

ECLA**EUROPEAN CLASSIFICATION****B41L****APPARATUS OR DEVICES FOR MANIFOLDING, DUPLICATING, OR PRINTING FOR OFFICE OR OTHER COMMERCIAL PURPOSES; ADDRESSING MACHINES OR LIKE SERIES-PRINTING MACHINES**

(printing presses or machines for industrial purposes [B41F](#); stamps, stamping or numbering devices [B41K](#))

Notes

[N9409]

1. This subclass does not cover constituent parts common to manifolding by means of pressure-sensitive layers or intermediaries, to apparatus or machines for duplicating or printing for office or other commercial purposes, or to addressing machines or like series-printing machines, which are covered by subclass [B41F](#).
2. In this subclass, as indicated by the references, groups [B41L15/00](#) and [B41L17/00](#) are intended to cover letterpress and lithographic printing apparatus only in so far as it is specially adapted for office or other commercial purposes; the general constructions or features of apparatus of these types are classified in subclass [B41F](#).

Constructions or features determining classification in these groups are, for example:

ease of operation by clerical staff, cleanliness of operation in non-industrial environments, the use of printing surfaces constructed for the production of a limited number of copies.

3. In this subclass, the following terms are used with the meanings indicated:
 - "manifolding" means the obtaining of several copies simultaneously by means of pressure-sensitive layers when making an original;
 - "duplicating" means the obtaining of successive copies from a master, e.g. a hectographic image;
 - "stencilling" involves the use of a printing surface which is perforated to form the image, the ink flowing through the perforations on the copy material.

Guide heading:

Manifolding by means of pressure-sensitive layers or intermediaries

B41L1/00

Devices for performing operations in connection with manifolding by means of pressure-sensitive layers or intermediaries, e.g. carbons; Accessories for manifolding purposes

B41L1/02

- Devices for preparatory operations, e.g. for bringing together sheets or webs and interposed carbons; Devices combined with devices for printing, for coating with carbon, for folding

B41L1/04

- Devices for performing operations subsequent to manifolding, e.g. for separating single sheets or webs from single form sets, continuous manifold assemblies from carbons

B41L1/06

- . on single form sets

- B41L1/08 . . . on continuous manifold assemblies
- B41L1/10 . . . Separate folding or disposition of single webs
- B41L1/12 . . . Severing webs to obtain single sheets or forms, e.g. by cutting, by bursting
- B41L1/14 . . . Severing edge perforations from webs

- B41L1/16 . Carriers or supply devices for pressure-sensitive material, e.g. for carbon sheets;
Carbon gloves
- B41L1/18 . . for carbon webs; Continuous carbon supply mechanisms

- B41L1/20 . Manifolding assemblies, e.g. book-like assemblies [(N: Multi-copy labels [G09F3/02C](#))]
- B41L1/22 . . made up of single sheets or forms
- B41L1/24 . . . Pads or books
- B41L1/26 . . Continuous assemblies made up of webs
- B41L1/28 . . . in rolled or wound form
- B41L1/30 . . . folded longitudinally
- B41L1/32 . . . folded transversely
- B41L1/32B [N: Stacks of sheets attached to a carrier strip or web]
- B41L1/32C [N: Uniting several webs, e.g. transversely]
- B41L1/32C2 [N: longitudinally]
- B41L1/32D [N: Severance lines; Perforations]
- B41L1/32E [N: Removing carbon sheets]
- B41L1/34 . . for making masters for hectographic duplicators
- B41L1/36 . . with pressure-sensitive layers or coating other than carbon ([sheet materials B41M5/00](#)) [[C9409](#)]

- B41L3/00 Platens or like sheet supports for manifolding using pressure-sensitive layers or intermediaries, e.g. for book-keeping purposes**

- B41L3/02 . with stationary clamping means for holding the manifolding assembly in registered position, e.g. resilient clamps for holding non-perforated sheets [N: [clamps for platens B41F1/36](#)]
- B41L3/04 . . Bars provided with pins engaging perforations in the elements
- B41L3/06 . with movable clamping or guiding means for the elements of the manifolding assembly
- B41L3/08 . with non-mechanical means for holding the elements in registered position, e.g. magnetic means

- B41L3/10 . with means for moving assembled elements step by step relative to platen or support, e.g. for column or line selection; Means for locating assembled elements when stationary

- B41L3/12 . Auxiliary devices
- B41L3/14 . . Magazines or storage compartments, e.g. for slips
- B41L3/16 . . Web-feeding arrangements
- B41L3/18 . . Displaceable covers, e.g. with windows
- B41L3/20 . . for facilitating manifolding in books

- B41L3/22 . . Applications of ink ribbons; Holding, feeding, or guiding means therefor
- B41L5/00** **Autographic registers or like manifolding apparatus using movable strips or webs (movable strip writing or reading apparatus [B42D19/00](#))**
- B41L5/02 . with means for limiting movements of webs fed by hand
- B41L5/04 . with mechanisms for feeding webs or for arranging web feed; with web storage arrangements [N: (in general [B65H](#))]
- B41L5/06 . . by means of rollers, wheels, or chains, [N: e.g. with pins] transversely
- B41L5/08 . . by reciprocating mechanisms
- B41L5/10 . with mechanisms for feeding the pressure-sensitive web or webs separately from the other webs, e.g. transversely
- B41L5/12 . with means for indicating exhaustion of web supply
- B41L5/14 . with auxiliary means for printing, perforating, or severing the web
- B41L5/16 . Accessories, e.g. drawers for storing forms, for money ([cash registers G07G](#))
- Guide heading:** **Apparatus or machines for duplicating or printing for office or other commercial purposes**
- B41L7/00** **Apparatus for directly duplicating from hectographic originals, i.e. for obtaining copies in mirror image**
- B41L7/02 . by passing original and copy-sheet or -web between rollers
- B41L7/04 . . with means for guiding original or copy-sheet or -web
- B41L7/06 . . with means for severing copy-sheet or -web
- B41L7/08 . . with means for moistening or drying
- B41L9/00** **Apparatus for indirectly duplicating from hectographic originals by means of hectographic intermediaries or transfer surfaces, i.e. "dry duplicators"**
- B41L9/02 . Containers for clay or gelatin
- B41L9/04 . with flat supports over which gelatin-paper is stretched
- B41L9/06 . . and with carriages for feeding the sheets
- B41L9/08 . . and with devices for rolling-in and securing hectographic gelatin-paper webs
- B41L9/10 . with rotary cylinders carrying sheets of hectographic gelatin-paper
- B41L11/00** **Apparatus for directly duplicating from hectographic masters in mirror image, i.e. "wet duplicators" for producing positive copies**
- B41L11/02 . with a flat support carrying the masters

- B41L11/04 . . and with carriages for feeding the sheets
- B41L11/06 . . for stack duplicating with pressure rollers
- B41L11/08 . with rotary cylinders carrying the masters
- B41L11/10 . with two rollers between which master is stretched
- B41L11/12 . Driving gear; Control thereof
- B41L11/14 . Constructional features of masters ([chemical aspects B41M](#))

- B41L13/00** **Stencilling apparatus for office or other commercial use** ([screen printing B41F15/00](#); [stencils, stencil materials, carriers therefor B41N1/24](#))

- B41L13/02 . with flat stencil carriers
- B41L13/04 . with curved or rotary stencil carriers
- B41L13/06 . . with a single cylinder carrying the stencil
- B41L13/08 . . with stencil carried by two or more cylinders, e.g. through the intermediary of endless bands
- B41L13/10 . . . Clips or clamps for securing stencils to stencil carriers
- B41L13/12 . for special purposes, e.g. for reproducing Braille characters [[N: \(typewriters for Braille B41J3/32\)](#)] [[C9704](#)]
- B41L13/14 . Attachments, e.g. for punching, cutting, severing
- B41L13/16 . Driving gear; Control thereof
- B41L13/18 . Inking units

- B41L15/00** **Letterpress printing apparatus specially adapted for office or other commercial purposes** ([in general B41E](#); [printing plates or foils, materials thereof or B41N1/00](#))

- B41L15/02 . with flat printing surfaces, e.g. with flat type-beds, surfaces made of thin sheet material or moulded from plastics or rubber
- B41L15/04 . . of composed type locked in chases
- B41L15/06 . with curved printing surfaces, e.g. cylinders
- B41L15/08 . . with stereotypes
- B41L15/10 . for multicolour printing; for perfecting
- B41L15/12 . Driving gear; Control thereof
- B41L15/14 . Attachments, e.g. for punching, cutting, severing

- B41L17/00** **Lithographic printing apparatus for office or other commercial purposes** ([in general B41E](#); [printing plates or foils, materials therefor B41N1/00](#))

- B41L17/02 . for direct impression printing
- B41L17/04 . . with flat printing surfaces
- B41L17/06 . . with curved printing surfaces, e.g. cylinders
- B41L17/08 . for offset printing
- B41L17/10 . . with flat printing surfaces, e.g. co-operating with travelling offset cylinders
- B41L17/12 . . with curved printing surfaces, e.g. forme cylinders
- B41L17/14 . of two-cylinder type, e.g. co-operating forme and impression cylinders
- B41L17/16 . of three-cylinder type
- B41L17/18 . for multicolour printing, e.g. tandem machines; for perfecting
- B41L17/20 . without damping means, e.g. using heat-activatable inks, refrigerated printing surfaces
- B41L17/22 . Driving gear; Control thereof
- B41L17/24 . Attachments, e.g. for punching, cutting, severing

B41L19/00 **Duplicating or printing apparatus or machines for office or other commercial purposes, of special types or for particular purposes and not otherwise provided for** ([addressographs B41L45/00](#))

- B41L19/00B . [\[N: using heat, e.g. wax transfer\]](#)
- B41L19/00N . [\[N: Auxiliary numbering devices\]](#)
- B41L19/02 . having forme cylinders carrying a plurality of printing surface, or for performing letterpress and lithographic processes selectively or in combination ([in general B41F11/00](#))
- B41L19/04 . for printing from selected parts of one or more printing surface in one cycle, e.g. line printing ([by inking selected areas B41L27/20](#))
- B41L19/06 . . with co-operating forme and impression cylinders
- B41L19/08 . . . by effecting relative movement of forme and impression cylinders during printing cycle
- B41L19/10 . . . by projecting and retracting parts of the surfaces of the forme cylinders
- B41L19/12 . . . by masking parts of the printing surfaces on the forme cylinders
- B41L19/14 . . . by selective damping of the copy material
- B41L19/16 . . . by selective tripping of impression cylinders

Guide heading: **Common details of, or accessories for, apparatus or machines for manifolding, duplicating, or printing for office or other commercial purposes**

B41L21/00 **Devices for conveying sheets or webs of copy material through the apparatus or machines for manifolding, duplicating, or printing** ([mechanisms for conveying copy material through addressographs or like series-printing machines B41L47/24](#); [\[N: feeding sheets or webs to or from printing apparatus or machines B65H](#); [in printing presses in general B41F21/00\]](#))

- B41L21/02 . for conveying sheets
- B41L21/04 . . Pins
- B41L21/06 . . Grippers
- B41L21/08 . . . Suction-operated grippers
- B41L21/10 . . Combinations of endless conveyors and grippers
- B41L21/12 . for conveying webs

- B41L23/00** **Devices for treating the surfaces of sheets, webs, or other articles in connection with printing** (as a final step in the manufacture of such articles, see the relevant places, e.g. [B29C71/00](#), [D21H23/00](#) or [D21H25/00](#); after-treatment of prints [B41M7/00](#)) [[C9409](#)]
- B41L23/02 . by damping, e.g. by moistening copy sheets in connection with hectographic printing
- B41L23/04 . . using friction rollers
- B41L23/06 . . using brushes
- B41L23/08 . . using spray elements
- B41L23/10 . . using endless bands
- B41L23/12 . . using absorbent pads
- B41L23/14 . . Ducts, containers, or like supply devices for liquids
- B41L23/16 . . Devices for tripping or lifting damping rollers; Supporting, adjusting, or removing arrangements therefor
- B41L23/18 . . Construction of damping rollers
- B41L23/20 . by heat drying, by cooling, by applying powders
- B41L23/22 . . Powdering devices, e.g. for preventing set-off
- B41L23/24 . Print-finishing devices, e.g. for glossing prints

- B41L25/00** **Devices for damping printing surfaces, e.g. moistening printing surfaces in connection with lithographic printing** (applying liquids or other fluent materials to surfaces in general [B05](#))
- B41L25/00B . [[N: Pre-damping etching devices](#)]
- B41L25/02 . using friction rollers
- B41L25/04 . using brushes
- B41L25/06 . using spraying elements
- B41L25/08 . using endless bands
- B41L25/10 . using absorbent pads
- B41L25/12 . Ducts, containers, or like supply devices for liquids
- B41L25/14 . Inking rollers serving also to apply ink repellent [[N: in rotary lithographic machines B41F7/36](#)]

- B41L25/16 . Devices for tripping or lifting damping rollers; Supporting, adjusting, or removing arrangements therefor [N: in rotary lithographic machines [B41F7/40](#)]
- B41L25/18 . Construction of damping rollers
- B41L27/00** **Inking arrangements or devices** (inking units for stencilling apparatus [B41L13/18](#); applying liquids or other fluent materials to surfaces, in general [B05](#))
- B41L27/02 . adapted for inking by hand
- B41L27/04 . Ducts, containers, or supply devices or ink-level control devices (level control in general [G05D9/00](#))
- B41L27/06 . . Duct blades or like supply devices
- B41L27/08 . . Troughs or like reservoirs with immersed, or partly immersed rollers
- B41L27/10 . . with ink-ejecting means, e.g. pumps
- B41L27/12 . . Feed or duct rollers (messenger or moving transfer rollers [B41L27/16](#))
- B41L27/14 . . . adjustable for regulating supply
- B41L27/16 . . Messenger or other moving transfer rollers
- B41L27/18 . Continuous, e.g. endless-band apparatus
- B41L27/20 . for inking selected parts of printing formes
- B41L27/22 . Ink removing or collecting devices
- B41L27/24 . for inking from interior of cylinder
- B41L27/26 . Absorbent pads
- B41L27/28 . Construction of inking rollers
- B41L27/30 . Spray apparatus
- B41L27/32 . Arrangements for tripping, lifting, adjusting, or removing inking rollers; Supports, bearings or forks therefor
- B41L27/34 . . Lifting or adjusting devices
- B41L27/36 . . . Cam, eccentric, wedge, or the like devices
- B41L27/38 . . . fluid-pressure operated
- B41L27/40 . . . magnetically operated
- B41L29/00** **Devices for attaching printing elements or formes to supports** [N: in printing presses in general [B41F27/00](#)]
- B41L29/02 . magnetic
- B41L29/04 . for attaching printing elements to flat type-beds
- B41L29/06 . for attaching elements to forme cylinders

- B41L29/08 . for attaching print formes to flat type-beds
- B41L29/10 . for attaching non-deformable curved printing formes to forme cylinders
- B41L29/12 . for attaching flexible printing formes
- B41L29/14 . . Clamping devices
- B41L29/16 . . . operating automatically during operation of rotary machines to attach the printing formes to the forme cylinders
- B41L29/18 electromagnetic, pneumatic, or hydraulic
- B41L29/20 . . . for adjusting position of leading edges of flexible printing formes circumferentially of forme cylinders
- B41L29/22 . for attaching printing formes to intermediate supports, e.g. adapter members
- B41L31/00** **Devices for removing flexible printing formes from forme cylinders**
- B41L33/00** **Pressing flexible printing formes or sheets or webs of copy material against cylinders, e.g. for smoothing purposes** [N: in printing presses in general [B41F25/00](#)]
- B41L35/00** **Cylinders for apparatus or machines for manifolding, duplicating, or printing for office or other commercial purposes** [N: in printing presses in general [B41F13/08](#)]
- B41L35/02 . Forme cylinders
- B41L35/04 . . Registering devices
- B41L35/06 . . . with means for displacing the cylinders
- B41L35/08 . . . with means for displacing the printing formes on the cylinders
- B41L35/10 . Impression cylinders
- B41L35/12 . Bearings or supports for forme, offset, or transfer or impression cylinders
- B41L35/14 . Means for heating or cooling forme or impression cylinders
- B41L35/16 . Cylinder-tripping devices; Cylinder impression adjustments
- B41L35/18 . . Arrangements or dispositions of cylinder bearings, forks, or supports
- B41L35/20 . . . Eccentric bearings
- B41L35/22 . . . Sliding bearings
- B41L35/24 . . . Swinging bearings
- B41L35/26 . . Cylinder lifting or adjusting devices
- B41L35/28 . . . Cams, eccentrics, wedges, or the like
- B41L35/30 . . . electrically or magnetically operated
- B41L35/32 . . . fluid-pressure operated
- B41L35/34 . Guards or covers, e.g. for safety purposes, for preventing egress or ingress of foreign matter
- B41L38/00** **Devices for attaching coverings or make-ready devices; Guiding devices for**

coverings (make-ready devices [B41N6/00](#); blankets or like coverings [B41N10/00](#))
[N9409]

- B41L38/02 . attaching to impression cylinders [N9409]
- B41L38/04 . attaching of endless or like continuously-fed coverings [N9409]

B41L39/00 **Indicating, counting, warning, control, or safety devices** (ink-level control devices [B41L27/04](#); such devices in general, see relevant subclasses, e.g. counting in general G06M)

- B41L39/02 . Indicating devices, e.g. counters
- B41L39/04 . Tripping devices or stop motions
- B41L39/06 . . for starting or stopping operation of sheet or web feed
- B41L39/08 . . for starting or stopping operation of cylinders [N: [B41L19/16](#) takes precedence]
- B41L39/10 . . for starting or stopping operation of damping or inking units
- B41L39/12 . . for starting or stopping the machine as a whole
- B41L39/14 . . Automatic control of tripping devices by feelers, photoelectric devices, pneumatic devices, or other detectors
- B41L39/16 . Programming systems for automatic control of sequence of operations

B41L41/00 **Cleaning arrangements or devices** [N: for printing presses in general [B41F35/00](#)]

- B41L41/02 . for forme cylinders
- B41L41/04 . for inking rollers
- B41L41/06 . for offset cylinders

B41L43/00 **Auxiliary folding, collecting, or depositing of sheets or webs (in general B65H)**

- B41L43/02 . Folding
- B41L43/04 . . lengthwise
- B41L43/06 . . crosswise
- B41L43/08 . . Folding-cylinders or drums
- B41L43/10 . Collecting
- B41L43/12 . . and stapling
- B41L43/14 . Adding inserts
- B41L43/16 . Depositing

Guide heading: **Addressing machines or like series-printing machines**

- B41L45/00** **Kinds or types of addressing machines or of like series-printing machines [C9409]**
- B41L45/02 . using printing plates
 - B41L45/04 . . composed on type-setting machines
 - B41L45/06 . . for addressing combined with other operations, e.g. franking, collating documents
 - B41L45/08 . with printing surfaces in the form of belts, or carried by chains
 - B41L45/10 . . for addressing combined with other operations, e.g. franking, collating documents
 - B41L45/12 . with separate devices for printing additional text or images, e.g. for printing receipts on blank sheets or webs
- B41L47/00** **Details of addressographs or like series-printing machines (common details of printing machines [B41F21/00](#) to [B41F35/00](#))**
- B41L47/02 . Applications of printing surfaces in addressing machines or like series-printing machines (printing surfaces in general B41N) [C9409]
 - B41L47/04 . . of flat or curved plates for relief printing
 - B41L47/06 . . of flat or curved stencils
 - B41L47/08 . . of flat or curved plates for hectographic printing
 - B41L47/10 . . or printing surfaces in the form of belts or chains
 - B41L47/12 . Auxiliary devices, e.g. for flattening plates, for assembling plates in predetermined order, for wetting stencils
 - B41L47/14 . Devices or arrangements for storing or handling plates
 - B41L47/16 . . Magazines
 - B41L47/18 . . Devices for feeding the plates in their plane
 - B41L47/20 . . Devices for feeding the plates otherwise than in their plane, e.g. transversely thereto
 - B41L47/22 . . with means for presenting plates for repeated printing operations
 - B41L47/24 . Mechanisms for conveying copy material through addressographs or like series-printing machines (in general B65;)
 - B41L47/26 . . for conveying or positioning single sheetlike articles, e.g. envelopes
 - B41L47/28 . . with gauging-rulers or the like, e.g. for facilitating hand-printing of copy material fed from stacks
 - B41L47/30 . . for conveying webs
 - B41L47/32 . . . combined with devices for other purposes, e.g. for cutting, severing, gluing
 - B41L47/34 . . . specially adapted for conveying chains of forms
 - B41L47/36 . . for conveying sheets or webs for tabulating purposes; Tabulating mechanisms combined with sheet or web conveyers
 - B41L47/38 . . . with clamping means for head or margin
 - B41L47/40 . . . with means for automatically reciprocating sheet or web transversely to enable addresses to be printed in columns side by side
 - B41L47/42 . Printing mechanisms

- B41L47/44 . . using flat platens
- B41L47/46 . . using line-contact members, e.g. rollers, cylinders
- B41L47/48 . . with inking or ink-ribbon devices
- B41L47/50 . . using multiple impression-members or -surfaces, e.g. for printing series of addresses with standing context, for printing from selected parts of printing surfaces ([applications of counting, numbering, or dating apparatus B41L49/02](#))
- B41L47/52 . . with movable counter-pressure plates for printing from selected areas of printing surfaces
- B41L47/54 . . with means for automatically reciprocating printing plate transversely to enable addresses to be printed in columns side by side
- B41L47/56 . Indicating, warning, control, or safety devices ([B41L47/58 takes precedence](#))
- B41L47/58 . Arrangements or devices for selecting, or for facilitating selection of, text or image to be printed
- B41L47/60 . . Markings applied to printing plates, e.g. code marks, colours, clips, perforations, edge notches, projections
- B41L47/62 . . Selecting devices, e.g. cams, windows, positions indicators
- B41L47/64 . . . Automatic selecting devices with or without overriding manual control, e.g. with scanning-fingers, with pre-setting controls operable by push-buttons, with programme control by punched tapes
- B41L49/00 **Accessories or attachments for addressographs or like series-printing machines****
- B41L49/02 . Counting, numbering, or dating devices
- B41L49/04 . Devices for applying selection markings to printing plates