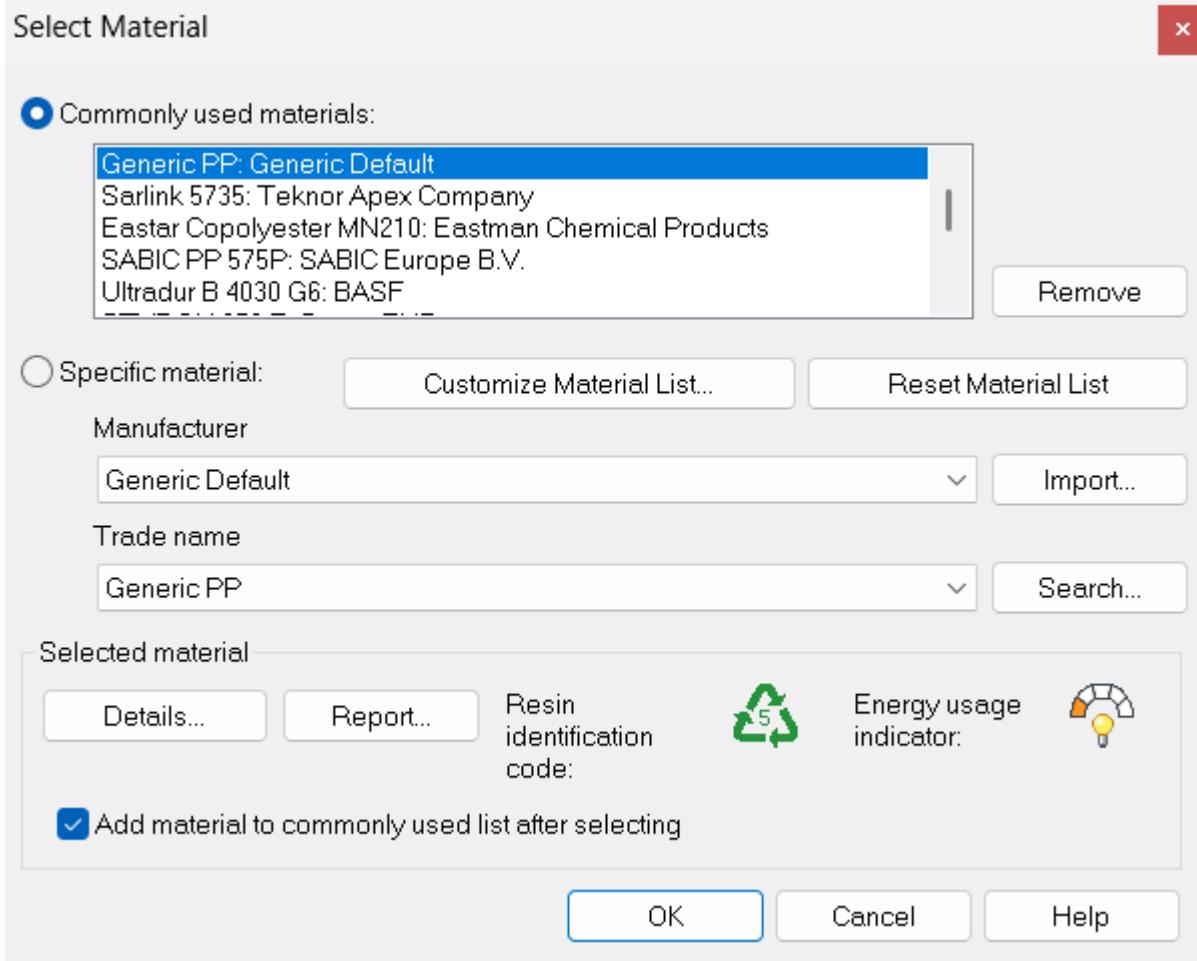


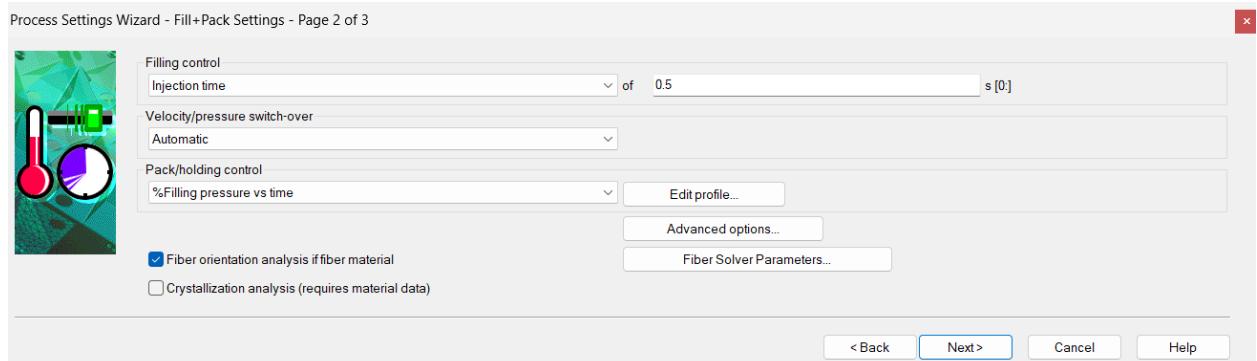
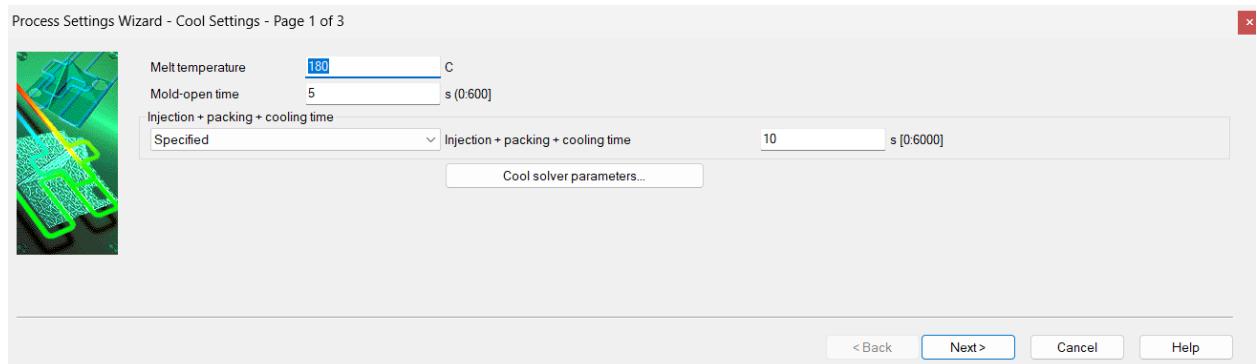
# BASE

## 1. Material used and their recommended values



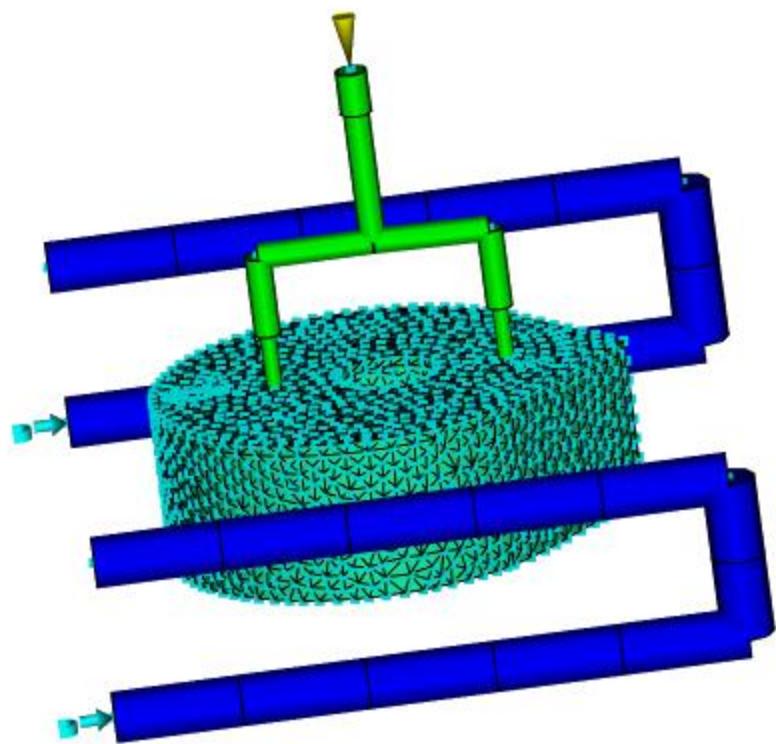
## 2. Good mesh(NO ERRORS)

## 3. Changes made



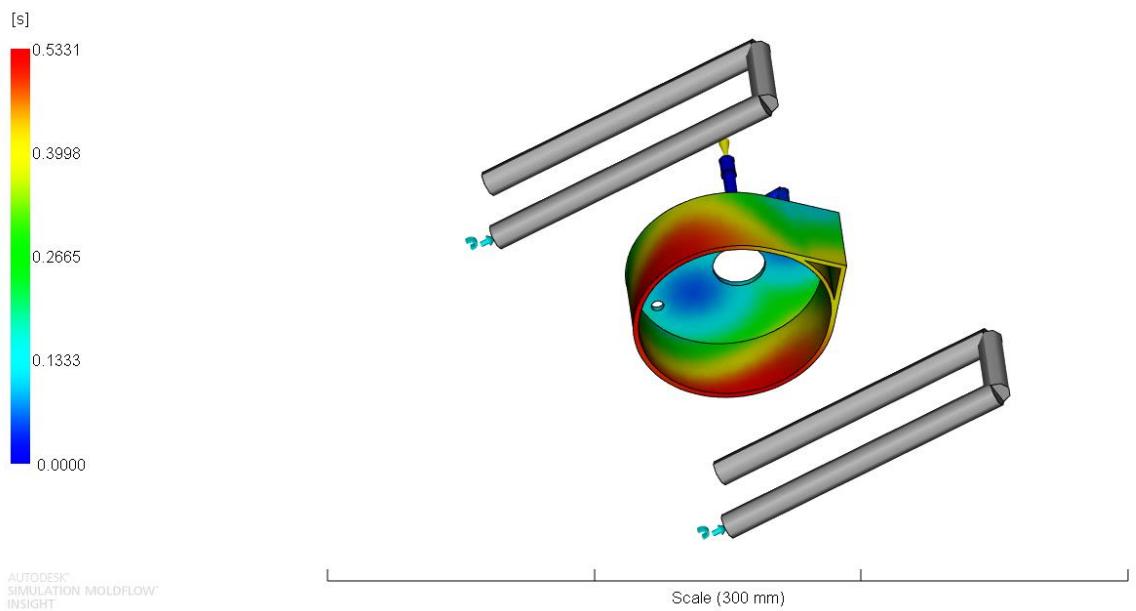
MuCell® Material Properties	Optical Properties	Environmental Impact	Quality Indicators	Crystallization Morphology	Stress - Strain	Mechanical Models	
Description	Recommended Processing	Rheological Properties	Thermal Properties	pvT Properties	Mechanical Properties	Shrinkage Properties	Filler Properties
Mold surface temperature	50 °C						
Melt temperature	220 °C						
Mold temperature range (recommended)							
Minimum	20 °C						
Maximum	80 °C						
Melt temperature range (recommended)							
Minimum	180 °C						
Maximum	260 °C						
Absolute maximum melt temperature	300 °C						
Ejection temperature	124 °C						
					<a href="#">View test information for ejection temperature...</a>		
Maximum shear stress	0.25 MPa						
Maximum shear rate	100000 1/s						

#### 4. Cooling channels and Cold runner:because it is cheap

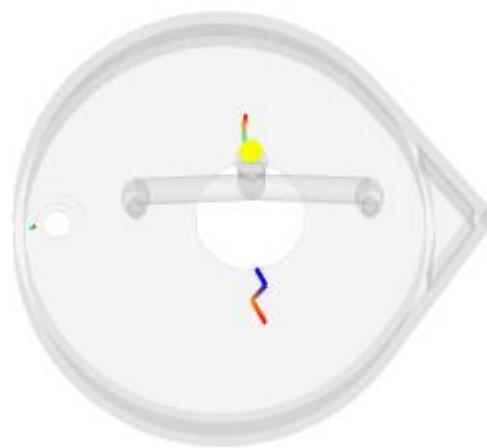


## 5. Fill time

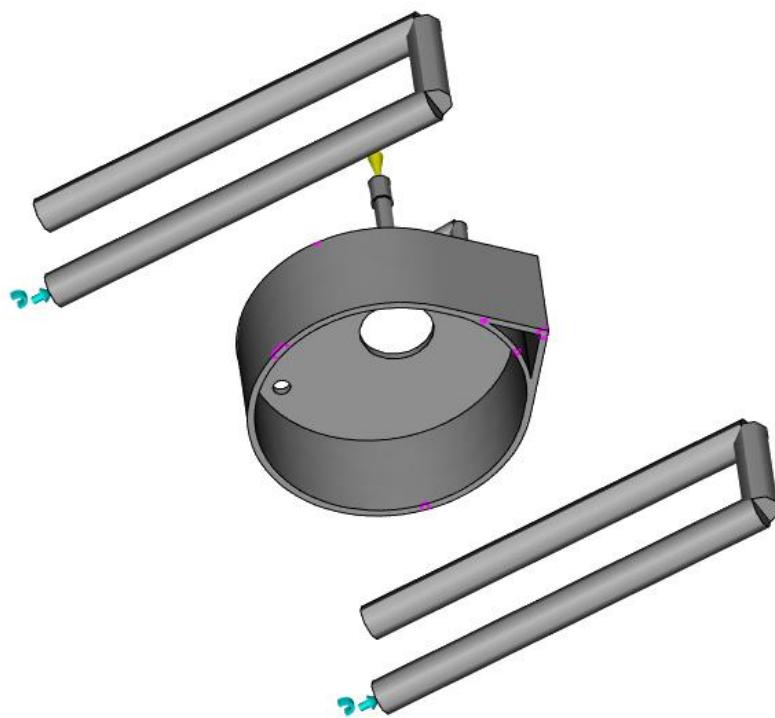
Fill time  
= 0.5331[s]



6. Weld lines



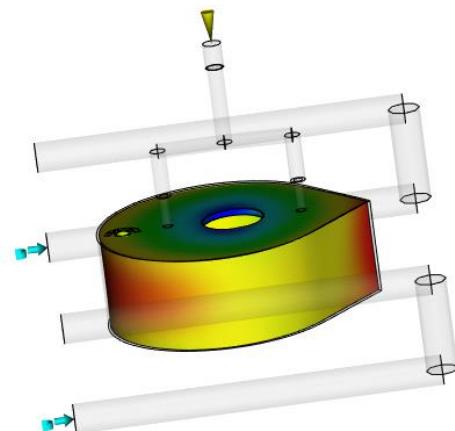
7. Air traps(you cant see all of it)



## 8. Deflection

Deflection, all effects:Deflection

Scale Factor = 1.000

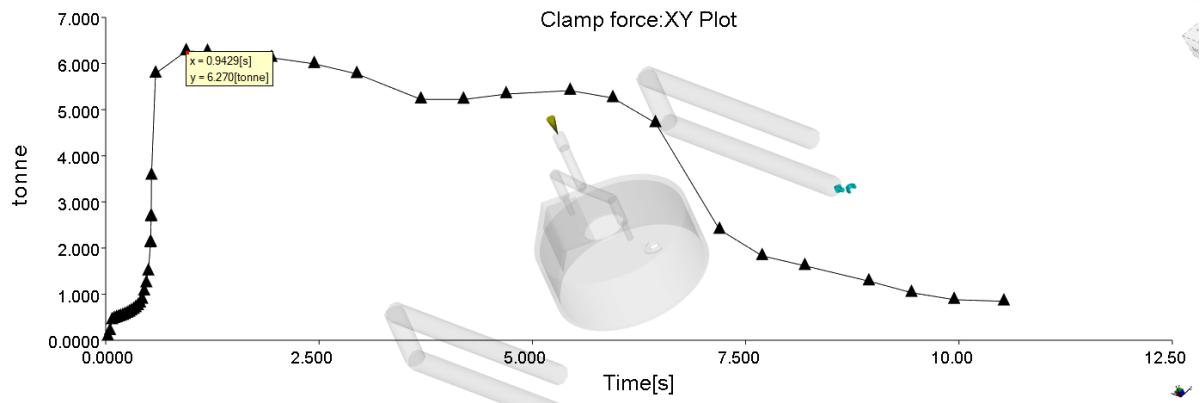


9.

AUTODESK®  
SIMULATION MOLDFLOW®  
INSIGHT

Scale (300 mm)

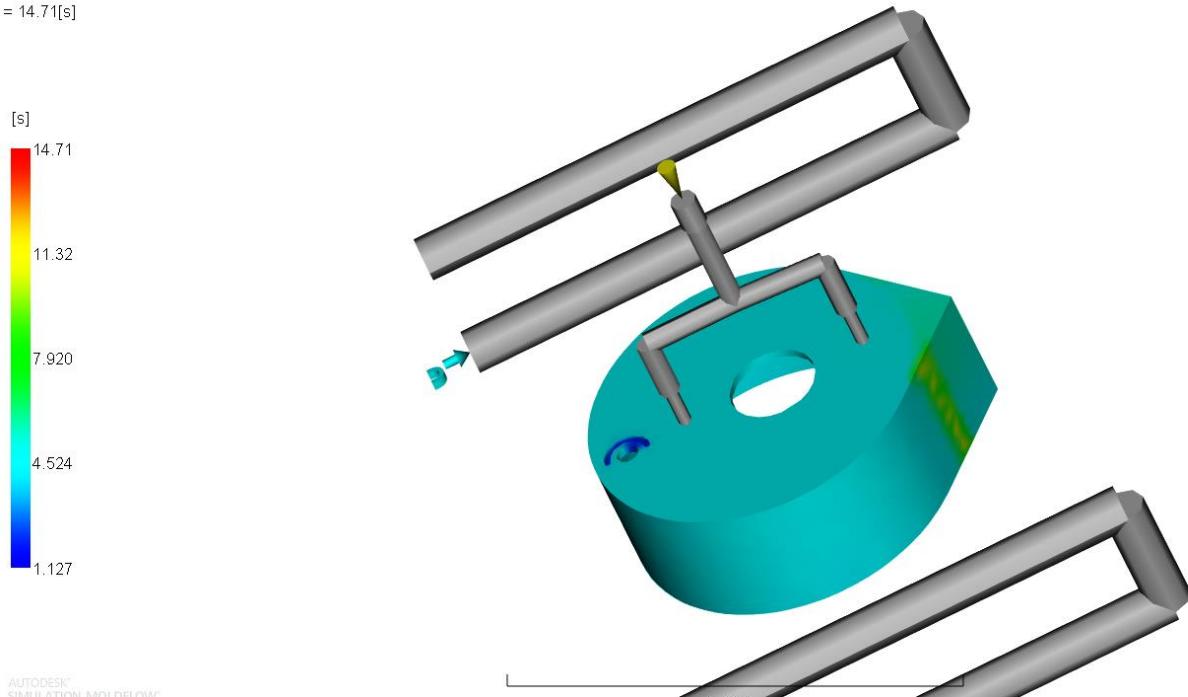
## 10. Clamp force



For a clamping force requirement of 6 tons, an all-electric injection molding machine is recommended for this operation. This type of machine offers high precision, low energy consumption, clean operation, and excellent repeatability, making it well suited for molding small polypropylene (PP) components such as cups or bottle parts.

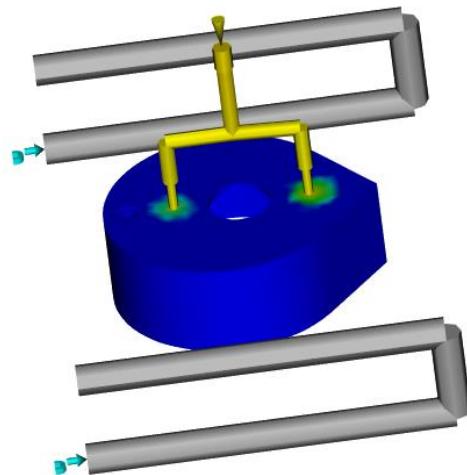
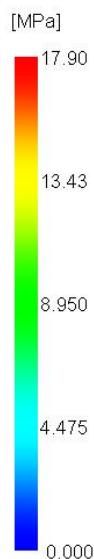
## 11. Time to reach injection temperature (cool)

Time to reach ejection temperature, part  
= 14.71[s]



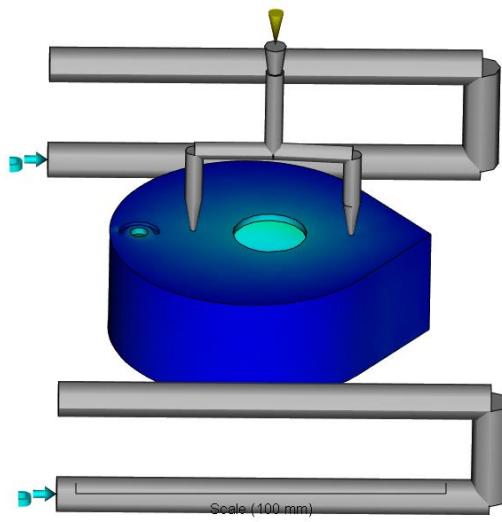
## 12. Pressure

Pressure  
Time = 10.53[s]



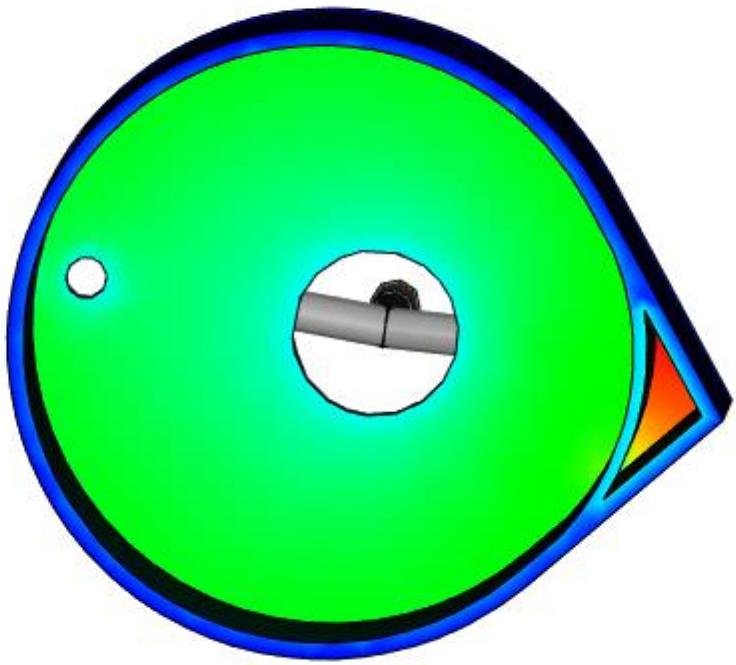
13. Temperature part

Temperature, part  
= 121.5[C]



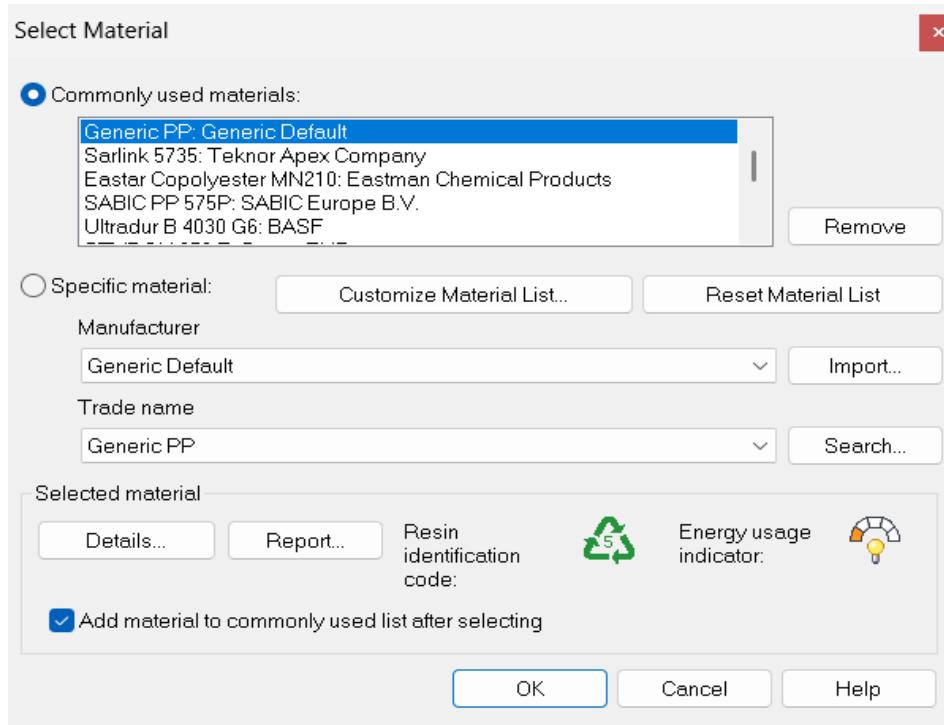
AUTODESK®  
SIMULATION MOLDFLOW®  
INSIGHT





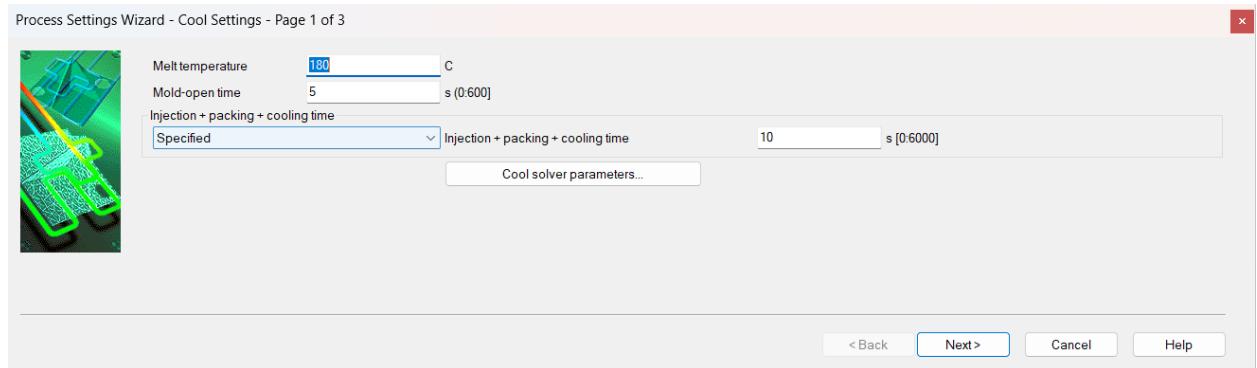
## LID

14. Material used and their recommended values



## 15. Good mesh

## 16. Changes made



Thermoplastics material

Optical Properties	Environmental Impact	Quality Indicators	Crystallization Morphology	Stress - Strain	Mechanical Models		
Description	Recommended Processing	Rheological Properties	Thermal Properties	pvT Properties	Mechanical Properties	Shrinkage Properties	Filler Properties
Mold surface temperature	20	C					
Melt temperature	220	C					
Mold temperature range (recommended)							
Minimum	20	C (-120:500)					
Maximum	80	C (-120:500)					
Melt temperature range (recommended)							
Minimum	180	C (0:1000)					
Maximum	260	C (0:1000)					
Absolute maximum melt temperature	300	C (0:1000)					
Ejection temperature	124	C (-100:500)					
Edit test information for ejection temperature...							
Maximum shear stress	0.25	MPa (0.200)					
Maximum shear rate	100000	1/s (0.1e+010)					

Name: Generic PP - Generic Default

OK Cancel Help

Process Settings Wizard - Fill+Pack Settings - Page 2 of 3

Filling control

Injection time ✓ of 0.5 s [0:]

Velocity/pressure switch-over

Automatic

Pack/holding control

%Filling pressure vs time

Fiber orientation analysis if fiber material

Crystallization analysis (requires material data)

Edit profile... Advanced options... Fiber Solver Parameters...

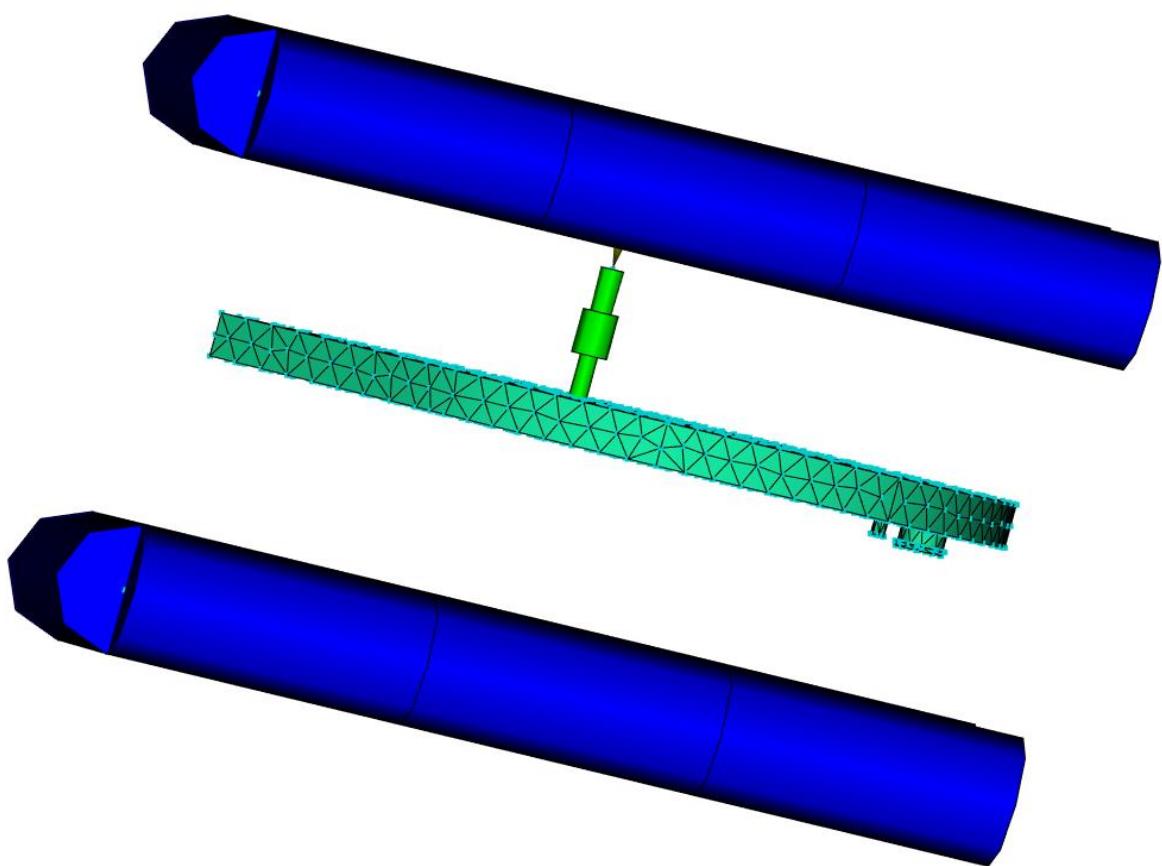
< Back Next > Cancel Help

The changes are presented in 1<sup>st</sup> and 3<sup>rd</sup> photo, whereas the 2<sup>nd</sup> photo represents the recommended values.

## 17. Injection gates

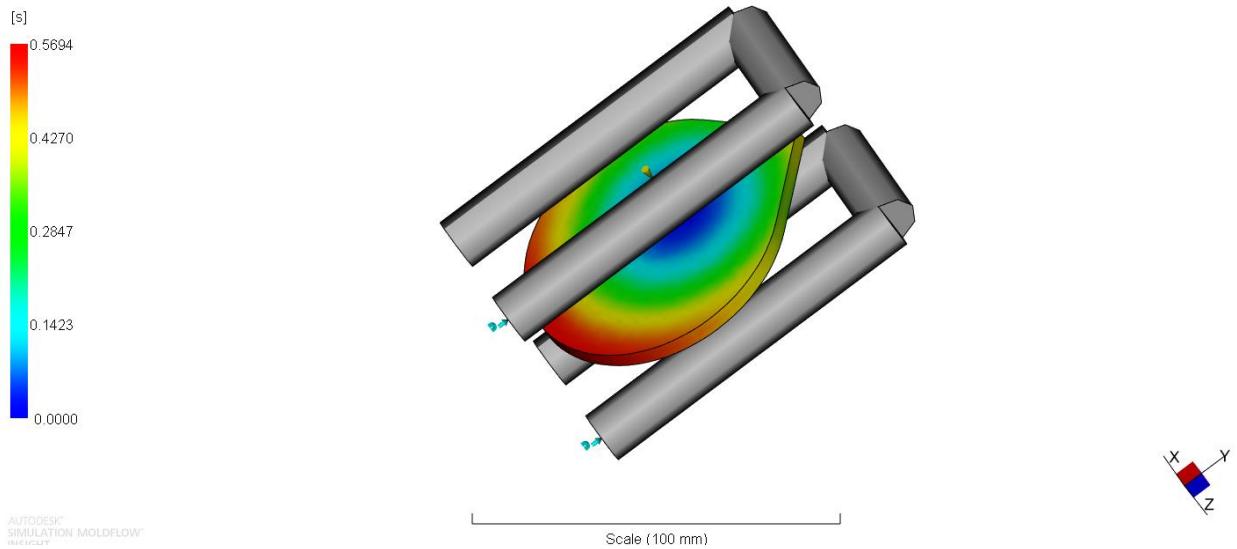
One injection gate is used in this part:

## 18. Cold runner: because it is cheap



### 19. Fill time

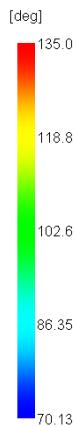
Fill time  
= 0.5694[s]



### 20. Weld lines

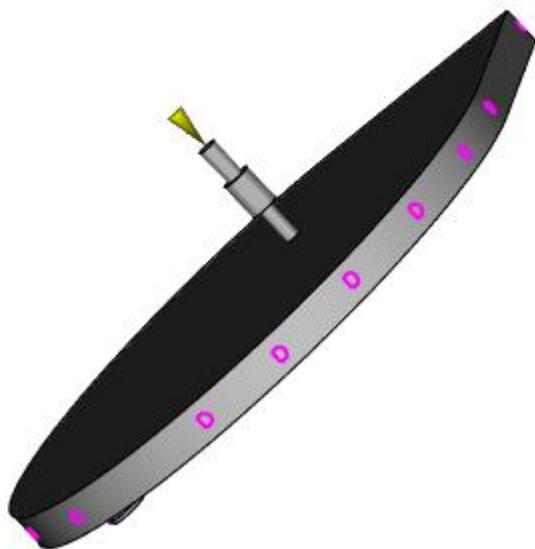
AUTODESK®  
SIMULATION MOLDFLOW®  
INCUBUS

Weld lines  
= 135.0[deg]



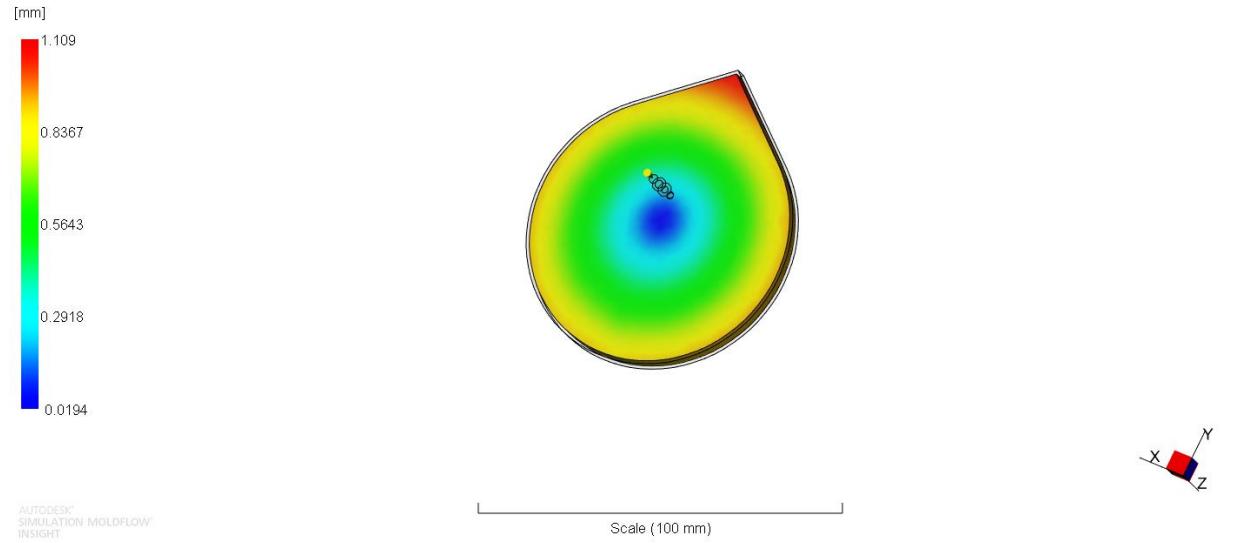
AUTODESK  
CLOUD AUTOMATE DESIGN

21. Air traps

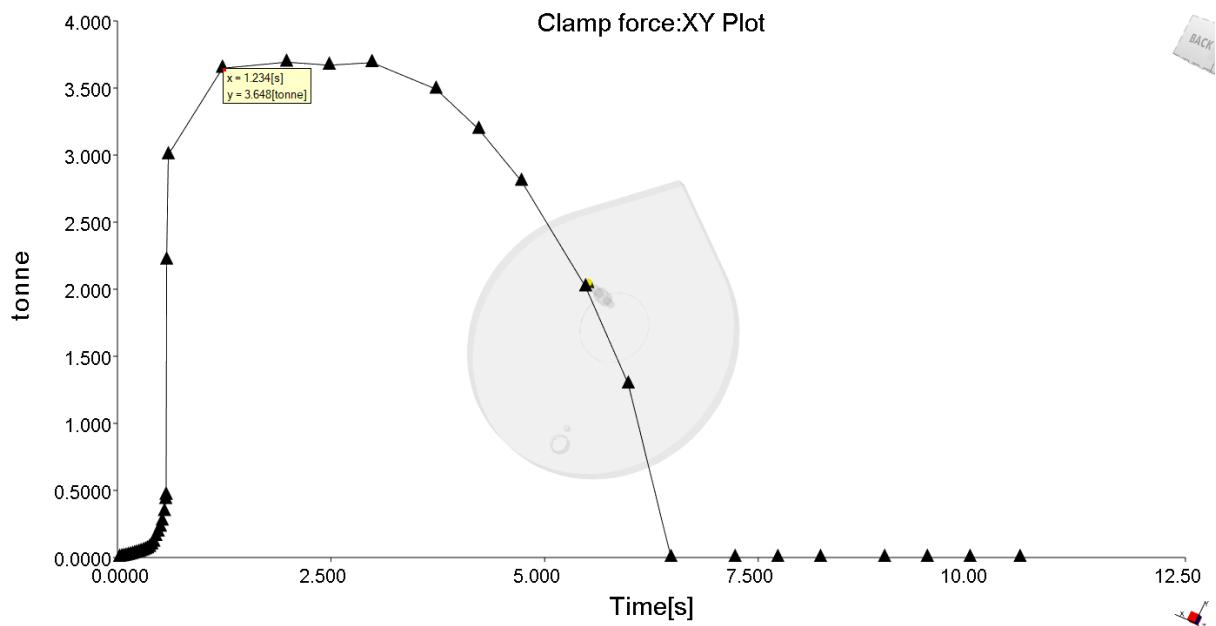


22. Deflection

Deflection, all effects:Deflection  
Scale Factor = 1.000

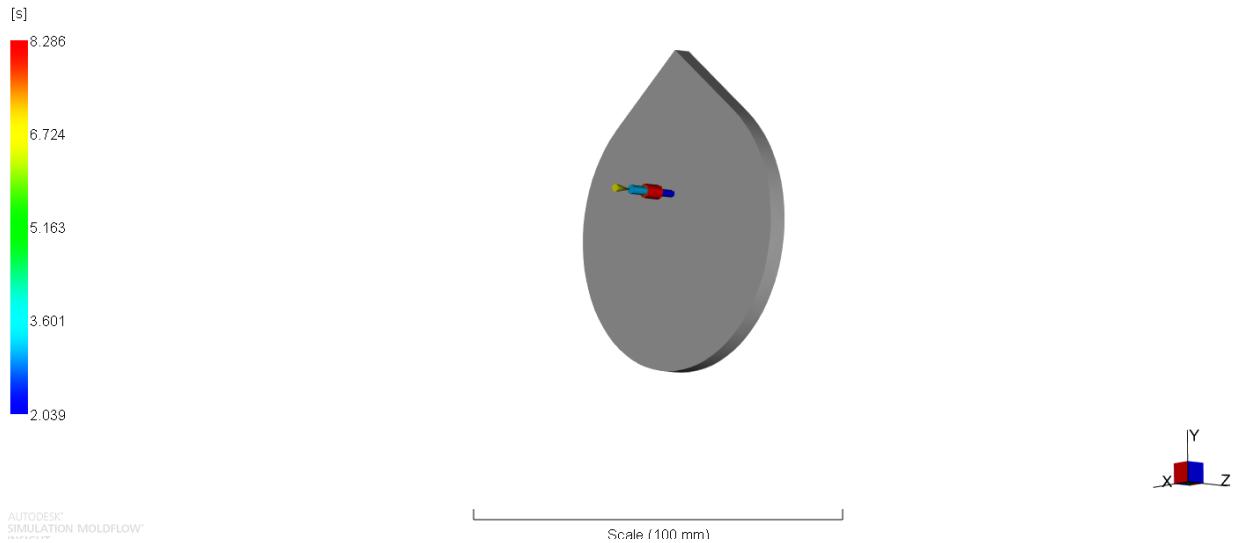


23. Clamp force (can use same machine as the base)



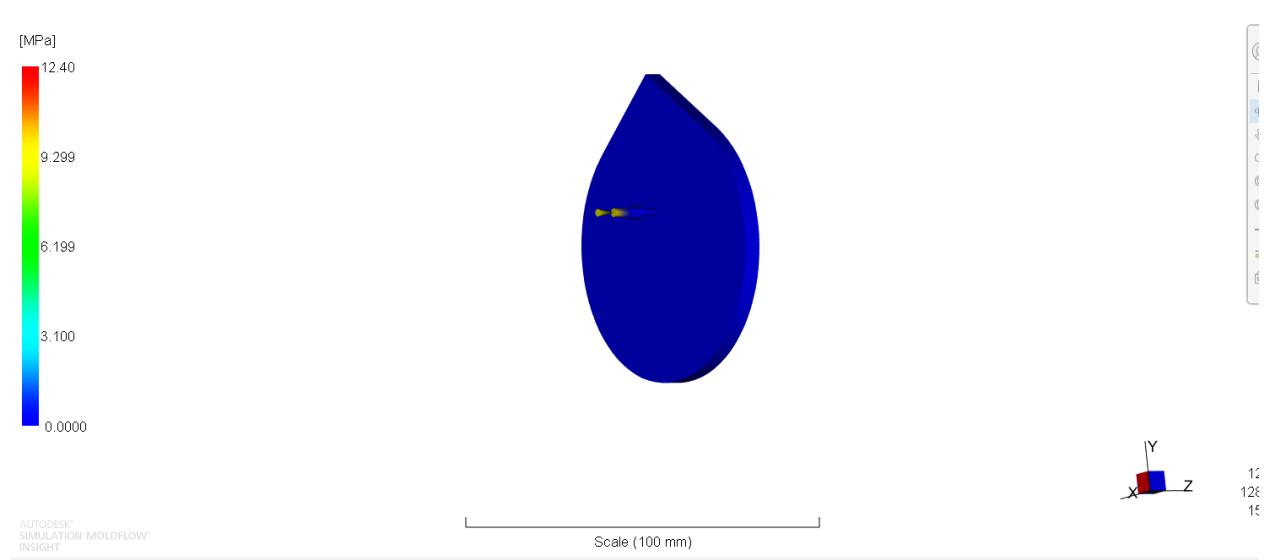
24. Time to reach injection temperature (cool)

Time to reach ejection temperature, cold runner  
= 8.286[s]



## 25. Pressure

Pressure  
Time = 10.56[s]



## 26. Temperature part

