RIM MOLDED COMPUTER TOMOGRAPH (CT) ENCLOSURE
Entered by: Thieme Corporation

Molder Thieme Corporation Tullastrasse 11, 79331 Teningen, Germany	**Designer** Thieme Corporation 3605 Swenson Ave., St. Charles, IL, 60174
Moldmaker Grauer, Form Plus & Golarsky Endigen, Germany	**Original Equipment Manufacturer (OEM)**

Entry Description

12 RIM components including the front and rear enclosure panels and the structural base frame panels are for a computer tomograph system used for medical analysis. The 12 RIM parts when assembled measure more than 94" wide, 74" high and 39" deep. Using a rib design by Thieme Corporation on each of the 12 panels, when assembled, the panels provide support and rigidity so the entire unit can be moved in an assembled position.

Why is this Part Innovative?

With respect to the RIM rear panel, it is one of the largest known single shot RIM parts to be manufactured in the world weighing in at 74 pounds and measuring 2200mm x 1700mm. Using the RIM process, creative CAD design by Thieme and numerous FEA analysis's, Thieme could determine strategic and unique rib designs to ensure adequate support and rigidity that could support all the 12 parts including the largest rear panel in an assembled position. Manufacturing the parts with PUR RIM enabled the OEM to realize consistent part dimensionality, reliability and part quality over traditional manufacturing methods such as fiberglass. Molding in assembly aids such as holes, ribs and attachment bosses and metal inserts reduced part cost, tooling cost, and assembly costs.

Manufacturing the largest rear panel in PUR RIM enabled the OEM to realize the desirable, free-flowing outer design, which is cosmetically stunning. Generally, panels this large would be deemed "un-moldable" due to the limitations of the machine and the panel would have to be split into two smaller panels requiring additional tools. Molding the large rear panel in a single shot enabled part consolidation thereby reducing set up times, tooling costs and assembly costs. To finish the desired look requested by the OEM, a water-based, two color PUR paint was used to finish the enclosure panels.