FUNCTIONAL OPTIMIZATION STUDY OF MODULAR VACUUMATIC PREHENSION DEVICES USING ON EXPERT SYSTEM

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This paper conceived by the authors brings an improvement from the constructive point of view of a variety of a prehensile vacuum device with frontal catch. In the paper is presented an optimization from a constructive point of view by conceiving and implementing a type of a modular cup support with spherical joint. Mounting these modules for cups on the frontal of the device it can be obtained a higher flexibility of the angular positions of the cups in rapport with the group of the prehensile faces. The vacuum cup adjustment is made using an expert system.

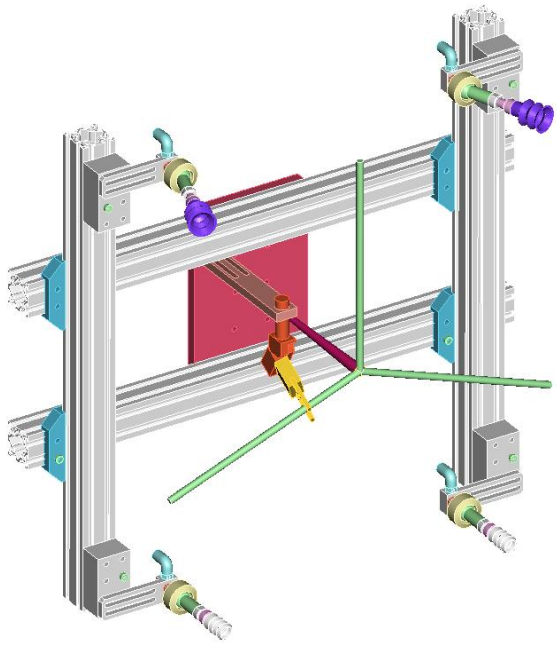

Figure. 3. 3D model modular vacuumatic prehension device assembly

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