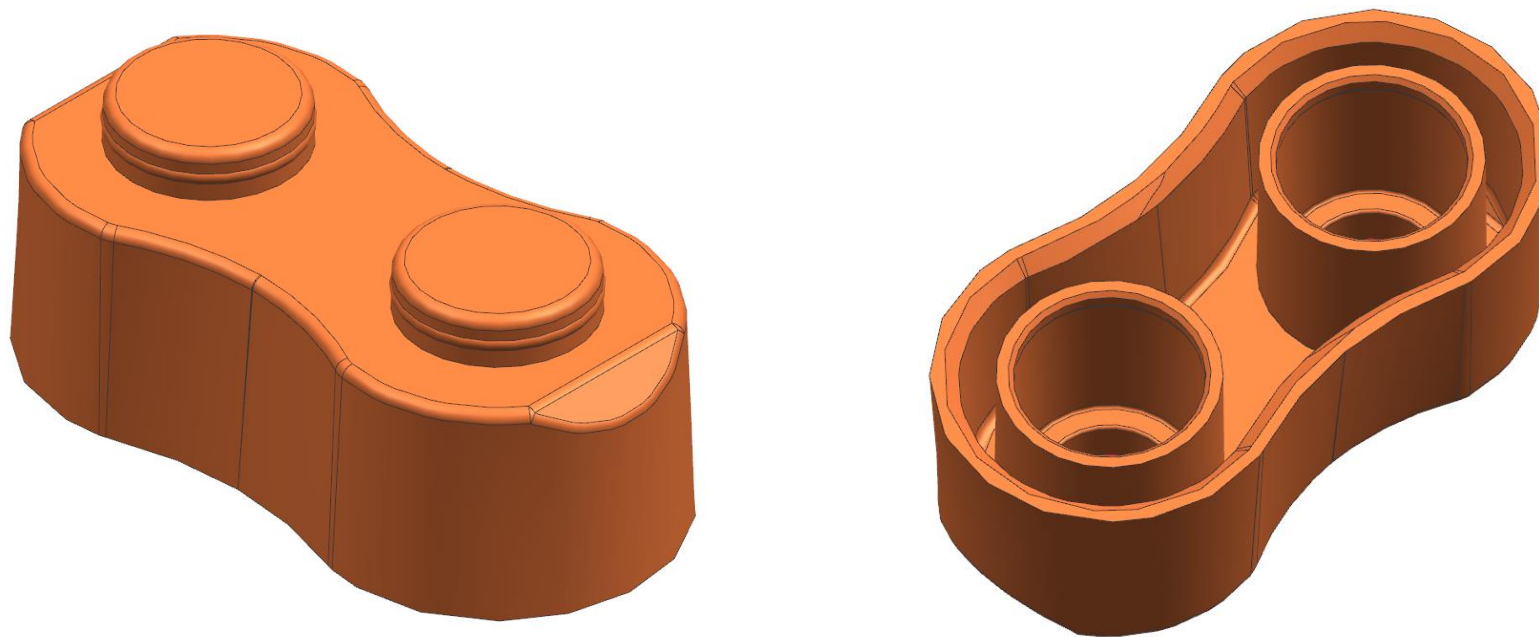


## DFM Report For Mold: JG23053

**GREEN** pages present data created by Jade Molds. **BLUE** pages present information customer has or needs to provide. Customer, please fill in missing information on the **BLUE** customer pages.



Standard block

Please confirm the part name?

## Part File Information

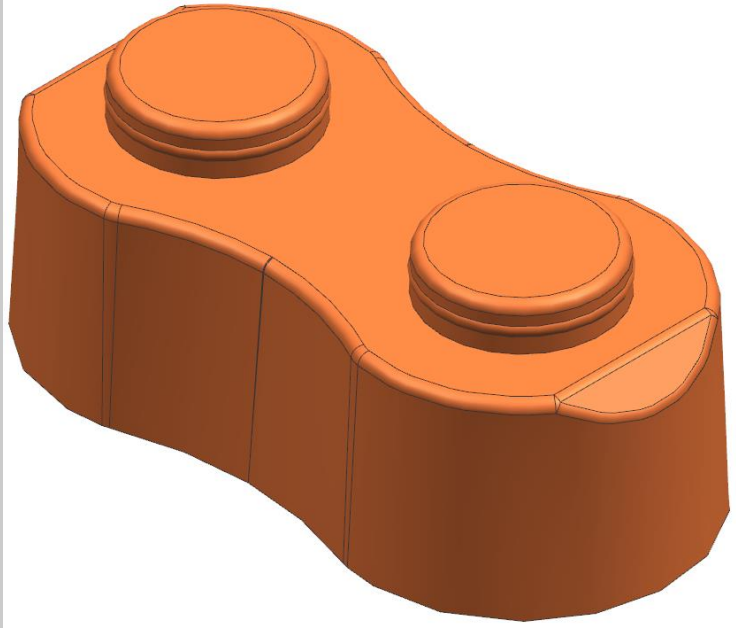
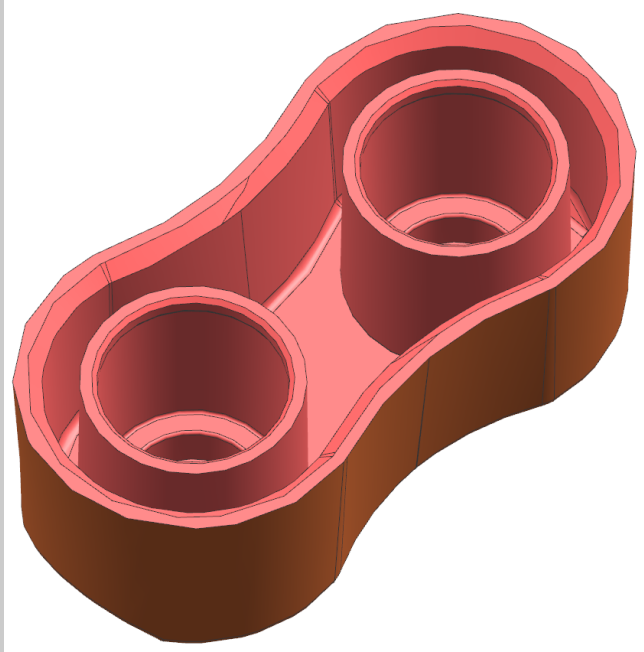
Original Customer provided 3D part file	crazy eight 5-24-23 Pat(1)_20230623.stp	*The name of the customer provided 3D part files goes here
Original Customer provided 2D part file	XXX.pdf	*A 2D print is needed for dimensional checks after sampling of mold. Typically 5-10 dimensions considered critical to fit or function of part
Jade Quote Number (JQ):	JQxxxx	*This helps us find your quote in our system and ensures a smooth launch
PO Number:	xxx	Customer PO for reference

## Material Information

<b>Material</b>	ExxonMobil™ HDPE HMA 016	*Plastic material required. A generic or similar grade that is readily available in China will help streamline the project
<b>Color</b>	Yellow、 Green、 Blue、 Red	*Color you would like to see initial samples. Color additives can affect shrink and other material properties.
<b>Shrink</b>	1.022 in/in (Source: Customer input) .	Specific shrink rate. Molds cannot be built to a shrink “range”
<b>Finish</b>	Core:- Medium Semi-glossy finish B-2 400 Grit Paper Cavity:-Medium Semi-glossy finish B-2 400 Grit Paper	Mold Tech Equivalent is preferred for texture. We also need to confirm adequate draft for release

Press Information		
Target Cycle Time	18 s	In seconds
Press Size (tonnage)	XX	
Tie Bar Clearance (HxV)	XX	
Min Mold Height	XX	
Max Mold Height	XX	
Max Daylight	XX	
Max Ejector Travel	XX	
Barrel Size	XX	
Delete incorrect sample detail(s) below and enter new text for correct details		
Clamp slot height	.875	
Locating Ring Diameter	3.990	
Nozzle Radius	1/2"	
KO Pattern	Center, 7 x 7, 4 x 16	Our presses require at least a center Knock out to sample
KO extension	YES	
KO Threads	½-13	
Water Fittings	300 (.375 ID) series 28mm diameter Counter bore	

## Texture Map

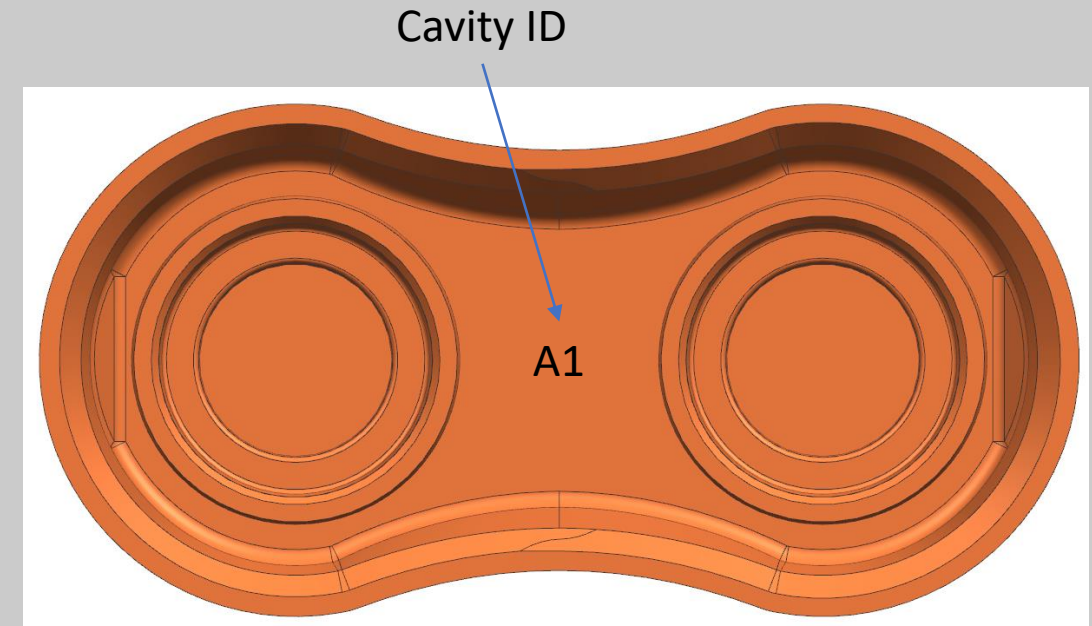
Finish:	Cavity - Medium Semi-glossy finish B-2 400 Grit Paper	Draft Required	Core - Medium Semi-glossy finish B-2 400 Grit Paper	Draft Required
				

## Part Engraving Details

<b>Date Code</b>	If Date Code is Required put catalog number of the Date Code here (example "DMDP06-22"). If not required leave blank	<b>Recycle Code</b>	Put Recycle Code here (example HDPE2 or triangle symbol). If not required leave blank
<b>Part Number/Rev</b>	Put part number "Text" here (example "PN800-4329 R3"). Part number can be solid or inserted. Rev level will be inserted on a core pin	<b>Cavity ID</b>	A1,A2,A3,A4.....A32

Please put a screen shot of the highlighted surface where the Date Code, Part Number, Recycle Code and Core ID is located.

If it is not required, remove note above. Use 1 picture only unless Core and Cavity locations are required

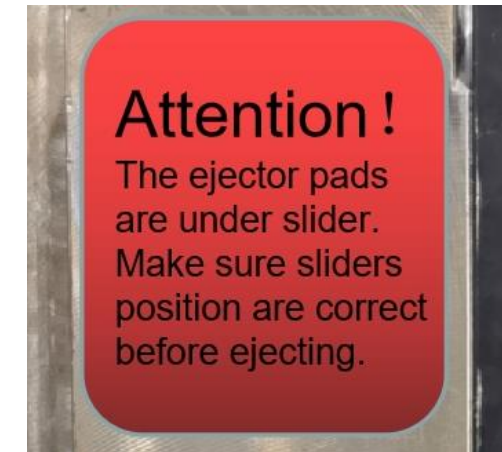
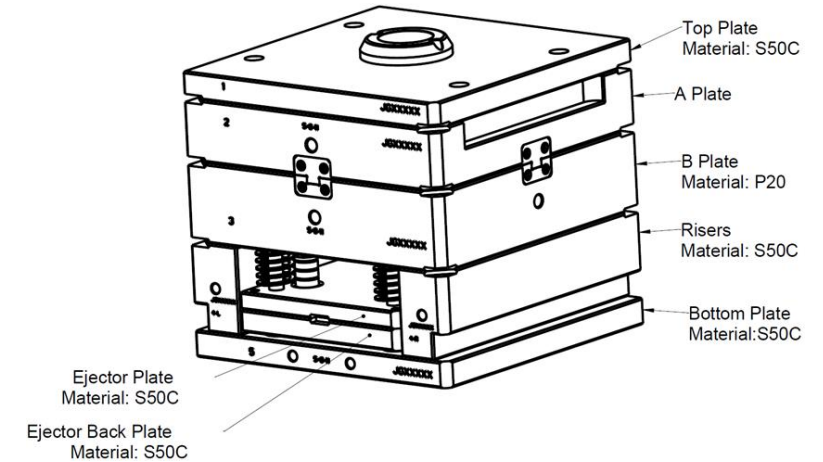


We want to make sure we get your outside mold text labelling right. Please fill in labels below with the exact text you want on your mold. Leaving labels blank below is OK, we just won't put it on. The choice is yours.

## Mold Text Labels

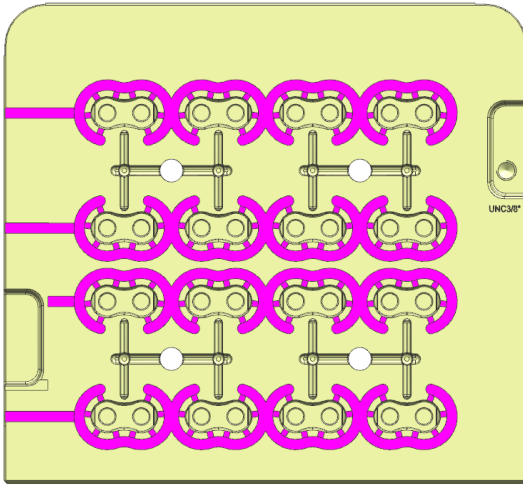
<b>Part Name:</b>	Standard block	This information will be engraved directly into the steel on your mold. Any fields left blank here will not be engraved
<b>Part Number:</b>	XXXX	
<b>EJ Stroke:</b>	Engrave on tool (in inches)	
<b>Mold Weight:</b>	Total Weight(in Pounds){ B side weight (in Pounds); A side weight (in Pounds)}	
<b>Year:</b>	2023	
<b>Mold Builder:</b>	JADE GROUP	
<b>JADE Mold Number:</b>	JG23053	

- ❑ Current 3D Model : See Page 2
- ❑ Current 2D File : See Page 2
- ❑ Cavities Qty : 32
- ❑ Mold Class : 103
- ❑ Mold Number : JG23053
- ❑ Runner System : Hot runner into cold runner sub gate
- ❑ Mold Construction : 2 Plate Mold
- ❑ Steel : Inserted or In Solid
- ❑ Cavity : H13 48-50 Rc Hardness
- ❑ Core : H13 48-50 Rc Hardness
- ❑ Stripper Plate : H13 42-44 Rc Hardness
- ❑ Mold base steel : S50C
- ❑ Mold Features : Parting Locks, Pry bar slots, Safety Strap, Shot Counter

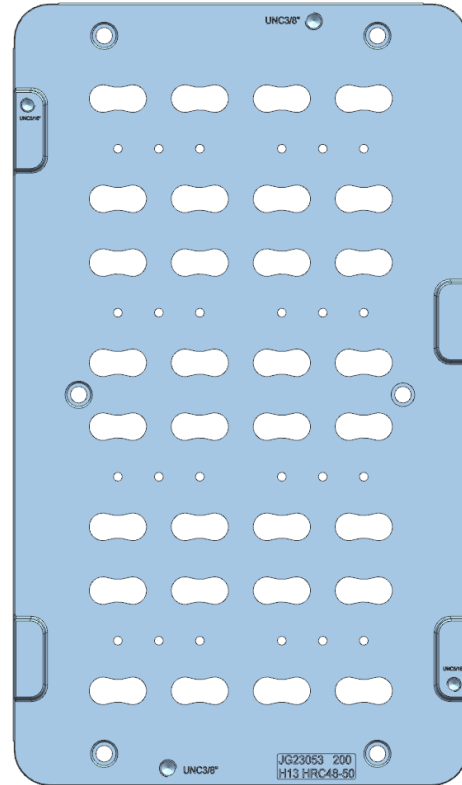


Is a warning plaque required due to special mold functions?

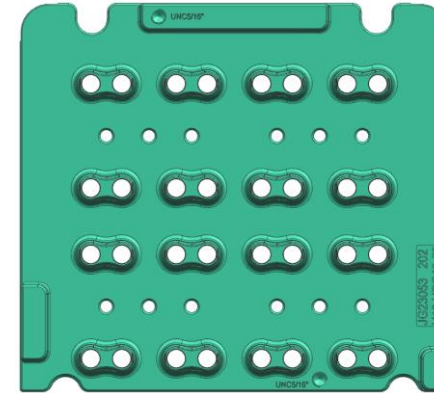




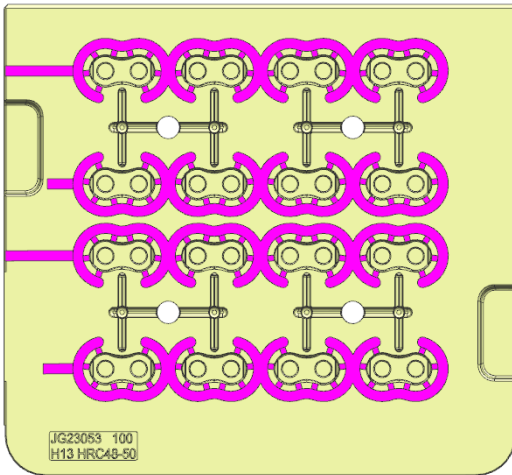
Cavity Insert(101)



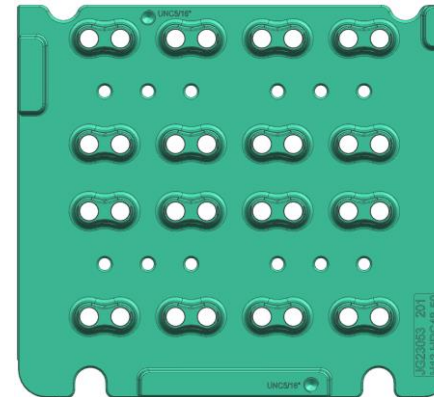
Stripper plate



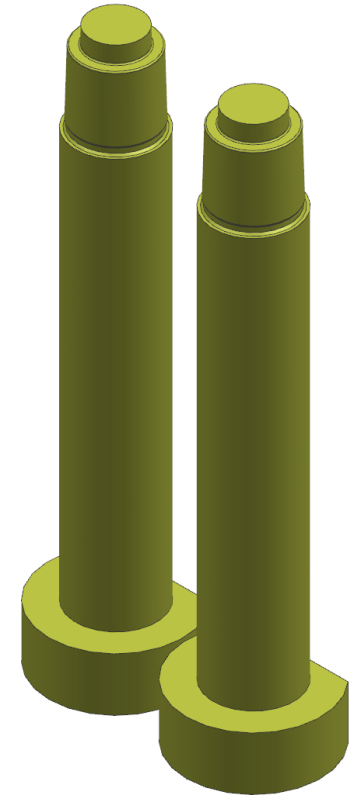
Core Insert(202)



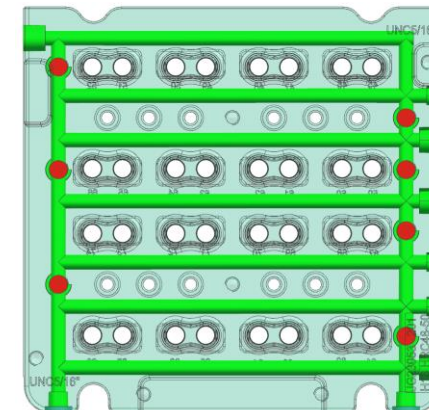
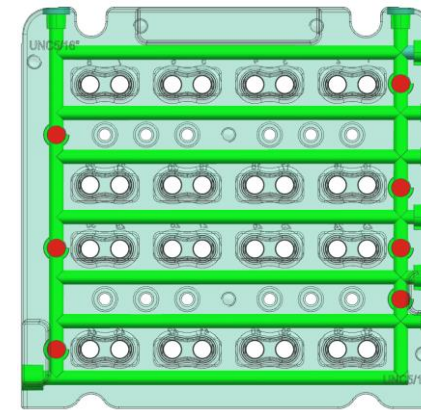
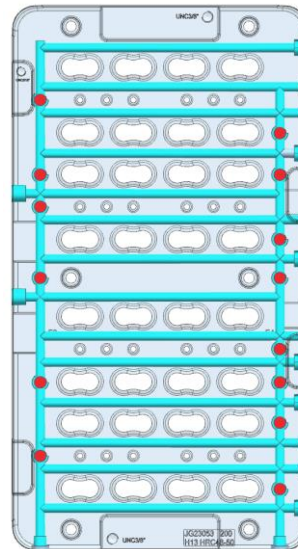
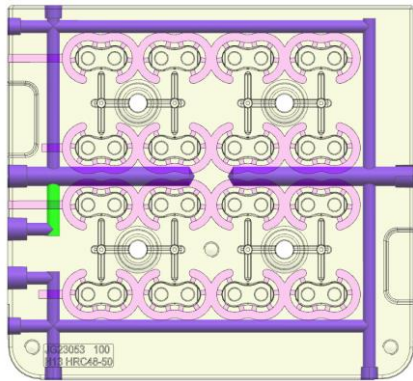
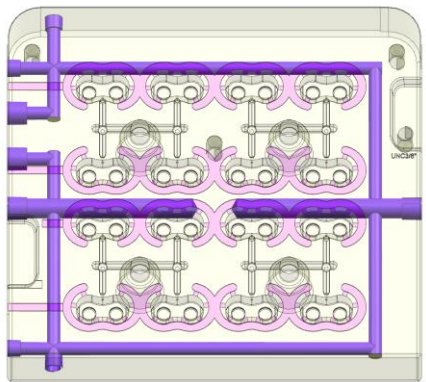
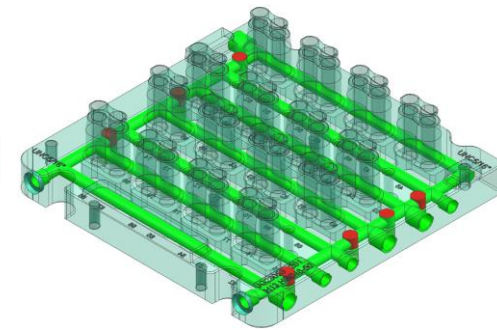
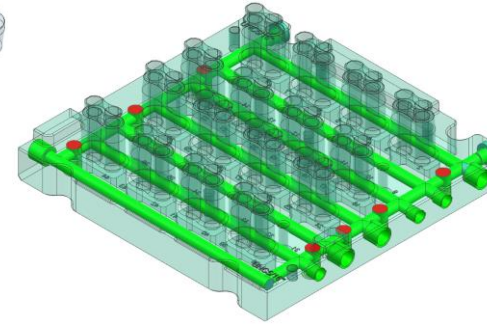
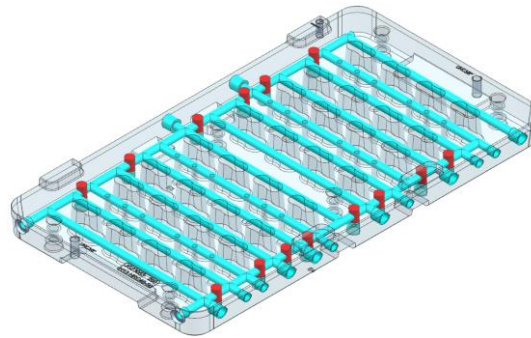
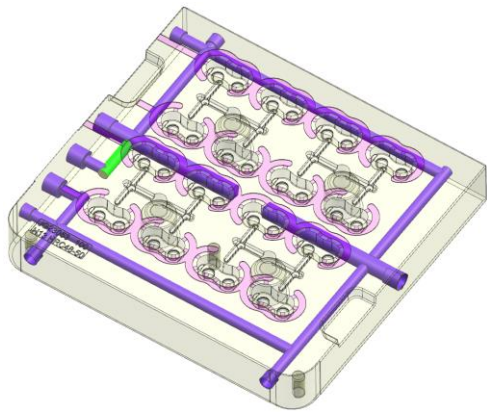
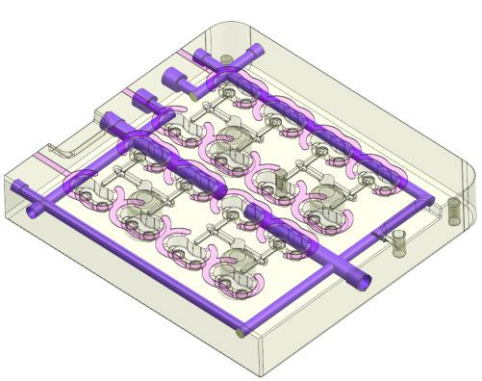
Cavity Insert (100)



Core Insert(201)



Floating Core  
Sub pins



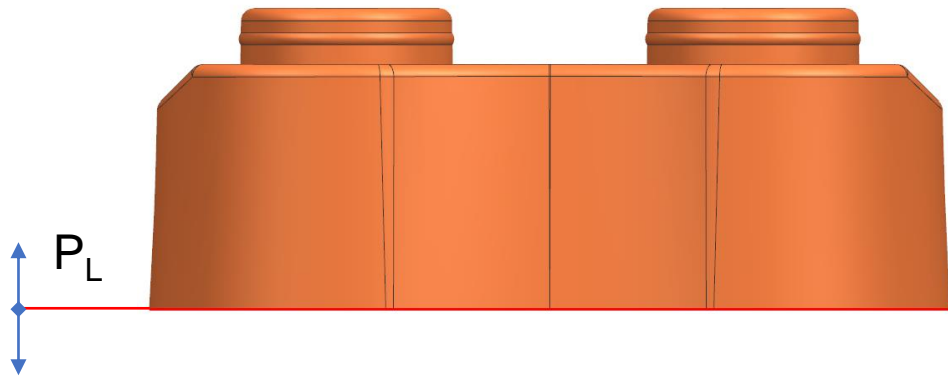
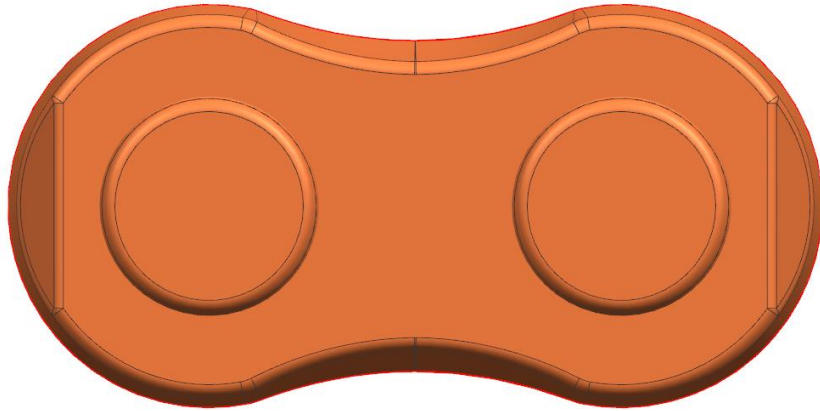
Cavity Insert(101)

Cavity Insert (100)

Stripper plate

Core Insert(202)

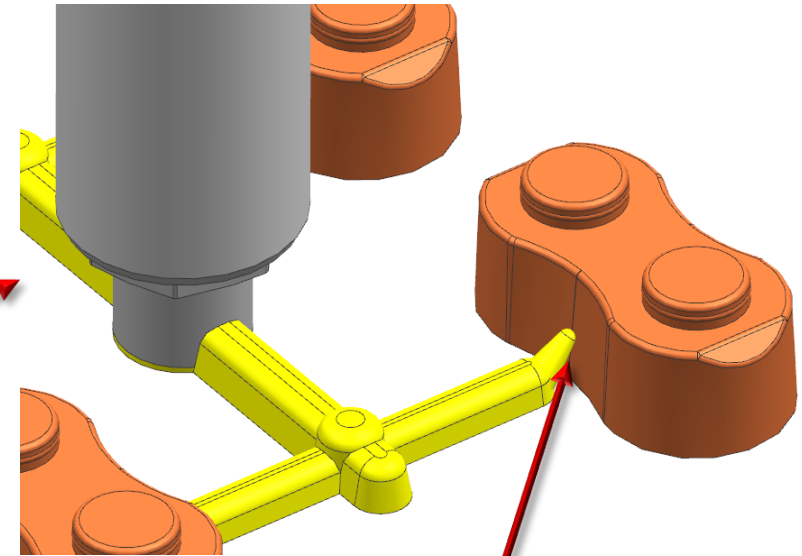
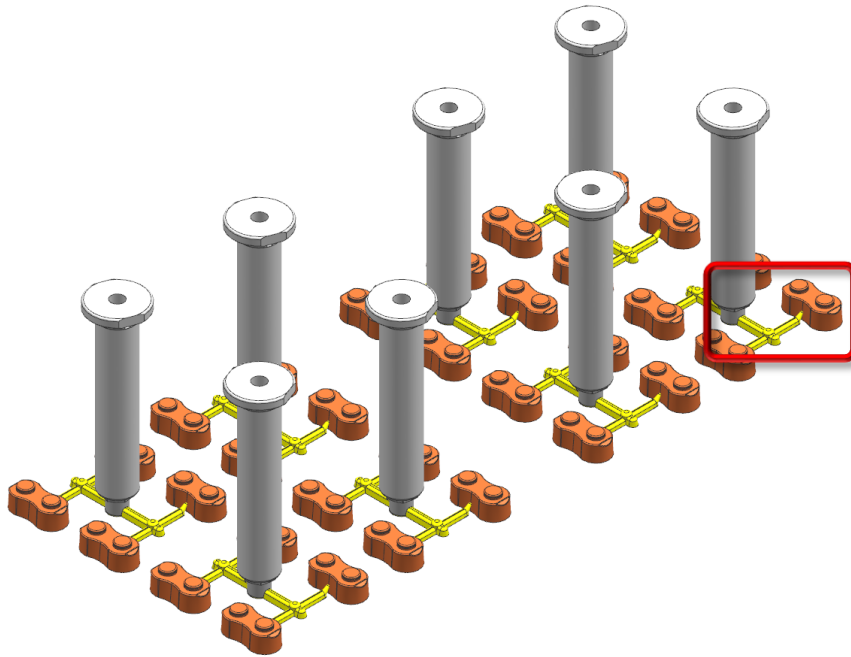
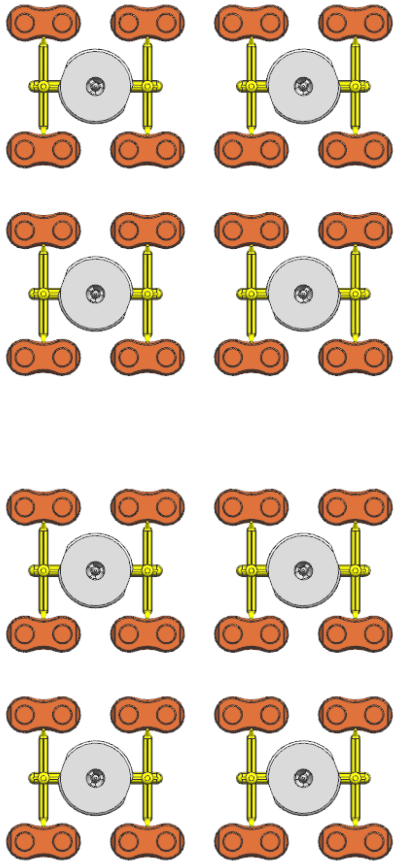
Core Insert(201)



Parting Line Highlighted in Red

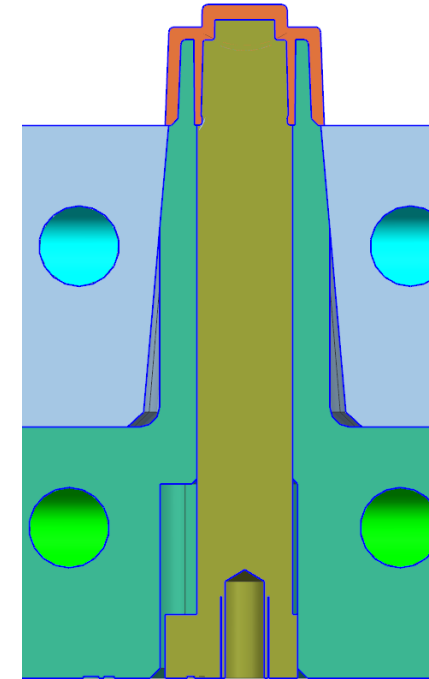
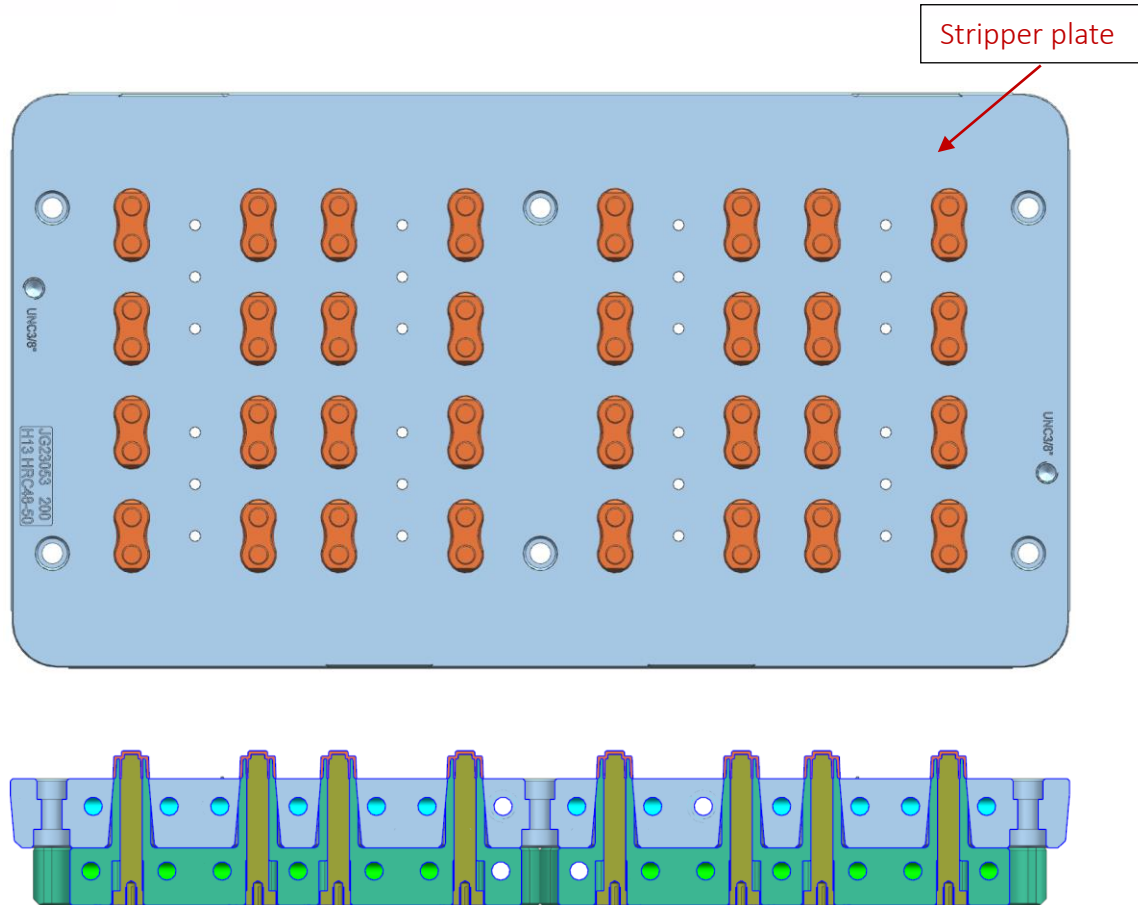


Runner Type: Hot Runner  
Number of Gates per Part: 1  
Type of gate: Direct Gate



1X Direct gate /part  
Gate opening Ø1.2mm

Gate mark (vestige) can form a visual imperfection on the part



Floating Core Pins

Core pins will be spring loaded. They will move along with stripper plate and stop after 8mm of ejection and stripper will continue forward and eject the part.

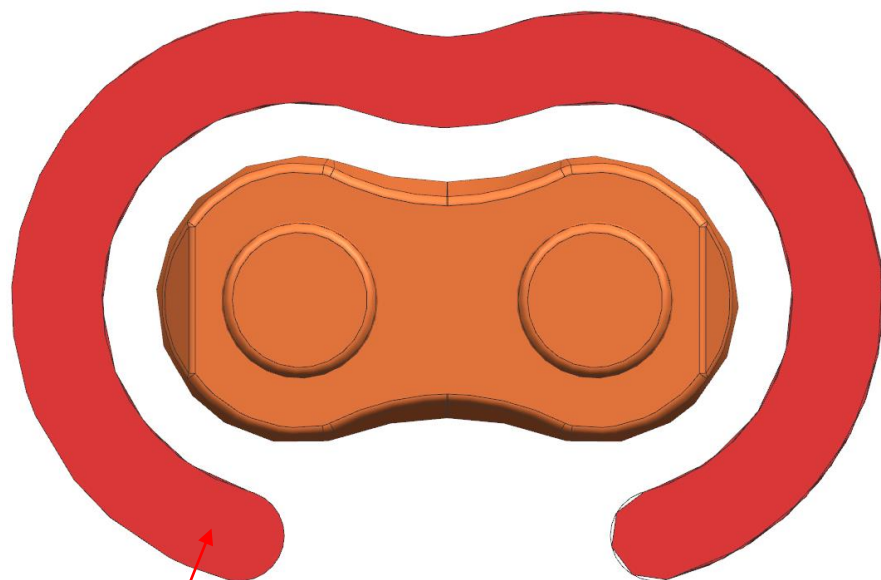


Ejector Direction

Jade Ejector system standards include  
Guided Ejection, Support Pillars, Spring Return, Tied In Knock Outs

## VENTING SYSTEM

Venting system in the mold is required to avoid air traps in mold cavity.

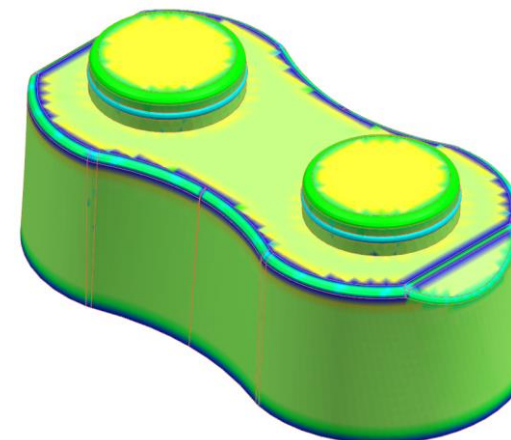


Venting

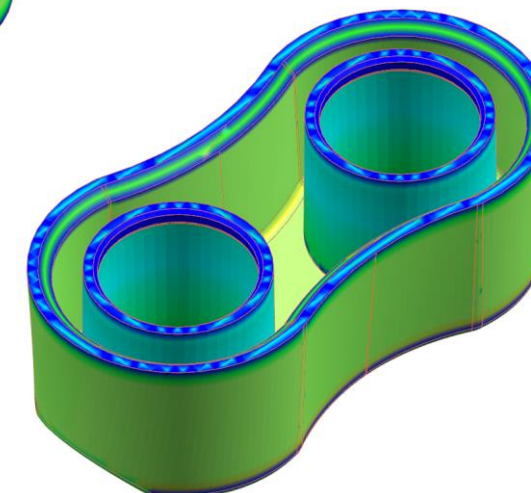
In the above part, due to the melt fill, the air traps are coming in the weld line areas and end of fill areas. To avoid short fill in the EOF areas we used perimeter venting and Air poppets in this part.

## WALL THICKNESS ANALYSIS

Wall thickness variation should be within tolerance limit, so it will allow smooth filling of the mold, otherwise, a sink mark may be observed.

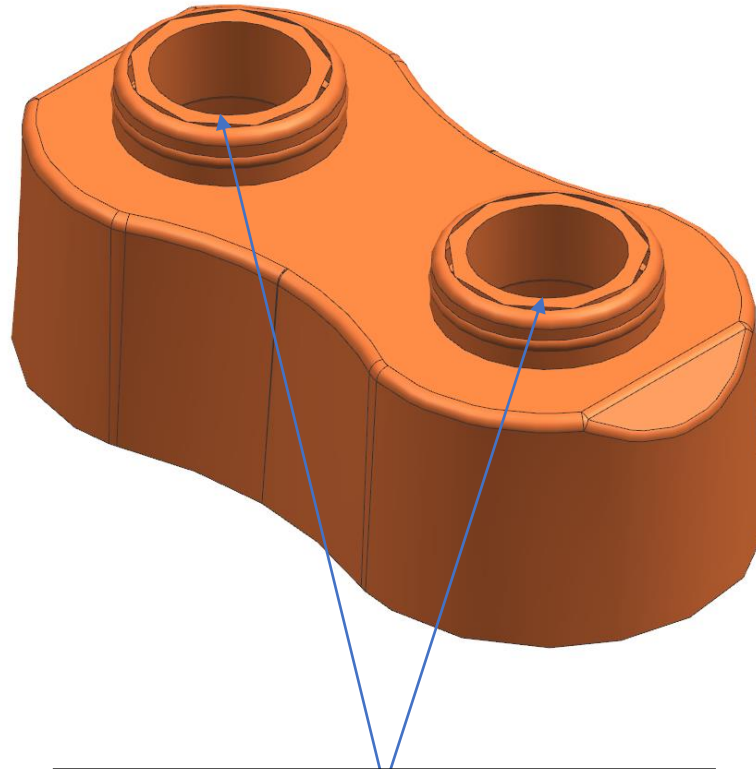


Minimum : 0.67mm  
Maximum : 1.62mm  
Average : 1.01mm



Areas noted above (fig A) is a thicker wall section. These areas are prone to hesitation during fill, sink and warp





Please confirm if we need to make 2 versions. V1 without hole, V2 with hole.

3D File Name:-Standard block-JADE-REV00-11July2023

It is certified that the above-mentioned DFM for mold is checked and approved for 3D Mold Design in all respects.

Sign:

Date:



*We look forward to discussing this engineering report with you soon so we can adjust as needed and move forward to mold design. Reach out to [craig.nelson@jademolds.com](mailto:craig.nelson@jademolds.com) to discuss.*

