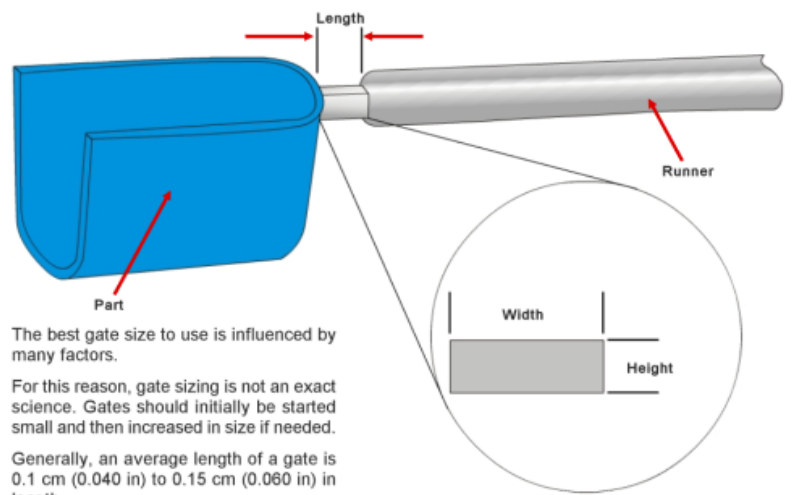


# Plastics Mold Design, Blow & Injection Molding Training | Multimedia Courseware

Basic Injection Mold Design - WX11304-AB01XEN-E1

Objective 10: Describe How Gate Size is Determined for a Mold

Gate Size Factors



Part

Runner

Length

Width

Height

The best gate size to use is influenced by many factors.

For this reason, gate sizing is not an exact science. Gates should initially be started small and then increased in size if needed.

Generally, an average length of a gate is 0.1 cm (0.040 in) to 0.15 cm (0.060 in) in length.

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## Mold Design: M11304

The Plastics Mold Design training course introduces basic injection mold design including injected mold sprues and runner systems and injection mold gates and mold vents. Advanced concepts taught include mold material and construction, multi-cavity molds, unbalanced multi-cavity molds, inserts in injection molds, and undercuts in injection molds. Learners will cover additional concepts in part design and material selection, thermoplastic molding materials, and blow molding design including materials and advanced design. These concepts provide an overview and cover a broad range of plastic mold design functions and operations.

## Teach Hands-On Skills

### What is the Process for Injection Molding?

An injection molding process is used to create solid part shapes from plastics material. A molding operation can create many complex parts less expensively than by using material removal methods, such as milling or turning. The injection molding process is performed by injection molten plastics into a mold. A mold contains a cavity, or hollow area, in the shape of the finished product. The mold consists of two or more pieces that can be separated to remove the plastics part. An injection mold can have several components, depending on the complexity of the part to be created. (There are seven common components of an injection mold: mold base, guide pins, sprue brushing (sprue), runners, gates, cavity, and vents.)

### Plastics Mold Design Training Features World-Class, Engaging Multimedia Curriculum

Amatrol's extensive, thorough [multimedia](#) covers design process basics such as plastic molds. Interactive screens paired with instructive graphics teach an array of design topics from mold design to material selection. Learners can then apply this theoretical knowledge to immediate hands-on skills. For example, learners study mold inserts and then use CAD/CAM to design their own mold insert. This combination of theory and practice ingrains concepts in a learner's mind and makes more advanced topics easier to comprehend. (References [94-DFM3](#))

## Additional Info

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- **Additional Requirements**

- Computer: [See requirements](#)

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### **Address**

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