The Powder Metallurgy Industry in the UK
- the next ten years

Executive Summary

This Report is the result of a broadly based study of the present state of, and trends in, the powder metallurgy industry in the UK, set against the European and global context in which it will be operating over the next decade or so. The objective of the study was to produce a set of practical action proposals aimed at competitive capability, health and growth in the sectors considered.

The policy throughout was that responses would be developed by interaction among all the role players, i.e. trade associations, professional bodies, universities, RTOs, research funding bodies, and the Government, as well as the companies themselves. Thus, the findings and proposals in the Report were derived from interviews, meetings, and workshops involving individuals and groups in and around the supply chain, all with direct or indirect interests in a positive future (the 'Consultation Community'). The core consultative aspect of the work was supported by literature and other database reference.

The study, conducted within the Foresight framework and supported by Department of Trade and Industry funding, was carried out in two phases. Phase 1, running from November 1998 to March 1999, was concerned with the identification of problems and opportunities, with emphasis always upon the influences shaping the industry internally and externally. Phase 2, running from October 1999 to May 2000, prioritised Phase 1 material and provided the foundations for active response and initiative. Appendix I on page 37 describes the study's programme, scope and methodology.

The Report therefore contains:

- **a review of the main problems and opportunities identified by the individuals and groups consulted**
- **proposals for essential immediate action to address problems and exploit potential in accordance with the suggestions, wishes and preferences of the Consultation Community**

It is indisputable that the factors to be considered are not solely technological. Therefore Section 1 of the Report stresses the non-technical aspects of the background against which the industry, like any other, must operate – the legislative, human resource, and commercial aspects. The authors of this Report hold the view that unless such matters are better understood, and squarely faced and responded to, the future is far from encouraging.

Sections 2 and 3 examine the two sectors of the industry selected for treatment in Phase 2: PM structural components and magnets (see page iv of this document for a brief description). These two sectors have some common features, as indeed they both do with the particulate materials industries in general, but the main characteristics can be stripped down to:

- **The structural components sector is predominantly a supplier to the automotive industry, and while it must certainly track developments there (facing the fact that while greater use of PM parts in vehicles is possible, design decisions are not in general taken in the UK), it must also look for alternative, often niche, markets.**
- **The magnets sector is growing fast in terms of both value and market diversification; the potential could be very great, but in the UK, science, technology, and human resource questions need to be addressed and clear knowledge of the emerging and possible markets and their potential is lacking**

Section 4 makes proposals for a prioritised programme to improve competitiveness and positive development in the UK, which can be briefly summarised as:

- **One or more benchmarking exercises**
- **Specific market studies**
- **A continuous, communicative and collaborative approach to environment, health and safety legislation matters**
- **A focus for R&D effort in the UK**
- **A collaborative and focused education and training programme**

It is important to note the consensus that most elements necessary for positive action are already in place in the UK. Entirely new structures are not generally envisaged, but there is an argument for a new system with a networking role to prioritise effort and maintain initiative. What is seen to be the way ahead, therefore, requires:

- **redeployment of existing capacity**
- **reorientation of priorities to make better use of existing structures and their resources**
- **reorganisation for collaborative and more clearly focused effort.**

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