

# Handbook on casting and other defects in gold jewellery manufacture

A UNIQUE PUBLICATION - AN ESSENTIAL TOOL!

NEW WGC TECHNICAL  
PUBLICATION

The customer's perception of gold jewellery as something precious, everlasting and to be valued should be reflected in their expectation of a quality-made jewellery product. As manufacturers are well aware, this expectation is not always easily fulfilled in practice and production of gold jewellery is prone to the occurrence of defects which can be difficult and expensive to rectify. Prevention of their re-occurrence can be even more difficult, especially when the nature of the defect and its cause is not well understood. Many producers do not have access to the sophisticated analytical and metallographic facilities necessary to determine them.

This is particularly true in Investment Casting, the major jewellery manufacturing process which is especially prone to defect formation. Who has not struggled with porosity problems in castings? Who can recognise the difference between gas porosity and shrinkage porosity?

As part of its support to the jewellery industry, the World Gold Council has supported a major investigation into actual defects arising during jewellery production that has been carried out at the German Precious Metals Research Institute, FEM, in Schwäbisch Gmünd, in association with the Santa Fe Symposium. Some of the results of this work have been reported in *Gold Technology* and at the Santa Fe Symposia. But the full results have not been readily available to the industry in a 'user friendly' format until now.

The *Handbook on Casting and Other Defects* is a mine of information on the common defects that can occur in jewellery production with some emphasis on those occurring in casting. Written by a world expert on jewellery technology, Dieter Ott, FEM, it is presented as a series of actual Case Histories of defects. Each defect

is fully described and well illustrated in colour, together with an explanation of its cause and recommendations for its prevention in future. Where appropriate, full metallographic investigation of the defect has been carried out and is described and illustrated.

This is the first major publication on the topic of defects in jewellery. It is a unique reference book that will prove to be an essential tool for all serious gold jewellery producers interested in quality products. It should help producers to improve the quality of their jewellery and their productivity. This 90 page book is in 3 sections and is easy to use. It complements the other technical publications produced by the World Gold Council, the *Technical Manual* and the *Investment Casting Manual* in particular.

Produced in English, it is available through your local WGC office or direct from WGC, London at a cost of £12 sterling including postage (addresses at the end of this issue).

*Note: It is possible that versions in other languages will become available later if there is sufficient demand; contact your local WGC office and express your interest.*

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