

# Bumper mould Design Feasibility



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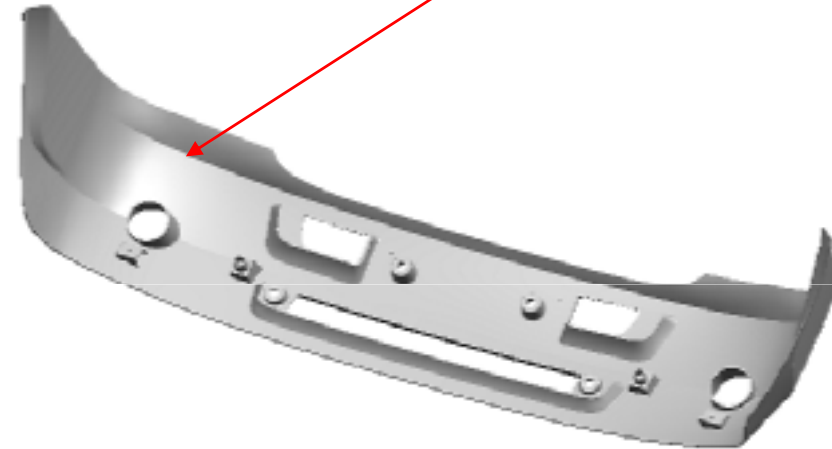
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Front rework.x\_t\_210809\_FEASIBILITY

A-SURFACE



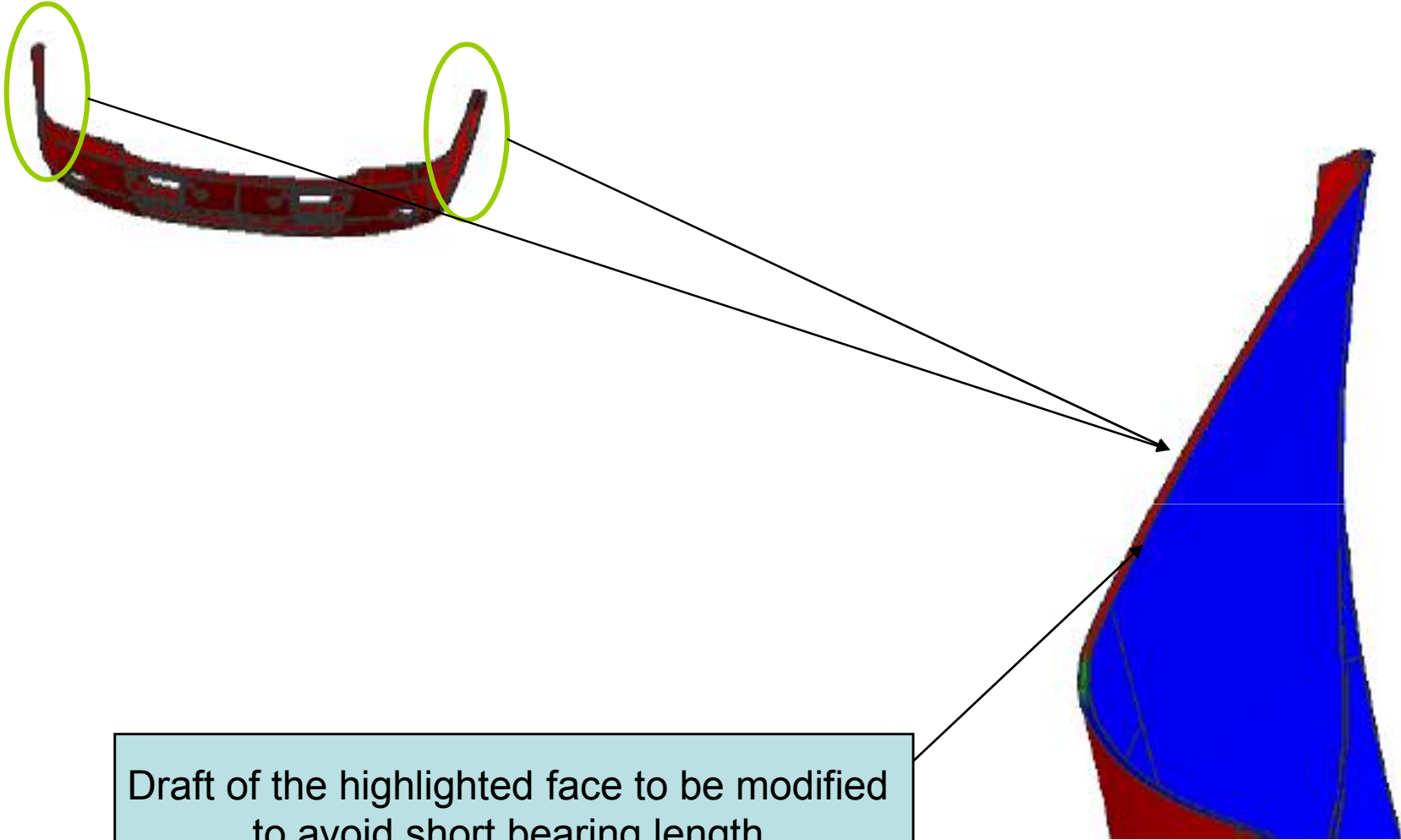
B-SURFACE



Product size :- 1876x422x680mm  
Product weight :- 3850 gms. (as per 3D data)  
Material :- PP ( To be confirmed)  
General wall thickness :- 4.0 mm

22.08.09

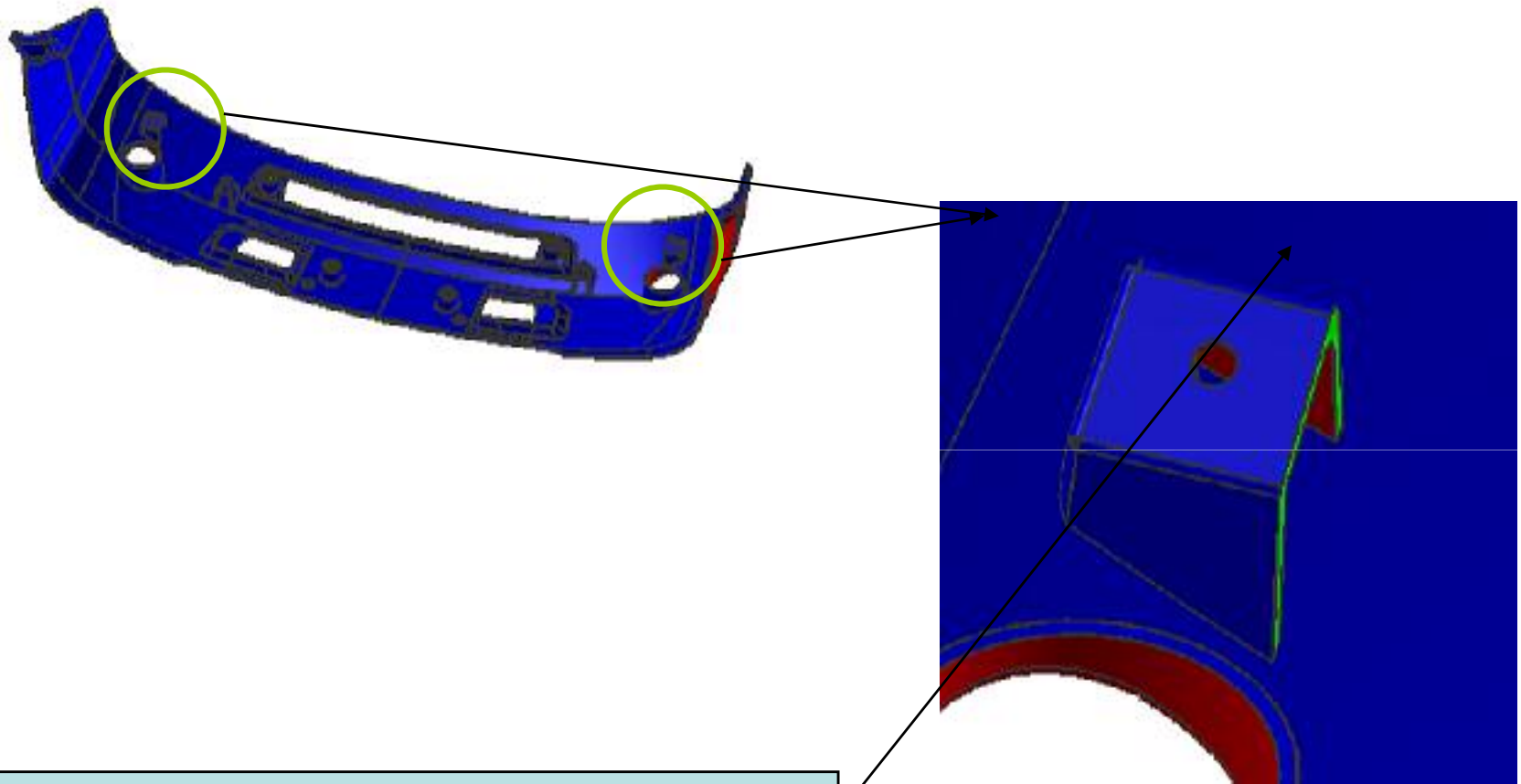
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Draft of the highlighted face to be modified to avoid short bearing length.



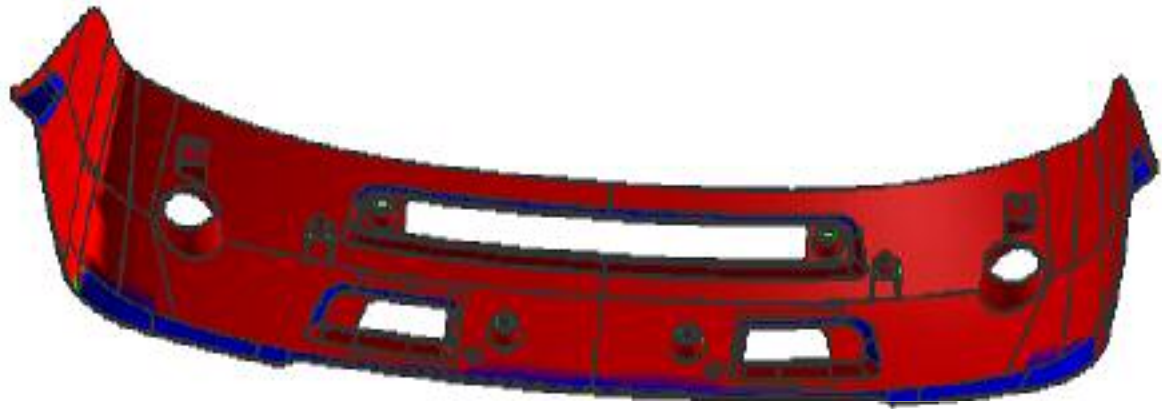
Front rework.x\_t\_210809\_FEASIBILITY



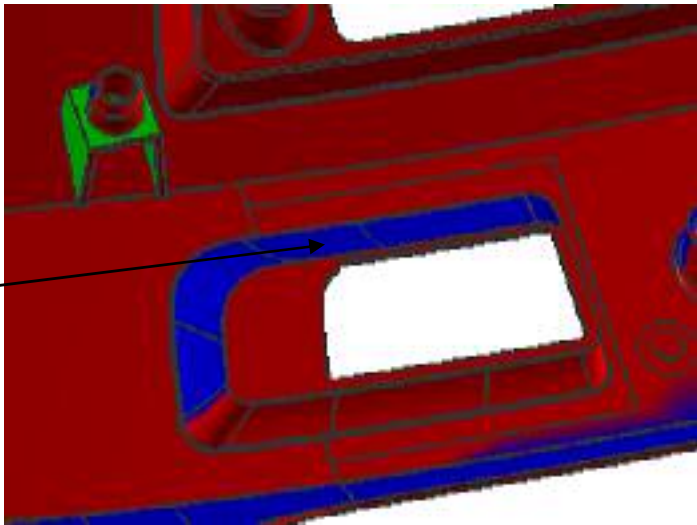
Creating undercut in mold line of draw.



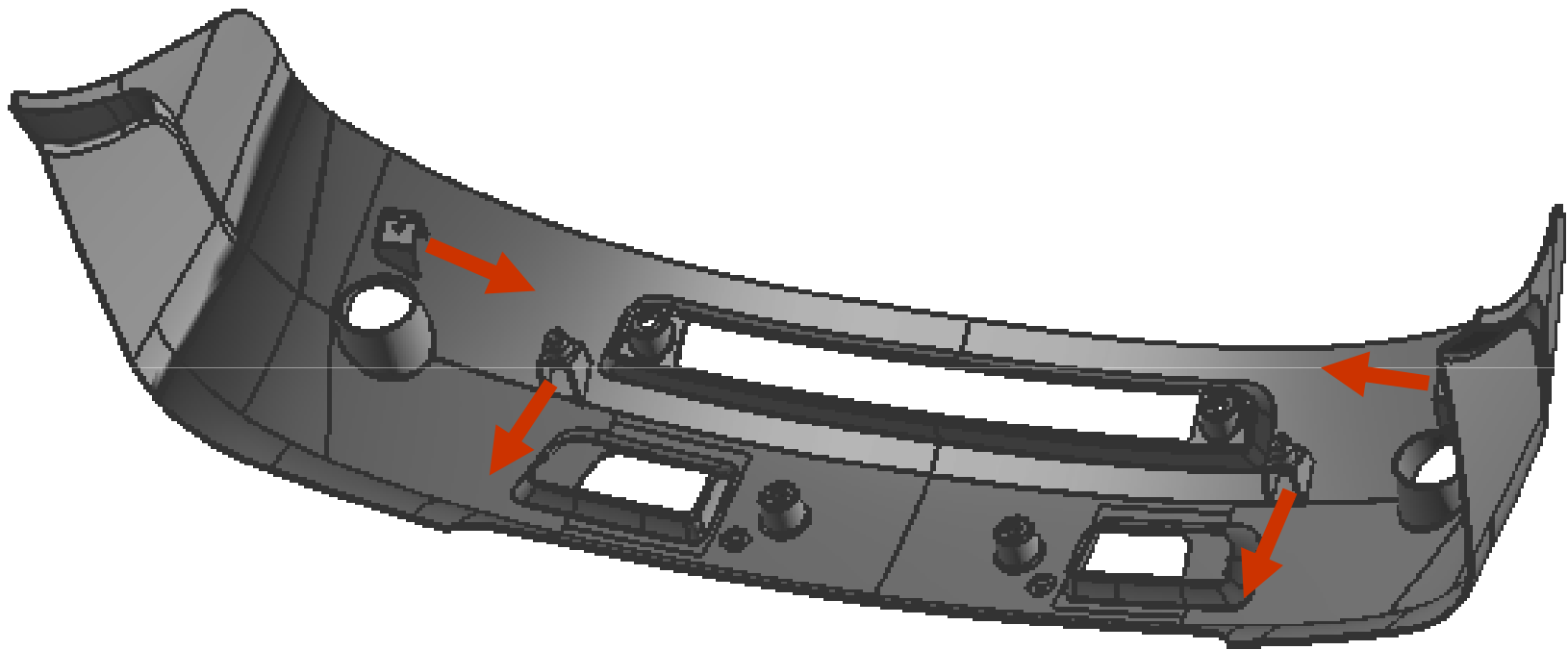
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Highlighted blue face will obstruct lifter movement.  
Dog house need to be shifted, if possible.



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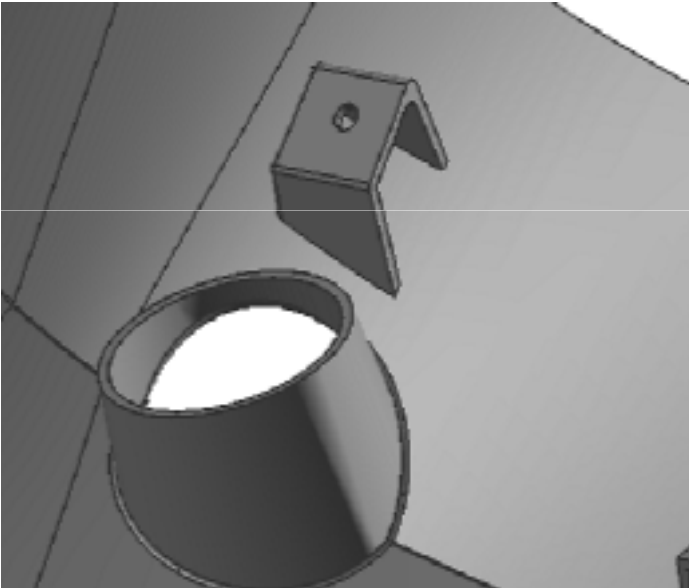
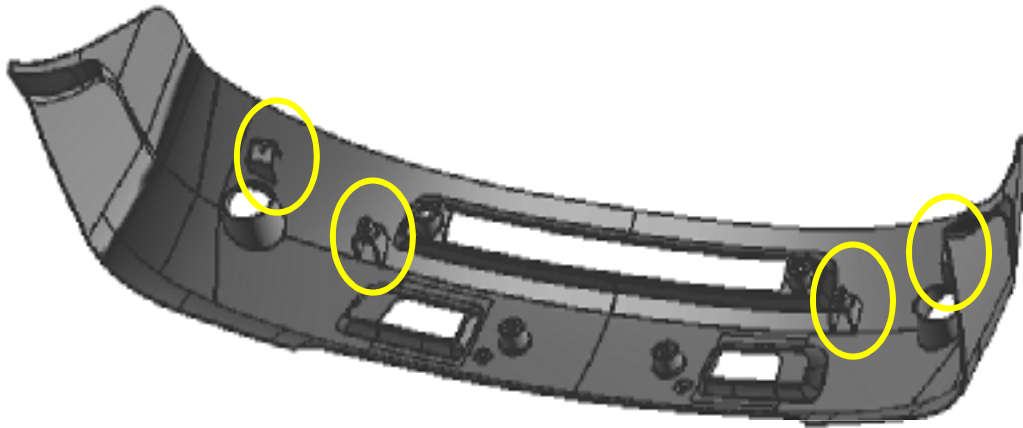


→ **ANGULAR LIFTER**



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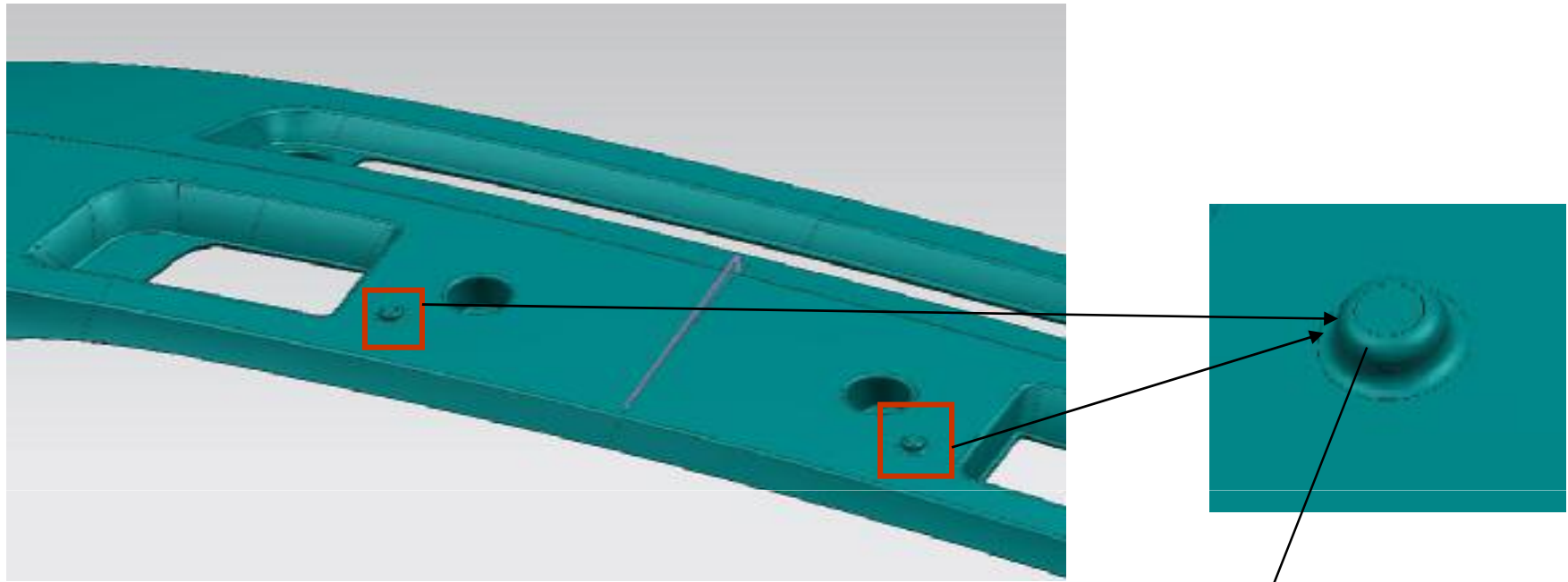
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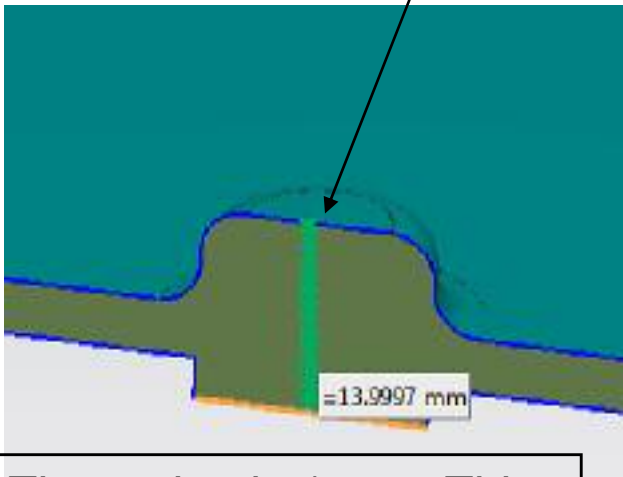
The root thickness of the highlighted features exceeds the permissible ratio of 40% to the base W/T. So there will be a possibility of sink marks appearing on A-surface.



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SINK MARK MAY BE SEEN BEHIND THE LOCKING AREAS.SHOWN IN PICTURE.CONFIMED AFTER MOLD FLOW.



The region is 14mm Thk

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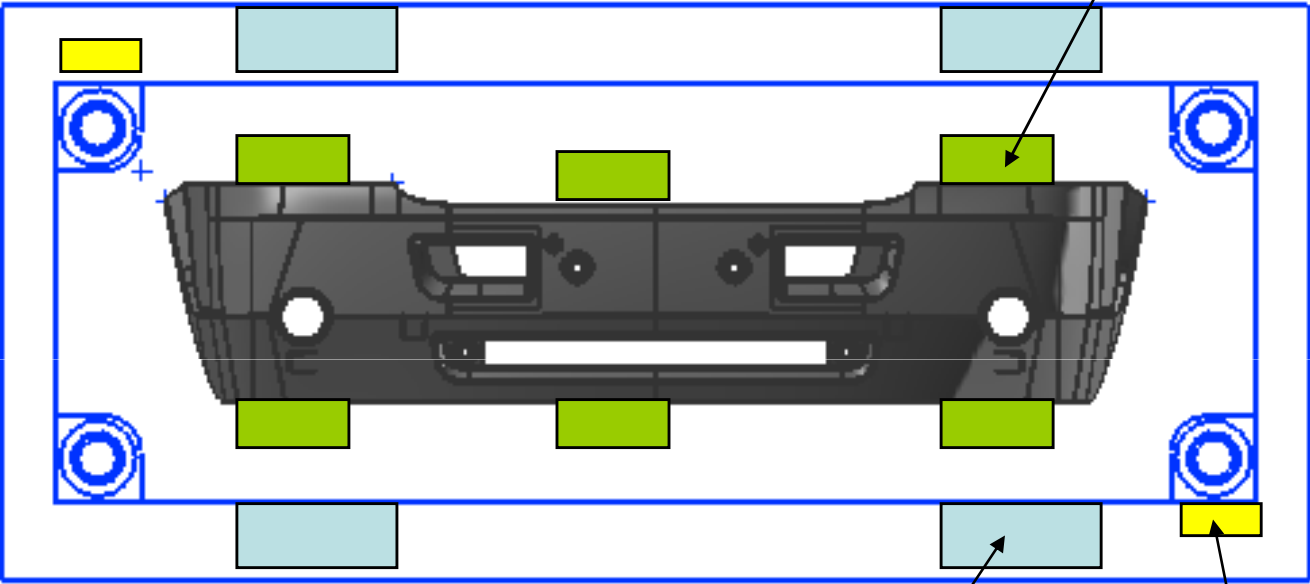
TENTATIVE TOOLING LAYOUT

BLOCK EJECTOR

TOOL TOP

OPERATOR SIDE

W



Mould size: max : L -2300+100+100 mm  
max :W -800+150+150 mm  
max : H - 1610 mm

L

EJE HYD CYLINDER.(X4)

LIMIT SWITCH(X3)

NOTE: ALL SIZES ARE APPROXIMATE.

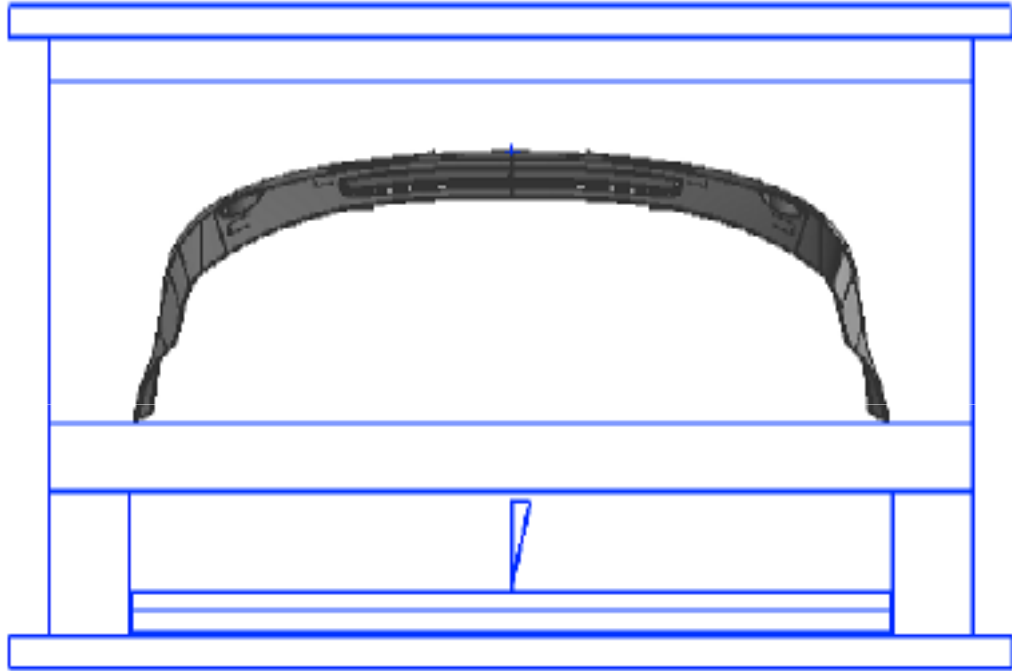


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# Front rework.x\_t\_210809\_FEASIBILITY

## TENTATIVE TOOLING LAYOUT

Top plate thickness:-80.0 mm.  
Bottom plate thickness:-80.0 mm.  
Manifold plate thickness:-110.0 mm.  
Cavity plate thickness:-830.0 mm.  
Core plate thickness:-830.0 mm.  
Locating ring dia:-As per customer. Req.  
Ejector plate thickness:-46 mm.  
Ejector back plate thickness:-56 mm.



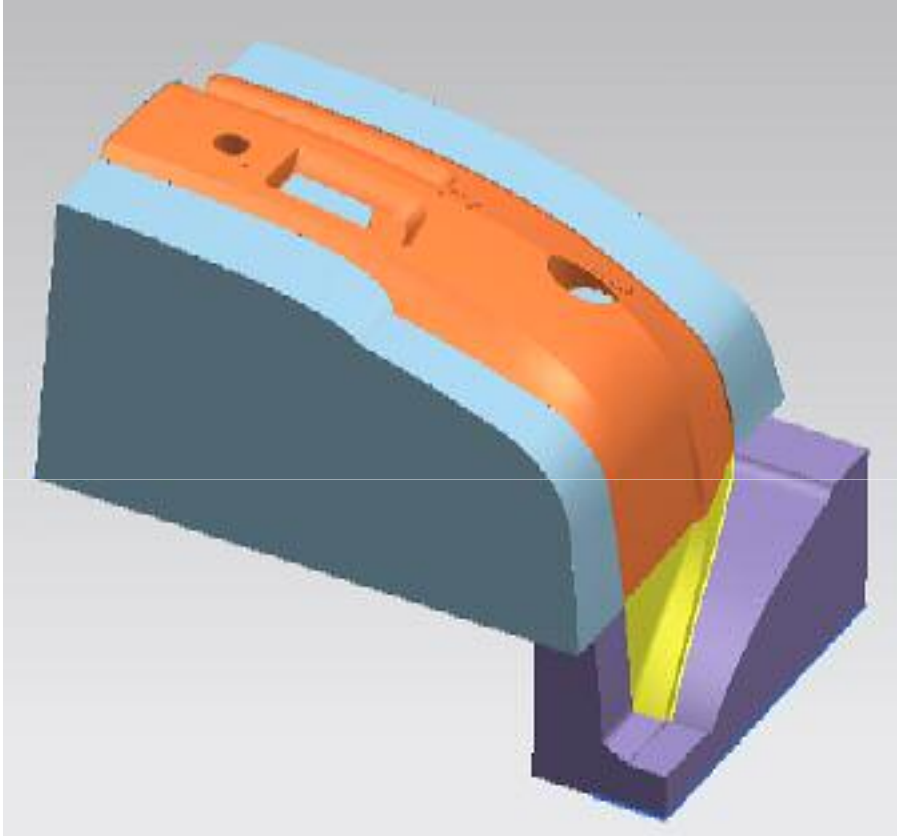
DRAW DIRECTION



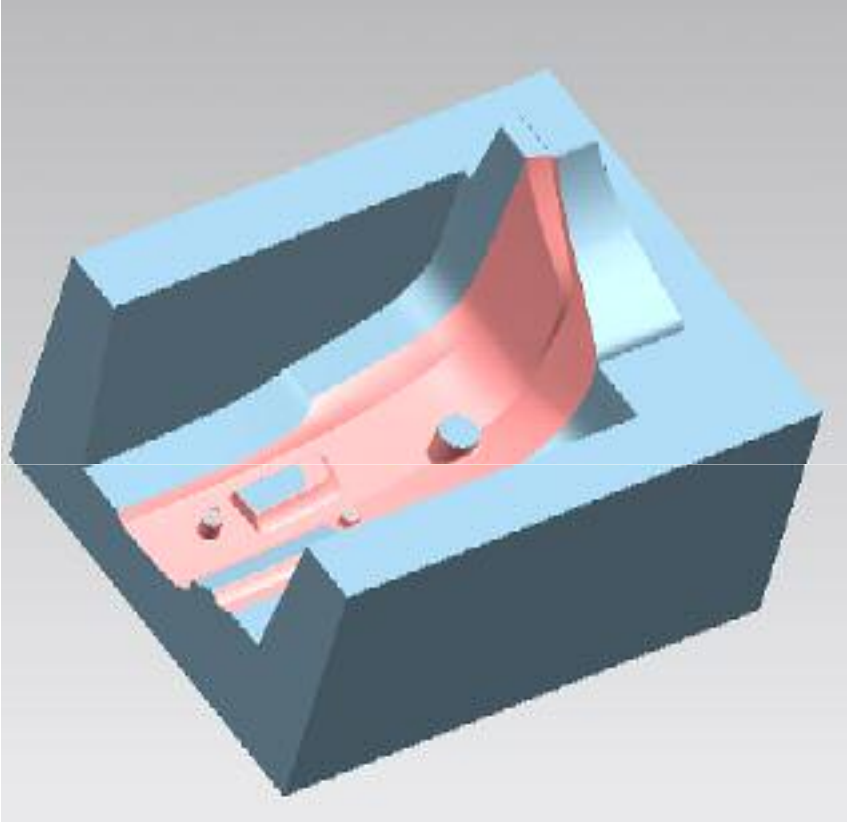
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TENTATIVE TOOLING LAYOUT



Punch Inset

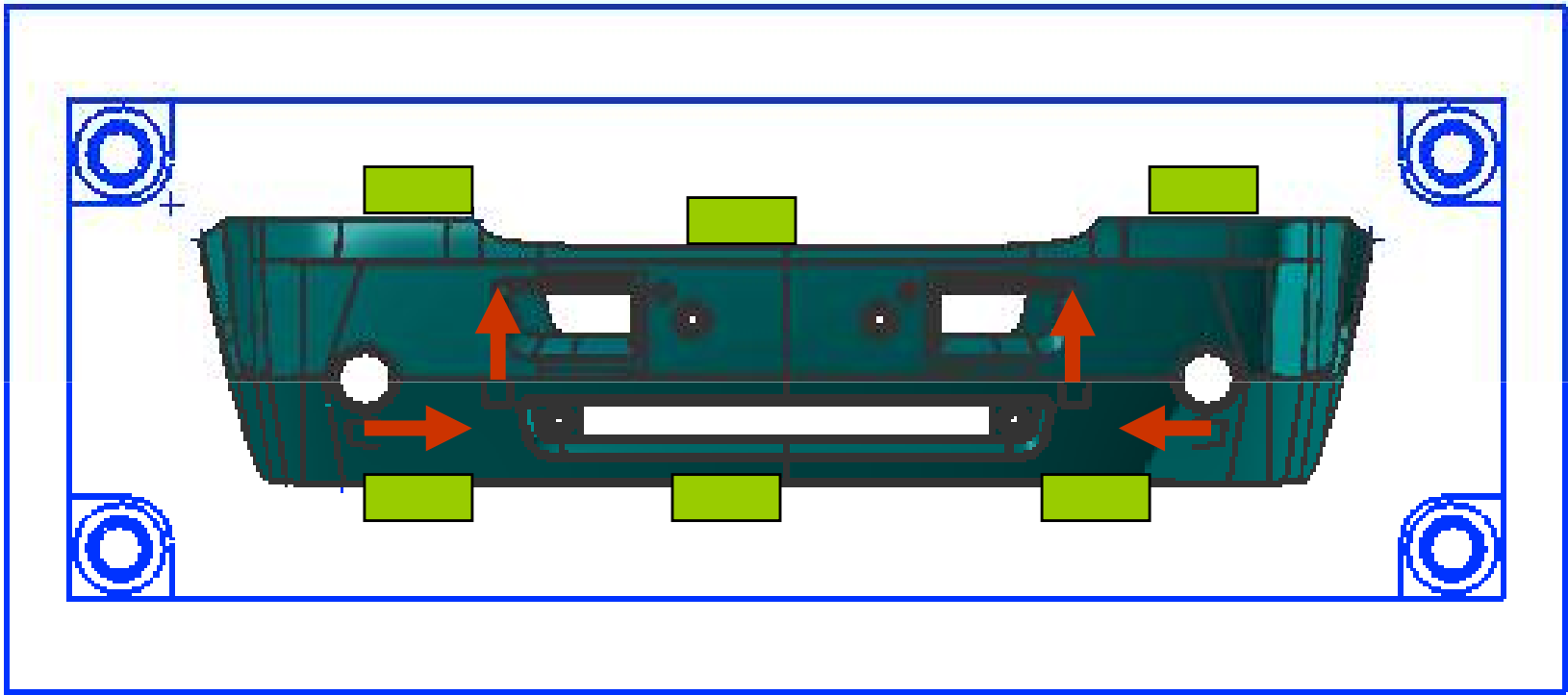


Cavity



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TENTATIVE EJECTORS



-  BLOCK EJECTOR
-  ANGULAR LIFTER



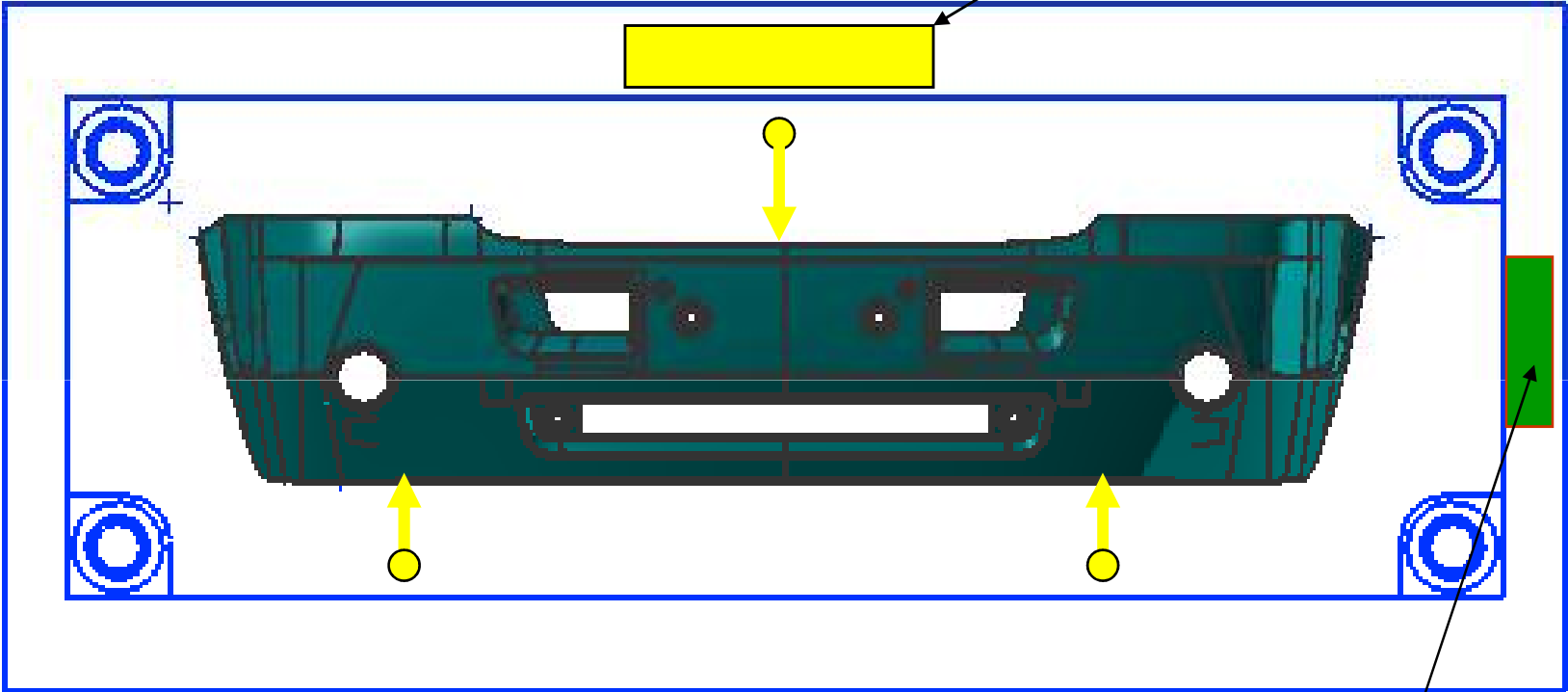
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TENTATIVE FEED SYSTEM

HOT RUNNER TEMP CONTROLLER

TOOL TOP

OPERATOR SIDE

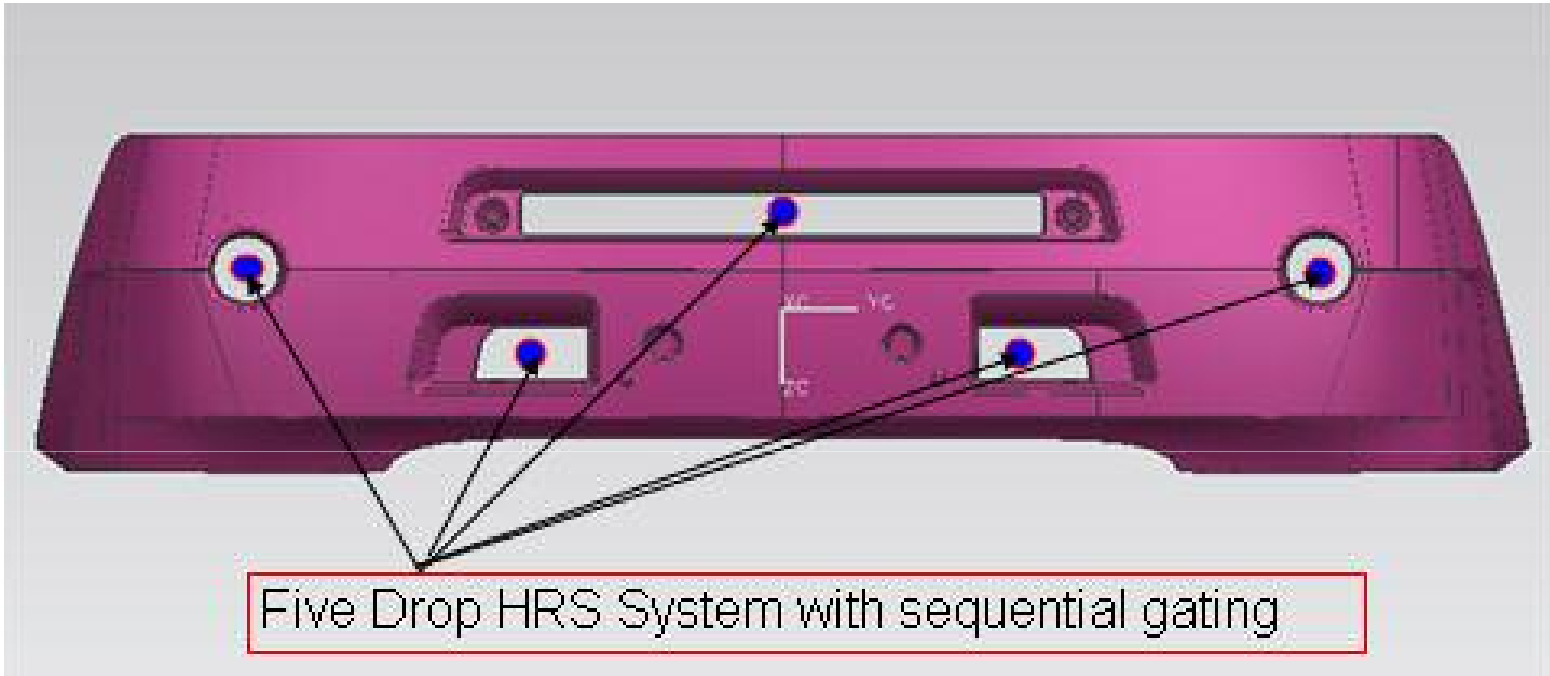


HOT RUNNER VALVE CONTROLLER

- \* At least 5 gate is required for this part.
- \* Hot runner system must should have sequential valve gate.
- \* Final gating will be based on mold flow report .

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TENTATIVE FEED SYSTEM

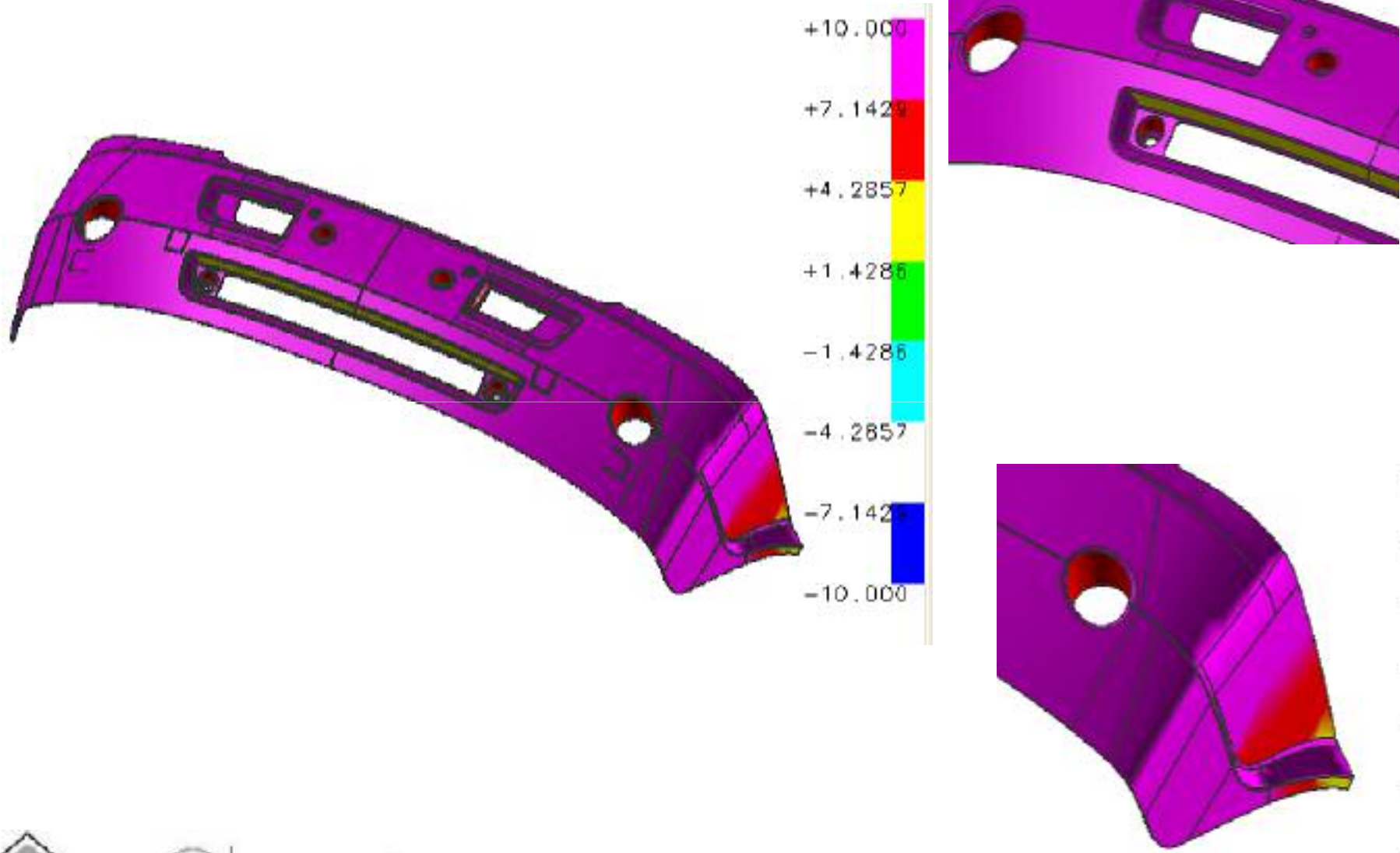


PROPOSED LAYOUT & FEED SYSTEM



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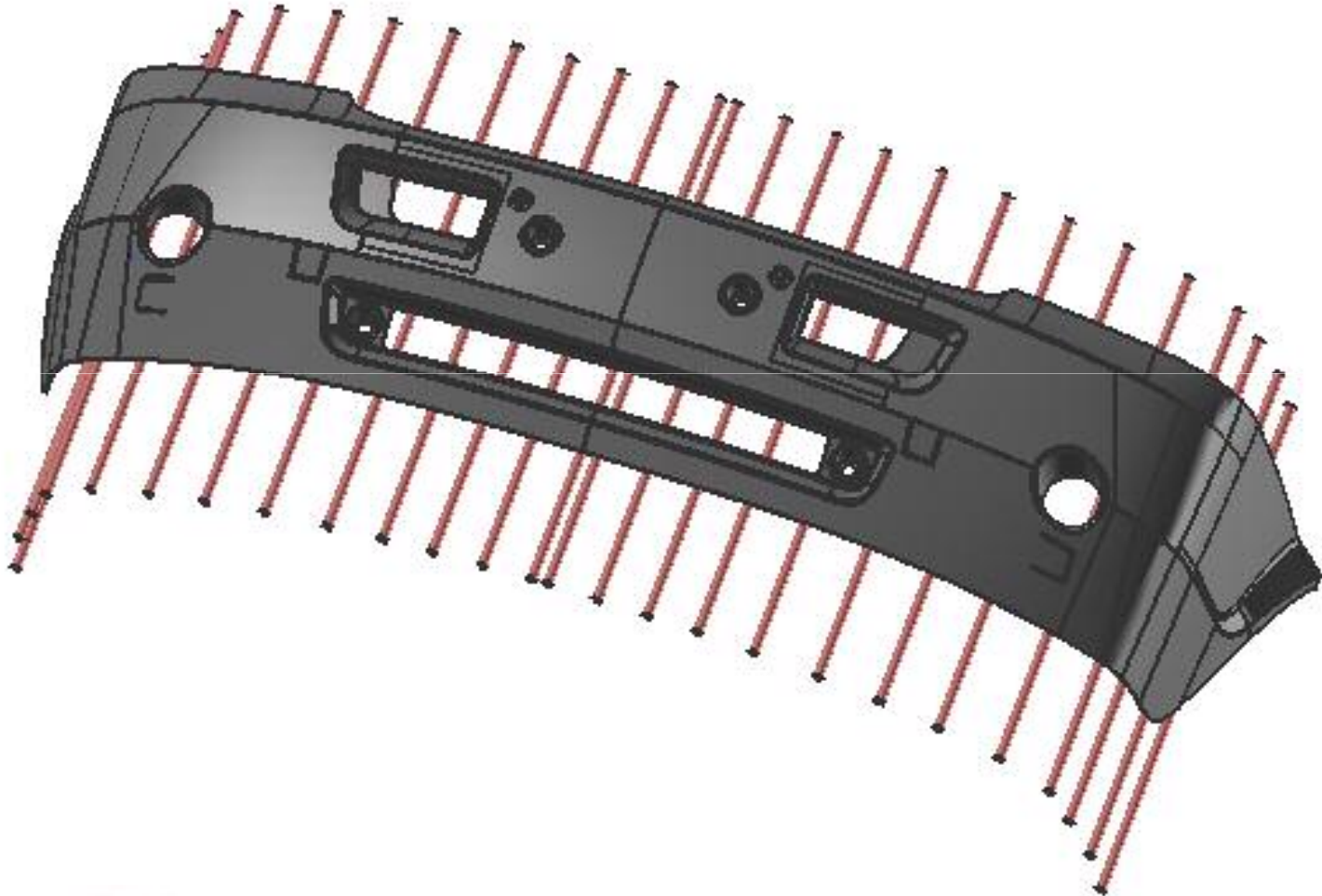
## DRAFT ANALYSIS FOR TEXTURING



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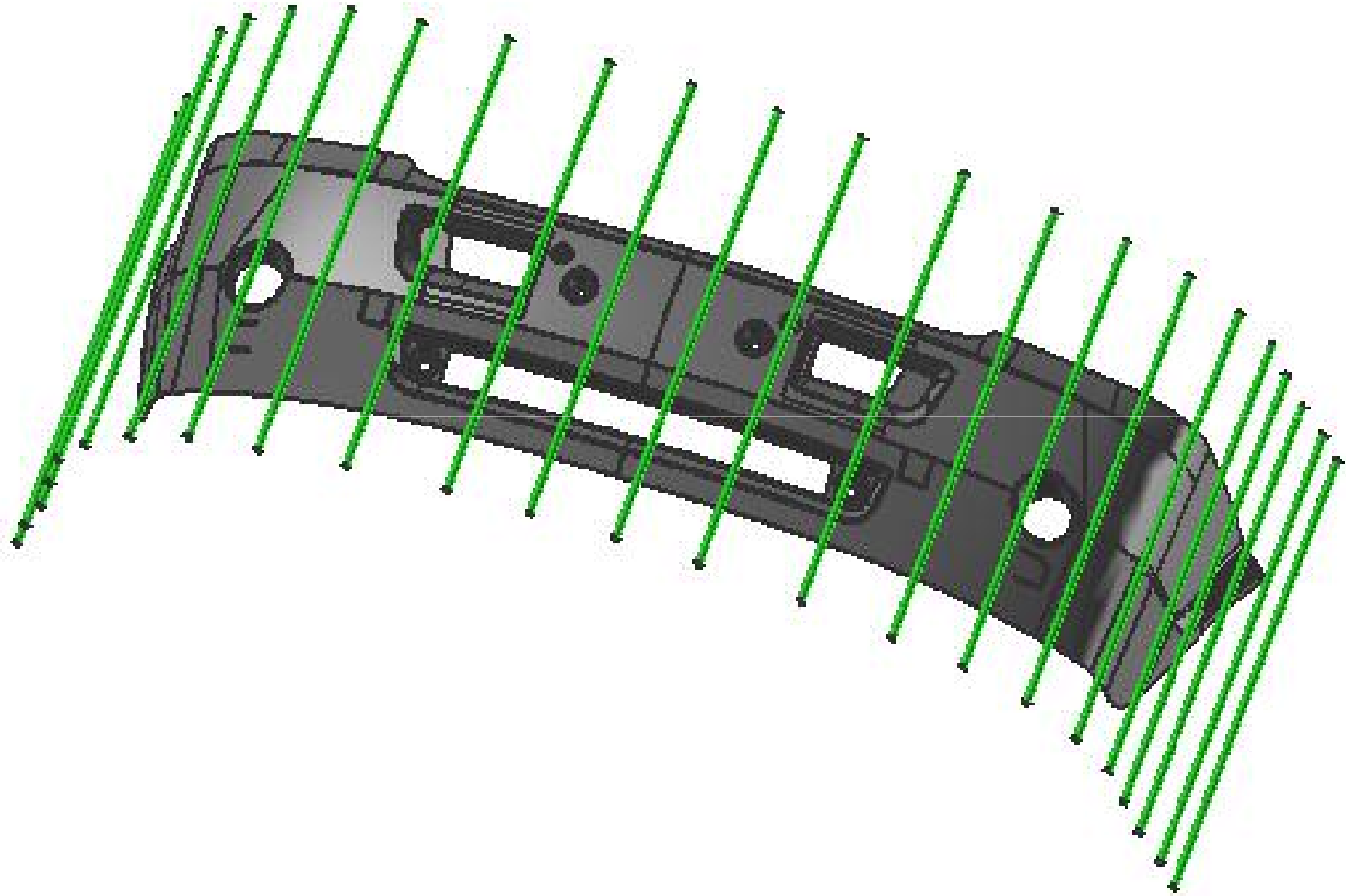
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TENTATIVE CORE COOLING



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TENTATIVE CAVITY COOLING



# Thank You

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