

THE FMS-UO-2R FLEXIBLE MANUFACTURING SYSTEM SYNTESIS

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Abstract: This paper presents the flexible manufacturing systems synthesis steps used for FMS-UO-2R realised at the University of Oradea, IMT Faculty, Mechatronics Department. Starting with group technology for representative piece in order to be executed on flexible manufacturing system FMS-UO-2R, has been established the FMS components and FMS layout.

At the University of Oradea, Managerial and Technological Engineering Faculty, Mechatronics Department, a flexible manufacturing system was design and realised.

The design of FMS and FMS itself was done through the research activity of teaching staff, which works in the fields of Robotics and Flexible Manufacturing Systems.

The block scheme of the FMS was design to achieve the following functions:

- manufacturing function;
- quality assurance function;
- logistic function;
- automated storage and retrieval function;
- programming and control function.

The layout of the FMS is presented in figure 1.

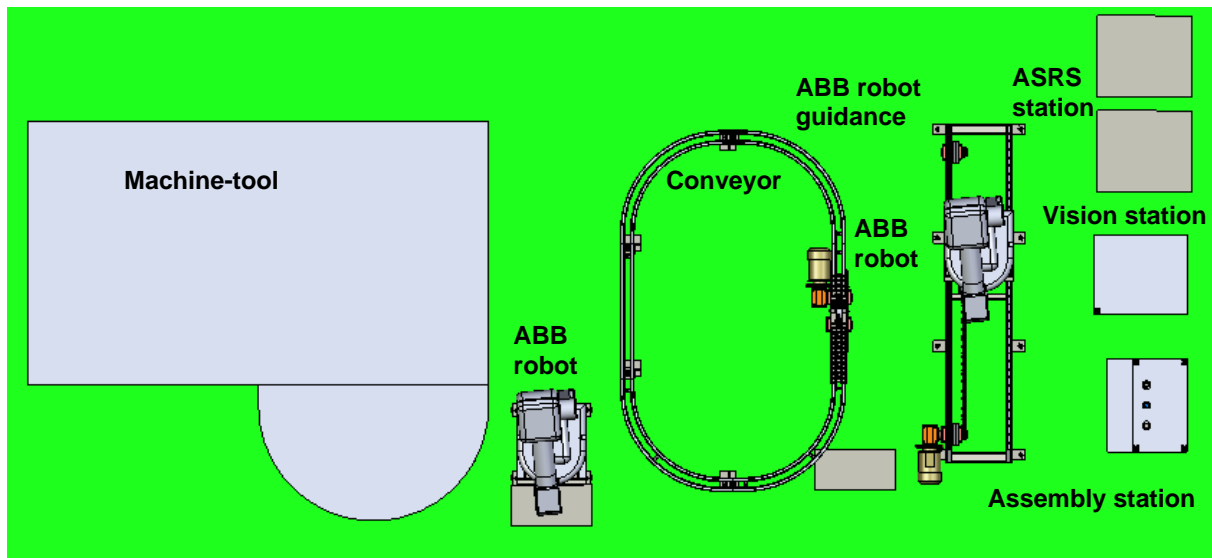


Fig. 1. The FMS layout

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