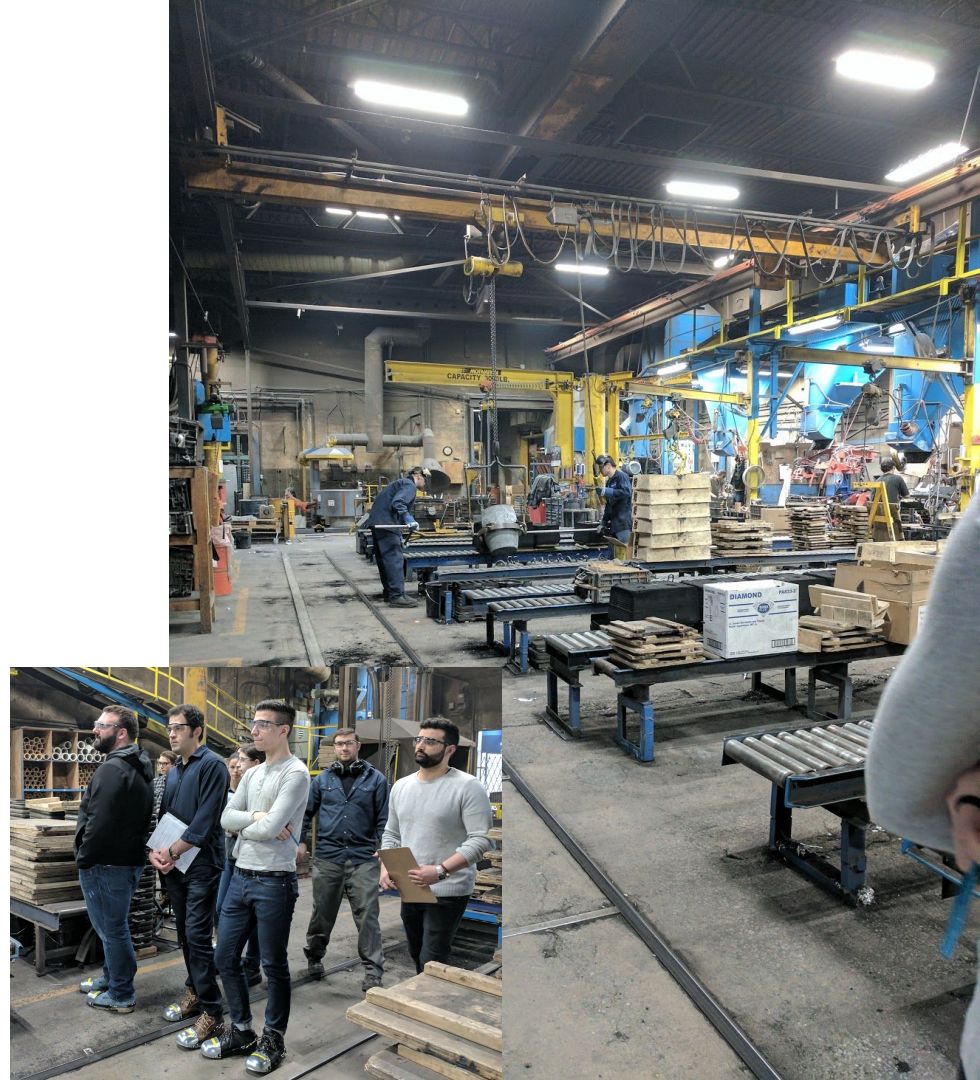
Fondremy

In this area of the factory, students* observed workers pouring molten metal** into molds made of sand.

The metal hardens when it cools. Then the workers break the sand molds apart, revealing the cast part made of metal.

*For safety reasons, students were split up into 3 separate groups.

**The process and parts could not be captured in detail to protect the clients and their designs.



Fondremy

Students visited the mold room. These molds are made of wood and are pressed into a box filled with sand, leaving an impression that will be later on filled with molten metal.



Gravity or Permanent mold casting: Image below shows a factory worker pouring molten metal inside a mold made of sintered metal. You can see the cast parts on the bottom left.



JP Metal

The tour at JP metal was given by Alex Levy, another Dawson Alumni that graduated in 2016.

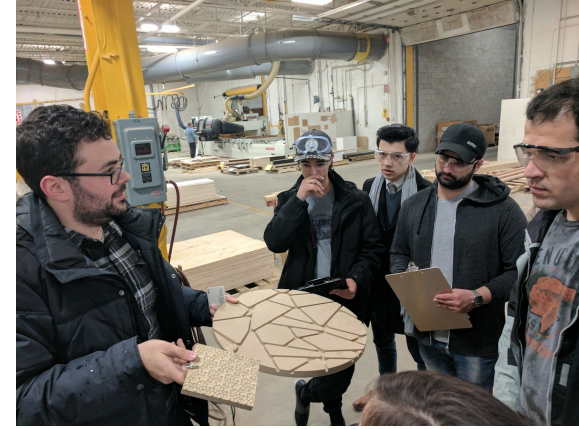
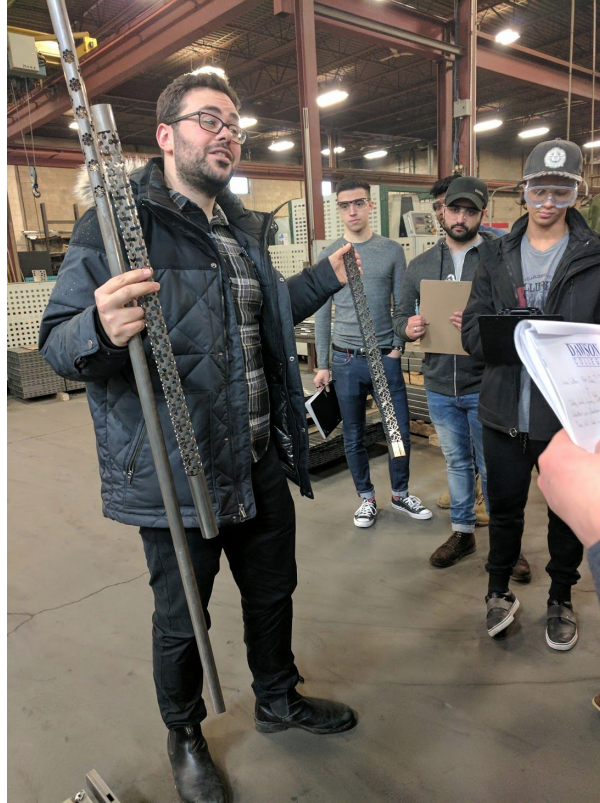
Students got to see how metal can be transformed into high end retail furniture for clients such Coach, Chanel and Nike.



JP Metal

Alex is explaining how the 5-axis laser cutting machine can cut intricate details into metal tubes of varying sizes.

On the right, Alex shows how a 5-axis router can carve out shapes into this piece of wood.

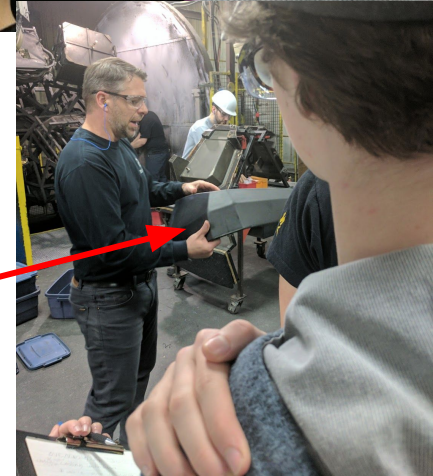
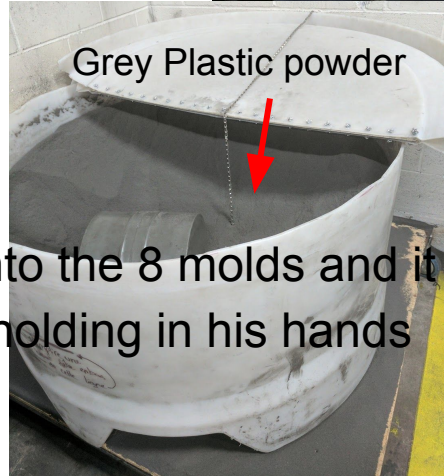


Rotoplast

Stéphane Daudlin, co-owner of Rotoplast, gave the students a tour of the rotomolding facility.

Shown on the right is a “shuttle” machine. It is holding 8 different molds of varying sizes, rotating along the x and y axis.

Grey plastic powder is poured into the 8 molds and it melts to form the parts that Stéphane is holding in his hands



Rotoplast

The “Rock ‘n’ Roll” machine can create multiple colored parts, like this kayak seen below.

An example of plastic thickness below. The longer the molds rotates, the thicker the plastic walls.



Rotoplast



This section of the factory is the shipping area. Flashings on parts are grinded off, electronics are installed (those that light up) and the surface torched with a flame to give it a nice glossy finish.

Megabrands

The tour at Megabrands was given by Industrial Design Dawson Alumni, Etienne Choiniere-shields.

At Mega, students learned how toys are designed, manufactured, packaged and distributed.

He also gave student tips on how to be hired to work here.



Megabrand

We weren't allowed to take pictures of the injection molding machines, the creative center, the building center, toy design center, packaging design center nor the graphic design dept.

They had the chance to see toys that will only be launched within the next year.



THANK-YOU STUDENT SUCCESS ACTION PLAN!



Student Trip report & Testimonial examples...