

Desain Mangkok Skripsi iProperties

General Summary Project Status Custom Save Physical

Solids
The Part Update

Material Polypropylene Clipboard

Density Requested Accuracy
0,899 g/cm³ Low

General Properties

		Center of Gravity	
Mass	0,055 kg (Relative I)	X	-0,000 mm (Relativ
Area	61248,737 mm ² (	Y	27,894 mm (Relativ
Volume	61713,547 mm ³ (	Z	-0,000 mm (Relativ

Inertial Properties

Principal Global Center of Gravity

Principal Moments

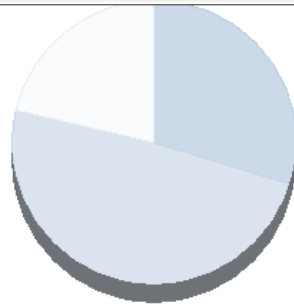
I1	105,044 kg mm	I2	162,763 kg mm	I3	105,044 kg mm
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Rotation to Principal

Rx	0,00 deg (Relat	Ry	0,00 deg (Relat	Rz	0,00 deg (Relat
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Data Hasil Simulasi Tekanan Injeksi 40 Mpa dan 210° C

Actual filling time	6.94 (s)
Actual injection pressure	40.000 (MPa)
Clamp force area	585.3685 (cm ²)
Max. clamp force during filling	126.850 (tonne)
Velocity/pressure switch-over at % volume	99.13 (%)
Velocity/pressure switch-over at time	6.94 (s)
Estimated cycle time	23.38 (s)
Total part weight	208.607 (g)
Shot volume	266.2604 (cm ³)
Cavity volume	246.8580 (cm ³)
Runner system volume	19.4024 (cm ³)

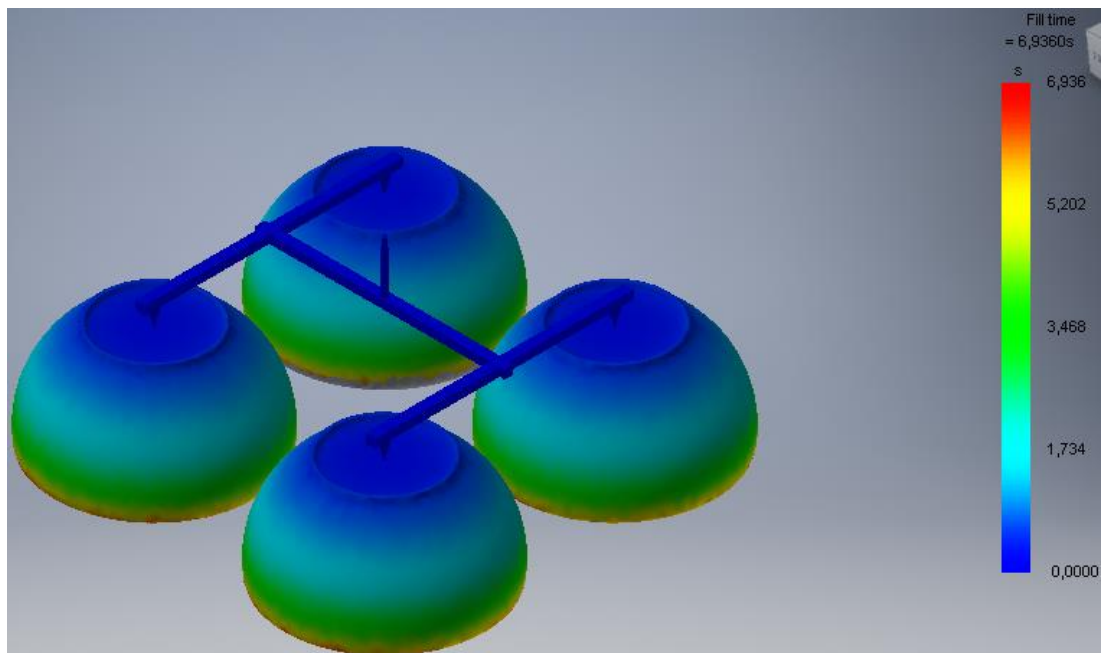


- ☐ Fill (until switch-over) (6.94s)
- ☐ Estimated Pack and Cool (11.44s)
- ☐ Mold open (5.00s)

Cycle time 23.38s

Solver warnings

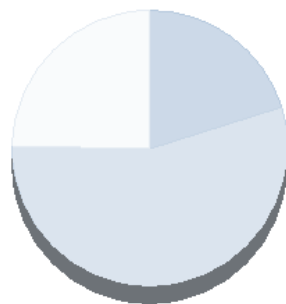
- ** WARNING 98934 ** The maximum machine injection pressure was reached. Using maximum machine injection pressure value.
- ** WARNING 128270 ** Short shot detected. The machine injection pressure or packing pressure is insufficient.



Data Hasil Simulasi Tekanan Injeksi 40 MPa dan 220° C

Actual filling time	4.81 (s)
Actual injection pressure	40.000 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	65.689 (tonne)
Velocity/pressure switch-over at % volume	99.20 (%)
Velocity/pressure switch-over at time	4.08 (s)
Estimated cycle time	20.14 (s)
Total part weight	198.977 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown

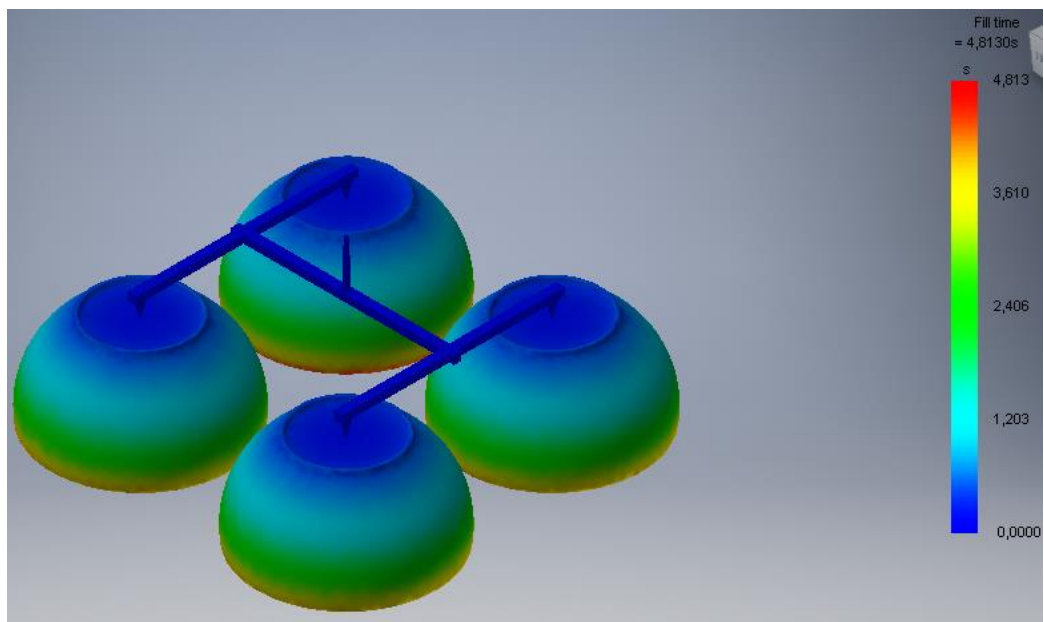


- Fill (until switch-over) (4.08s)
- Estimated Pack and Cool (11.06s)
- Mold open (5.00s)

Cycle time 20.14s

Solver warnings

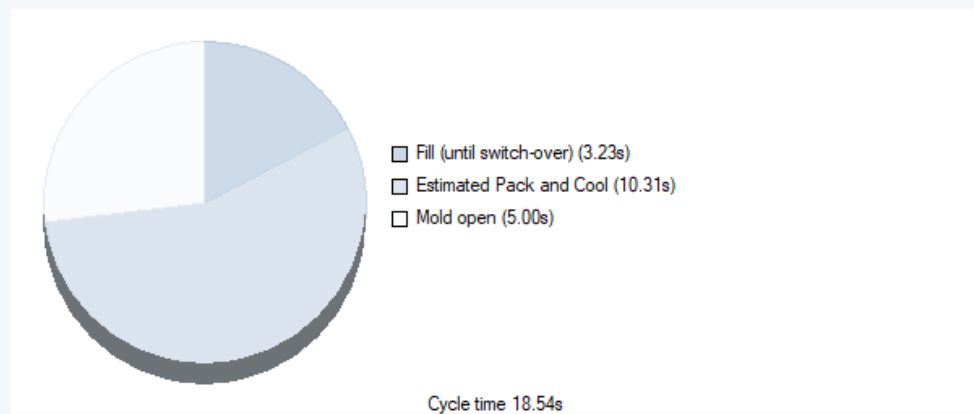
**** WARNING 98934 **** The maximum machine injection pressure was reached. Using maximum machine injection pressure value.



Data Hasil Simulasi Tekanan Injeksi 40 MPa dan 230° C

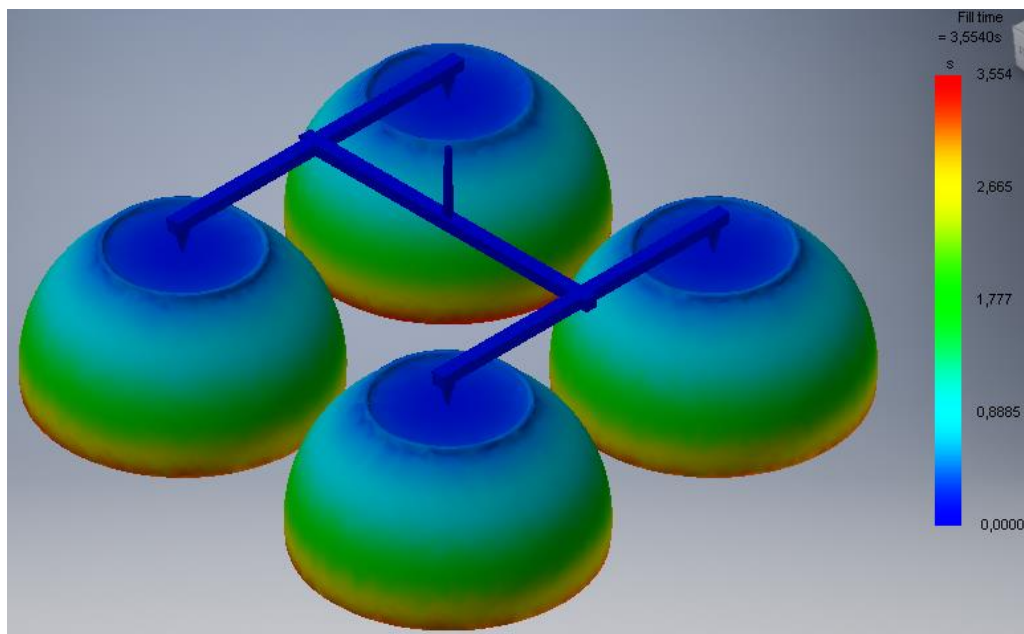
Actual filling time	3.55 (s)
Actual injection pressure	40.000 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	70.439 (tonne)
Velocity/pressure switch-over at % volume	99.06 (%)
Velocity/pressure switch-over at time	3.23 (s)
Estimated cycle time	18.54 (s)
Total part weight	195.621 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown



Solver warnings

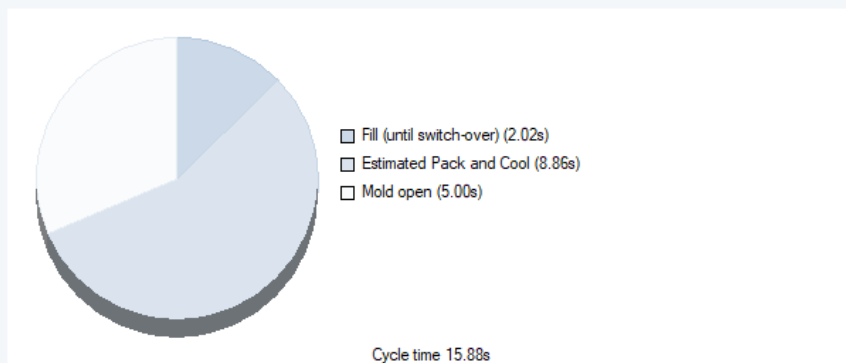
**** WARNING 98934 **** The maximum machine injection pressure was reached. Using maximum machine injection pressure value.



Data Hasil Simulasi Tekanan Injeksi 50 MPa dan 210° C

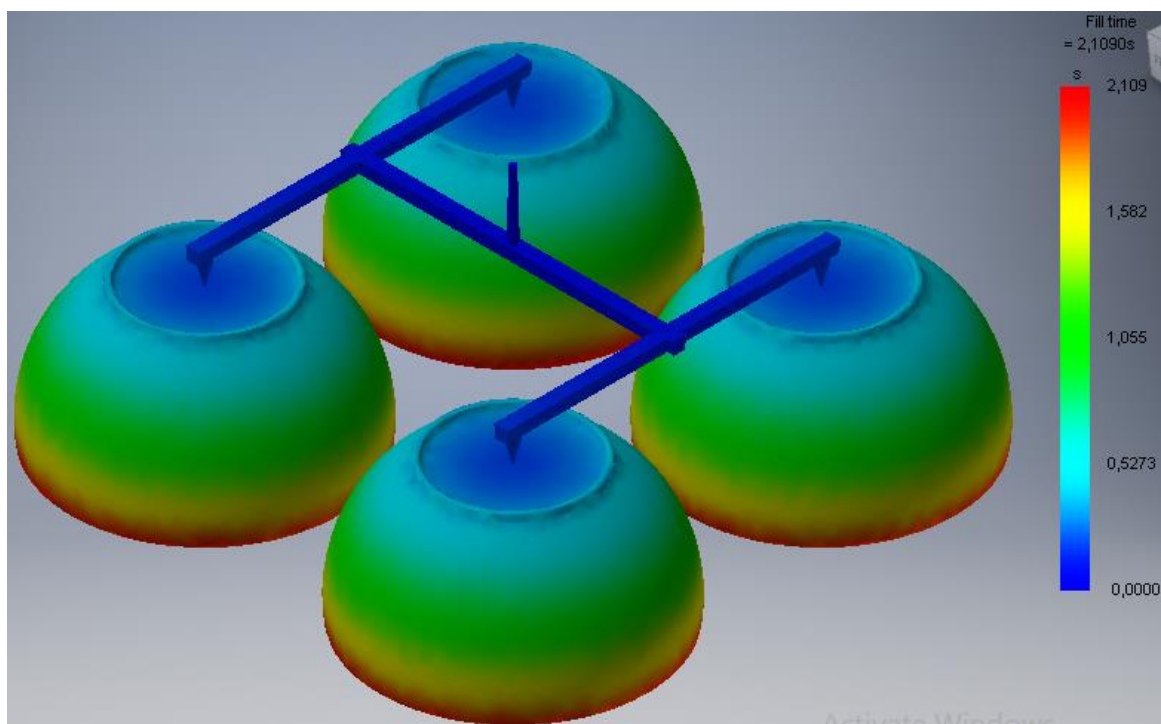
Actual filling time	2.11 (s)
Actual injection pressure	50.000 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	81.042 (tonne)
Velocity/pressure switch-over at % volume	99.15 (%)
Velocity/pressure switch-over at time	2.02 (s)
Estimated cycle time	15.88 (s)
Total part weight	193.638 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown



Solver warnings

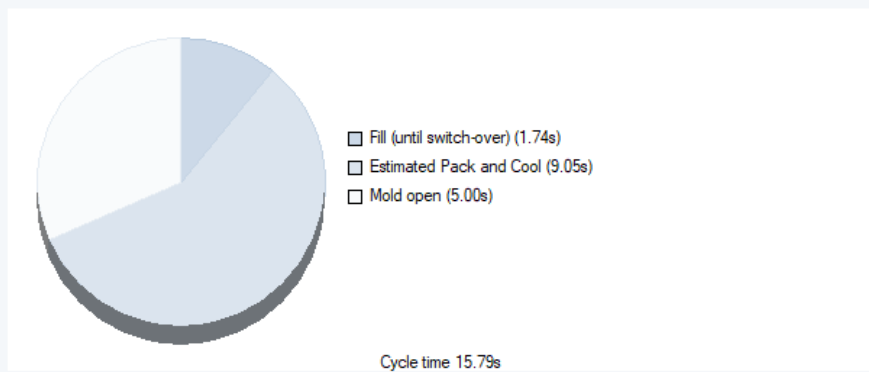
**** WARNING 98934 **** The maximum machine injection pressure was reached. Using maximum machine injection pressure value.



Data Hasil Simulasi Tekanan Injeksi 50 MPa dan 220° C

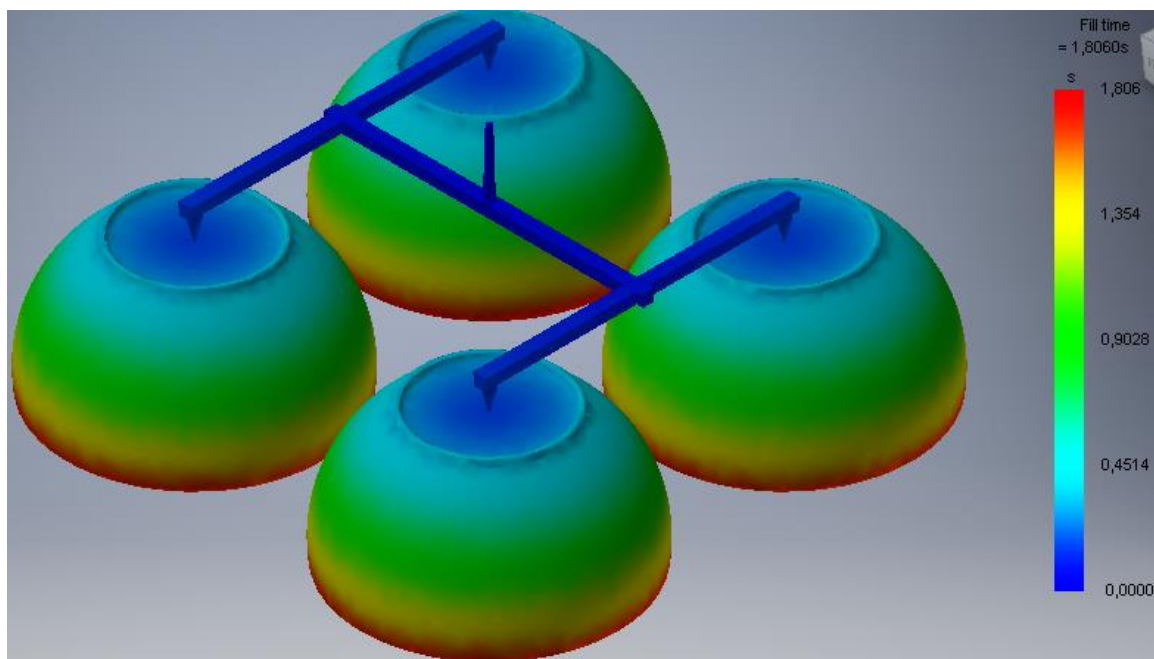
Actual filling time	1.81 (s)
Actual injection pressure	50.000 (MPa)
Clamp force area	584.2862 (cm ²)
Max. clamp force during filling	75.416 (tonne)
Velocity/pressure switch-over at % volume	99.10 (%)
Velocity/pressure switch-over at time	1.74 (s)
Estimated cycle time	15.79 (s)
Total part weight	191.937 (g)
Shot volume	265.6807 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.8264 (cm ³)

Cycle time breakdown



Solver warnings

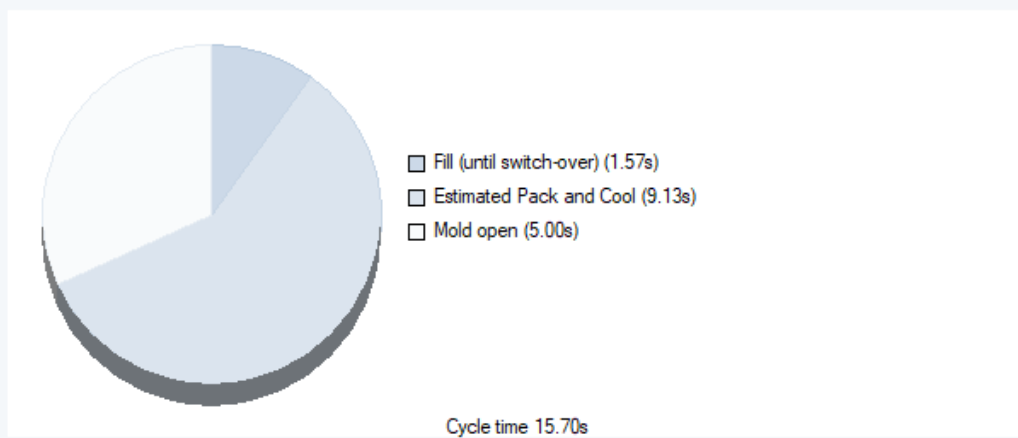
**** WARNING 98934 **** The maximum machine injection pressure was reached. Using maximum machine injection pressure value.



Data Hasil Simulasi Tekanan Injeksi 50 MPa dan 230° C

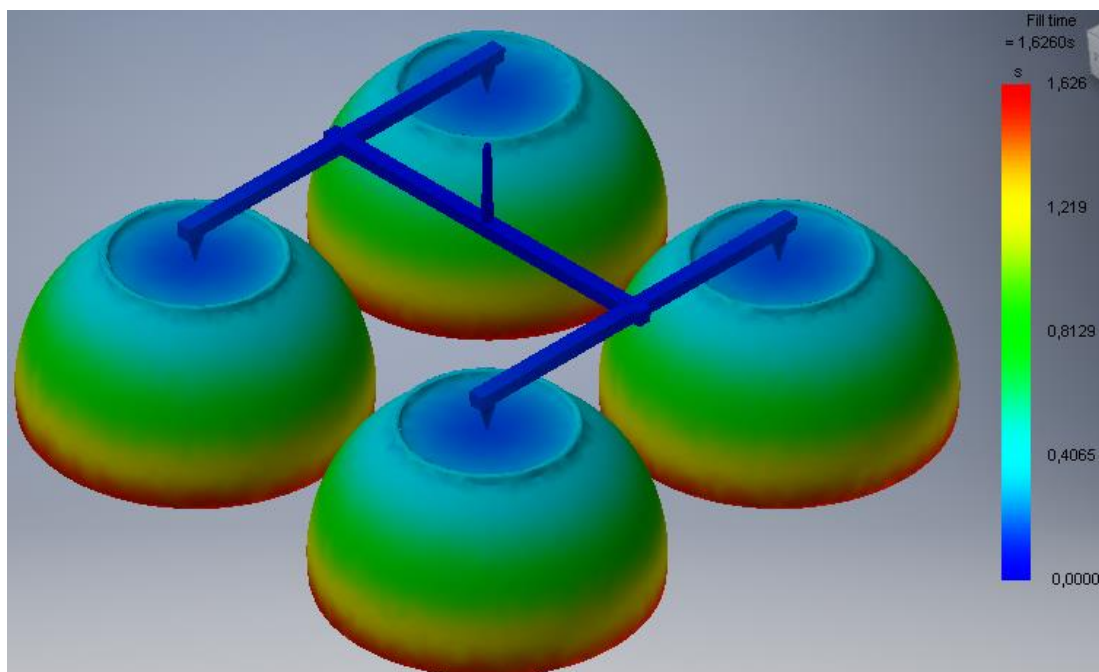
Actual filling time	1.63 (s)
Actual injection pressure	50.000 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	74.957 (tonne)
Velocity/pressure switch-over at % volume	99.12 (%)
Velocity/pressure switch-over at time	1.57 (s)
Estimated cycle time	15.70 (s)
Total part weight	190.830 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown



Solver warnings

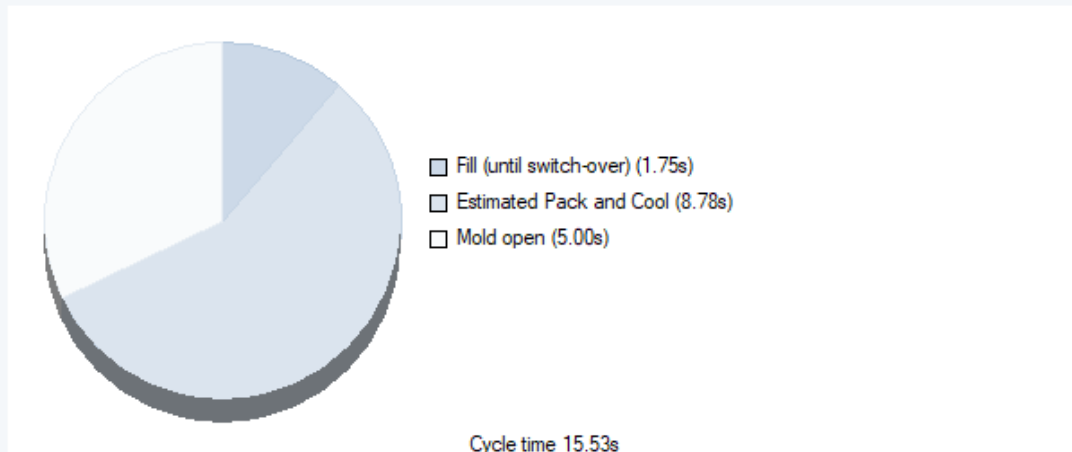
**** WARNING 98934 **** The maximum machine injection pressure was reached. Using maximum machine injection pressure value.



Data Hasil Simulasi Tekanan Injeksi 60 MPa dan 210° C

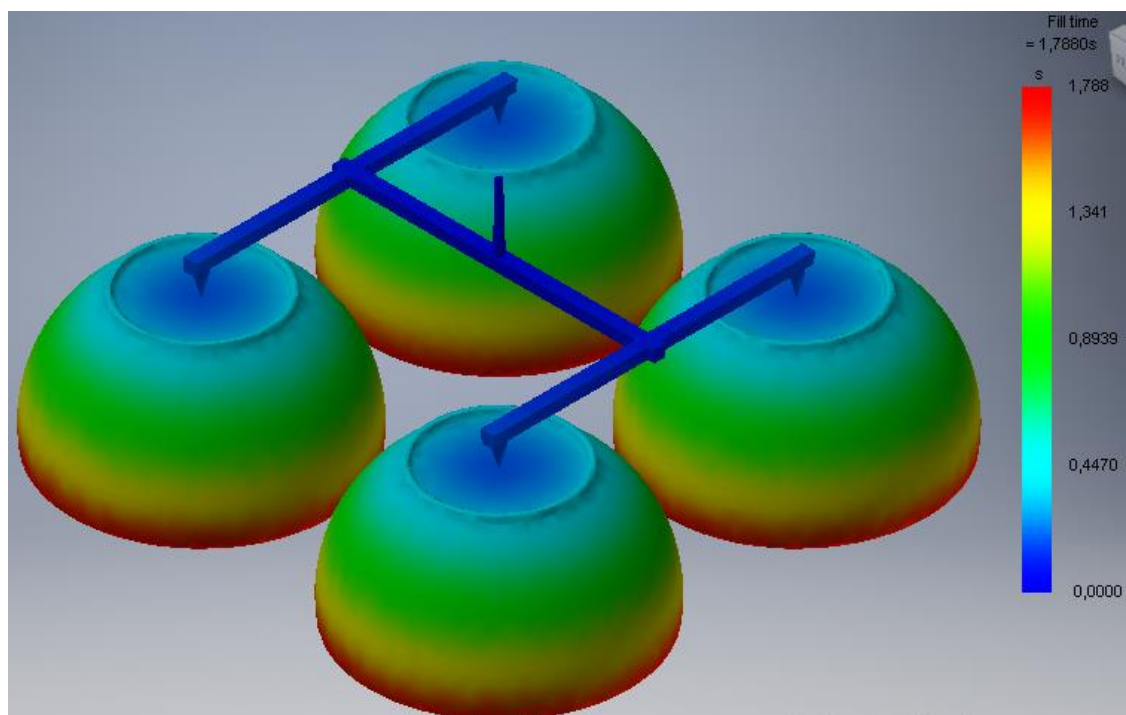
Actual filling time	1.79 (s)
Actual injection pressure	58.277 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	85.004 (tonne)
Velocity/pressure switch-over at % volume	99.16 (%)
Velocity/pressure switch-over at time	1.75 (s)
Estimated cycle time	15.53 (s)
Total part weight	192.383 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown



Solver warnings

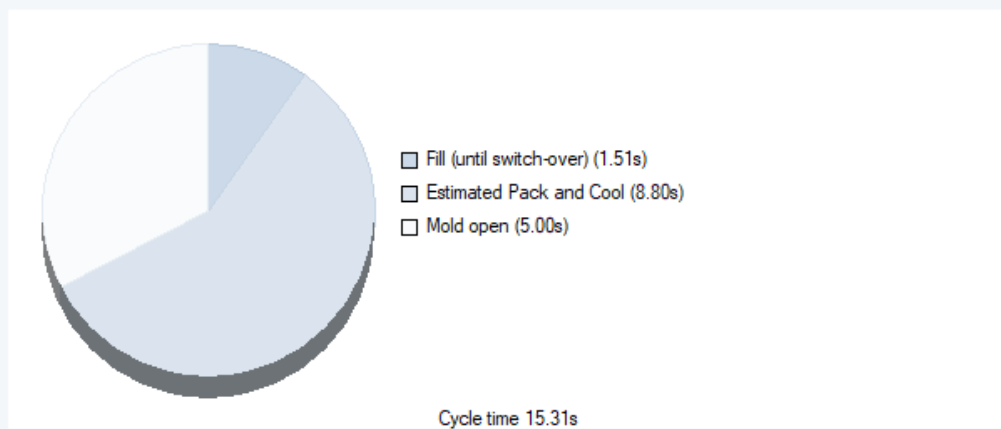
None



Data Hasil Simulasi Tekanan Injeksi 60 MPa dan 220° C

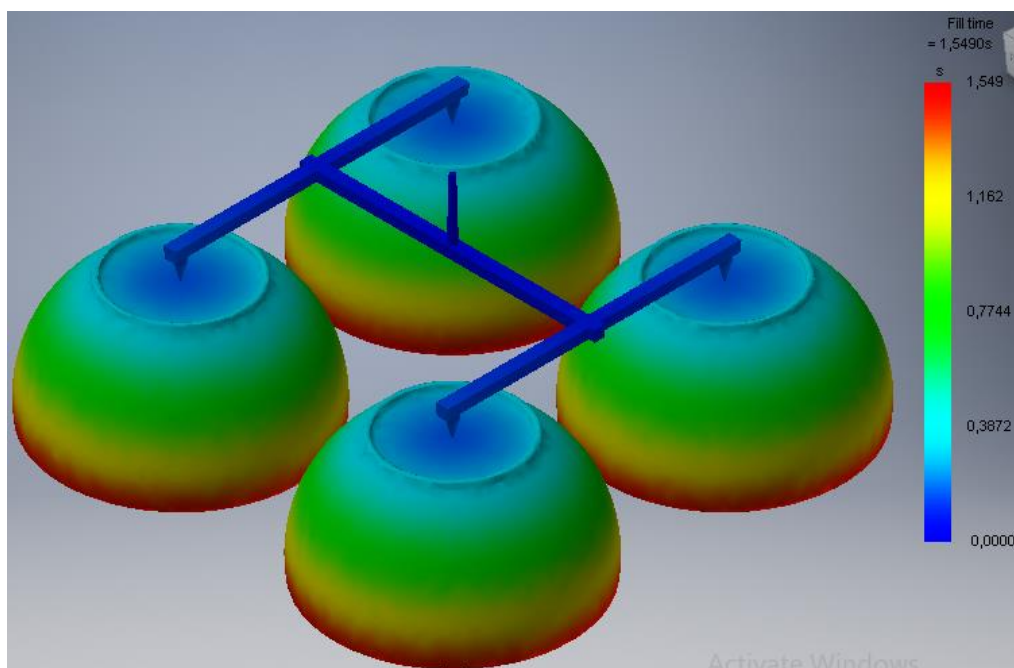
Actual filling time	1.55 (s)
Actual injection pressure	58.126 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	82.415 (tonne)
Velocity/pressure switch-over at % volume	99.10 (%)
Velocity/pressure switch-over at time	1.51 (s)
Estimated cycle time	15.31 (s)
Total part weight	191.156 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown



Solver warnings

None



Data Hasil Simulasi Tekanan Injeksi 60 MPa dan 230° C

Actual filling time	1.43 (s)
Actual injection pressure	57.467 (MPa)
Clamp force area	584.5571 (cm ²)
Max. clamp force during filling	79.909 (tonne)
Velocity/pressure switch-over at % volume	99.02 (%)
Velocity/pressure switch-over at time	1.40 (s)
Estimated cycle time	15.33 (s)
Total part weight	190.241 (g)
Shot volume	265.8247 (cm ³)
Cavity volume	246.8543 (cm ³)
Runner system volume	18.9704 (cm ³)

Cycle time breakdown

