AGENDA

SPECIES meeting opening - Prof. Tullio Tolio

The Network Part Program (NPP) approach in view of co-evolving products, processes and systems - Prof. Tullio Tolio

A Unified Manufacturing Resource Model for CNC Machining Systems - Prof. Stephen T. Newman

Industrial perspective on processes/products interaction/evolution - Dr. Dan Frayssinet (Esprit)

Developments in Simulation of CNC Production Processes - Dr. John Reed (CGTech Ltd)

Migration Manufacturing: a new Approach for Automotive Factory Planning - Dr. Thomas Meichsner (Wilhelm Karmann GmbH)

Concluding Remarks - Prof. Jack Hu, Prof. Tullio Tolio

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August 28th, 2008
Manchester, UK
Meeting Opening

AGENDA

- Opening, welcome, introduction of invited guests
- Approval of the agenda
- Approval of the minutes
- About “SPECIES-Product System Evolution”
- Organized activities
- Web-site

The Vision

AGENDA

ABOUT “SPECIES-Product System Evolution”

ORGANIZED EVENTS

TOOLS
Open Issues

- Characterization of evolution scenarios for products/processes and production systems (Scenario analysis);
- Formalization of information characterizing the link between products/process and production systems;
- Economical analysis of changeability and reconfigurability at a production system level (Protection of investments);
- Configuration/Reconfiguration planning under uncertainty;
- Influence of production system evolution on manufacturing strategy;
- Filling the gap between the inertia of production systems and the frequency of change of products/processes and manufacturing strategies (co-evolution).

The Mission

The **Mission** is to investigate approaches, techniques and methods devoted to determine the most appropriate evolution strategy for a production system, grounding on knowledge about competitive environment changes, with a particular focus on evolving product and process characteristics.
Organized activities

Special Session in 5th International CIRP Conference on Digital Enterprise Technology
(22-24 October 2008, Nantes, France)

Conference Chairs:
Alain Bernard, l'Ecole Centrale de Nantes (France)
Paul G. Maropoulos, University of Bath (UK)

AGENDA
ABOUT “SPECIES-Product System Evolution”
ORGANIZED EVENTS
TOOLS

The Co-Evolution MODEL

- Contributions in improving and sharing the model are needed

http://www.species.polimi.it
The Data Structure Formalization

- Contributions in improving and sharing the model are needed

http://www.species.polimi.it

The production system design approach

- Contributions in improving and sharing the model are needed

http://www.species.polimi.it
DESIGN OF FLEXIBLE PRODUCTION SYSTEMS

PUBLISHER: SPRINGER-VERLAG
EDITOR: Tullio TOLIO

Chapters and Authors of the book

1. Designing Manufacturing Flexibility in Dynamic Production Contexts
   W.Terkaj, T.Tolio, A.Valente

2. Flexibility in Manufacturing - an Empirical Case-Study Research
   M.Cantamessa, C.Capello

3. A Review on Manufacturing Flexibility
   W.Terkaj, T.Tolio, A.Valente

4. Product-Process-System Information Formalization to support Manufacturing System Design
   W.Terkaj, T.Tolio

5. Manufacturing Strategy: Production Scenario Evolution Analysis for Assessing Focused Flexibility
   M.Bruccoleri, D.Lanza, G.Perrone

6. Pallet Configuration for approaching Mapping Requirements on Devices
   G.Celano, A.Costa, S.Fichera, B.Santangelo

7. Design of Focused Flexibility Manufacturing Systems (FFMSs)
   W.Terkaj, T.Tolio, A.Valente

8. System Life-Cycle Planning
   M.Cantamessa, C.Capello, G.Cordella

9. System Performance Simulation and Analysis
   A.Grieco, F.Nucci

10. Testing
    M.Bruccoleri, C.Capello, A.Costa, F.Nucci, W.Terkaj, A.Valente
Contacts

If you are interested in SPECIES-WG topics and you want to learn more information, feel free to contact us:

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