

Methods of Indentation Marking

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Indentation marking can be accomplished with several kinds of equipment including hand stamps, pneumatic or hydraulic stamping machines, roll-marking machines, special tooling in lathes and other machines. The best method must be determined for each application and depends on the nature of the part, quantity to be marked and specific customer requirements.

Hand Stamping. The most common method of marking and one which is entirely adequate in many situations is hand stamping. Inspector codes, date codes and trademarks are often hand stamped.

Stamping by Impact or Squeeze Type

Machines. Plates and solid or heavy-walled parts to be marked on a flat area frequently can be marked with flat stamping dies. Present press equipment may be utilized by providing engraved tools to fit.

Cylindrical or contoured parts can be stamped by utilizing a convex or concave engraved die. The marking of conical graduated dials is an example.

Roll Marking Machines can cut tonnage requirements by seventy-five to eighty percent and prevent damage to parts. Where the tonnage for marking would make a press too costly or the part is not strong enough to withstand the pressure, a roll marking machine is a practical and economical solution. For example, it may require 100 tons pressure to mark a part in a stamping operation. In roll marking, since the part is only in point contact with the die, the capacity of the machine can be reduced to the tonnage required to indent the character or characters at the point of contact.

Flat pats are marked by rolling a knurl die or knurl type holder across the flat under pressure. Solid round parts are marked around the periphery with a straight die or type holder by rolling the part on the table or in a cradle.

Hollow rounds with insufficient wall thickness to withstand the marking pressure without internal support are placed on a stud arbor table fixture.

Thin walled parts may be marked on close fitting studs to avoid bulge.

For the best method of permanent marking for your particular product, consult a Toronto Stamp marking specialist.

