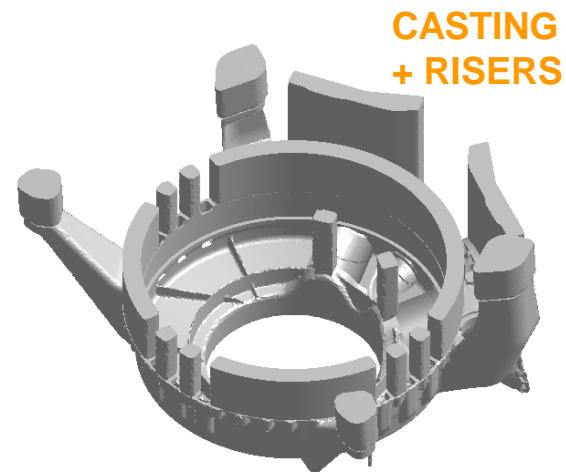
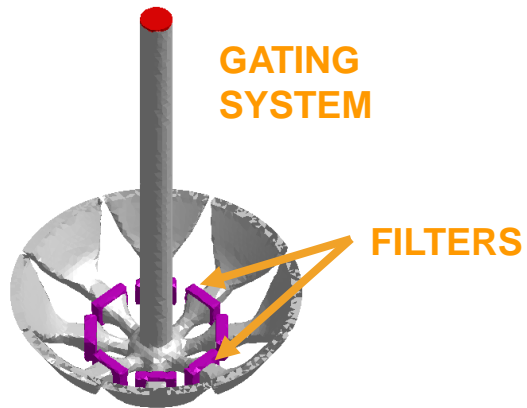
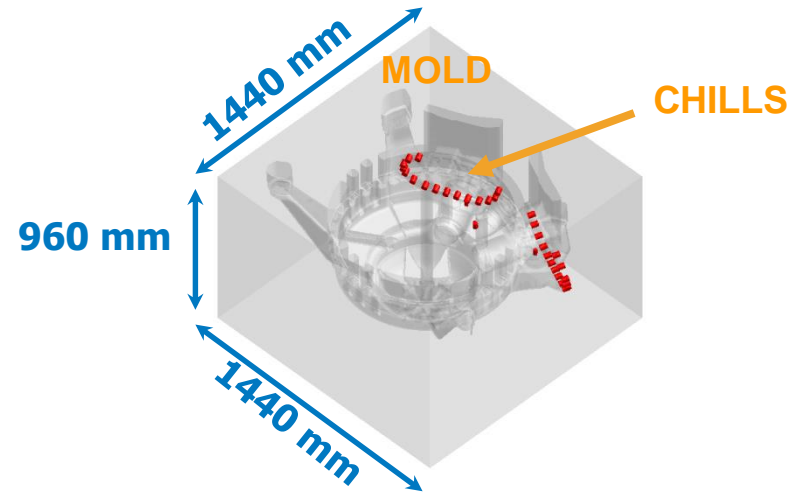


ProCAST

Sand Casting – Aluminium
Helicopter Transmission Case

Courtesy of  **ACTech**[®]



Dimensions

Casting (& gating system) :

Weight : 194 Kg

Mold:

Length : 1440 mm

Width : 1440 mm

Height : 960 mm

Materials

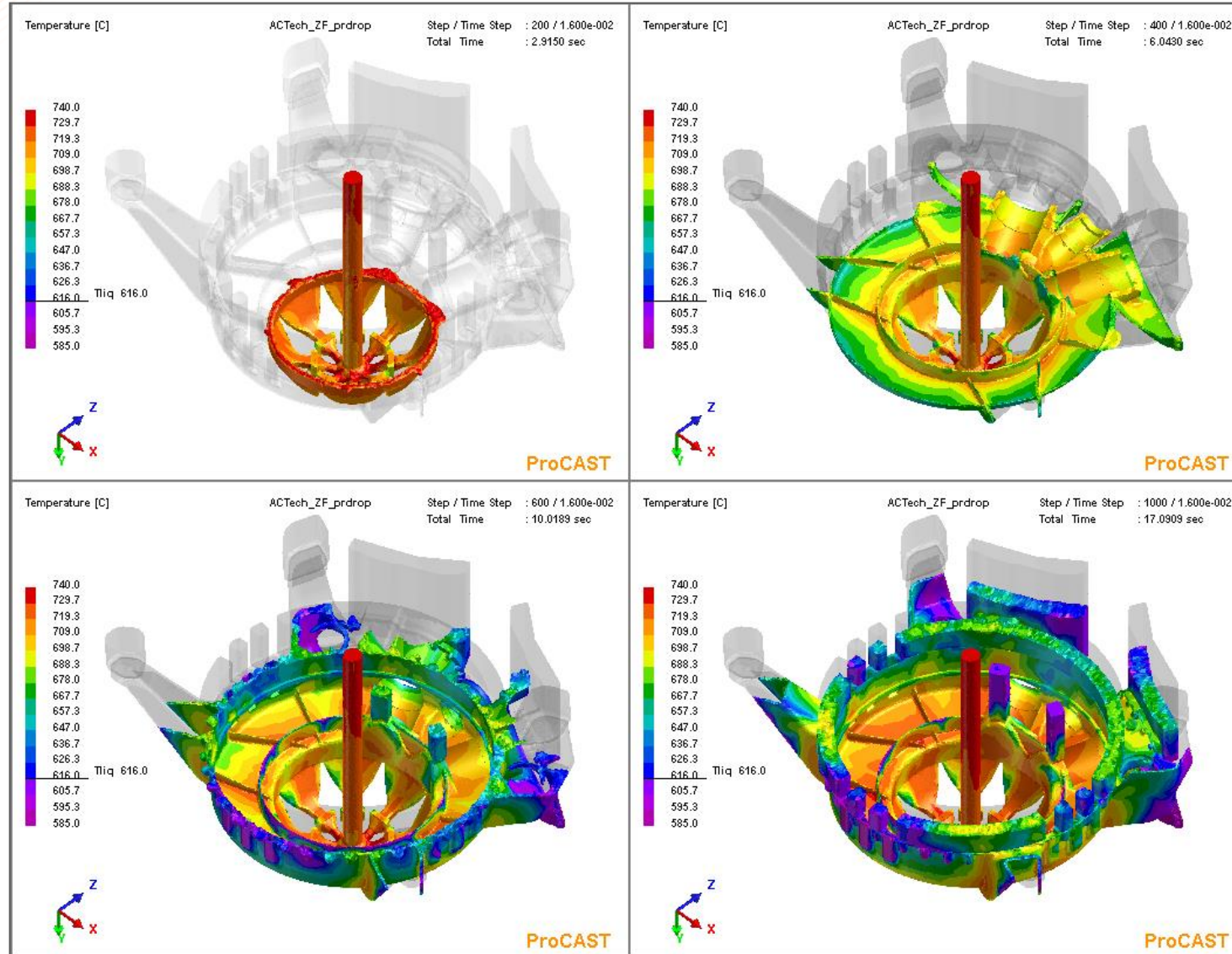
● Casting : AlSi7Mg03

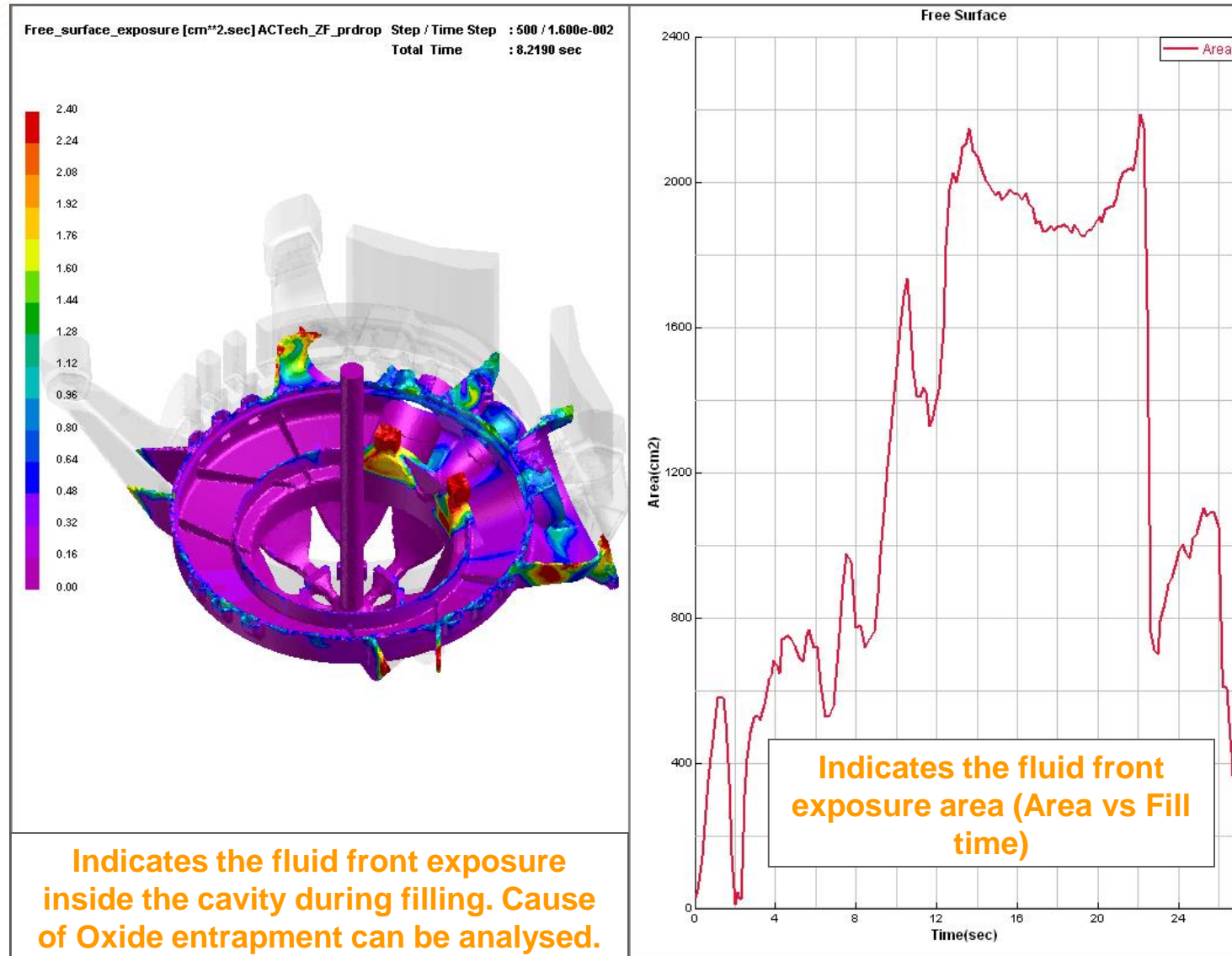
$T_{\text{liquidus}} = 616^{\circ}\text{C}$

$T_{\text{solidus}} = 559^{\circ}\text{C}$

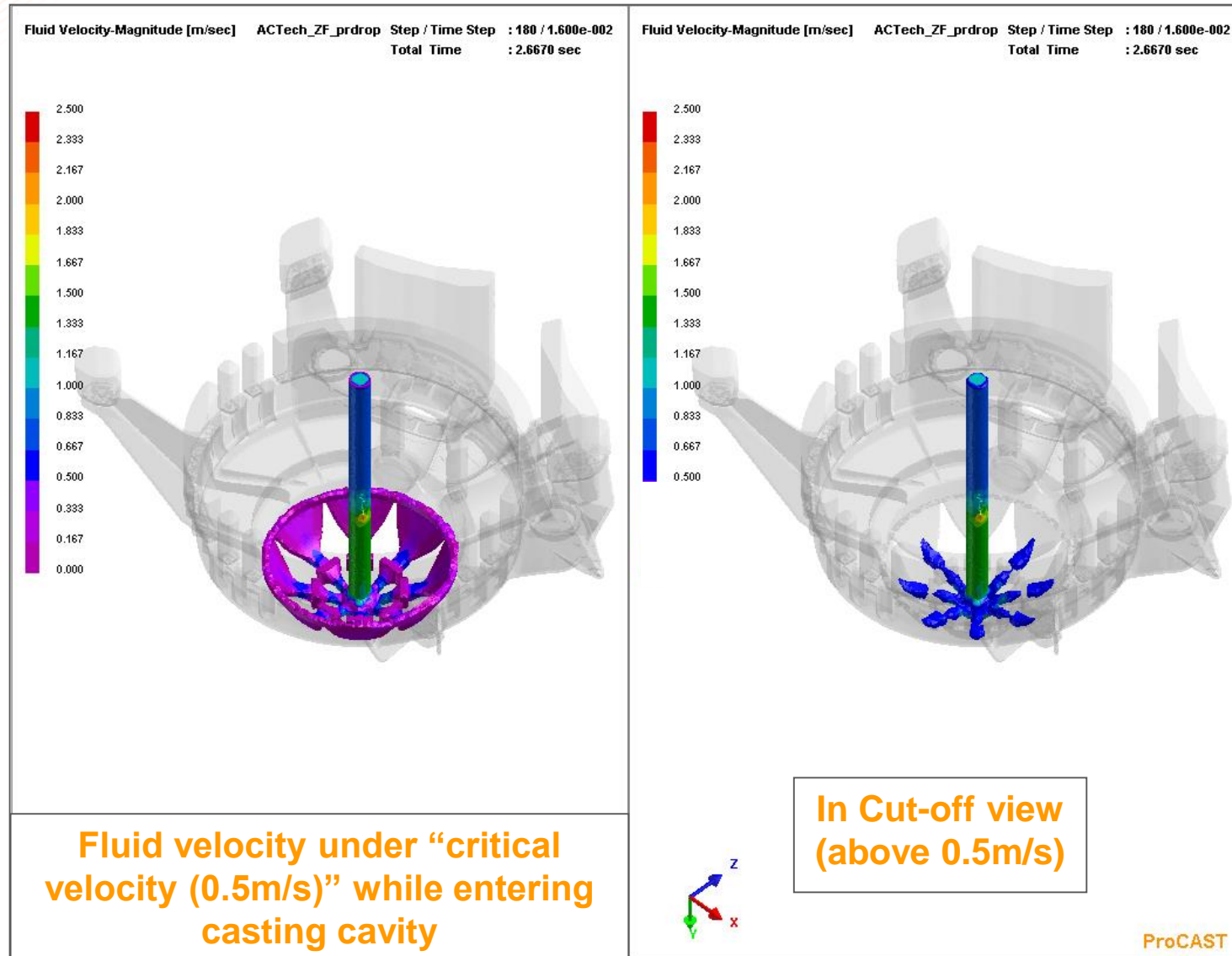
● Mold : Silica Sand

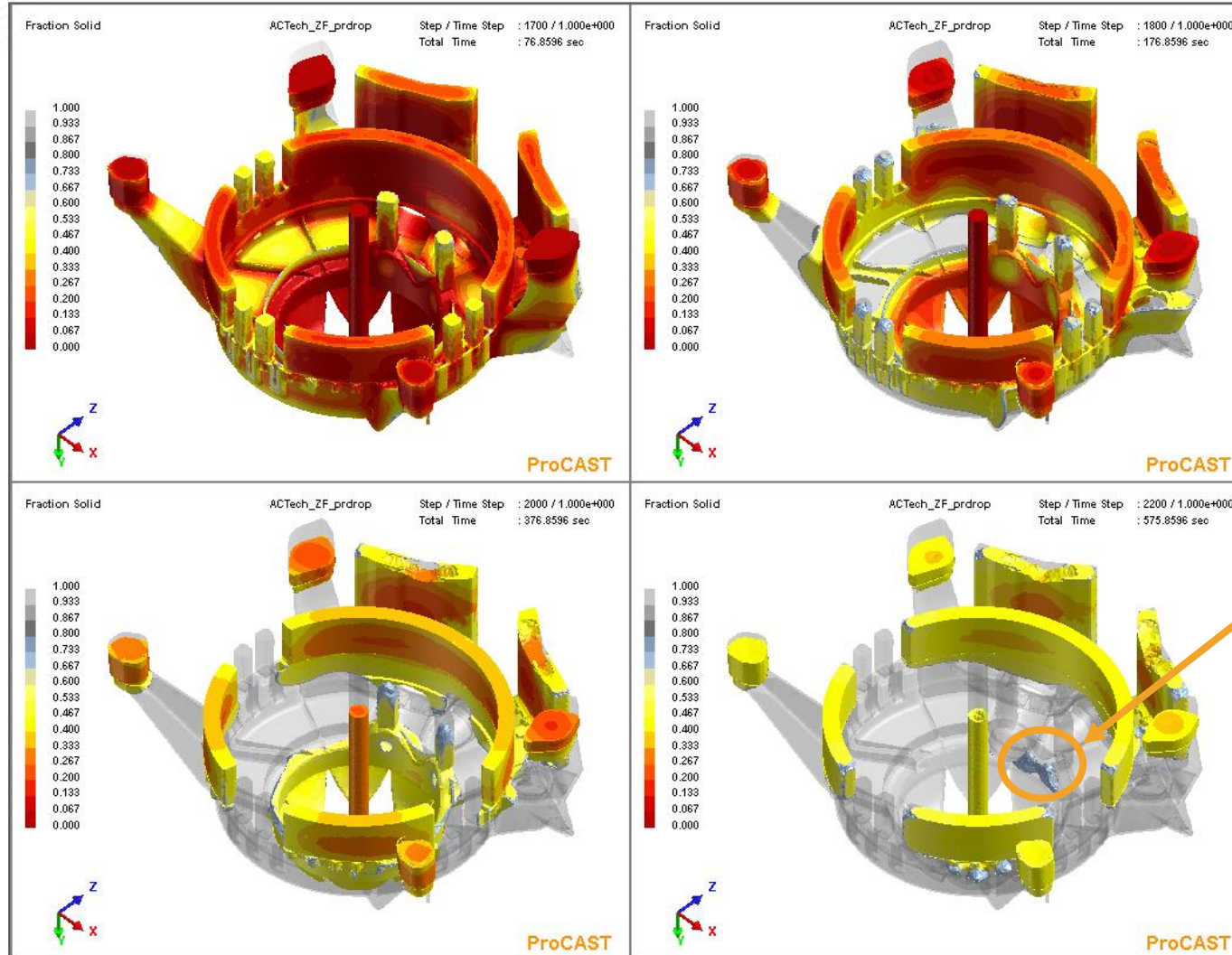
● Chill blocks: Cast Iron





Indicates the fluid front exposure inside the cavity during filling. Cause of Oxide entrapment can be analysed.

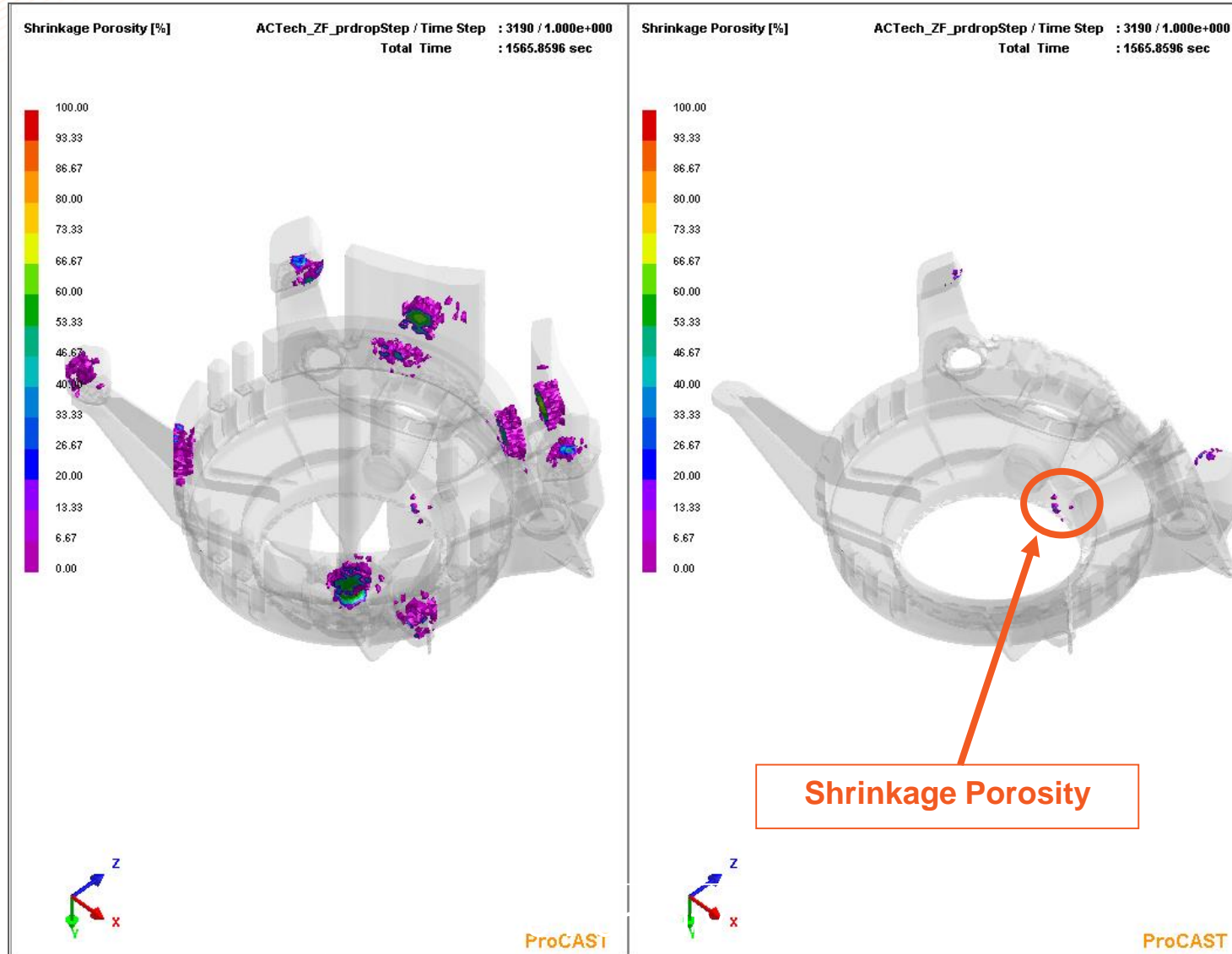


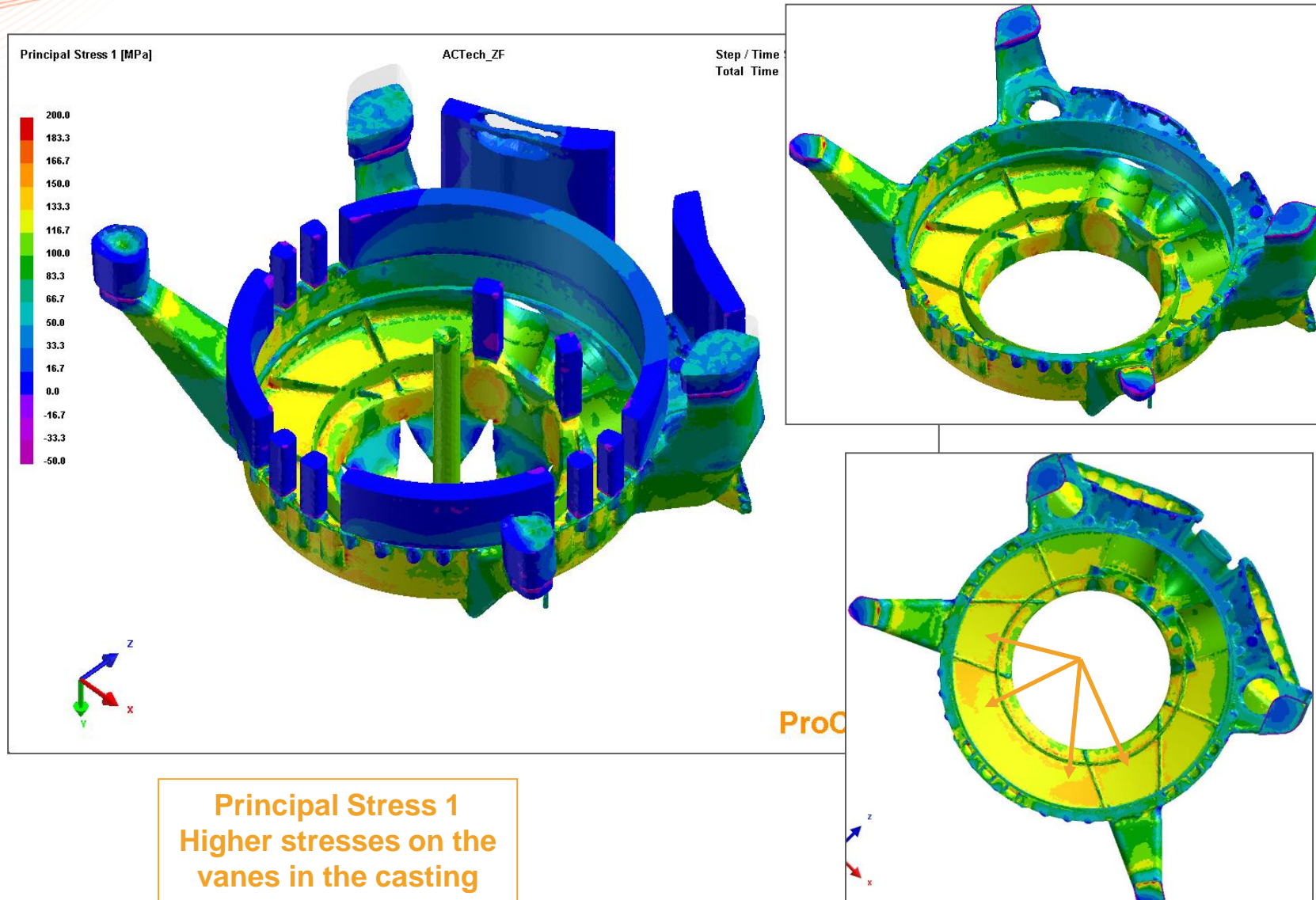


In cut-off view
(below 70%)

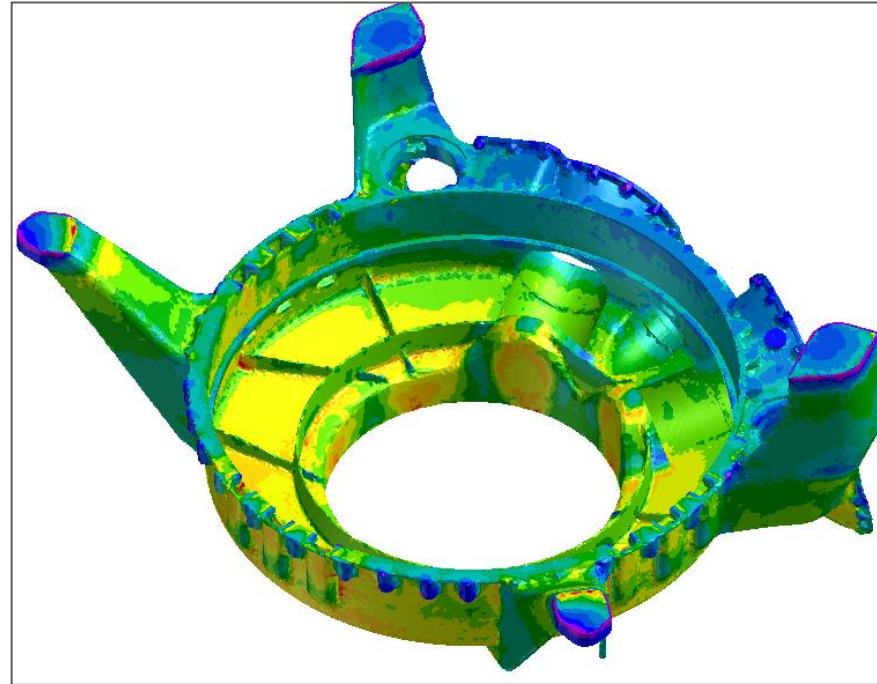
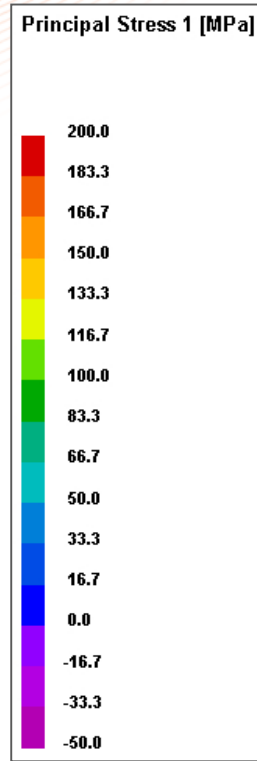
Indicates
isolated
pockets in the
casting, which
could lead to
possible
defects

SOLIDIFICAZIONE: POROSITÀ E PUNTE A SPILLO

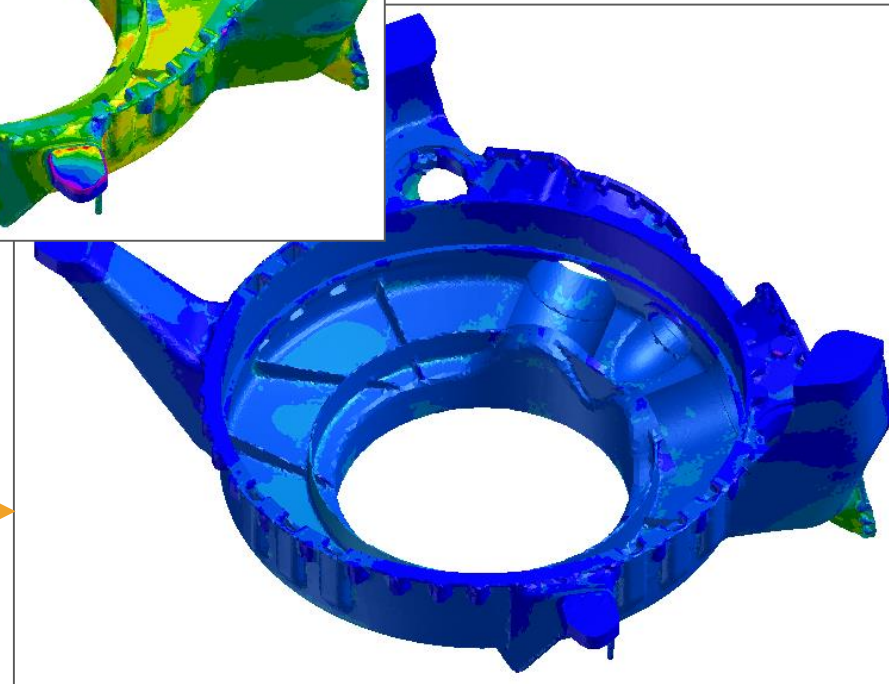




TENSIONI E SFORZI PRE-POST STERRATURA



Stress plot before Mold removal



Stress plot after Mold removal
(risers & gating still attached to casting)

