Abstract
The mechanical reducers are tools commonly used for the transmission of power in the industry, constantly they are subjected to big stresses but at the same time they should be light to make comfortable to the necessities of the means and efficient use of material. The objective of this article is to identify the incidence that will have the use of hollow axes in the weight of a series of reducers of transmission to one step, for this end it has been considered the geometry and variation of weight of each one of the constituent elements of the reducers affected by the geometric change in the exit axes, this way it is sought to generate an approach about the convenience of using hollow axes in mechanical reducers to one step and which is its impact.

Keywords
Mechanical reducers, transmission of power, weight, hollow axes.