



SOMMACT Self Optimising Measuring MAChine Tools

Grant Agreement no.: CP-FP 229112-2

Start Date: 2009-09-01 Duration: 36 months



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Deliverable D6.4

NWIP for an ISO standard on: Numerical compensation of geometric errors of machine tools

Document title: D6.4 ISO NWIP Draft00.doc

Reference WP/Task: WP6 / T6.4

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Date: 2010-10-26

Revision: 00

Status: Draft Final

Nature 1): R

Dissemination level 2): PU

1) \mathbf{R} = Report, \mathbf{P} = Prototype, \mathbf{D} = Demonstrator, \mathbf{O} = Other

PU = Public, PP = Restricted to other programme participants, RE = Restricted to a group specified by the consortium, CO = Confidential, only for members of the consortium Grant Agreement no.: CP-FP 229112-2 - Deliverable D6.4



Executive summary

Standardisation concerning machine tool geometric error functions and parameters is essential to disseminate the SOMMACT project outcomes and to promote interoperability. Such goal needs to be addressed at the world level within the International Standard Organisation (ISO).

Cooperation under the Intelligent Manufacturing System (IMS) umbrella has also been sought (see Deliverable D6.5).

This document reports on the current state of standardisation activities of SOMMACT partners within ISO, aiming to actively promote international standardisation on:

- Machine tool geometric error functions and parameter definition, identification and terminology, insuring uniformity in different technological fields;
- Data format for the presentation of different measuring systems and sensors systems output;
- Data format for volumetric compensation tables;
- Definition of CNC functions required to apply (standardised) volumetric compensation tables.

An outline of the proposed document has been presented at the last ISO TC39/SC2 meeting that took place in Seoul, Korea in May 2010. The subcommittee members appreciated the idea and many experts from different countries manifested their intention to actively participate to the preparation of the document.

According to ISO/IEC rules, the request for a New Work Item Proposal (NWIP) needs to be officially submitted by an ISO member body (i.e. National Standardisation Organizations).

This document has been prepared and transmitted to UNI (*Ente Nazionale Italiano di Unificazione*, the Italian ISO member body) and it is currently undergoing electronic ballot procedure amongst national experts.

The ballot will terminate on 2010-11-06 and its outcomes will certainly be positive.

According to the rules, UNI will then transmit the official request to ISO TC39/SC2 that will give an official NWIP number to the document and will, in turns, submit it for electronic ballot at international level.

There is no doubt that the international ballot outcome will be positive (as experts already manifested their interest at the Seoul meeting).

The new standard proposed by SOMMACT project will be named: *Numerical compensation of geometric errors of machine tools*.

A copy of the NWIP document, together with the relevant outline, is available on the SOMMACT project web site: www.sommact.eu

General information on the role of experts within ISO may be gathered at the following link: http://www.iso.org/iso/mv_iso_iob.pdf

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