

FACTORY AUTOMATION FOR PLASTICS MOLDING

Parts / Sprue Picking Robot

HYROBOTICS CORP.

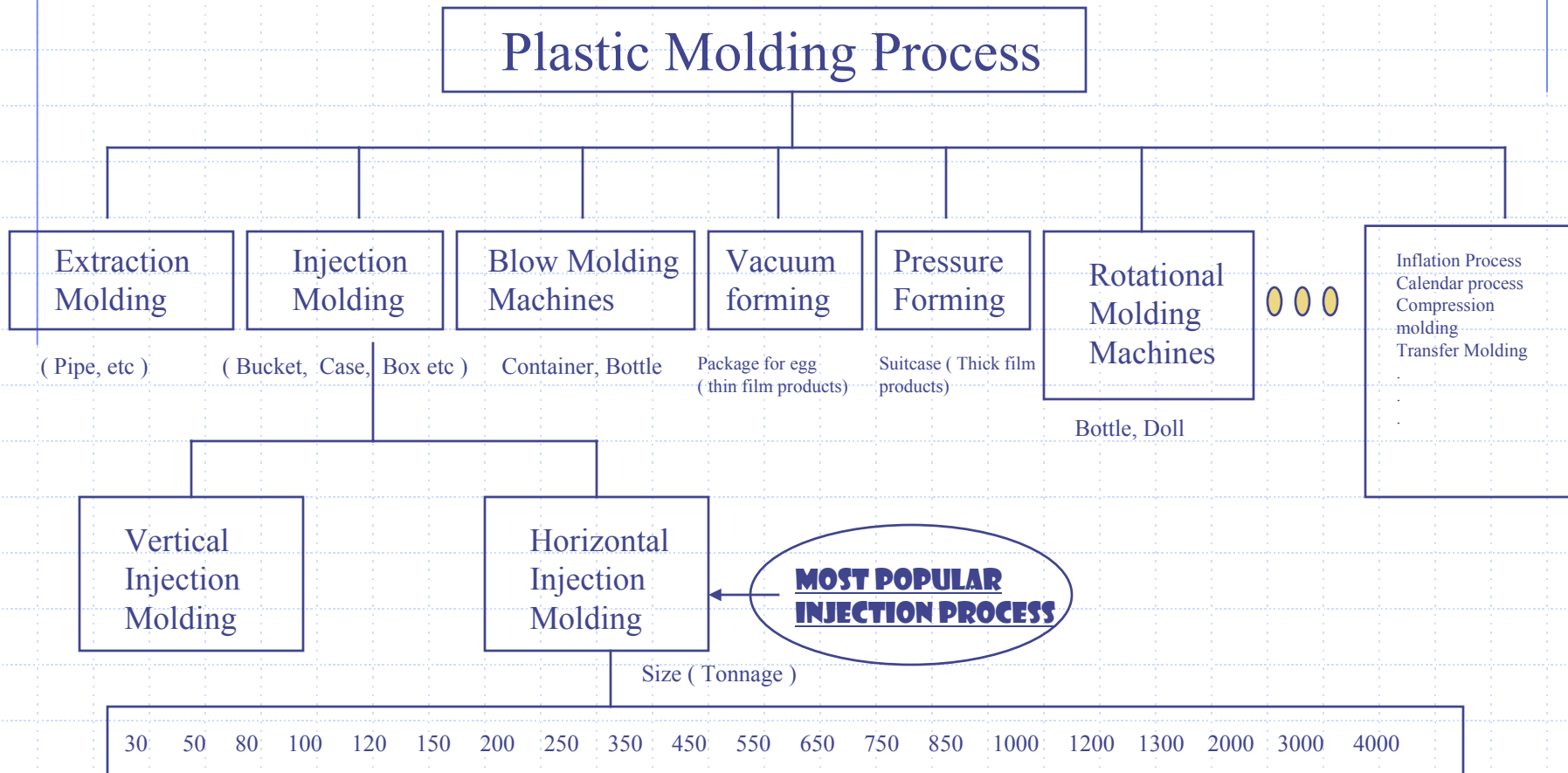
Introduction

- ◆ HYROBOTICS CORP
 - St.Louis, MO

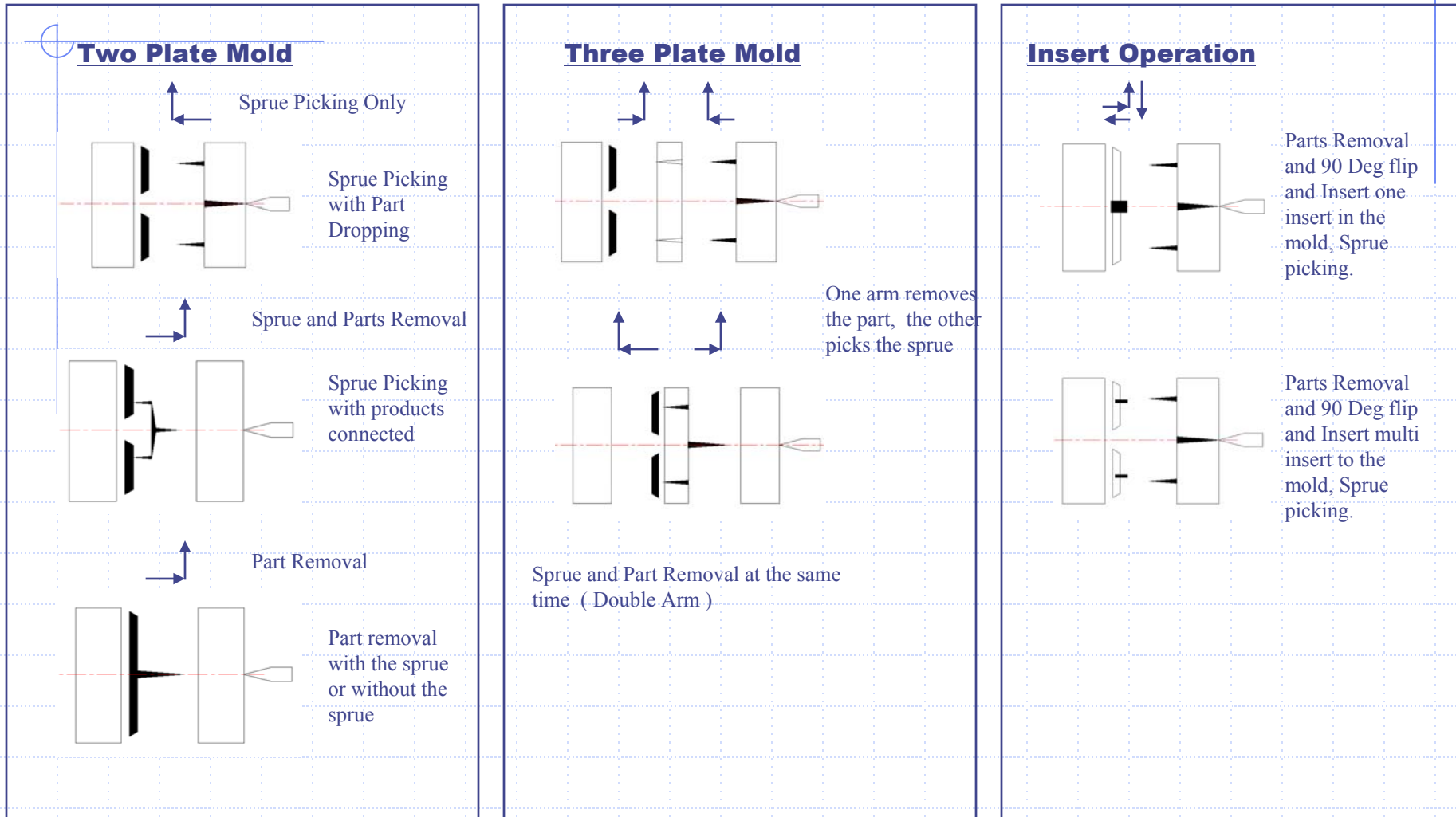
- ◆ HYROBOTICS CO.LTD
 - Incheon, South Korea

General Molding and Automation

The word “Plastic” means substances which have plasticity , and accordingly anything that is formed in a soft state and used in a solid state can be called a plastic. The main plastics forming methods are shown as belows

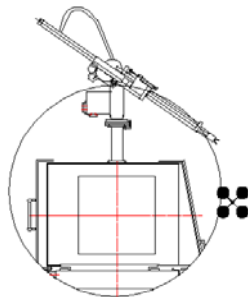


Robot Applications inside the Mold

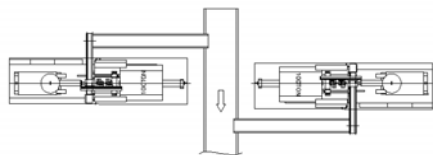


Robot Applications outside the Mold

Simple Operation

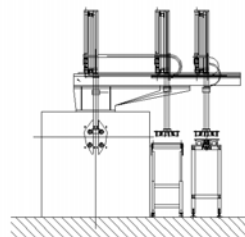


Taking out the Sprue from the mold and dropping it. (Inside of the mold, Conveyor, Box)

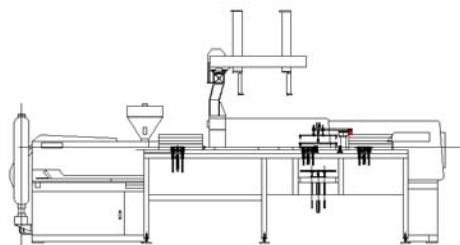


Remove Parts, 90deg Rotation and Placing the parts (Conveyor, Box)

Deburr and stacking

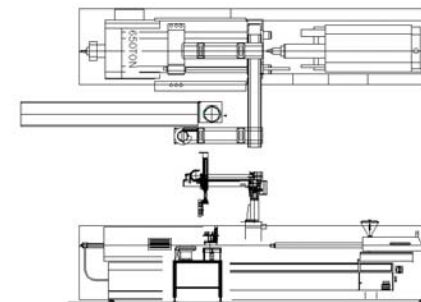


Remove the parts from the mold place on the deburr station and move it to conveyor



Place the parts directly in boxes on the stacker

Insert Operation



Pickup the inserts from the loading station (Parts feeder or table) remove product, insert the inserts in the mold , and place the products on the conveyor.

Why IMM needs Robot and Sprue Picker ?

- ◆ Less Labor Cost
- ◆ Safety Issue
- ◆ Fast Cycle time
- ◆ Consistency
- ◆ Parts Quality
- ◆ 24 Hour Operation
- ◆ Separate the Sprue from the Parts 100%
- ◆ Automatically recycle using Crusher and Hopper dryer.
- ◆ Tougher Jobs
- ◆ Cosmetic, No Ejector Marks.

Our Product Information

◆ Swing type pneumatic picker.

- From 30 tons up to 450 Tons
- Three Models
 - ◆ A : Sprue Picker Only
 - ◆ X : Sprue Picker with 90 deg Wrist
 - ◆ XC : Picker (Part or Sprue) with 90 deg Wrist and Vacuum system
- Motion controlled by hand held micro processor control (Handy control)
 - ◆ Control has preprogrammed motion pattern or programmable with timer setup
 - ◆ 99 mold setups can be stored, setups retain motion patterns and timer values.
 - ◆ Mechanical stroke settings are not stored.

◆ Installation

- Every unit includes complete installation hardware kit and detailed instructions.
- Steps
 - ◆ Mount unit on stationary platen.
 - ◆ Wire interface box to IMM control (SPI connector : Plug and Play).
 - ◆ Test.
 - ◆ Setup
- Installation Service Available.

◆ Points of Interest

- Future Products
 - ◆ More swing type size (450,750, Twin)
 - ◆ Traverse type
- Safety features
 - ◆ ANSI, RIA
 - ◆ Safety Circuit
 - ◆ Emergency Stop

◆ Questions

Robot / Sprue Picker Sizing Correct Unit

- ◆ General
 - On catalogue
- ◆ Quick Layout
- ◆ Parts Size
 - Mold Size
 - Door Heights
 - Other
- ◆ See Sizing Worksheet.

Pros and Cons

- ▼ Pros
 - Very Attractive Pricing
 - Units / Parts in Stock
 - Self Installation
- ▼ Cons
 - New Brand
 - Limited Line
 - Self Installation