



Toulouse, France
June 27-29, 2018

Invited session

Demand-Driven Material Requirement Planning - DDMRP

Organized by

Matthieu Lauras, IMT Mines Albi, matthieu.lauras@mines-albi.fr
Pierre Baptiste, Polytechnique Montréal, pierre.baptiste@polymtl.ca

Support

Joint Research Lab AGIRE (<http://agire.mines-albi.fr/>)
Poly DDMRP Lab (<http://www.polymtl.ca/poly-ddmrp/>)

Abstract

Demand Driven Material Requirements Planning method or DDMRP is a recent and promising material management method that has been developed and implemented in the practitioner world. Essentially, DDMRP represents a rethinking of the basic MRP logic. By incorporating elements drawn from Lean Systems and the Theory of Constraints and by introducing new features such as dynamic buffers, DDMRP modifies the basic MRP logic so that it is better able to satisfy customer demands in an increasingly demanding, turbulent, and dynamic environment. Papers submitted to this session should consider one of the following subjects:

- To validate what the firms claim about DDMRP (pros and cons).
- To compare DDMRP with other planning methods (MRP, Kanban, Production Wheel...).
- To analyze the growing DDMRP literature.
- To design innovative decision support systems for DDMRP.
- To develop DDMRP application cases.
- Etc.

List of topics

Practical application of DDMRP
Scientific study of DDMRP forces and weaknesses
Optimization model for DDMRP
Simulation model for DDMRP
DDMRP literature review
...

Keywords

DDMRP, Decision Support Systems, Modelling, Simulation, Application Cases