

autoform 中文详细介绍

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- model > geometry generation 图形

1 Prepare 准备

Tool setup

指定单动双动类形

Define object

Part 设选定元素为 Part (凸模部分)

Binder 设选定元素为 Binder (压料面)

Flange 设选定元素为 Flange 翻边

Delete 删除选定元素

Display part 显示 Part 元素

Display Binder 显示 Binder (压料面)

Display Flange 显示 Flange 翻边元素

Display Delete 显示删除元素

Reset 重设元素

Part bondary

Part 容差和接触距离, 不需更改

Outer trim

外部修剪, 不需更改

Inner trim

内部修剪, 不需更改

Symmetry /double

对称

Apply

应用, 必须



fillet 倒角

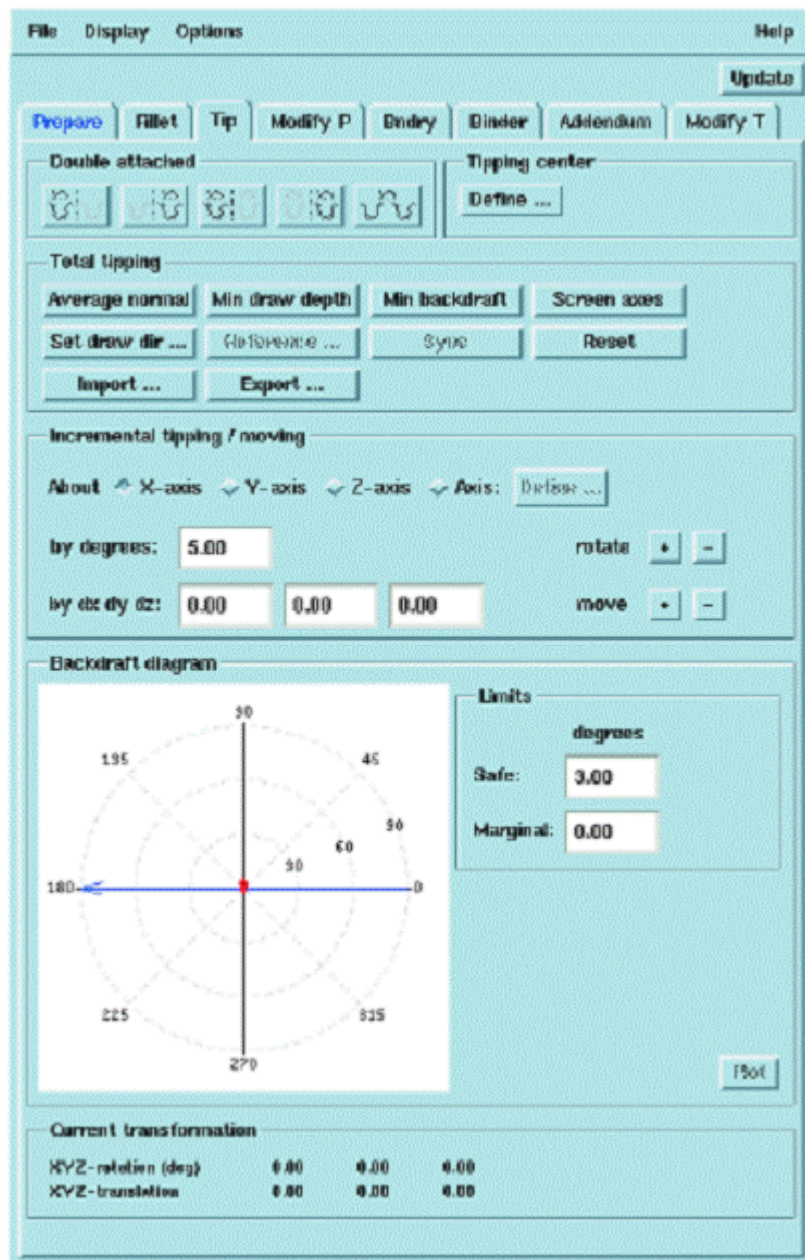
2.1 check radius 检查半径 check 检查 ok 合格

2.2 global fillet radius 全局倒角半径

2.3 display 显示

fillet geometry 倒角形状 edged geometry 未倒角形状

2.4 add line 增加倒角线



tip 方向

3.1 total tipping of part

average normal 平均垂直 ; min draw depth 最小拉延深度

最小拔模角 ; screen axes 屏幕轴 ; set draw dir 设拉延 ;

reference 参考 ; reset 重设 ; import 输入 ; export 输出

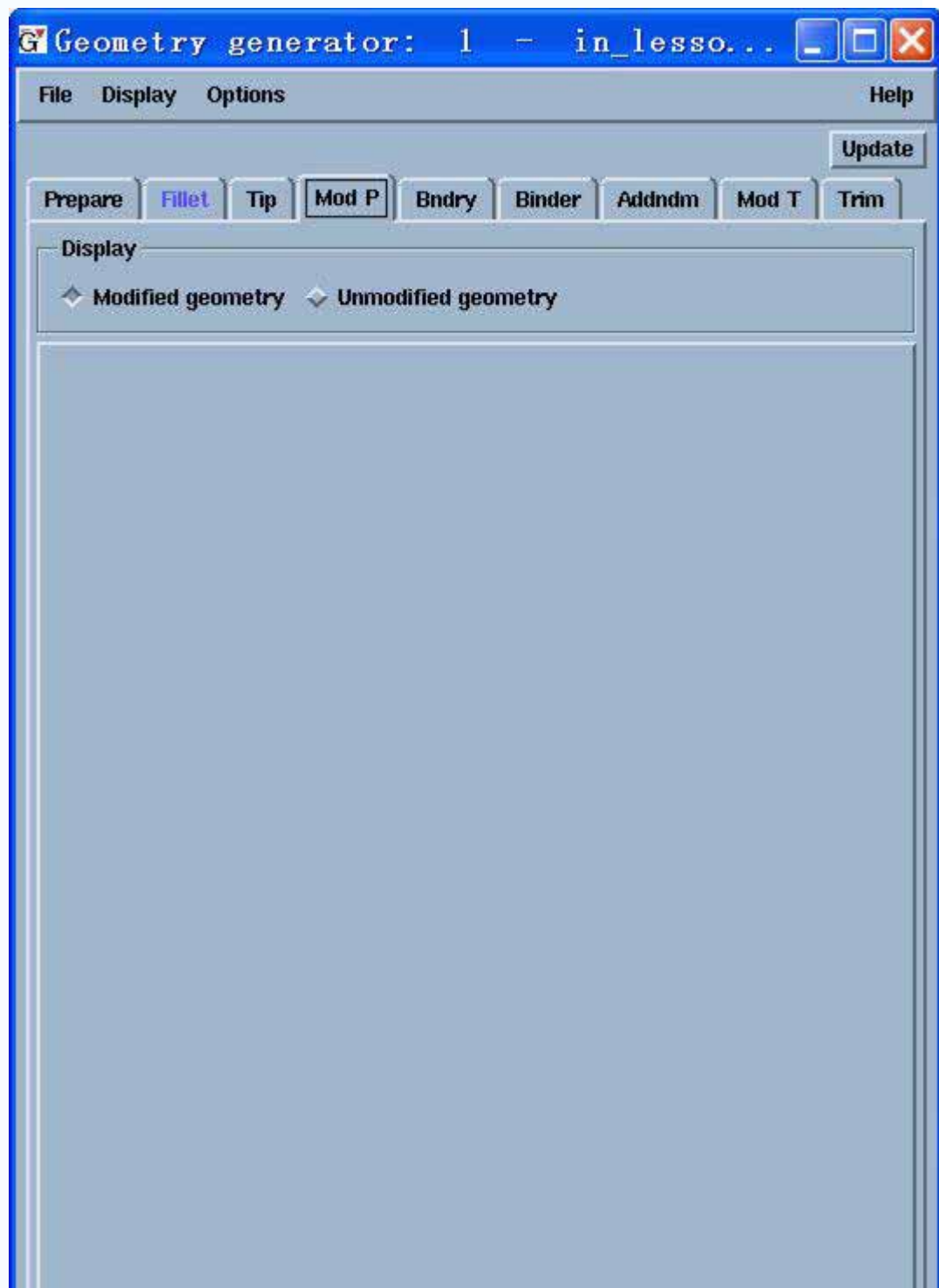
incremental tipping/moving of part

about x-axis ; y-axis; z-axis 定义轴方向

by degrees ; 按角度 rotate + - 正 (负) 向旋转

limit 限制 degree safe 安全 marginal 中性

mod P 修改产品



4.1 display 显示

modified geometry 修改形状

unmodified geometry 未修改形状

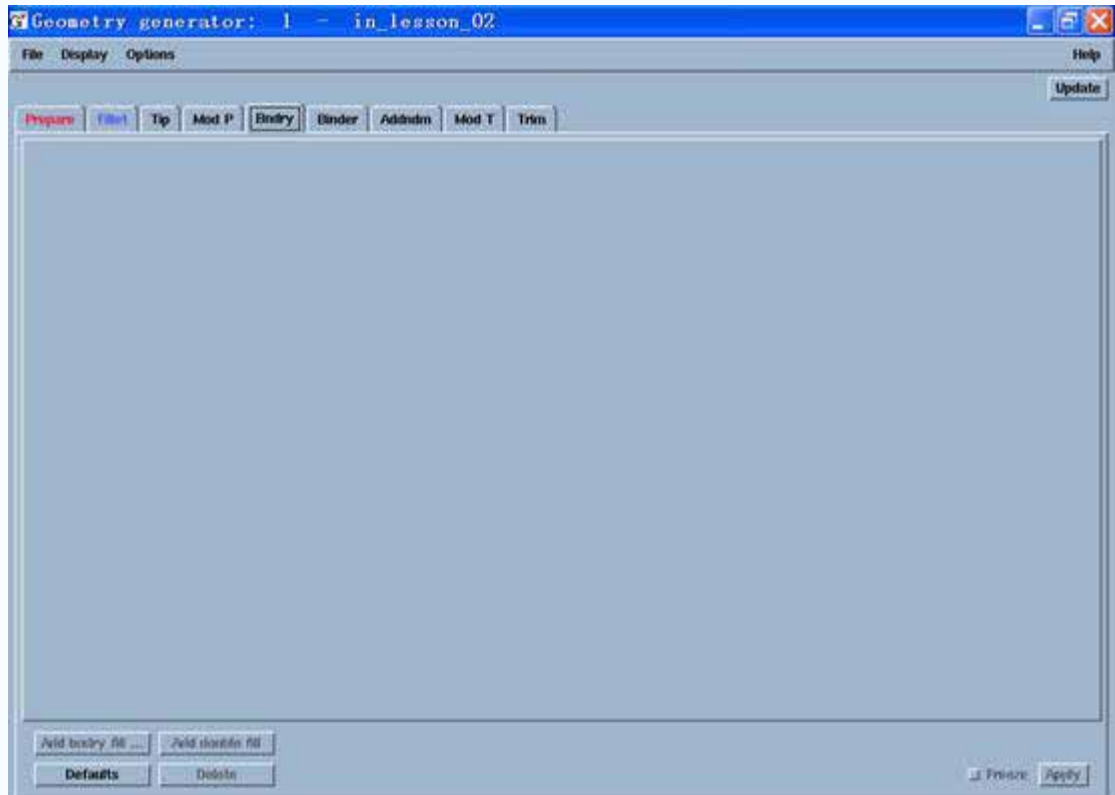
addhole 增加一个孔

all hole 增加所有孔

4.4add overcrown 增加冠状形

4.5add deta1 增加加强筋

bndry 边界填充



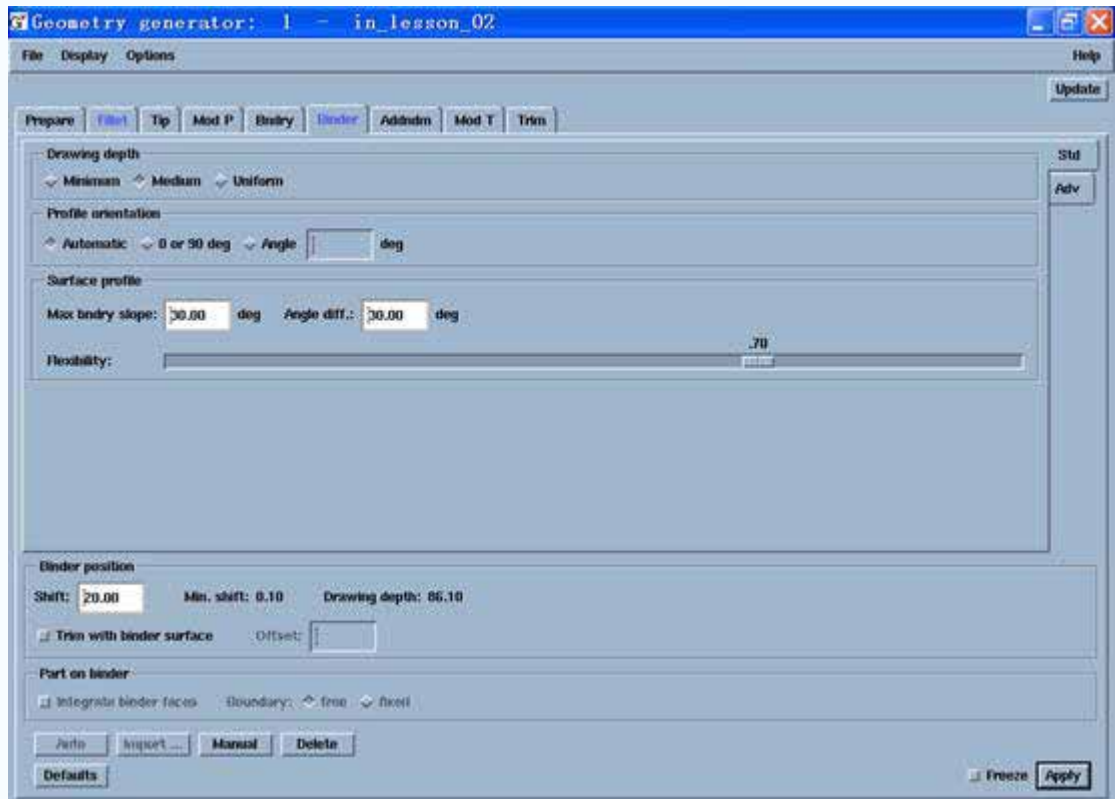
5.1 fill parameter 填充参数

boundary fill roll radius 边界

add boundary fill 添加边界填充

add double fill 添加双边界填充

binder 生成压边圈



6.1 drawing depth 拉延深度

mininum 最小 medium 中等 uniform 平均

profile orientation 图形方向

automatic 自动 0 or 90deg 0度或90度 angle 角度

surface profile 曲面形状

max bndry slope 最大边界斜面 angle diff 角度区别

flexibility 柔度

binder position 压边圈位置

shift 平移

trim with binder 用压边圈修剪 offset 偏置

part on binder 零件法兰在压边圈上

integrate binder face 作用压边面

boundary free (fixed) 边界自由 (固定)

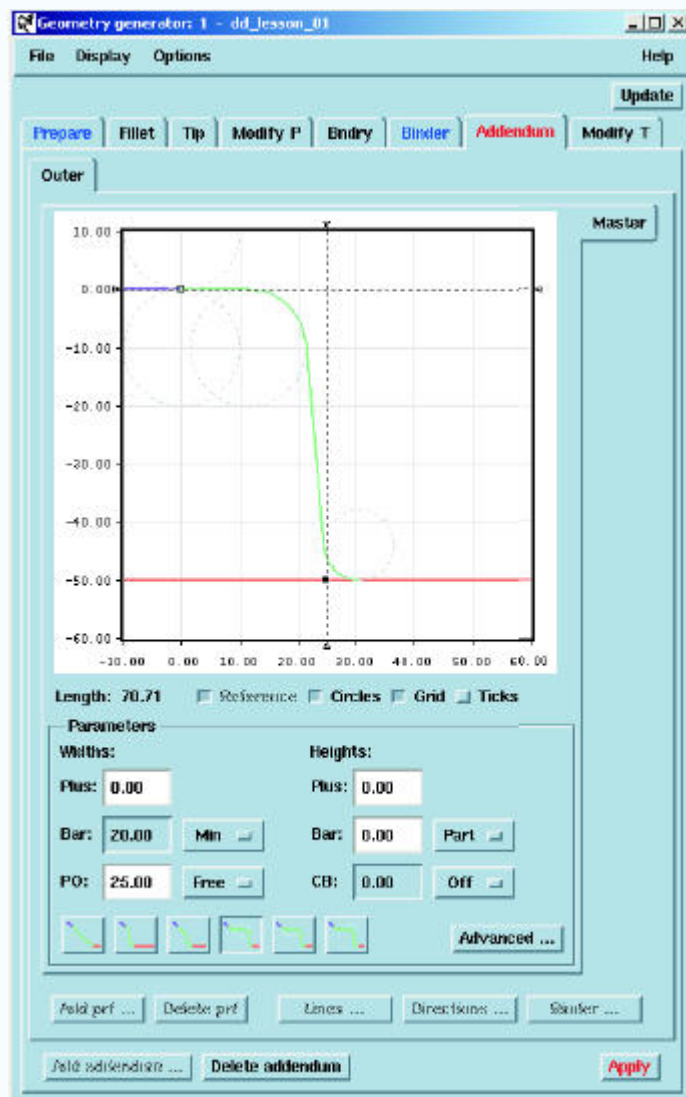
auto 自动生成

import 从文件输入

manual 人工生成压料面

delete 删除

addndm



7.1 parameters 参数

add prf 增加切面

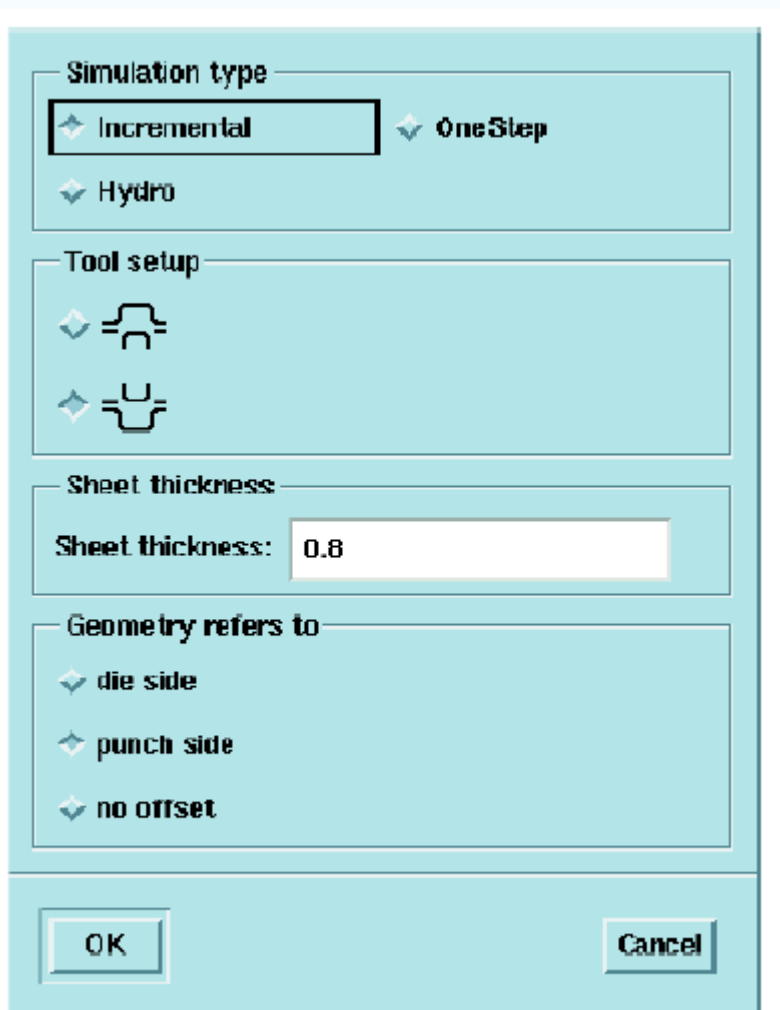
del prf 删除切面

lines 控制线

cb 线 bar 线 po 线

7.5directions 方向

2 Model input generater



The image shows a software dialog box titled "Simulation type". It contains several sections with expandable options (indicated by diamond icons):

- Simulation type**: Includes "Incremental" (selected), "OneStep", and "Hydro".
- Tool setup**: Includes two expandable options, each with a diamond icon and a schematic drawing of a tool profile.
- Sheet thickness**: Includes a text field labeled "Sheet thickness:" with the value "0.8".
- Geometry refers to**: Includes three expandable options: "die side", "punch side", and "no offset".

At the bottom of the dialog are "OK" and "Cancel" buttons.

第一次启动时显示模拟类型窗口

Simulation type 模拟类型

Increamental 增量法 onestep 一步法

Tool setup

单动 双动

sheet thickness 板料厚度

geometry refers to 数模表面指向

die side 凹模侧 punch side 凸模侧 no offset 无偏置

第二次启动时显示 输入生成器窗口

The image shows a screenshot of a software application window. The window has a title bar with the text 'Title' and a 'Help' button. Below the title bar is a tabbed interface with five tabs: 'Title' (selected), 'Tools', 'Blank', 'Lube', and 'Process'. The 'Title' tab is active, displaying a text field with the text 'in_jesson_01 (Thomas, 12 Jan 2002)' and a large, empty text area for comments. The window is styled with a light blue background and a standard Windows-style border.

2.1 title 标题

comment 注释

2.2 tools 工具

The screenshot shows a software window with a menu bar (File, Add, Job, Create, Help) and a tabbed interface. The 'Tools' tab is selected. The main area contains several sections for defining tool parameters:

- Tool name:** A text field labeled 'Name:' contains the word 'punch'. Below it are two radio buttons: 'Above' (selected) and 'Below'.
- Geometry:** A section with buttons 'Reference ...', 'Add X, Y, Z ...', and 'Delete data'. To the right of these buttons is the text 'P: 10034 F: 11813'. Below are three input fields for 'Position:' and a checkbox 'Blank contact'. Below that is an 'Offset:' field with the value '0' and two radio buttons: 'Inwards' (selected) and 'Outwards'.
- Working direction:** A section with three input fields for 'dx dy dz:' containing the values '0', '0', and '1'. To the right is a 'Copy f. ...' button. Below is a 'Move:' field with the value '0'.
- Columns:** A section with four radio buttons: 'None', 'Tool center' (selected), 'Blank cntr', and 'User def.'. To the right is a 'Input ...' button.
- Stiffness:** A section with a 'Stiffness:' label and an input field containing the value '50'.

At the bottom of the window are three buttons: 'Add tool ...', 'Delete tool', and 'Define tools ...'.

tool name

name 名字

above 在上模 below 在下模

geometry 定义工具形状

reference tool geometry 定义工具形状参考

current geometry 当前模型

select objects 选择目标

pick faces 选择曲面

position 位置 blank contact 由板料接触位置定义

offset 偏置数 inwards 向里 outwards 向外

working direction 运动方向

dx dy dz x 分量 y 分量 z 分量

move 起始位置

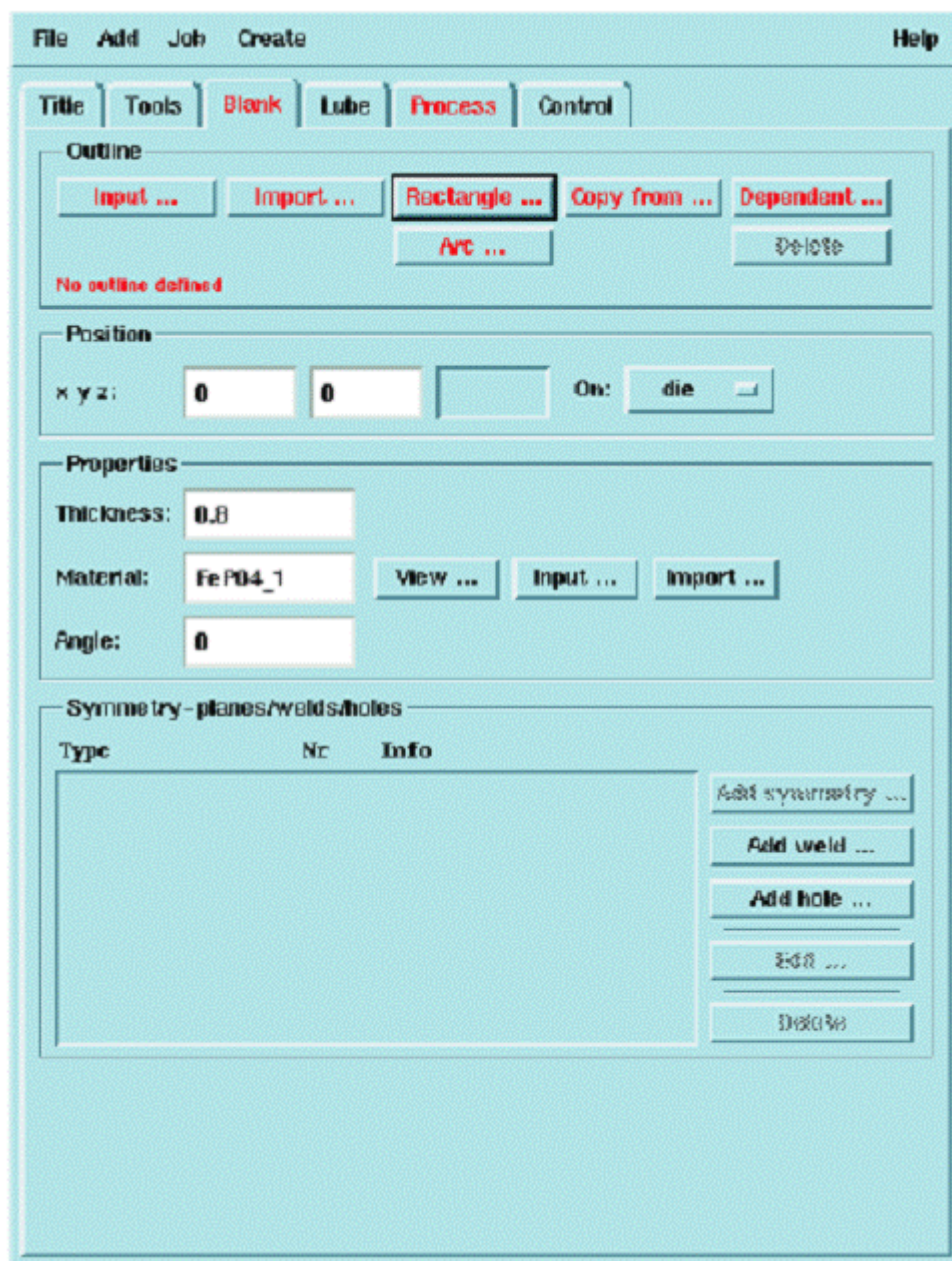
columns

none 无 tool center 工具中心 blank cntr 板料中心 user def 用

stiffness 硬度

add tool 增加工具

2.3 blank 定义板料



outline 外形线

input 勾画

import 从文件输入

rectangle 长方形

Angle
Angle: 0

Center
Center x, y: 0 0

Length X
Length X: [Red Swatch]

Length Y
Length Y: [Red Swatch]

OK Cancel

copy from 从曲线中选择

dependent 依据曲线

position 位置

properties 特性

thickness 厚度

material 材料

roll angle 轧制方向

add symmetry 增加对称

add weld 增加熔接

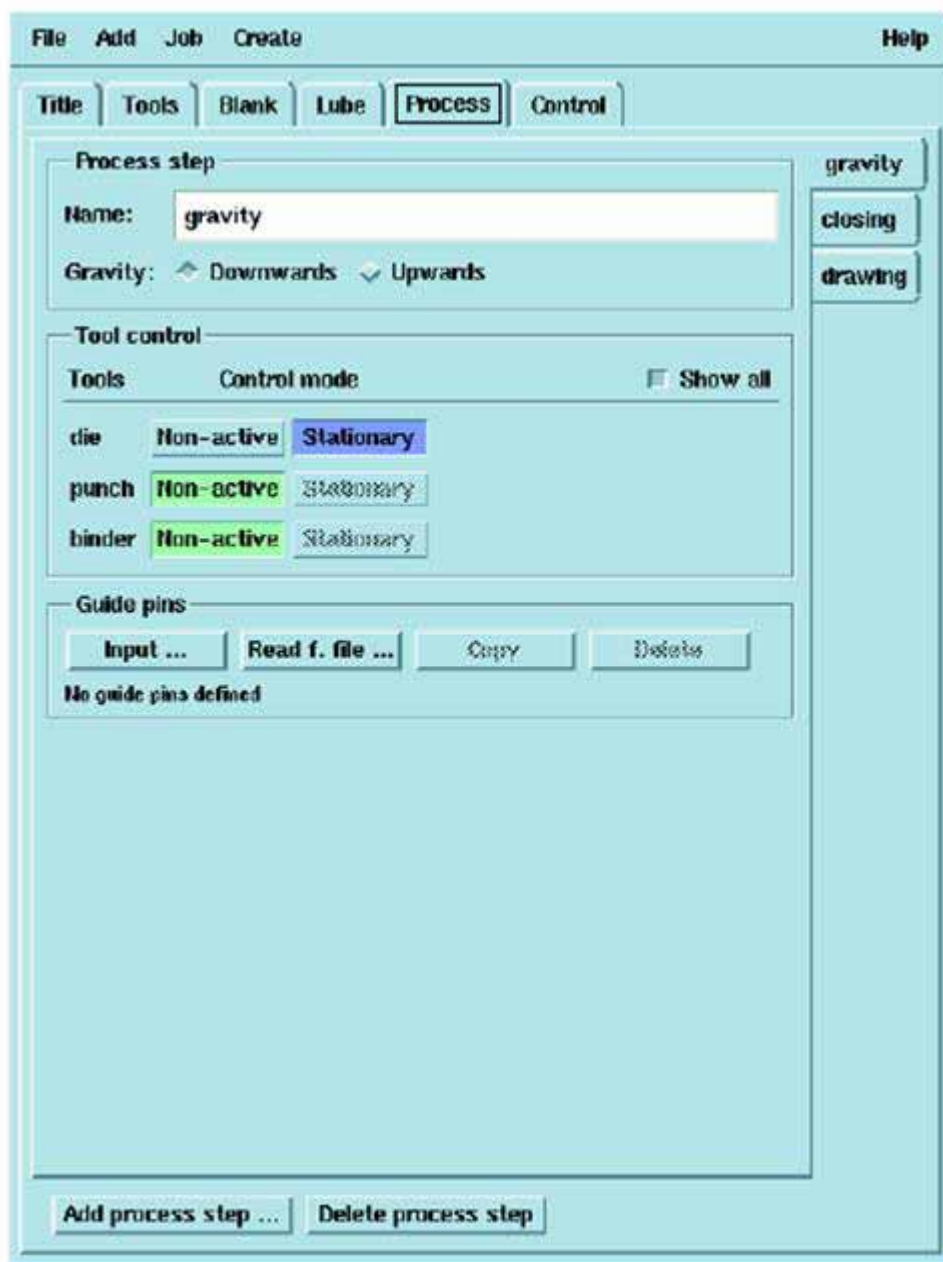
add hole 增加孔

edit 编辑

2.4 lube 摩擦系数

2.5 process 过程

定义重力方向



定义接近过程

File
Add
Job
Create
Help

Title
Tools
Blank
Lube
Process
Control

Process step

Name: closing

Type: Binder wrap Gravity downwards

gravity
closing
drawing

Tool control

Tools
Control mode
Show all

die
Non-active
Stationary
v = 1
Force

punch
Non-active
Stationary
Displacement
Force

binder
Non-active
Stationary
Displacement
Force

Guide pins

Input ...
Read f. file ...
Copy
Delete

No guide pins defined

Detail height

h:

Duration

Until time
Until closure
During time

During time

Time: 500

Add process step ...
Delete process step

定义拖延过程

FileAddJobCreate

Help

TitleToolsBlankLubeProcessControl

Process step

Name: drawing

Type: Drawing

gravity

closing

drawing

Tool control

ToolsControl modeShow all

dieNon-activeStationaryv = 1Force

punchNon-activeStationaryDispicmntForce

binderNon-activeStationaryDispicmntP = 3

Duration

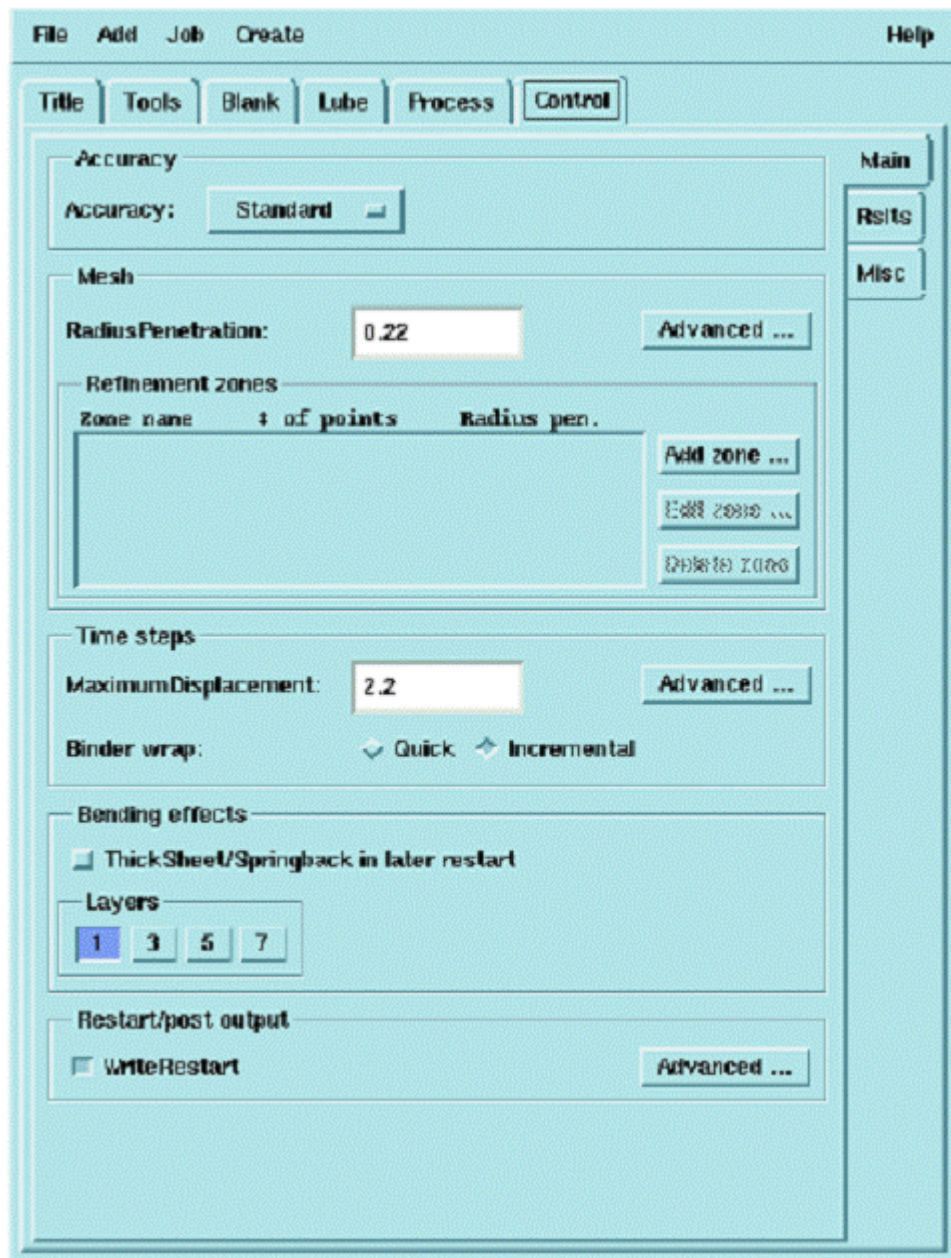
Until timeUntil closureDuring time

During time

Time: 65

Add process step ...Delete process step

控制选项



计算控制选项

accuracy 精度

mesh 网格划分

refinement zone 精化区域

time steps 时间步长

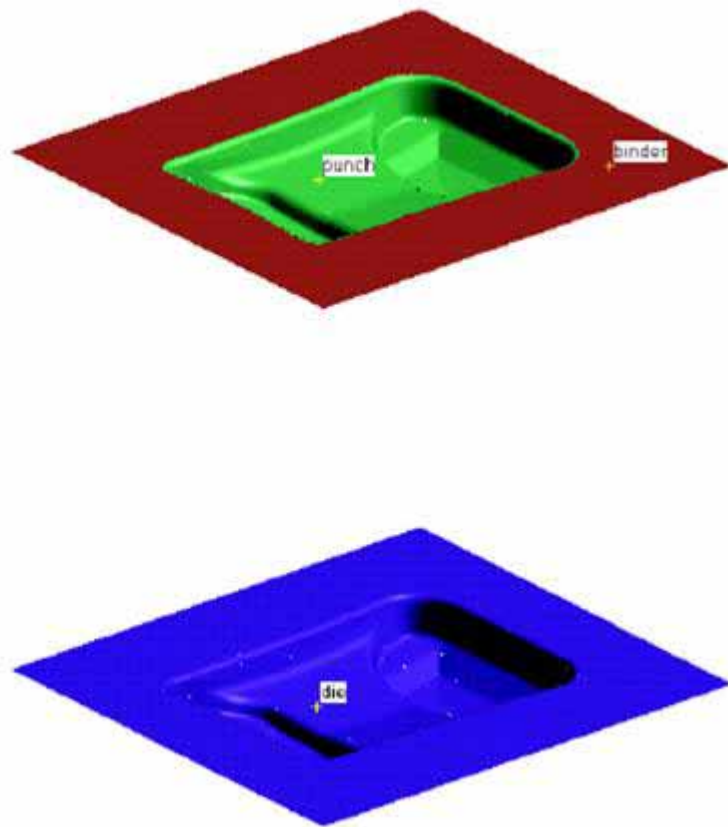
bending effects 折弯效果

think sheet /springback in late restart 厚料或回弹

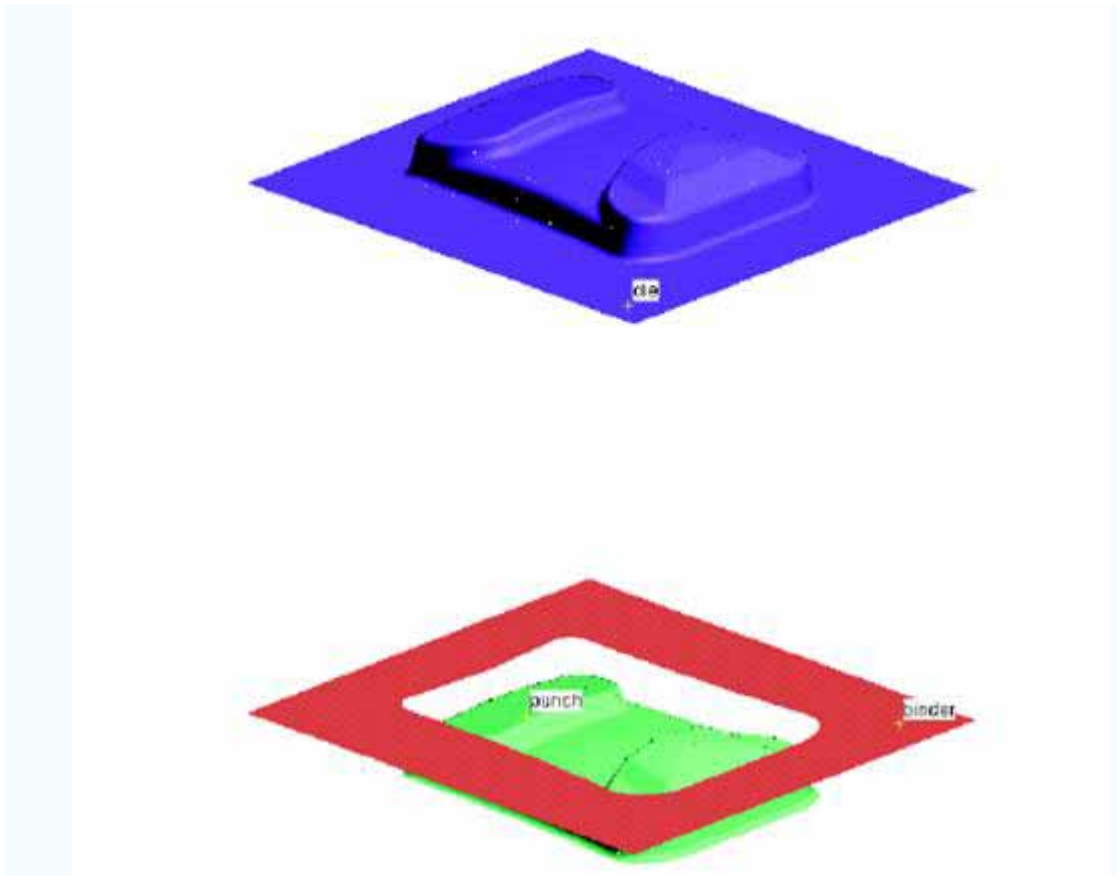
restart/post output 重启动输出

incremental

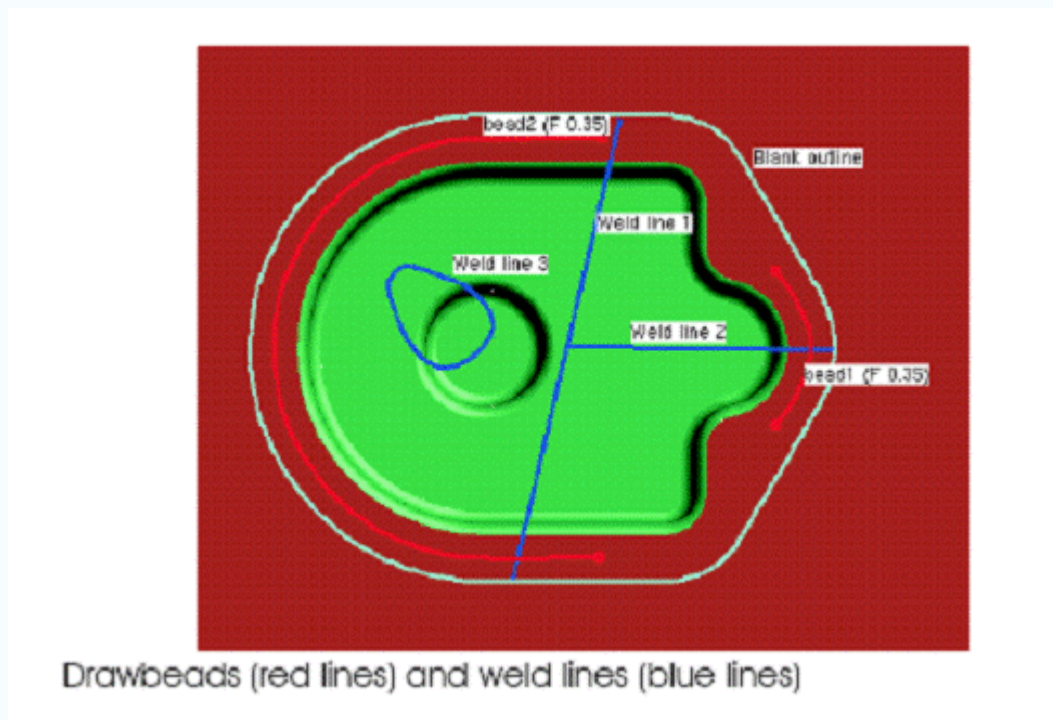
lesson 1 双动拉延



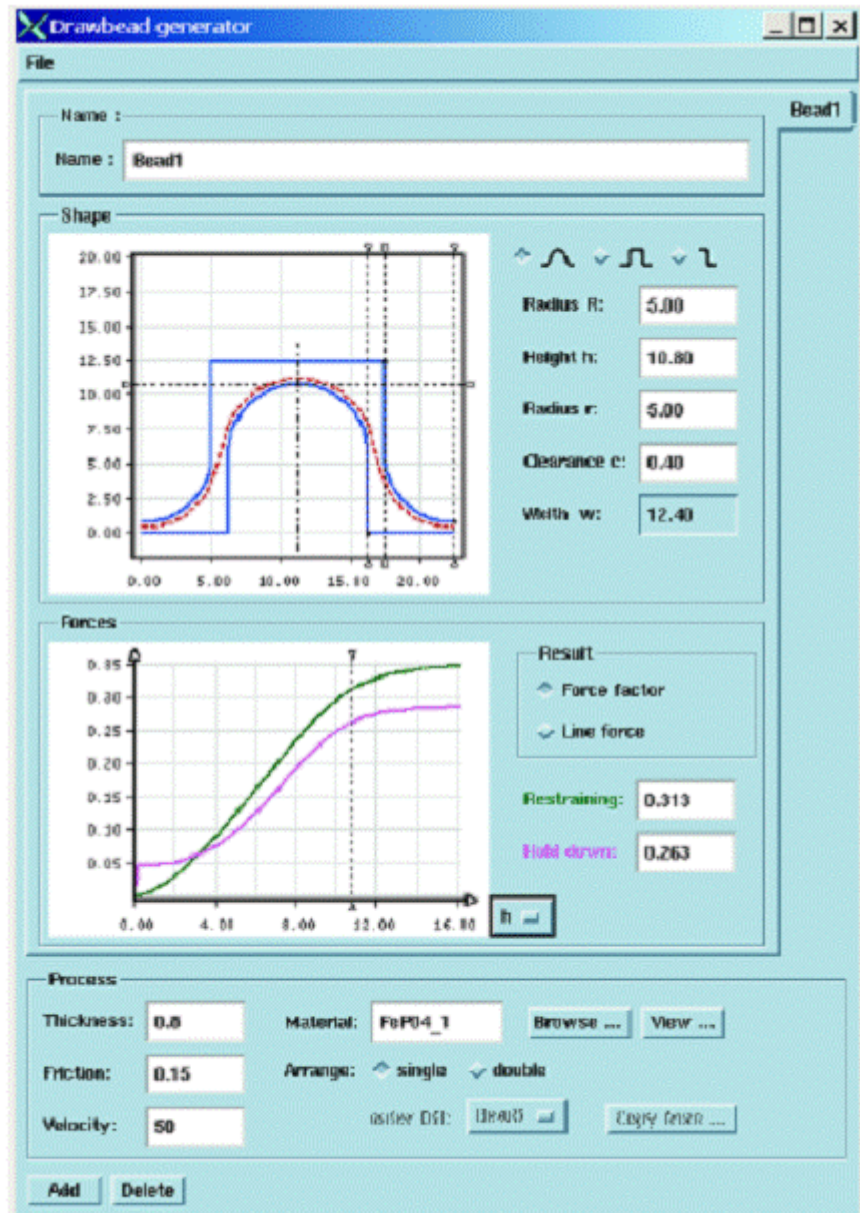
lesson 2 单动拉延



lesson 3 拉延筋和板料裁剪



lesson 4 拉延筋生成器



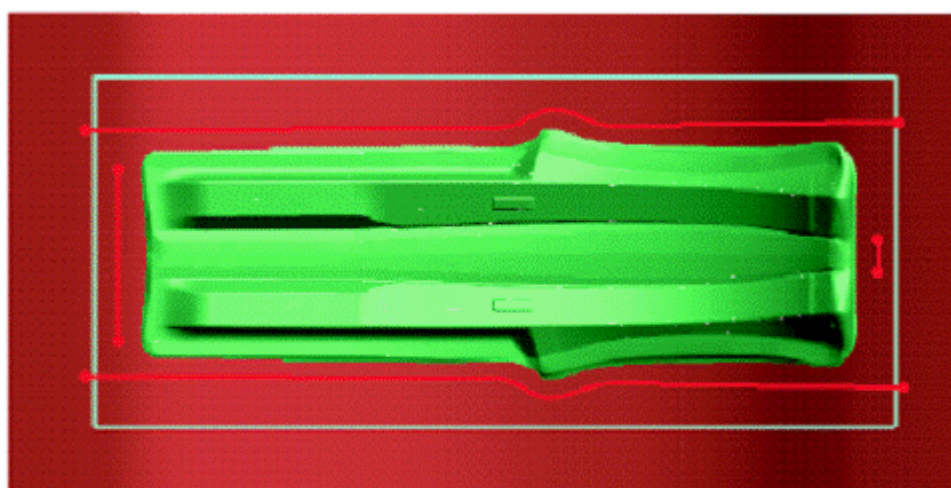
Drawbead generator

Lesson 5 冲压方向和切边



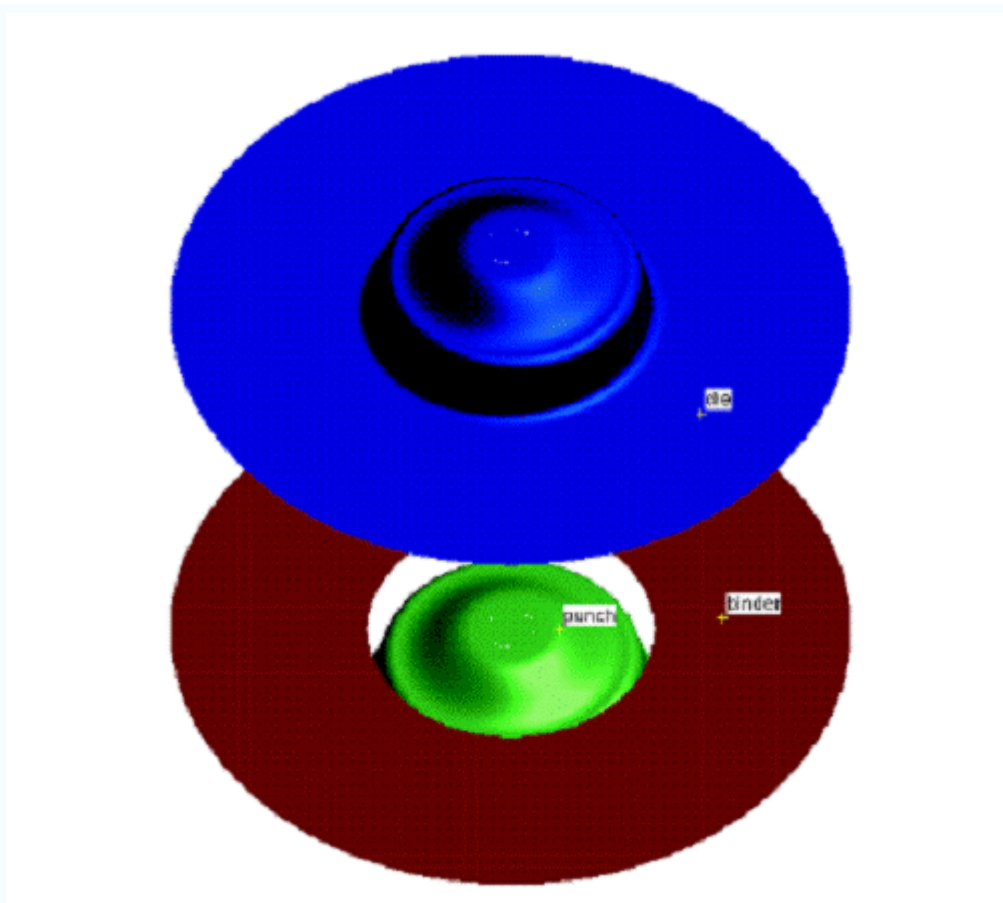
Tool geometry of Lesson 5 with cutting lines

Lesson 6 参数优化

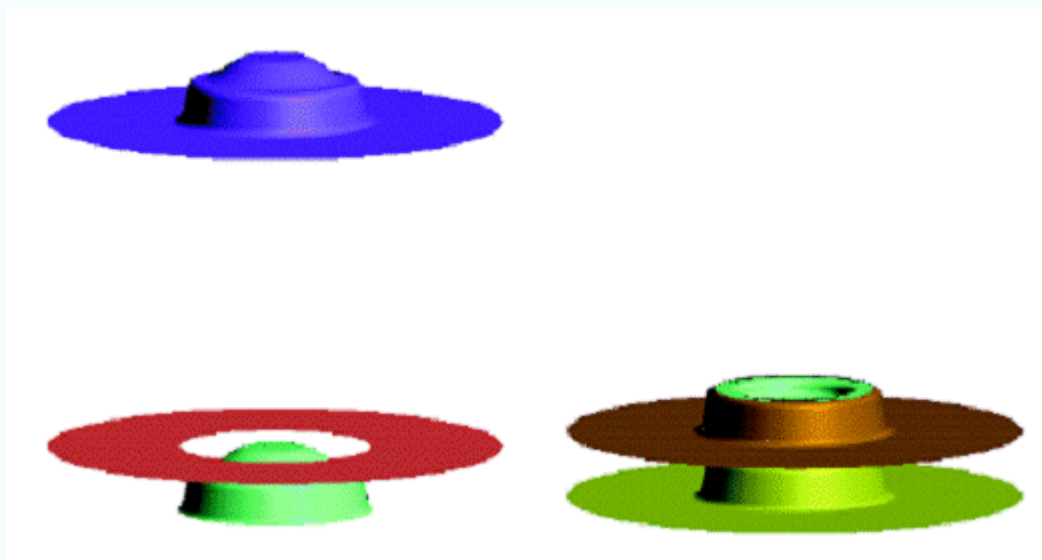


Punch, binder and drawbeads of the optimization example

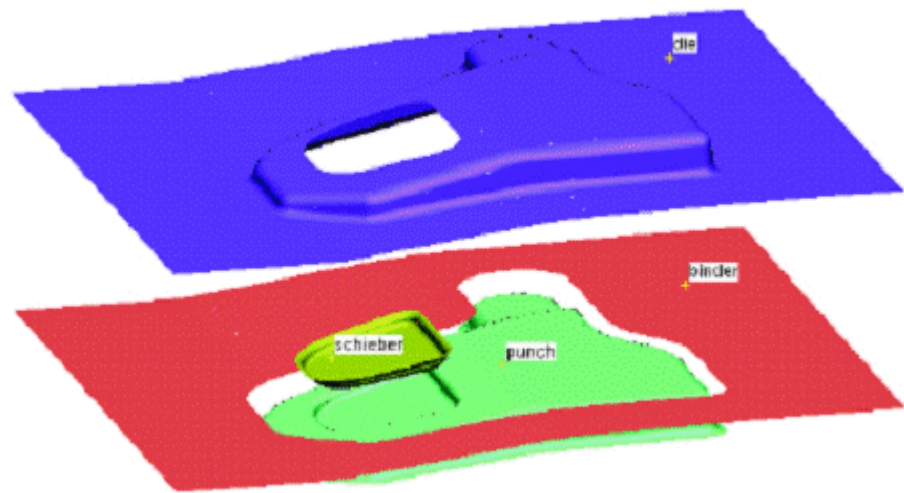
Lesson 7 常半径自动倒角



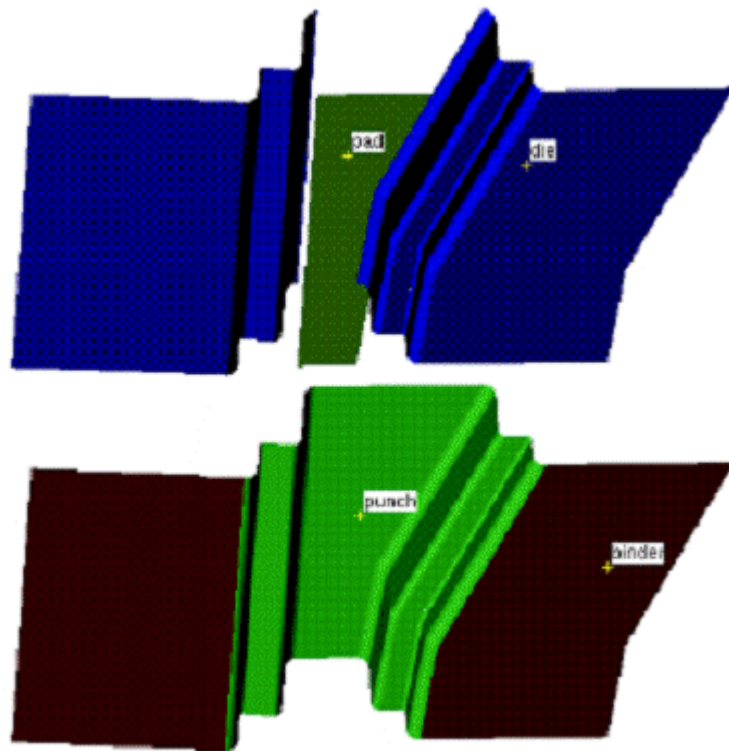
lesson 8 多工位和重启动文件



lesson 9 侧冲工具

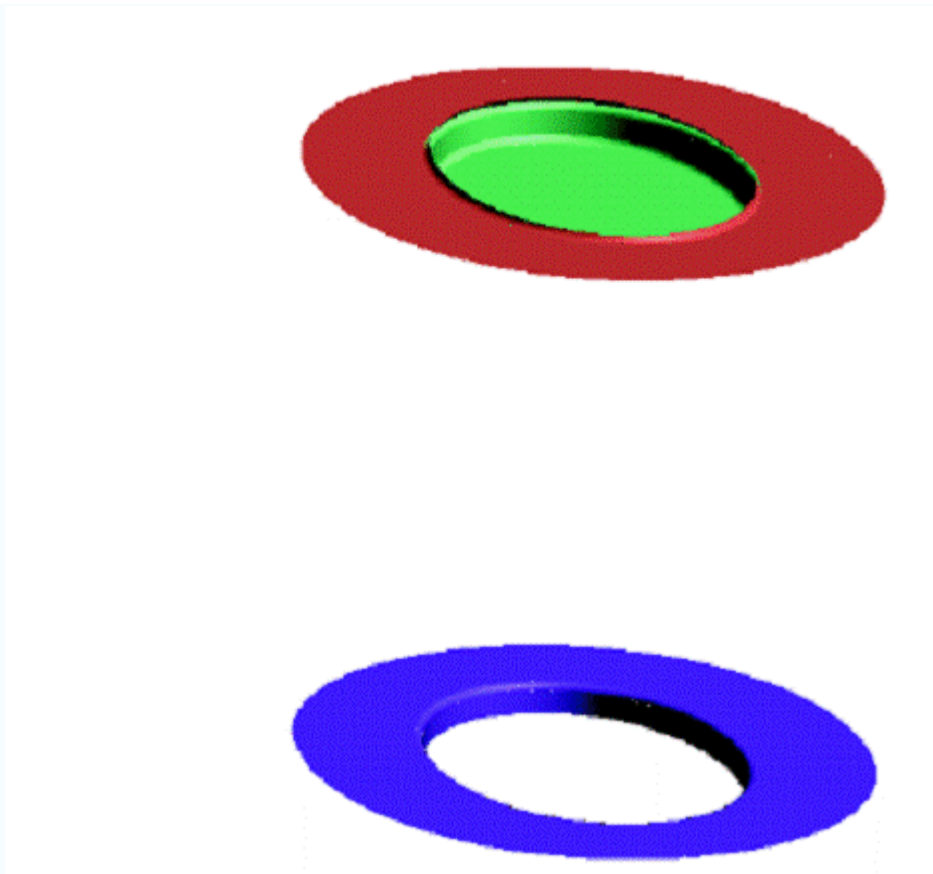


lesson 10 压料板的使用和回弹

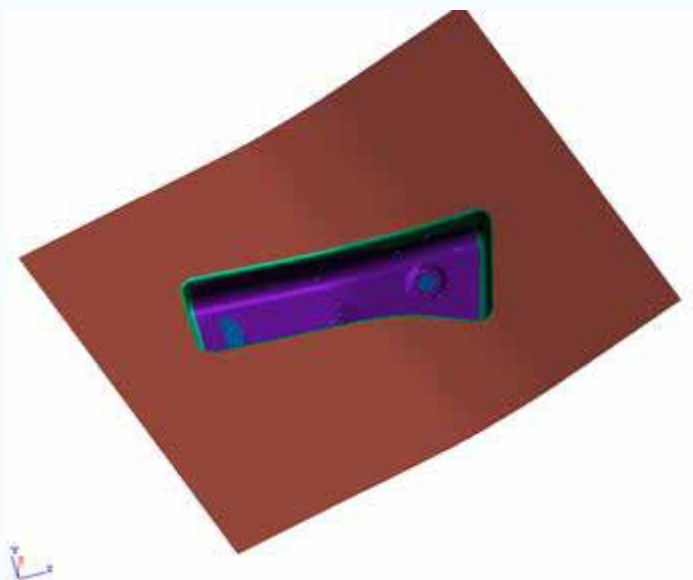


Example for use of a pad

lesson 11 液压成形

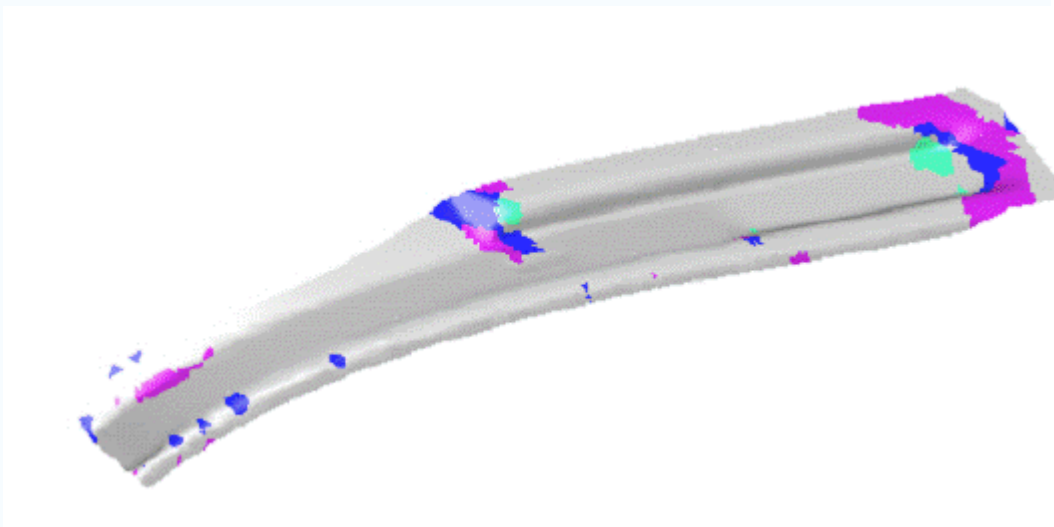


lesson 12 无压边成形

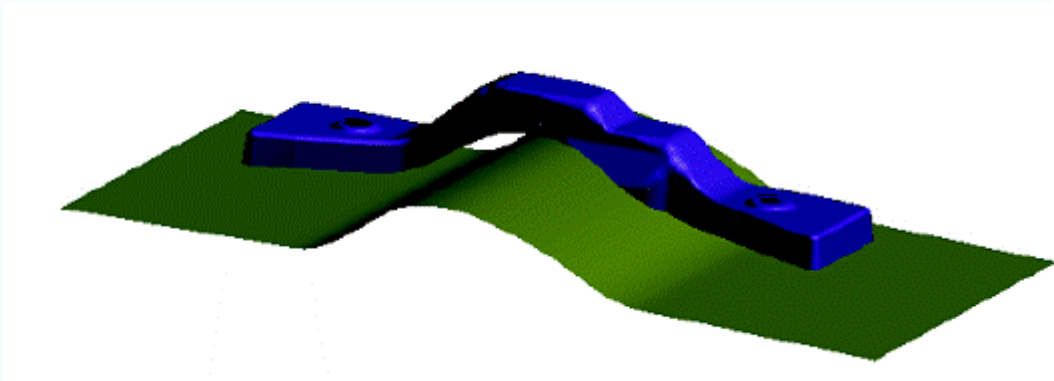


onestep

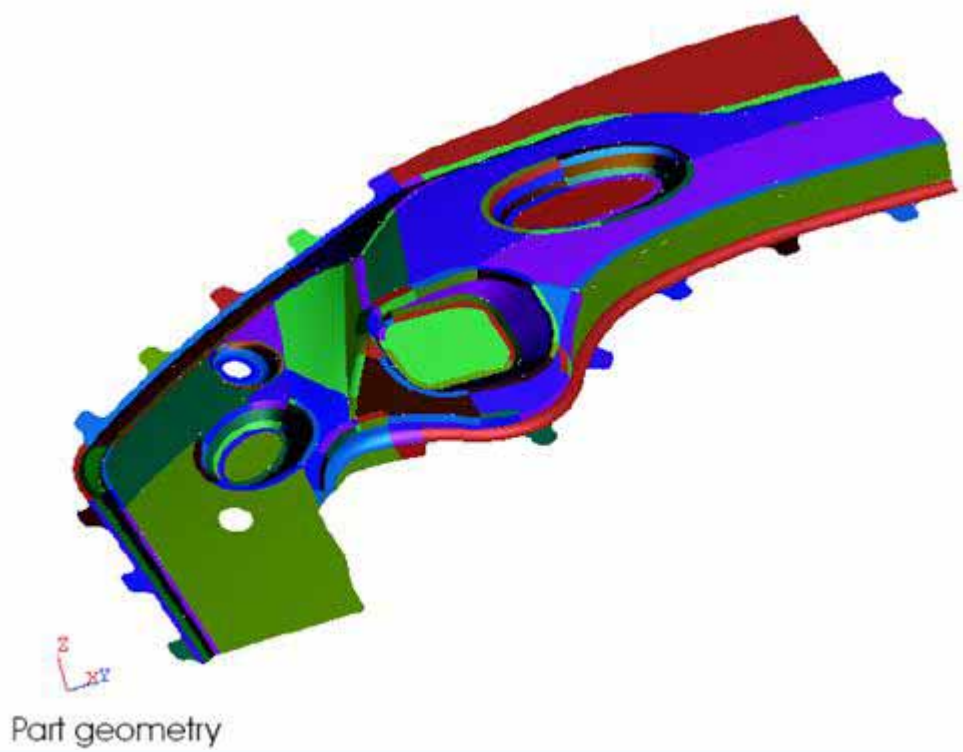
lesson 1 使用向导的单 part 模拟



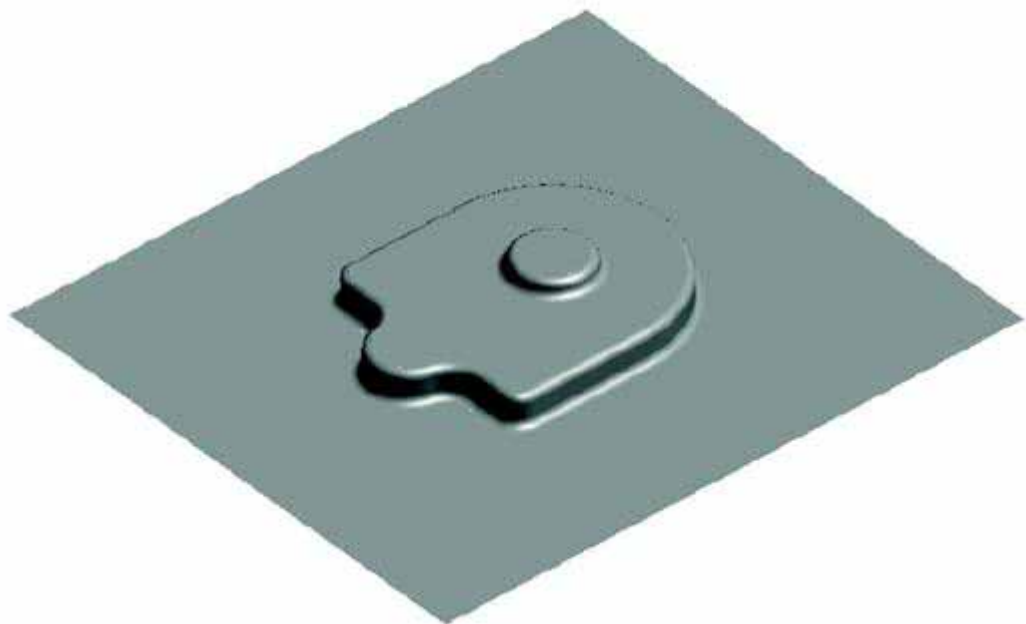
lesson 2 单 part (两步法)



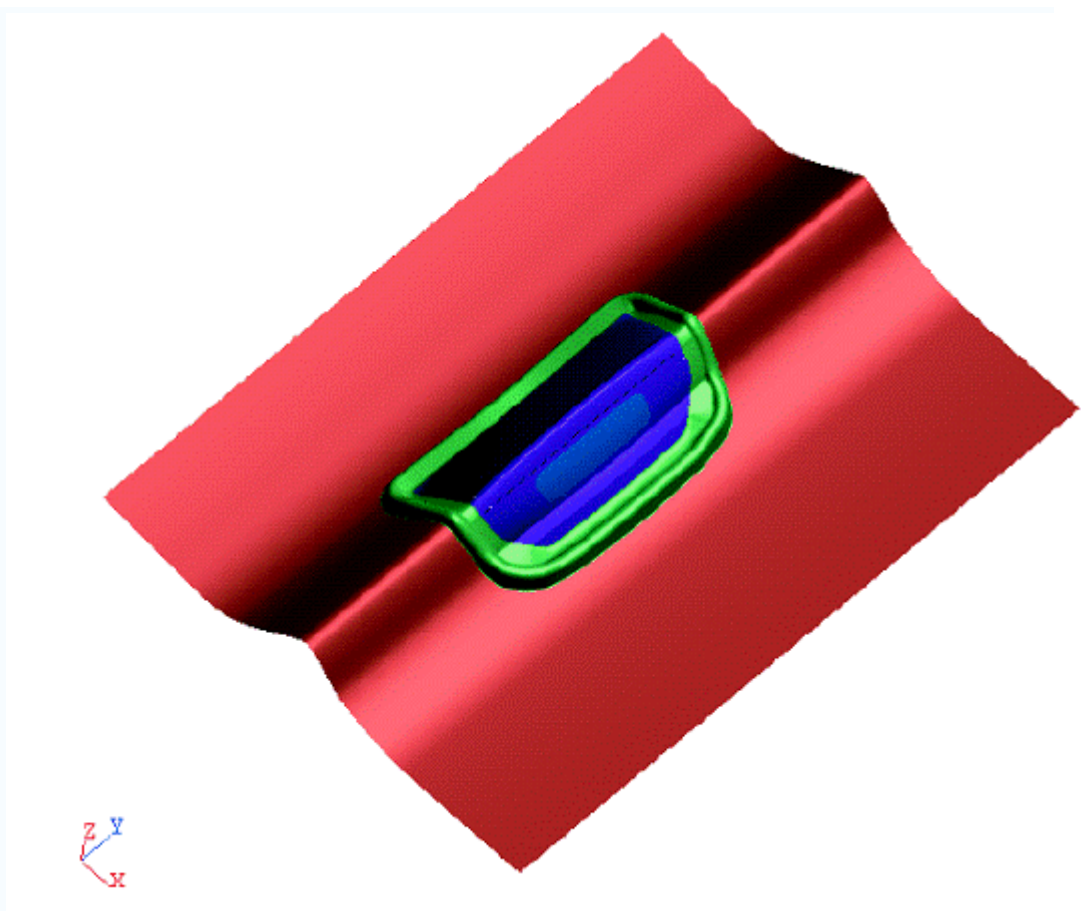
lesson 3 part + binder (两步法)



lesson 4 全工具（一步法）



lesson 5 全工具（两步法）



lesson 6 优化



lesson 7 双件成型



TRIM

lesson 1 优化板料外形

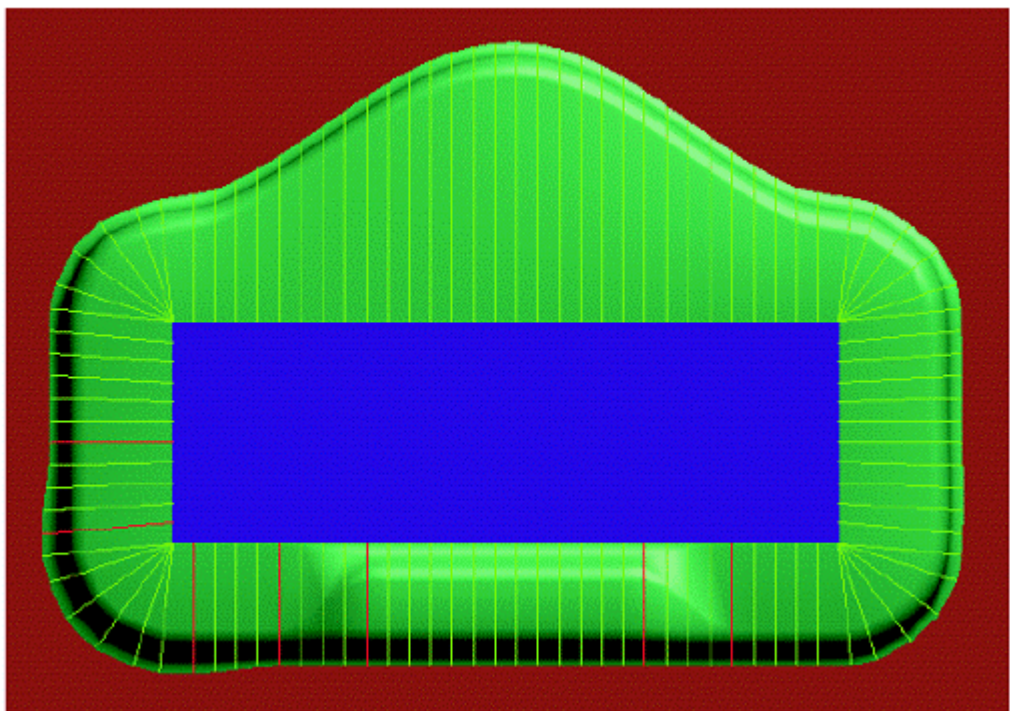


lesson 2 优化切边轮廓

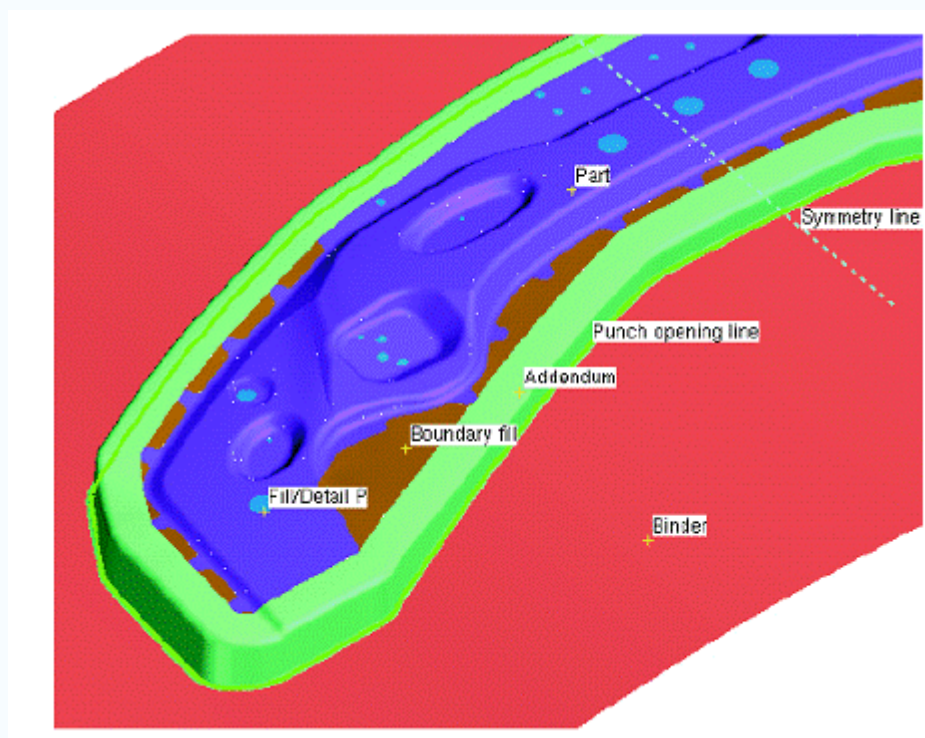


DIEDESIGN

lesson 1 基本功能

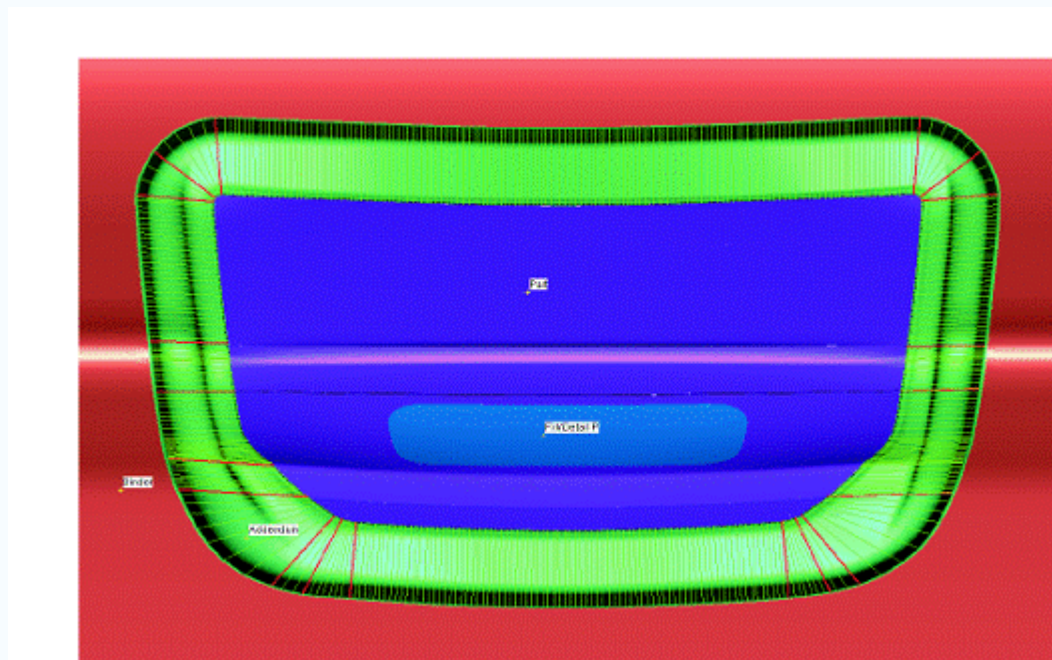


lesson 2 一个简单的模具

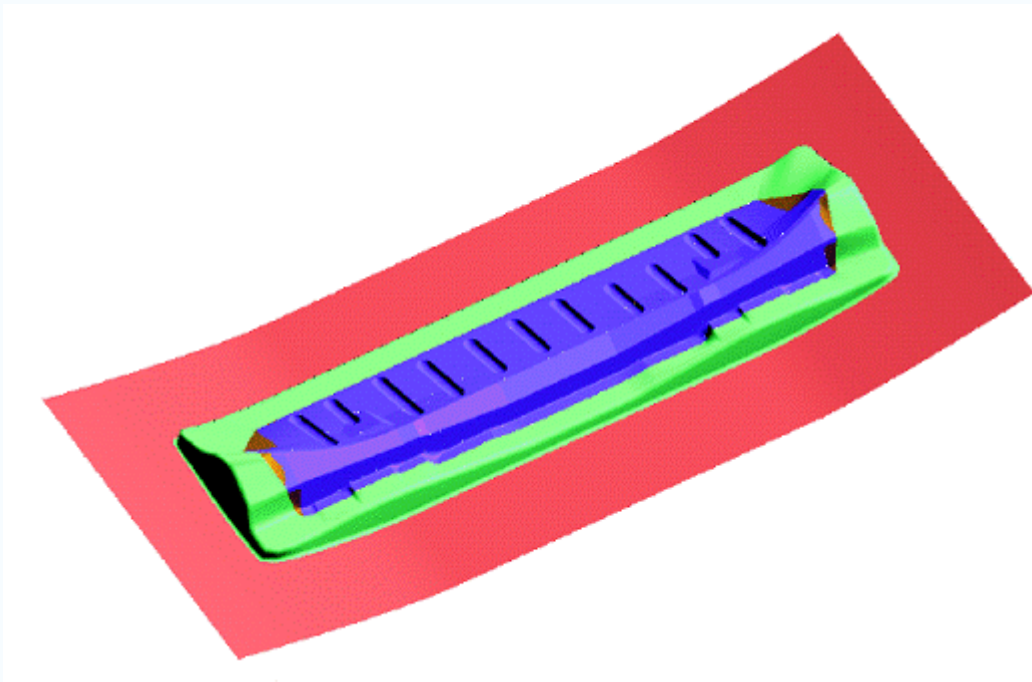


Fig

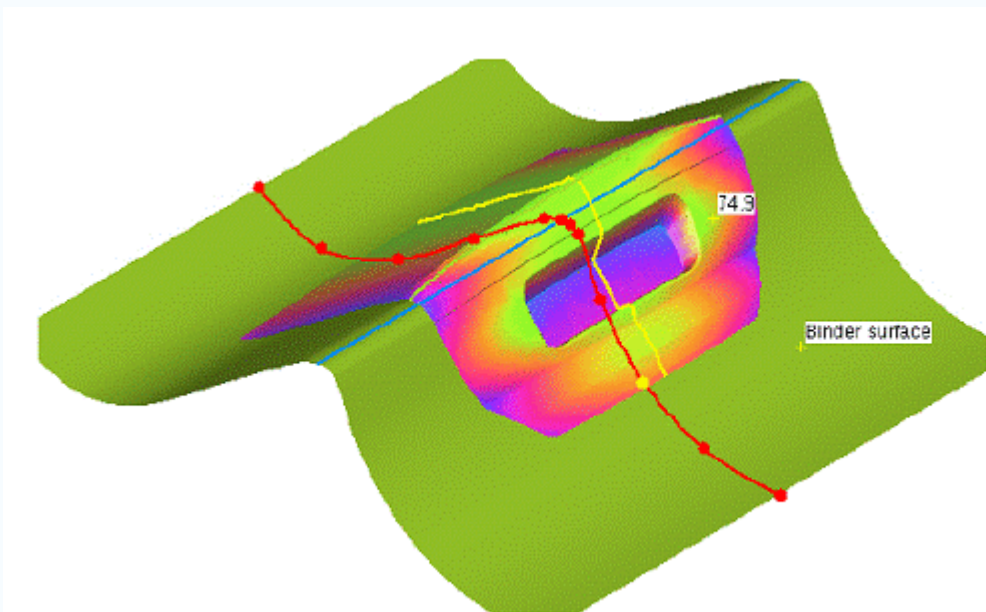
lesson 3 图形方向



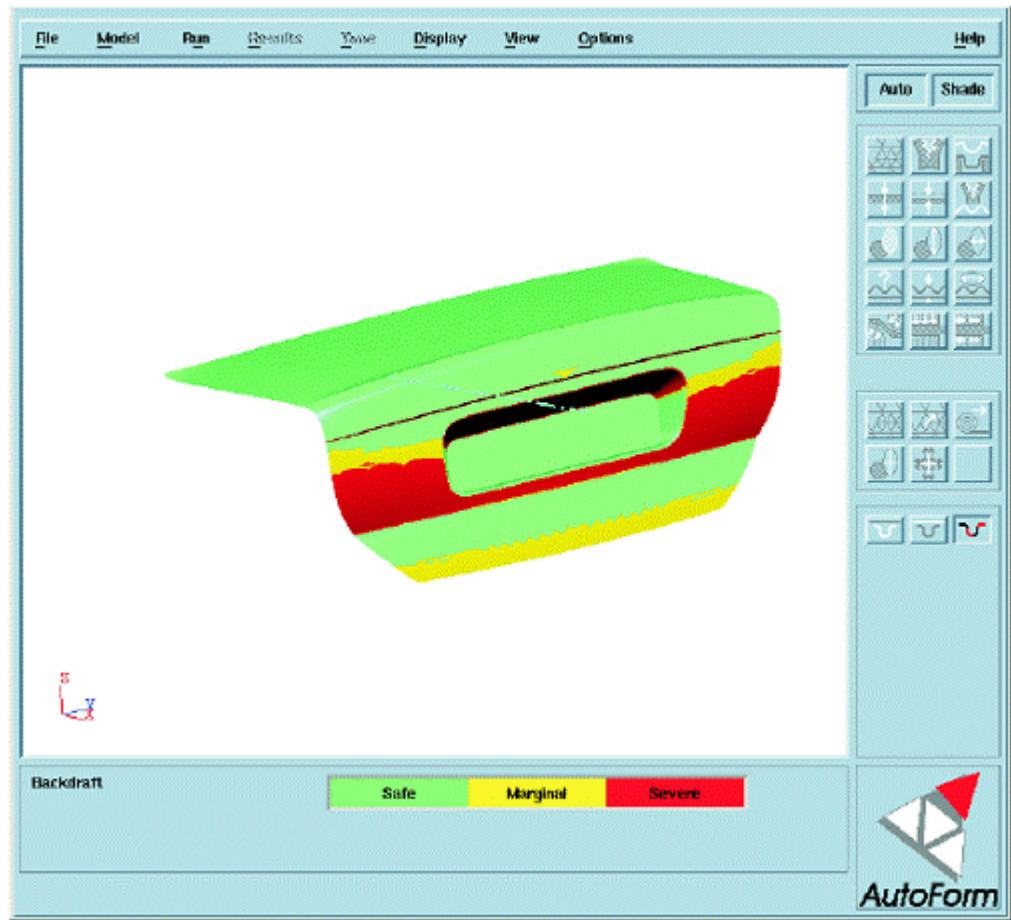
lesson 4 一个深拉延的例子



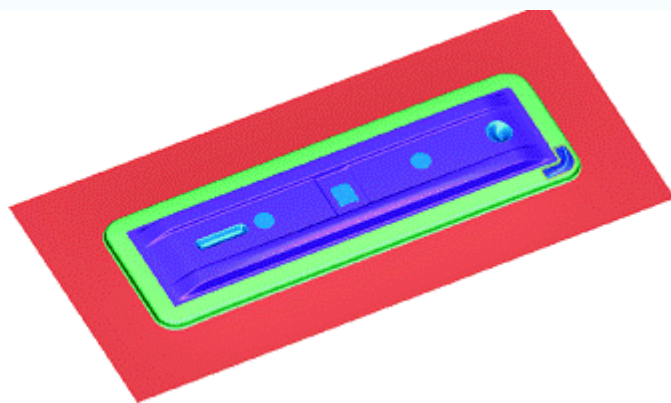
lesson 5 生成压边圈的自动和人工方式



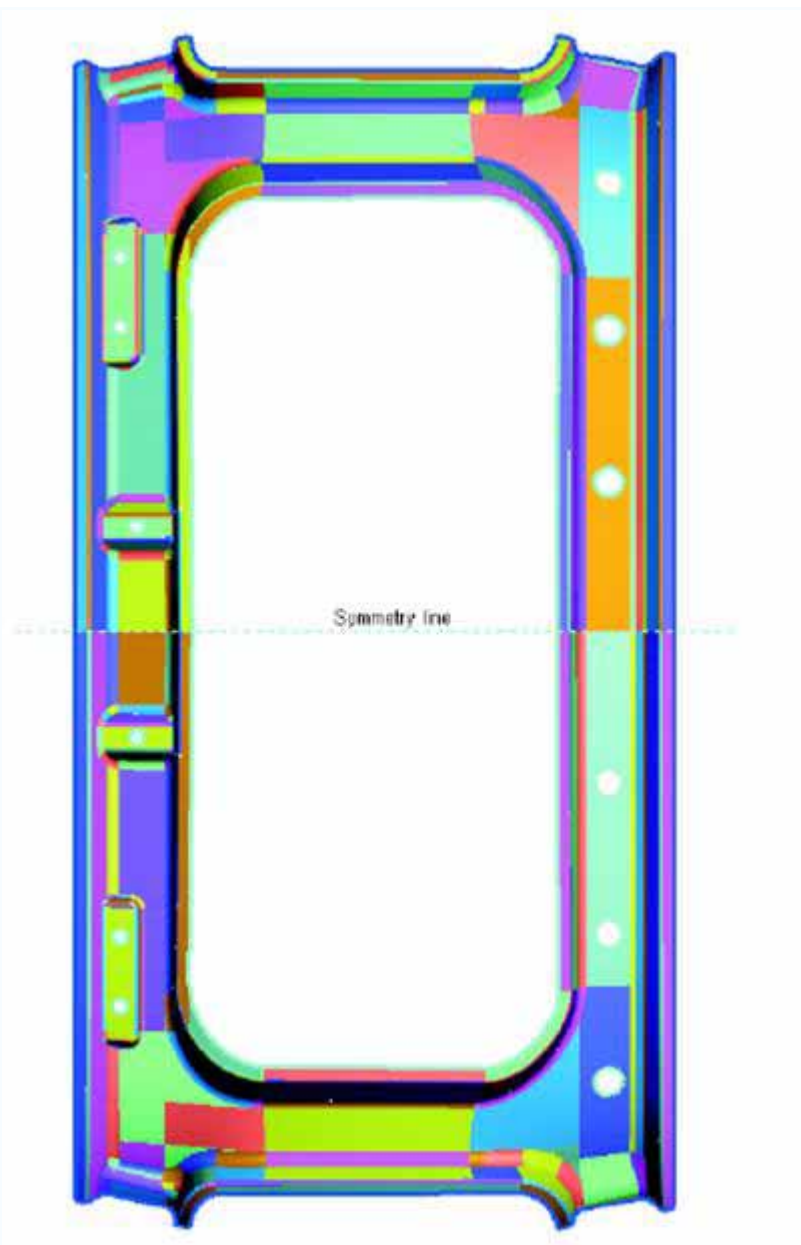
lesson 6 定义拉延方向



lesson 7 修改产品和模具形状



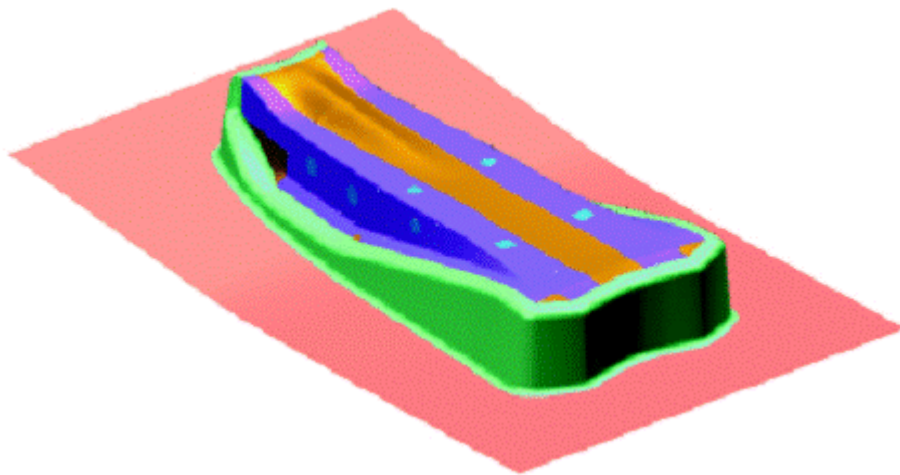
lesson 8 带有内压边和补充的模具



lesson 9 双件成形



lesson 10 双件成形和展开



lesson 11 带翻边的零件

