

alternative to mechanical engraving. The digital nature of laser marking offers a great variety of individual marking. The result is that all typical jewellery marking tasks are performed effortlessly with perfect results every time. The numerous design features of software, the once difficult tasks, such as marking the inside of wide or irregular shaped rings, make simple to achieve. Use of such machines provides the benefits of non-contact, abrasion-resistant, permanent marking onto almost any type of jewellery articles with high speed and high precision.

3. Advantages:

- ❖ CNC computer controlled quick repeatable marks.
- ❖ Little to no surface deformation as compared to letter stamping.
- ❖ Non-contact marking, etching and engraving.
- ❖ Ability to mark on flat or unusually shaped items with little to no distortion.
- ❖ Equally suited to low and high volume marking, etching and engraving applications.
- ❖ Jewellery which could not be marked by the conventional method without damage particularly in case of jewellery articles being too thin or fragile could be easily marked by the laser.
- ❖ Laser marks do not cause distortion or bruising, which reduces substantially any finishing costs after hallmarking and prior to the sale of the product.

4. Adoption of techniques for hall marking

In October 1997 a Regulation of the British Hallmarking Council approved the concept of carrying out the process of hallmarking by use of a laser. Other Assay Offices have since decided to adopt laser marking post-haste following this consent. At a meeting of the International Hallmarking Convention held in Helsinki - May 1998, it was agreed by all Member States that laser marking would also be permitted under the Convention. Lasers have, of course, been used in industry for many years and

more recently in the jewellery industry for surface decoration, but this initiative pioneered and developed by the Birmingham Assay Office, using state-of-the-art technology, is a first for Europe. This concept is ideally suited for those products which cannot be marked satisfactorily by the conventional method using punches, such as some traditional Indian gold jewellery. It is a non-impact method and therefore does not result in the 'sinking' and bruising damage usually associated with the hallmarking of hollow and fragile articles.

The consumer and retailer also benefit from the larger and more legible marks which can be applied. customer logos, pattern numbers and sequential serial numbers can be applied if required. This facilitates implementation of Quality Assurance requirements such as traceability.

5. Marking clause as per IS:1417(BIS Standard)

6 MARKING:

6.1 The gold, gold alloys, Jewellery / artefacts shall be stamped with the Standard Mark in this case known as the "Hall Mark" by BIS recognized assaying & Hall Marking Centres only. The hall marked articles shall carry the following markings:

- (a) BIS Mark
- (b) Purity Grade/Fineness
- (c) Assay Centre's Identification Mark
- (d) Year of marking denoted by a letter symbol (as defined by BIS)
- (e) Jeweller's mark / manufacturer's identification mark.

Hall Marking: The use of hall mark is governed by the provisions of the BIS act 1986 and rules & regulations made there under. The details of conditions under which the licence for the use of the standard mark may be granted to jewelers/Jewellery manufacturers may be obtained from BIS.

"NOTE: Jewellers/Sponsorer's logo on each article shall be marked before offering the lot to BIS