

ECLA**EUROPEAN CLASSIFICATION****B31B**

MAKING BOXES, CARTONS, ENVELOPES OR BAGS (incising, scoring, in general [B26D3/08](#); combined making and filling [B65B](#))

[N: **WARNING** [N1204]

The following IPC groups are not used in the internal ECLA classification scheme.

Subject matter covered by these groups is classified in the following ECLA groups:

[B31B7/02](#) covered by [B31B1/02](#)
[B31B7/14](#) covered by [B31B1/14](#)
[B31B7/60](#) covered by [B31B1/60](#)
[B31B7/74](#) covered by [B31B1/74](#)
[B31B9/00](#) covered by [B31B3/00](#)
[B31B9/02](#) covered by [B31B3/02](#)
[B31B9/14](#) covered by [B31B3/14](#)
[B31B9/26](#) covered by [B31B3/26](#)
[B31B9/60](#) covered by [B31B3/60](#)
[B31B9/74](#) covered by [B31B3/74](#)
[B31B11/02](#) covered by [B31B1/02](#)
[B31B11/14](#) covered by [B31B1/14](#)
[B31B11/26](#) covered by [B31B1/26](#)
[B31B11/60](#) covered by [B31B1/60](#)
[B31B11/74](#) covered by [B31B1/74](#)
[B31B13/02](#) covered by [B31B1/02](#)
[B31B13/14](#) covered by [B31B1/14](#)
[B31B13/60](#) covered by [B31B1/60](#)
[B31B13/74](#) covered by [B31B1/74](#)
[B31B15/14](#) covered by [B31B1/14](#)
[B31B15/26](#) covered by [B31B1/26](#)
[B31B15/60](#) covered by [B31B1/60](#)
[B31B15/74](#) covered by [B31B1/74](#)
[B31B21/02](#) covered by [B31B19/02](#)
[B31B21/14](#) covered by [B31B19/14](#)
[B31B21/26](#) covered by [B31B19/26](#)
[B31B21/60](#) covered by [B31B19/60](#)
[B31B21/74](#) covered by [B31B19/74](#)
[B31B23/02](#) covered by [B31B19/02](#), [B31B23/00](#)
[B31B23/14](#) covered by [B31B19/14](#), [B31B23/00](#)
[B31B23/26](#) covered by [B31B19/26](#), [B31B23/00](#)
[B31B23/60](#) covered by [B31B19/60](#), [B31B23/00](#)
[B31B23/74](#) covered by [B31B19/74](#), [B31B23/00](#)
[B31B25/02](#) covered by [B31B19/02](#), [B31B25/00](#)
[B31B25/14](#) covered by [B31B19/14](#), [B31B25/00](#)
[B31B25/26](#) covered by [B31B19/26](#), [B31B25/00](#)
[B31B25/60](#) covered by [B31B19/60](#), [B31B25/00](#)
[B31B25/74](#) covered by [B31B19/74](#), [B31B25/00](#)
[B31B27/02](#) covered by [B31B19/02](#), [B31B27/00](#)
[B31B27/14](#) covered by [B31B19/14](#), [B31B27/00](#)
[B31B27/26](#) covered by [B31B19/26](#), [B31B27/00](#)
[B31B27/60](#) covered by [B31B19/60](#), [B31B27/00](#)
[B31B27/74](#) covered by [B31B19/74](#), [B31B27/00](#)
[B31B29/02](#) covered by [B31B19/02](#), [B31B29/00](#)
[B31B29/14](#) covered by [B31B19/14](#), [B31B29/00](#)
[B31B29/26](#) covered by [B31B19/26](#), [B31B29/00](#)
[B31B31/00](#) covered by [B31B29/00](#)
[B31B31/02](#) covered by [B31B19/02](#), [B31B29/00](#)
[B31B31/14](#) covered by [B31B19/14](#), [B31B29/00](#)
[B31B31/26](#) covered by [B31B19/26](#), [B31B29/00](#)
[B31B31/60](#) covered by [B31B29/60](#)
[B31B31/74](#) covered by [B31B29/74](#)
[B31B33/00](#) covered by [B31B29/00](#)
[B31B33/02](#) covered by [B31B19/02](#), [B31B29/00](#)
[B31B33/14](#) covered by [B31B19/14](#), [B31B29/00](#)

[B31B33/26](#) covered by [B31B19/26](#), [B31B29/00](#)
[B31B33/60](#) covered by [B31B29/60](#)
[B31B33/74](#) covered by [B31B29/74](#)
[B31B35/00](#) covered by [B31B29/00](#)
[B31B35/02](#) covered by [B31B19/02](#), [B31B29/00](#)
[B31B35/14](#) covered by [B31B19/14](#), [B31B29/00](#)
[B31B35/26](#) covered by [B31B19/26](#), [B31B29/00](#)
[B31B35/60](#) covered by [B31B29/60](#)
[B31B35/74](#) covered by [B31B29/74](#)
[B31B37/02](#) covered by [B31B19/02](#), [B31B37/00](#)
[B31B37/14](#) covered by [B31B19/14](#), [B31B37/00](#)
[B31B37/26](#) covered by [B31B19/26](#), [B31B37/00](#)
[B31B37/60](#) covered by [B31B19/60](#), [B31B37/00](#)
[B31B37/74](#) covered by [B31B19/74](#), [B31B37/00](#)
[B31B39/02](#) covered by [B31B19/02](#), [B31B39/00](#)
[B31B39/14](#) covered by [B31B19/14](#), [B31B39/00](#)
[B31B39/26](#) covered by [B31B19/26](#), [B31B39/00](#)
[B31B39/60](#) covered by [B31B19/60](#), [B31B39/00](#)
[B31B41/02](#) covered by [B31B19/02](#), [B31B41/00](#)
[B31B41/14](#) covered by [B31B19/14](#), [B31B41/00](#)
[B31B41/26](#) covered by [B31B19/26](#), [B31B41/00](#)
[B31B41/60](#) covered by [B31B19/60](#), [B31B41/00](#)
[B31B41/74](#) covered by [B31B19/74](#), [B31B41/00](#)
]

Notes [C1204]

1. In this subclass, envelopes or bags are regarded as being essentially flexible containers, the final shape of which is determined by their contents.
2. In this subclass, the following expression is used with the meaning indicated:
 - "boxes or cartons" includes bags formed similarly to cartons, trays with upstanding side-walls, barrels, tubes and cups, other than articles formed by winding.
3. In this subclass, it is desirable to add the indexing codes of [L31B200/00](#) - [L31B241/00N](#)

B31B1/00

Box, carton, envelope or bag making machinery characterised by performing specific operations (machinery for performing operations of general application, see the appropriate subclasses)

[N: Note]

Envelope or bag making machinery characterised by performing specific operations is classified in the respective subgroups of group [B31B19/00](#) (or of groups [B31B23/00](#) to [B31B29/00](#), [B31B37/00](#) to [B31B41/00](#))
]

B31B1/02

- . Feeding or positioning sheets, blanks, or webs

B31B1/04

- . . Feeding sheets or blanks

B31B1/06

- . . . from stacks[N: ([B31B5/76](#) takes precedence)] [C1204]

B31B1/08

- . . . during envelope or bag-making operations

B31B1/10

- . . Feeding or positioning webs

B31B1/12

- . . by air pressure or suction[N: ([B31B1/06](#) takes precedence)]

B31B1/14

- . Cutting, e.g. perforating, punching, slitting, trimming [N:(means for removing cut-out

- material or waste [B26D7/18](#)]
- B31B1/16 . . Cutting webs to form sheets or blanks
- B31B1/18 . . Slitting webs longitudinally
- B31B1/20 . . Cutting sheets or blanks [N: e.g. cutting corners, or involving scoring or printing or embossing (surface scoring per se [B31B1/25](#); printing or embossing per se [B31B1/88](#))]
- B31B1/22 . . . Notching; Trimming edges of flaps
- B31B1/24 . . . Making window openings
- B31B1/25 . Surface scoring (cutting through material [B31B1/14](#))
- B31B1/26 . Folding sheets, blanks, or webs
- B31B1/28 . . around mandrels, including bottom-forming operations
- B31B1/30 . . . the mandrels moving
- B31B1/32 in circular paths
- B31B1/34 about their own axes
- B31B1/36 . . by continuously feeding same to stationary members, e.g. plates, ploughs, cores
- B31B1/38 . . . the members being forming-tubes
- B31B1/40 acting internally
- B31B1/42 acting externally
- B31B1/44 . . by plungers moving through folding dies
- B31B1/46 . . . and interconnecting side walls during such movement
- B31B1/48 by folding or tucking-in locking flaps
- B31B1/50 by interengaging tongues and slots
- B31B1/52 . . by reciprocating or oscillating members, e.g. fingers, other than plungers or dies
- B31B1/54 . . . operating on moving material
- B31B1/56 . . by rotary members co-operating with blades
- B31B1/58 . . by moving endless belts
- B31B1/60 . Uniting opposed surfaces or edges; Taping
- B31B1/62 . . by adhesives
- B31B1/64 . . by applying heat or pressure
- B31B1/66 . . . high-frequency electric heating
- B31B1/68 . . by stitching, stapling, or riveting
- B31B1/70 . . . by corner stapling
- B31B1/72 . . by applying or securing strips or sheets [N: (on already formed boxes [B31B3/72](#); delivering and applying strips, sheets, tape in general [B65H35/00](#))] [C1204]
- B31B1/74 . Auxiliary operations; [N: Parts; Components]
- B31B1/76 . . Opening or distending flattened articles
- B31B1/78 . . . mechanically
- B31B1/80 . . . pneumatically
- B31B1/82 . . Attaching windows
- B31B1/84 . . Forming valves or applying valve inserts; [N: Applying rigid valves, spouts, filling

- tubes](connection of valves to inflatable elastic bodies [B60C29/00](#))
- B31B1/86 . . Forming integral handles or mounting separate handles (making separate handles by multi-step processes [B31D1/06](#))
- B31B1/88 . . Printing or embossing
- B31B1/90 . . Attaching accessories not otherwise provided for, e.g. opening or closure devices, tear strings
- B31B1/92 . . Delivering [N: [B31B19/92](#) takes precedence]
- B31B1/94 . . . singly or in succession
- B31B1/96 in overlapping arrangement
- B31B1/98 in stacks or bundles

Guide heading: **Machinery for making boxes or cartons**

B31B3/00 **Machinery characterised by making boxes or cartons by folding single-piece sheets, blanks, or webs ([B31B5/00](#) takes precedence)**

- B31B3/02 . and having means for feeding or positioning sheets, blanks, or webs [N: (not used; see [B31B1/02](#))]
- B31B3/14 . and having means for cutting, e.g. perforating, punching, slitting, trimming[N: (not used; see [B31B1/14](#))]
- B31B3/26 . and having means for folding sheets, blanks, or webs
- B31B3/28 . . around mandrels, including bottom-forming operations
- B31B3/30 . . . the mandrels moving [N: ,e.g. with independent mandrels or with mandrels fixed on an endless chain]
- B31B3/32 in circular paths [N: ,e.g. with radially extending mandrels on a rotating drum]
- B31B3/34 about their own axes [C1204]
- B31B3/36 . . by continuously feeding same to stationary members, e.g. plates, ploughs, cores
- B31B3/44 . . by plungers moving through folding dies
- B31B3/46 . . . and interconnecting side walls during such movement
- B31B3/48 by folding or tucking-in locking flaps
- B31B3/50 by interengaging tongues and slots
- B31B3/52 . . by reciprocating or oscillating members, e.g. fingers, other than plungers and dies
- B31B3/60 . and having means for uniting opposed surfaces or edges, or for taping
- B31B3/64 . . by applying heat or pressure
- B31B3/72 . . by applying and securing strips or sheets [N: on already formed boxes]
- B31B3/74 . and having means for effecting auxiliary operations

B31B5/00 **Machinery characterised by making boxes or cartons by folding single-piece sheets which can be set-up from a collapsed condition, including setting-up and recollapsing to break creases**

- B31B5/02 . and having means for feeding or positioning sheets[N: (not used; see [B31B1/02](#))]

- B31B5/14
 - and having means for cutting, e.g. perforating, punching, slitting, trimming[N: (not used; see [B31B1/14](#))]
- B31B5/26
 - and having means for folding sheets, blanks, or webs
- B31B5/36
 - . . by continuously feeding same to stationary members, e.g. plates, ploughs, cores
- B31B5/60
 - and having means for uniting opposed surfaces or edges, or for taping [C1204]
- B31B5/74
 - and having means for effecting auxiliary operations
- B31B5/76
 - . . Opening or distending flattened articles [N: e.g. collapsed blanks, including arrangements therefor; Setting-up of boxes]
- B31B5/78
 - . . . mechanically
- B31B5/80
 - . . . pneumatically[N: i.e. with suction cups for totally or partially opening the collapsed blanks or by introducing a jet of gas into the collapsed blanks, e.g. with means for recollapsing or breaking creases]
- B31B7/00**

Machinery characterised by making lined or internally-reinforced boxes or cartons
([B31B11/00](#) takes precedence)
- B31B7/26
 - and having means for folding sheets, blanks, or webs
- B31B7/28
 - . . around mandrels, including bottom-forming operations
- B31B7/30
 - . . . the mandrels moving [N: with independent mandrels or with mandrels fixed on an endless chain]
- B31B7/32
 - in circular paths [N: , e.g. with radially extending mandrels on a rotating drum]
- B31B7/44
 - . . by plungers moving through folding dies
- B31B7/46
 - . . . and interconnecting side walls during such movement
- B31B11/00**

Machinery characterised by making boxes or cartons having partitions or like inserts not integral with walls (making partitions, inserts, or reinforcements for boxes or cartons [B31D](#))

[N: **Note**
Making non-integral partitions or like inserts is classified in group [B31B11/00](#)
]
- B31B13/00**

Machinery characterised by assembling drawer-and-shell boxes or cartons
- B31B15/00**

Machinery characterised by making covered or externally-reinforced boxes or cartons [N: ([B31B7/00](#) takes precedence)]
- B31B15/02
 - and having means for feeding or positioning sheets, blanks, or webs
- B31B17/00**

Machinery characterised by making other boxes or cartons by assembling several separate sheets, blanks, or webs

[N: **Note**

The term "other boxes or cartons" is understood as to cover subject matter other than that of groups [B31B7/00](#), [B31B11/00](#), [B31B13/00](#) or [B31B15/00](#)]

[B31B17/60](#) . and having means for uniting opposed surfaces or edges, or for taping

[B31B17/74](#) . and having means for effecting auxiliary operations

Guide heading: **Machinery for making envelopes or bags**

Note

Machinery for making boxes or cartons as well as envelopes or bags are classified in groups [B31B3/00](#) to [B31B17/00](#).

[B31B19/00](#) Machinery characterised by making rectangular envelopes or bags of flat form, i.e. without structural provision at the base for thickness of contents ([B31B21/00](#), [B31B23/00](#) take precedence) [C1204]

[B31B19/02](#) . and having means for feeding or positioning sheets, blanks, or webs

[B31B19/10](#) . . Feeding or positioning webs

[B31B19/14](#) . and having means for cutting, e.g. perforating, punching, slitting, trimming

[B31B19/16](#) . . Cutting webs to form sheets or blanks

[B31B19/18](#) . . Slitting webs longitudinally

[B31B19/20](#) . . Cutting sheets or blanks, [N: e.g. applying corner cuts]

[B31B19/26](#) . and having means for folding sheets, blanks, or webs

[B31B19/36](#) . . by continuously feeding same to stationary members, e.g. plates, ploughs, cores

[B31B19/52](#) . . by reciprocating or oscillating members, e.g. fingers, other than plungers or dies

[B31B19/60](#) . and having means for uniting opposed surfaces or edges, or for taping

[B31B19/62](#) . . by adhesives

[B31B19/64](#) . . by applying heat or pressure [(N: for block bottom bags [B31B29/60](#))]

[B31B19/66](#) . . . high-frequency electric heating

[B31B19/68](#) . . by stitching, stapling or riveting

[B31B19/74](#) . Auxiliary operations; [N: Parts; Components]

[B31B19/82](#) . . Attaching windows

[B31B19/84](#) . . Forming valves or applying valve inserts

[B31B19/86](#) . . Forming integral handles or mounting separate handles (making separate handles by multi-step processes [B31D1/06](#))

[B31B19/88](#) . . Printing or embossing

[B31B19/90](#) . . Attaching accessories not otherwise provided for, e.g. opening or closure devices, tear strings[N: patches] [C1204]

[B31B19/92](#) . . Delivering

- B31B19/94 . . . singly or in succession
- B31B19/96 in overlapping arrangement
- B31B19/98 . . . in stacks or bundles

- B31B21/00** Machinery characterised by making rectangular envelopes or bags of flat form, i.e. without structural provision at the base for thickness of contents, from sheets or blanks, e.g. from flattened tubes [N: e.g. making mailing envelopes] [C1109]

- B31B23/00** Machinery characterised by making rectangular envelopes or bags of flat form, i.e. without structural provision at the base for thickness of contents, from webs, e.g. from flattened tubular webs (machinery characterised by cutting sheets or blanks from webs and working them to form such envelopes or bags [B31B21/00](#)) [C1204]

- B31B25/00** Machinery characterised by making pointed or tapered envelopes or bags

- B31B27/00** Machinery characterised by making interconnected envelopes or bags [C1204]

- B31B29/00** Machinery characterised by making envelopes or bags with structural provision at the base for thickness or contents([B31B31/00](#)to[B31B37/00](#)take precedence; [N:[B31B31/00](#),[B31B33/00](#),[B31B35/00](#)are not used,[B31B39/00](#)Ctakes precedence])

- B31B29/60 . and having means for uniting opposed surfaces or edges, or for taping
- B31B29/74 . and having means for effecting auxiliary operations
- B31B29/84 . . Forming valves or applying valve inserts

- B31B37/00** Machinery characterised by making envelopes or bags with structural provision at the base for thickness of contents from webs, e.g. from tubular webs (machinery characterised by cutting sheets and blanks from webs and working them to form such envelopes or bags [B31B31/00](#)) [C1204]

- B31B39/00** Machinery characterised by making lined envelopes or bags [N: ([B31B19/00K6](#) takes precedence)]

- B31B41/00** Machinery characterised by making envelopes or bags of other specific form or construction [N: i.e. not particularly otherwise provided for]

- B31B43/00** Machinery characterised by making containers by shaping, other- wise than folding, sheet material under pressure

- B31B45/00** Machinery characterised by making containers having corrugated or pleated walls

- B31B47/00** Hand tools for making envelopes, bags, boxes or cartons

- B31B47/02 . for making envelopes or bags without preshaped bottoms

[B31B47/04](#) . for making envelopes or bags with preshaped bottoms

[B31B49/00](#) **Machinery, accessories or processes not provided for in [B31B1/00](#) to [B31B47/00](#)**
(forms or constructions of boxes, cartons, envelopes or bags [B65D](#))

Note

Processes dependent on the use of specific machinery provided for in groups [B31B1/00](#) to [B31B45/00](#) are classified in those groups.

[B31B49/02](#) . for making boxes or cartons

[B31B49/04](#) . for making envelopes or bags