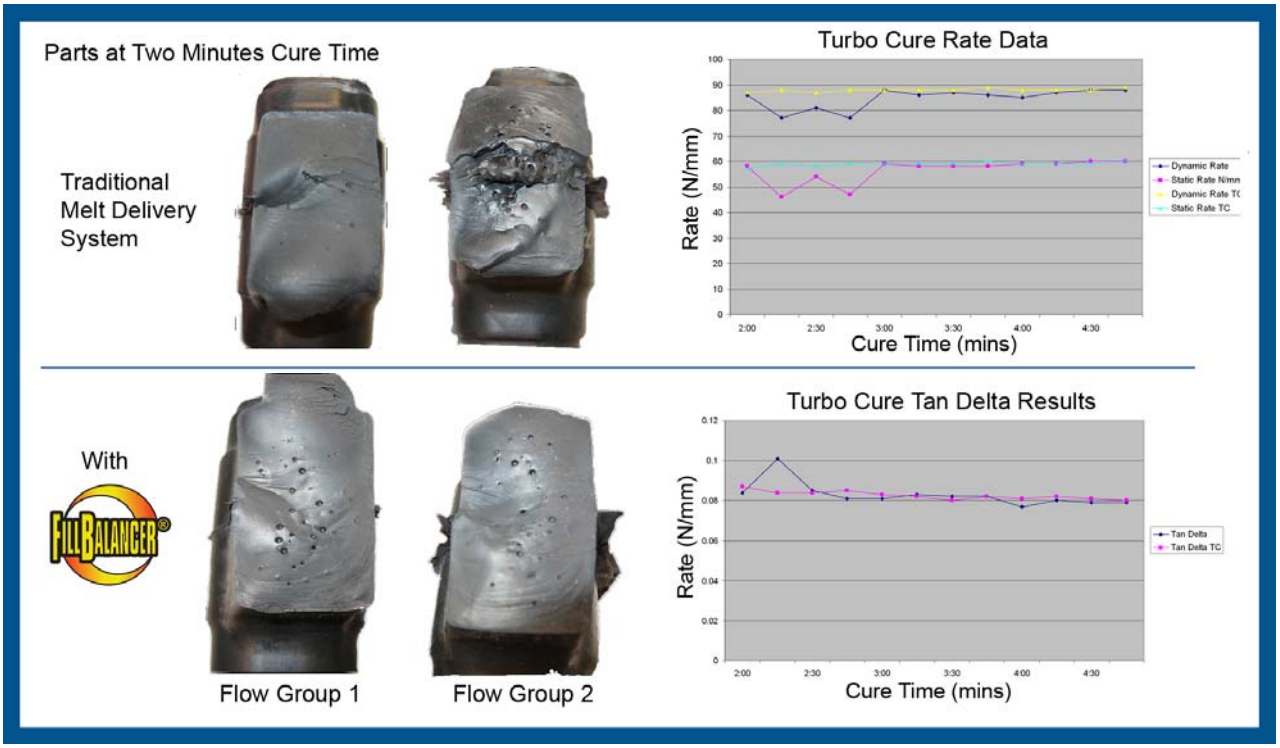
Fill Balancer® Case Study

Case Study: Fill Balancer® reduces cure time.

Fill Balancer® Technologies can be used in single cavity molds as well as multi-cavity molds to reduce cure-time by as much as 50%. In the case below, Fill Balancer® technologies were used within an 8-cavity mold to improve the filling balance, reduce the cure time, and improve part performance. This application had a traditional "H" pattern runner layout, very similar to the runner in the illustration above, except that there were two gates per cavity.



Before Fill Balancer® the high temperature material was delivered to the inside cavities (Flow Group 1) causing those to cure significantly faster than the outermost cavities (Flow Group 2) as shown in the top picture. This picture shows the state of cure after two minutes using a standard runner. The bottom picture shows the state of cure after two minutes with Fill Balancer® technology installed within the mold. The two graphs (shown beside the pictures) were used to measure part dynamic and static rate performance for each case.

The 5 Step Process™ methodology was used to benchmark the filling performance of this mold before and after Fill Balancer® was applied, and can be used with any injection mold.

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