عنوان مقاله:

An Intelligent Knowledge Based System for CO2 Laser Beam Machining for Optimization of Design and Manufacturing

محل انتشار:

اولین کنفرانس بین المللی چشم انداز های نو در مهندسی برق و کامپیوتر (سال: 1395)

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خلاصه مقاله:

This paper addresses the concept of CO2 Laser beam machining (LBM) and development of intelligent knowledge base system (IKBS) for CO2 LBM for optimization of design and manufacturing in computer based concurrent engineering environment. The IKBS links with feature library. The design specification is acquired through a feature based approach. The IKBS links with material data base which holds attributes of more than 50 type of materials. It also links with Laser data base which hold attributes of 3 types of laser machine. IKBS is also links with Laser machine data base which hold Laser machine parameters. For each design feature, IKBS provides information needed for design and manufacturing optimization. The IKBS can be used as an advisory system for designers and manufacturing engineers. It can also be used as a teaching program for new CO2 laser operators in computer based concurrent engineering environment

کلمات کلیدی:

Intelligent knowledge based system, Design, manufacturing

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