## **Bibliography and Publications**

- <sup>5</sup>Stigler,G."Production and Distribution in the Short-run". Journal of Political Economy (47),1939, pp.305-328.
- <sup>6</sup> Browne, J., Dubois, D., Rathmili, K., Setlù, S.P.and Stecke, K.E. "Classification of flexible manufacturing systems". The FMS Magazine (2), no.2,1984.
- Sethi, A.K. and Sethi, P.S. "Flexibility in Manufacturing: a Survey". International Journal of Flexible Manufacturing Systems 2, 1990, pp. 289-328.
- <sup>8</sup> Palles, N., Yannou and Bocquet, J-C. "Manufacturing Flexibility: a New Evaluation" in Chedmail et.al (op.cit.).
- <sup>9</sup> Del Mar, D. Operations and Industrial Management: Designing and Managing for Productivity. McGraw Hill, 1985.
- 10Del Mar (1985), p.72
- <sup>11</sup>Erixon, G. Modular Function Deployment a Method for Product Modularization. The Royal Institute of Technology, Stockholm, 1998.
- <sup>12</sup>See for example Carvalho, M.F., Silva Filho, O. S. and Femandes, C.A.O. "O Planejamento da Manufatura Praticas Industriais e Métodos de Otimização" in Gestão & Produção, v.5, n. 1, April 1998 pp..34-59). <sup>13</sup>See Erixon (1998), p.7.
- <sup>14</sup> Yang. T. and Peters, B.A. "Flexible Machine Layout Design for Dynamic and Uncertain Production Environments". European Journal of Operations Research 108 (1998), pp.49-64.
- 15 Millen, R. A.; Solomon, M.M. and Afentakis, P. "The Impact of a Single Input/Output device on Layout Considerations in Flexible Manufacturing Systems". Int.J.Prod.Res. 30, no. 1 (1992), pp.89-93.
- <sup>16</sup> Meller, R.D. and Gau, K-Y. "The Facility Layout Problem: Recent and Emerging Trends and Perspectives" in Journal of Manufacturing Systems 15, no. 5 (1996), pp. 351-366.
- <sup>17</sup> Chedmail, P., Bocquet, J-C and Dorn:field, D. Integrated Design and Manufacturing in Mechanical Engineering . Kluwer Academic Publishers, 1997.
- <sup>18</sup>Walker, J.M. (ed.). Handbook of Manufacturing Engineering, Marcel Dekker Inc., 1996.
- <sup>19</sup>Chednmü et al. (199-7), pp.xvi-xvii
- <sup>20</sup> Gao, J.X. and Bennett, G.R. "Manufacturing Capability Modeling for Concurrent Product Development" in Chedmail et.al.
- <sup>21</sup> This idea was suggested by Prof. Michel Minoux, Université de Paris (France) during a visit to the University of Southampton.
- <sup>22</sup> Mahbub, R. Automation and Robotics in Construction.\_ Unpublished MSc Dissertation. University of Manchester, 1993.
- <sup>27</sup> Riemer, R- and Edan Y. "The Evaluation of the Influence of Target Locations on Robots". Working paper, Dept. of Industrial Engineering and Management, Ben-Gurion University of the Negev, 1999.
- <sup>28</sup> Billingsley, J. Robots and Automated Manufacture. IEEE Control Engineering Series. Short Run Press Ltd., 1985.
- <sup>29</sup> Fuller, 1992 (op. cit.), p. 171.
- <sup>30</sup> This sub-section of the report is largely based on inputs from A. Pashkevich (ROBOLAB, Belarus).
- <sup>31</sup> A robot simulation package called ROBOMAX with all of the features named below developed by ROBOLAB.
- <sup>32</sup> The repeatability of industrial robots tends to be higher than their accuracy, averaging 0.5 mm and 1.0 mm respectively.
- <sup>33</sup> Roy, Daniel. Une architecture hierarchisee multi-Agents pour le pilotage reactif d'ateliers de Production. Unpublished Ph.D. thesis, Universite de Metz, 1998.
- <sup>34</sup> Davies, W. and Edwards, P. "Agent-based Knowledge Discovery". Working Paper, Dept. pf Computer Sciences, University of Aberdeen, 1995.
- 35 Roy, D. 1998 (op.cit.), p. 18.
- <sup>36</sup>Roy, D. and Anciaux, D. "A Hierarchical Multi-agent Approach Applied to the Shop Floor Control". Proceedings of the CARS & FDF Conference, Colombia, Dec. 1997.
- <sup>37</sup> Graphical representation based on Roy, D. 1998, op.cit (pp. 34
- <sup>38</sup> Roy, D. 1998 (ap.cit.), p. 43.
- <sup>40</sup> The introductory section on Production Planning and Scheduling was largely based on contribution and bibliographic references provided by C.N. Potts from the University of Southampton (UK). The sub-section on plant layout was enlarged to include publications from the Universite de Metz.
- <sup>41</sup> Drexl, A.and Kinuus, A.. "Lot Sizing and Scheduling Survey and Extensions". European Journal of Operational Research 99 (1997), pp. 221-235.
- Gelders, L.F.and Van Wassenhove, L.N.. "Production Planning, a Review". European Journal of Operational Research 7
- Nam, S.-J. and Logendran, R. "Aggregate Production Planning --- A Survey of Models and Methodologies". European Journal of Operational Research 61, 1992, pp. 255-272.
- Zapfel, G. and Missbauer, H. "New Concepts for Production Planning and Control". European Journal of Operational Research 67 (1993).pp. 297-320.
- <sup>42</sup> Chen, B., Potts, C.N. and Woeginger, G. "A Review of Machine Scheduling: Complexity, Algorithms and Approximability" in Du. D.-Z and Pardalos, P.M. (eds.) Handbook of Combinatorial Optimization, Volume 3, Kluwer, 1998, pp. 21-169, See also Lawler, E.L., Lenstra, J.K., Rinnooy Kan, A.H.G. and Shmoys, D.B. "Sequencing and Scheduling: Algorithms and Complexity" in Graves, S.C., Rinnooy Kan A.H.G. and Zipkin, P. (eds.). Handbooks in Operations Research and Management Science: Logistics of Production and inventory, volume 4., North-Holland, 1993, pp. 445-522. See also Morton, T.E. and Pentico, D.W. Heuristic Scheduling Systems. Wiley, 1993. See also Pinedo, M. Scheduling: Theory, Algorithms and System . Prentice-Hall, Englewood Cliffs, N.J., 1995.

- <sup>43</sup> See, for instance Yie, Xiaolm. "Manufacturing Cell Formation under Capacity Constraints". Applied Stochastic Models and Data Analysis, vol. 9, 1993, pp. 87-96. Also Harhhalakis, G., Proth, J.M. and Xie, X.L. "Manufacturing Cell Design using Simulated Annealing: au Industrial Application'. Journal of Intelligent Manufacturing 1, 1990, pp. 185-191. Also Souilah A. "Theory and Methodology: Simulated Annealing for Manufacturing Systems Layout Design'. European Journal of Operations Research 82, 1995 (pp. 592-614).
- <sup>44</sup> Hassan, M.M.D. "Machine Layout Problem in Modem Manufacturing Facilities". International Journal of Production Research 11 (1994), pp.2559-2584.See also Kusiak, A. and Heragu, S.S. "The facility layout problem". European Journal of Operational Research 29 (1987), pp. 229-251.
- <sup>45</sup> Meller, R. D. and Gau K-Y. "The Facility Layout Problem: Recent and Emerging Trends and Perspectives". Journal of Manufacturing Systems 15, no. 5,1996, pp. 351-366.
- <sup>46</sup> Graves, R.J., McGinnins, L.F., Medeiros, D., Ward, R.E. and Wilhem, M.R. (eds.). Progress Material Handling Research, Braun-Brumfield, 1995 (p. 17)
- <sup>47</sup> Askin, R-D. and Standridge, C.R. Modeling and Analysis of Manufacturing Systems, John Wiley & Sons, 1993.
- <sup>48</sup> Cundiff, E.W. and Hilger, M.T. Marketing in the International Environment, Prentice-Hall International Editions, 1988.
- <sup>49</sup> Cundiff and Hilger (1988), op.cit., p.350.
- <sup>50</sup>Fuller, J. (1 992), op. cit., p. 171
- <sup>51</sup> Maintainability is a largely undefined design characteristic that measures the facility of access and repair of a given system, also being linked to system complexity as well as the ease, accuracy, safety and cost associated with the performance of maintenance actions.
- <sup>52</sup> Bertztiss, A. Software Methods for Business Reengineering. Springer, 1996.
- <sup>53</sup>Bumberg, D.F. "Strategic Examination of Reverse Logistics and Repairs Service Requirements, Needs, Market Size and Opportunities". Journal of Business Logistic, 20, No.2, 1999, pp. 141-159.
- <sup>54</sup> Blanchard, B. S. Logistics Engineering and Management Prentice-Hall International Series, 1986.
- <sup>55</sup> Common indicators for reliability and maintainability are mean time between failures and mean time to repair, respectively.
- <sup>56</sup> Dornier, P-P, Ernst R., Fender, M. and Kouvelis, P. Global Operations and Logistics. Text and Cases. John Wiley & Sons, 1998.
- <sup>57</sup> Barros, L. "Integrated Logistics and Development" in Rosenhead, J. and Tripathy, A. Operational Research for Development, New Age International Publishers, 1996
- <sup>58</sup>Rushton, A. S. "the Cost of Materials Handling to the Economy". Material Flow 1, 1983.
- 59 Rushton, A. and Oxley, J. Handbook of Logistics and Distribution Management. Kogan Page, 1989.
- \*Final Report Project INTAS number 93-2183 "Integrated Methodology for the design of FMS with 'Hard' and 'Soft' Lines" Project Co-ordinator: Prof Lilian BARROS. UTT 1998/ L. L. Baptista/ S. Rohmer /K. Adjallah / E. Chatellet
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