

Invited Session on “Lot Streaming” for IFAC MIMS Conference

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Session Speaker

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Lot streaming is a technique that accelerates the flow of products through a production system by splitting their production lots into sublots and then processing the sublots simultaneously over the machines, thereby reducing the work-in-process and cycle time. It has been applied for the processing of jobs in a variety of machine configurations, including flow shops, job shops, open shops, parallel machines, and hybrid flow shops, even though the bulk of studies have been devoted to flow shop scheduling problems. We will present a review of work reported in this area, and also, present the use of lot streaming in a two-stage assembly environment in which the subassemblies produced by vendors at the first stage are assembled into products at the second stage, which constitutes some of the latest work reported in this area. Some new results and applications of lot streaming in mass customization and wafer fabrication will also be presented.