

## **Mid-surfacing: a task for the “brave”? Not any more**

Dimitrios Zafeiropoulos

Mid-surfacing of complex casting and plastic parts is one of the most time consuming and frustrating tasks in pre-processing. An attempt to provide a solution was made in ANSA v13.2 with the “Casting” function, which proved to have a high degree of automation, but it couldn't be considered as a 100% solution, in the sense that manual inspection and correction was required to achieve the desired mesh quality.

This manual post-processing set of actions requires the application of versatile functions such as aligning nodes, trimming/extending features, creating new surfaces, setting up correct thickness, fixing the mesh quality and in some cases even creating hybrid meshes. Moreover, the complexity of the geometries makes the checking of those results a very difficult task to perform.

ANSA version 18.0 has a new automated mid-surfacing algorithm to present, with a completely new approach for checking and fixing problematic areas. This new approach not only speeds up the whole process but also generates new potential in creating the “perfect” mid-surface.

This demo will give you a tour in the advancements of mid-surfacing in ANSA v18.0 and help you gain a better understanding of what to expect in the near future.