

Low Cost Tooling Concepts for RTM Development

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ABSTRACT

Tooling has always been a substantial portion of cost for fabrication of parts using the Resin Transfer Molding, RTM, process. This is especially true for RTM development and prototype components. RTM tooling is generally constructed of machined metallic details, even for non-production tooling. While the raw tool material costs are low, the cost and lead time incurred for N/C programming, machining, tool fit-up and assembly represent a significant investment. Also, any required tooling modifications can add considerable time and cost, possibly resulting in tool detail scrap and remake. This paper presents a novel approach that directly addresses tooling and modification cost, as well as lead time, for development of resin transfer molding fabrication.