

# WHY SUSTAINABLE MANUFACTURING IS IMPORTANT AND HOW WE DO IT



Have you ever thought about how plastic bottles are made?



What about your children's favorite toys?



Or maybe, the single-use syringes you see at the hospital?

Well, all of these are actually made through a manufacturing process called plastic injection molding. In China or elsewhere, Plastic injection molding is a process that creates products by injecting melted plastic into a mold

## But, why is sustainable manufacturing important?



### Sustainable Manufacturing Creates Clean Production Processes



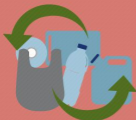
Sustainable manufacturing is making its mark throughout various industries as companies respond to the increasing global environmental movement. Each industry is looking for more ways to create eco-friendly processes while minimizing the amount of waste created from each one. Besides lessening your global footprint, sustainable manufacturing has been observed to reduce costs by improving operational efficiency.

### Manufacturing with Recyclable Materials

Plastic products can take up to a thousand years to decompose. In order to prevent the pile-up of plastic in landfills, plastic injection molding companies have converted to use recyclable plastic in their manufacturing. The materials used for plastic injection molded products could be the plastic water bottle that you recycled or the old Tupperware that you properly disposed of.



### Recycling Plastics for Reuse



Recycling plastics is no easy task. Before plastic is used for the procedures of plastic injection molding, it must first go through a series of sanitization and shaping. During the plastic injection molding process, the plastic pellets are re-melted and injected in fixed quantities into a mold. High pressure is used in order to effectively push the melted plastic through. After this, a cooling process will re-solidify the plastic.

### Robotic Packing System to Reduce Packaging Costs

Technology has been utilized in the design and manufacturing of plastic injection molded products. Robotic packaging machinery has the capability to maximize the space found within each cardboard box through complex computations. Not only that, but robotics packaging machinery has also helped reduce transportation costs.



### Minimize Waste Being Sent to Landfills



An automated robotic machine will be able to consistently produce the same results with even less waste. This is because robotics is able to create detailed incisions, cleanly trimmed edges, and drill holes with consistent precision. The machine's settings can be altered to allow it to collect these wastes for further reuse.

### Less Energy-Consuming Machinery

By expediting the processes of manufacturing, machines are saving valuable energy. Less energy used entails a reduced need for a non-sustainable energy source such as fossil fuels.



### Energy-From-Waste Technology



Plastics actually have high-energy content. In order to further reduce the amount of plastic waste going to landfills, innovators have created a machine that can create energy from plastic waste. New forms of technology are now able to recover the energy heavily contained in plastics and convert it into electricity, fuel, and synthetic gas.

### Train Staff for Environmental Manufacturing

With all of these advancements in technology and the innovative processes to improve efficiency, you might be asking yourself, where are humans in the equation?

Training employees does not just refer to the start of their time in your business. Incorporate formal and informal types of training for your employees to help them better understand the importance of sustainable manufacturing.



RICHFIELDS

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