- 84.42 Machinery, apparatus and equipment (other than the machines of headings 84.56 to 84.65) for preparing or making plates, cylinders or other printing components; plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished).
 - 8442.30 Machinery, apparatus and equipment
 - 8442.40 Parts of the foregoing machinery, apparatus or equipment
 - 8442.50 Plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished)

Apart from certain exclusions referred to later, this heading includes:

- (1) The printing parts of printing machinery, for example, plates and cylinders, engraved or otherwise prepared for printing, used to print texts or illustrations (by hand or by the machines of heading 84.43); and prepared lithographic stones, cylinders and plates (i.e., those prepared so as to be suitable for engraving or otherwise receiving an image for subsequent use in printing).
- (2) The machines, apparatus and accessories used to make the printing parts referred to above, or used to assemble (compose) it for use in printing, whether by hand or mechanically.

This heading covers equipment used in the printing of texts, illustrations or repetitive designs, etc., whether on paper, textiles, linoleum, leather or on other materials, by **printing processes**, viz.:

- Relief printing: by using relief photo-engraved plates. In this process, the relief parts of the character or image are inked.
- (II) Planographic printing: by lithography, photo-lithography or by offset printing. The printing ink is applied only to certain specially prepared parts of the plane surface of the printing plate, etc. This category of printing also includes stencilling.
- (III) Intaglio printing: by rotogravure, or by means of etched or engraved metal plates. The printing ink is accumulated in the engraved or etched parts.

(A) MACHINERY, APPARATUS AND EQUIPMENT (OTHER THAN THE MACHINES OF HEADINGS 84.56 to 84.65) FOR PREPARING OR MAKING PLATES, CYLINDERS OR OTHER PRINTING COMPONENTS

This heading includes:

- (1) Machines for making printing plates by direct reproduction from a document. In these machines, a photocell scans the document, and the impulses transmitted by an electronic device from that cell activate a tool which engraves a plate of plastics.
- (2) Machines for acid etching plates or cylinders. These consist of special vats fitted with stirrers.

(3) Machines for sensitising offset zinc plates (horizontal whirlers), generally fitted with an electric heating device.

* *

The heading covers only phototype-setting or composing machines which actually set type, even if the type is photographed after it has been set. However, the heading excludes photographic cameras, photographic enlargers or reducers, photographic contact printers and similar photographic apparatus for preparing printing plates or cylinders (Chapter 90), for example:

- (a) vertical or horizontal process cameras mounted on a hanging frame (bed) or a sliding bed, cameras for three colour printing;
- (b) photographic enlargers and reducers, reproduction apparatus and printing frames;
- (c) light tables used for planning layouts or for contact printing.

Some of these apparatus use half-tone or similar finely cross-lined glass or plastics screens, glass or plastics colour filters for colour printing or screen or filter holders.

(B) PLATES, CYLINDERS AND OTHER PRINTING COMPONENTS; PLATES, CYLINDERS AND LITHOGRAPHIC STONES, PREPARED FOR PRINTING PURPOSES (FOR EXAMPLE, PLANED, GRAINED OR POLISHED)

This heading includes:

- (1) Relief or intaglio plates engraved by hand, mechanically or by acid. These may be of wood, linoleum, copper, steel, etc.
- (2) Lithographic stones. The illustration is either hand-drawn or photographically transferred and prepared with acid.
- (3) Offset printing plates of zinc or aluminium or similar flexible metal sheets on which the design is reproduced in the flat, i.e., neither in relief nor intaglio.
- (4) Engraved or etched cylinders.
- (5) Plates and dies for relief stamping or printing, e.g., for machines which emboss, with or without also inking, letter heads, visiting cards, etc.

Provided they have been treated so as to render them suitable for engraving or impressing, **lithographic stones**, **metal plates and cylinders**, even though not engraved or impressed, are also included in this heading, e.g.,:

- (6) Planed or grained lithographic stones.
- (7) Metal plates or sheets prepared for engraving (by planing, graining or polishing).

- (8) Perfectly polished or grained surface metal cylinders. These cylinders, usually of cast iron, are generally electroplated with copper, or else have a copper covering consisting of assembled removable sleeves.
- (9) Metal or plastic masters for use on office-type offset printing machines. The top edge of the sheets has usually been processed to permit attachment to the drum of the machine.

Sensitised plates (e.g., consisting of metal or plastics, coated with a sensitised photographic emulsion, or of a sheet of photosensitive plastics, whether or not affixed to a support of metal or other material) are **excluded** (heading 37.01).

PARTS

Subject to the general provisions regarding the classification of parts (see the General Explanatory Note to Section XVI), the heading also covers parts of the machines of this heading.

The heading also excludes:

- (a) Stencils of zinc, plastics, cardboard, etc., for use in stencil printing machines (classified according to the constituent material).
- (b) Copying or transfer papers, bearing texts or designs for reproduction (heading 48.16).
- (c) Silk screens for silk screen printing, whether or not coated (heading 59.11); metal wire cloth, mounted on a frame, whether or not prepared, for use in screen printing (classified according to the constituent material).
- (d) Marking irons for gilding machines (heading 84.40).
- (e) Metal, stone or wood working machine-tools and water-jet cutting machines (for example, matrix planing and finishing machines; machines for planing and cutting rules; disc or ball graining machines; engraving machines; milling cutters; routing machines; trim saws) (headings 84.56 to 84.65).
- (f) Type and other printing parts of typewriters, calculating or other machines of headings 84.70 to 84.72 (heading 84.73).
- (g) Moulds (heading 84.80).
- (h) Laser photoplotter for creating latent images, on photosensitive film, generally from digital formats, by means of a laser beam (heading 90.06).
- (ij) Measuring or checking instruments (heading 90.17 or 90.31).