

# SCALEBLASTER<sup>®</sup>

WATER CONDITIONER

# APPLICATIONS

*Sustainable Solutions to Hard Water Problems*

CLM-532

Injection Molding



# Injection Molding Applications

Injection molding is used to create many things such as wire spools, packaging, bottle caps, automotive dashboards, pocket combs, and most other plastic products available today. Injection molding is the most common method of part manufacturing. It is ideal for producing high volumes of the same object. Some advantages of injection molding are high production rates, repeatable high tolerances, the ability to use a wide range of materials, low labor cost, minimal scrap losses, and little need to finish parts after molding. Some disadvantages of this process are expensive equipment investment, potentially high running costs, and the need to design moldable parts.

Most polymers may be used, including all thermoplastics, some thermosets, and some elastomers. In 1995 there were approximately 18,000 different materials available for injection molding and that number was increasing at an average rate of 750 per year. The available materials are alloys or blends of previously developed materials meaning that product designers can choose from a vast selection of materials, one that has exactly the right properties. Materials are chosen based on the strength and function required for the final part but also each material has different parameters for molding that must be taken into account. Common polymers like Epoxy and phenolic are examples of thermosetting plastics while nylon, polyethylene, and polystyrene are thermoplastic.

One of the essential requirements for plastic injection molding is proper cooling, and for that water is primarily used. Chilled water is most often the cooling agent of choice because it's low-cost, has excellent thermal transfer properties, and is readily available.

Water used for cooling injection molding machines should be treated with **ScaleBlaster** to prevent bacterial growth, scaling build up, or contamination of the entire system.

## Prevents Limescale Formation

**ScaleBlaster** will modify the lime scale-forming ions so they do not adhere to each other or to surfaces anywhere in the cooling tower/HVAC system.

## Condensers, Chillers, Air Handlers, Hot Water Heaters and Boilers

**ScaleBlaster** will control lime scale deposits on heat exchanger tubes, heat exchanger surfaces, heating coils, heating tanks, boiler fire tubes, condensation tank, pumps, pipes and valves.

## Equipment that will benefit

Boilers, heat exchangers, rollers, transfer lines, pumps, valves, condensers and cooling towers will all save a ton of money by operating more efficiently with the **ScaleBlaster System**.

## Energy Savings

The cleanliness of the lines and equipment affects the pumping efficiency and therefore the total cost of the energy. Less energy used in the plant means more energy that can be sold for power.



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**ScaleBlaster.com**  
**800-756-7946**

