



INTERNATIONAL JOURNAL OF MACHINE TOOLS AND MANUFACTURE

Design, Research & Application

AUTHOR INFORMATION PACK

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DESCRIPTION

The *International Journal of Machine Tools and Manufacture* is devoted to advances in scientific understanding of **essential mechanics of processes and machines** applied to the **manufacture of engineering components**, mainly in **metals**, but also in **composites, ceramics and other structural/functional materials**. To this end coverage is given to a range of topics that includes:

- Essential mechanics of processes involving material removal, accretion and deformation, in solid, semi-solid or particulate form
- Significant scientific development of existing or new processes and machines
- In-depth characterisation of workpiece materials (structure/surfaces) by advanced techniques (e.g. SEM, EDS, TEM, EBSD, AES, Raman spectroscopy) to reveal new phenomenological aspects that govern manufacturing processes
- Tool design, utilisation and in-depth studies of failure mechanisms
- Novel concepts of machine tools/fixtures/tool holders supported by modelling and demonstrations that are relevant to manufacturing processes within the journal's remit
- Novel scientific contributions dealing with interactions between the machine tool, control system, software design and processes.
- Studies of specific mechanisms governing niche processes (e.g. ultra-high precision, nano /atomic level manufacturing with either mechanical or non-mechanical "tools")
- Novel approaches, supported by adequate in-depth scientific analysis, addressing emerging / breakthrough processes (e.g. bio-inspired manufacturing) and/or applications (e.g. ultra-high precision optics)

The above list is not exhaustive and papers on other topics associated with process science/technology or manufacturing hardware are welcome. Significant and useful advance of the current state of knowledge is an essential factor and it is important that papers are presented in a manner that will be appreciated by both academics and practising engineers. It is unlikely that papers dealing with theory or modelling alone will be acceptable, unless a significant proven advance in scientific/technological knowledge is demonstrated. Likewise, papers in which the use of methodology predominates over technological advance would probably be rejected. Normally, multipart papers are not acceptable.

AUDIENCE

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Description

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[3] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

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[4] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

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