

Stage 279

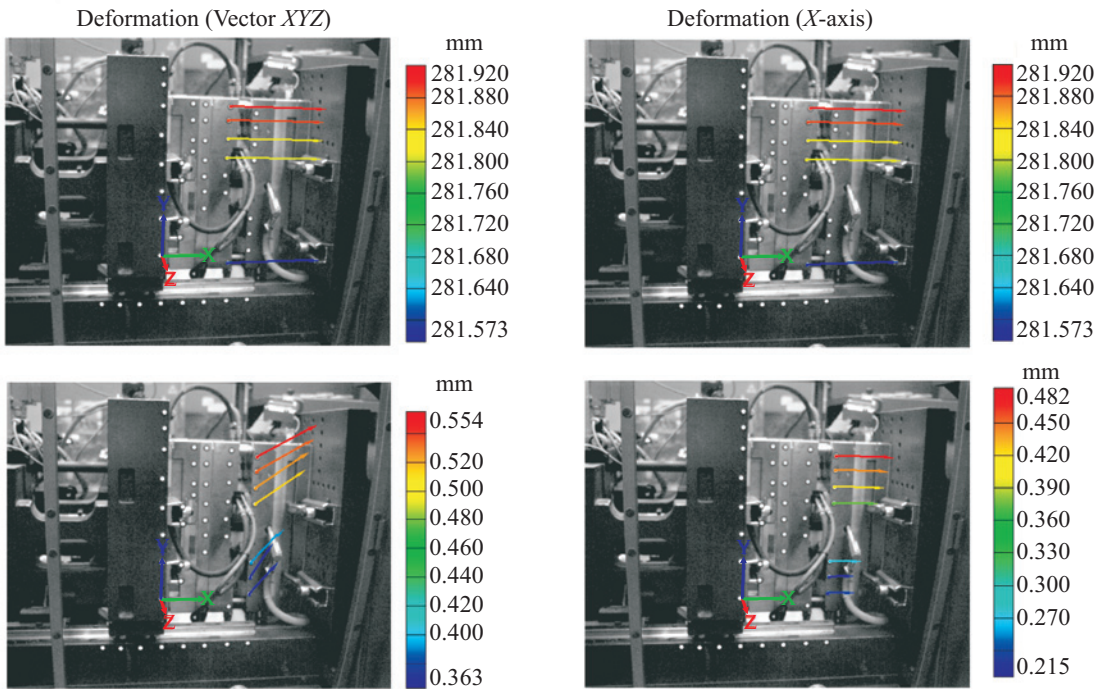


Fig. 10. Measurement reports deformations for 500 kN force

Stage 279

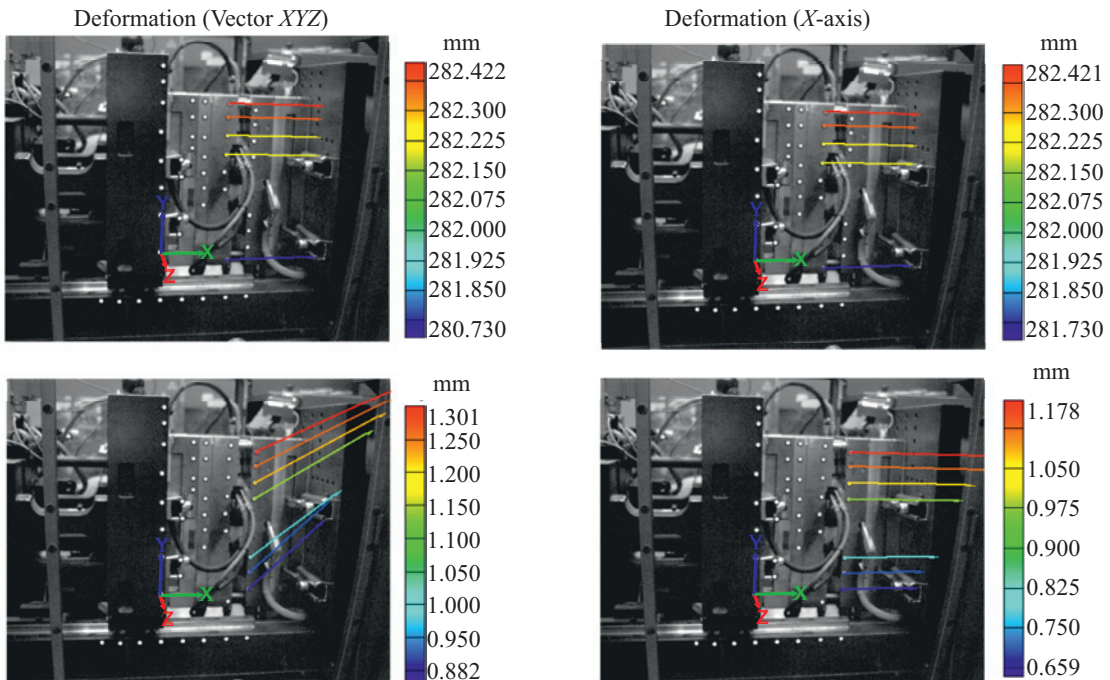


Fig. 11. Measurement reports deformations for 1200 kN force

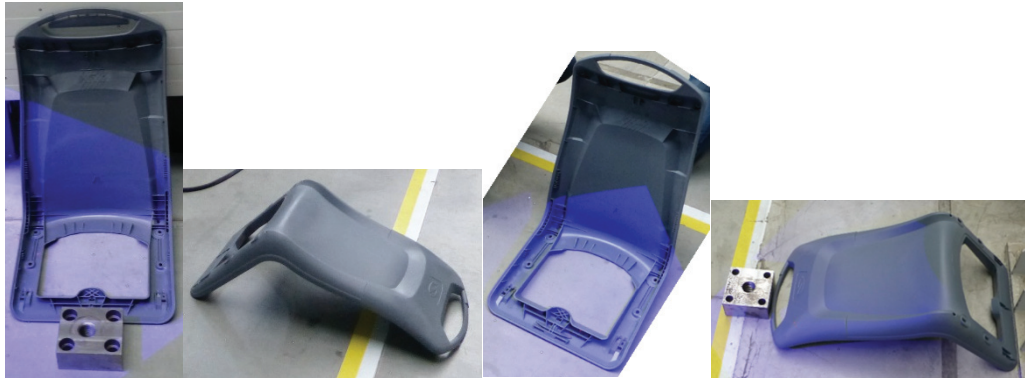


Fig. 12. Positions of seats during cooling, from left: L blocked, V free, L free, V blocked

Investigation of cooling process by thermovision

A very important issue for geometrical shape of seats is proper selection of cooling parameters and cooling position. This part of research was made to investigate deformation of a seat due to different storing position during cooling. Cooling was performed in environment conditions. Four cooling positions were investigated. They all are shown on Fig. 12.

The research was aimed to find out which of the position causes the smallest deviation in cold state. Measurement results are shown on the Figs. 13–16. Each of them presents deviations on a view from the top and from the left side.

Basing on these results V free position was chosen for further analysis using thermography.

Temperature distribution with a seat just after opening the mold was shown on Fig. 17 and seat during cooling on Fig. 18.

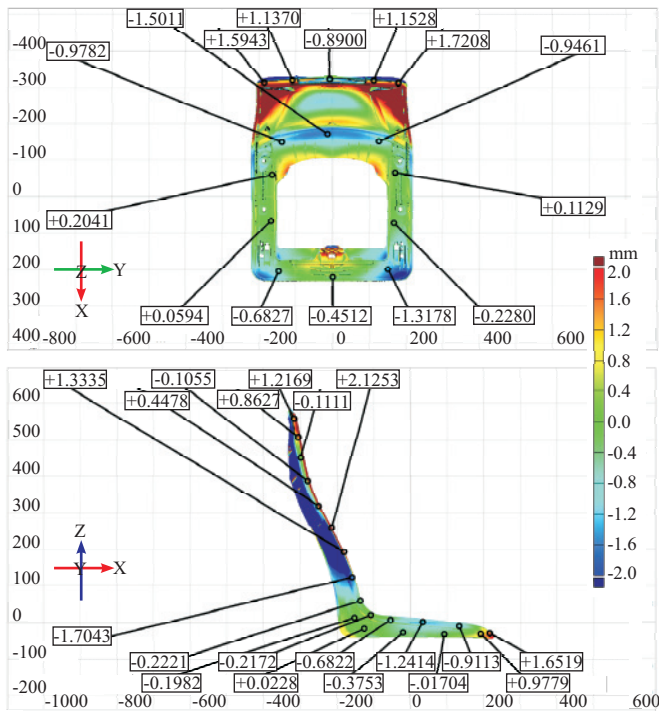


Fig. 13. Seat deviations after cooling in L blocked position

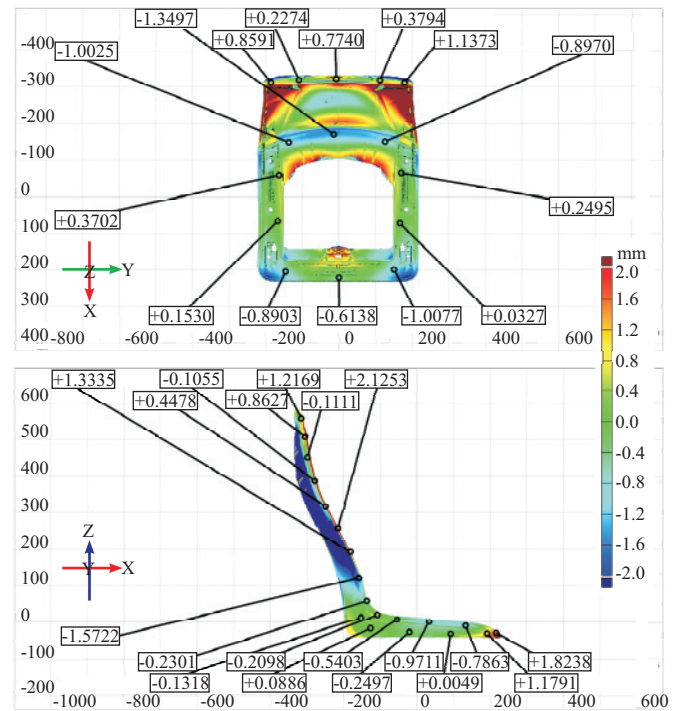


Fig. 14. Seat deviations after cooling in V free position