

## Current situation and future in field of programming Mitutoyo CNC CMM's

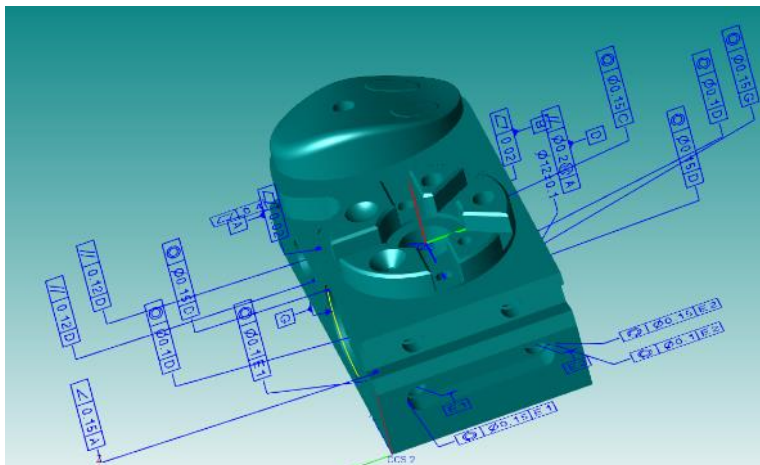
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Actually CMM users can create CNC measuring routines by taking information's from technical drawings and CAD models. Programing can be done in online and offline. That method is time consuming. In online method also CMM is occupied and can't be used for daily measuring tasks. Current offline methods also require technical drawings and CAD models. The drawing is needed as source of information about datum's, tolerances, standards etc. the CAD model is source of nominal dimensions. CAD model is used mainly for visualization how CMM will provide measurements.

Technology is changing and offering new possibilities, also in field of CAD models, now they can contain more information such as datum's, dimensions and tolerances. Actually the designer during creation of CAD model can decide how product will be check. That is possible by adding PMI (Product Measurements Information's) information. Once we have CAD model with PMI, time to creating measurements information is dramatically reduced. In that technology human influence is reduced, in field of decision about method choice, measurement strategy, point distributions etc., which give better repeatability of measurement result.



**Fig. 2.** Sample of CAD model with PMI