

RAPID TOOLING DESIGN



Rapid Tooling Design Introduction

Indirect Tooling

Direct Tooling

Rapid Prototyping Processes

The Rapid Prototyping Workflow

Data Preparation

Part Building

Postprocessing

Indirect Rapid Tooling Processes Introduction

Room Temperature Vulcanized Rubber Molding/RTV

The Pattern Design

Pattern Draft

Pattern Construction

RTV Mold Making Process

RTV Part Materials & Quantities

Direct Rapid Tooling Processes Introduction

Use Of Direct Rapid Tooling In Injection Molding

The Hybrid Mold

Direct Rapid Tooling Vs. Traditional Technologies

Direct Rapid Tool Materials

Metals

Plastic Resins

The Four Steps In Constructing An Injection Mold

Tool Design

Insert Design

Core & Cavity Design

Stock Allowances

Component Building

Rapid Prototyping

Simultaneous Machining Of Mold Elements

Postprocessing Of Inserts

Avoiding Excessive Secondary Operations

Tool Assembly

Inserts Mounted To Mold Pockets

Injection Molding

Metal vs. Plastic Resin Inserts

Conformal Cooling Channels