

SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B31 MAKING ARTICLES OF PAPER OR CARDBOARD; WORKING PAPER OR CARDBOARD

B31B MAKING BOXES, CARTONS, ENVELOPES OR BAGS OF PAPER OR CARDBOARD (incising, scoring, in general B26D 3/08; combined making and filling B65B)

Note(s)

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.

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1/00	Box, carton, envelope or bag making machinery characterised by performing specific operations (machinery for performing operations of general application, <i>see</i> the appropriate subclasses) [1, 2006.01]	1/25	• Surface scoring (cutting through material B31B 1/14) [2, 2006.01]
1/02	• Feeding or positioning sheets, blanks, or webs [1, 2006.01]	1/26	• Folding sheets, blanks, or webs [1, 2006.01]
1/04	• • Feeding sheets or blanks [1, 2006.01]	1/28	• • around mandrels, including bottom-forming operations [1, 2006.01]
1/06	• • • from stacks [1, 2006.01]	1/30	• • • the mandrels moving [1, 2006.01]
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1/10	• • Feeding or positioning webs [1, 2006.01]	1/34	• • • • about their own axes [1, 2006.01]
1/12	• • by air pressure or suction [1, 2006.01]	1/36	• • by continuously feeding same to stationary members, e.g. plates, ploughs, cores [1, 2006.01]
1/14	• Cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]	1/38	• • • the members being forming-tubes [1, 2006.01]
1/16	• • Cutting webs to form sheets or blanks [1, 2006.01]	1/40	• • • • acting internally [1, 2006.01]
1/18	• • Slitting webs longitudinally [1, 2006.01]	1/42	• • • • acting externally [1, 2006.01]
1/20	• • Cutting sheets or blanks [1, 2006.01]	1/44	• • by plungers moving through folding dies [1, 2006.01]
1/22	• • • Notching; Trimming edges of flaps [1, 2006.01]	1/46	• • • and interconnecting side walls during such movement [1, 2006.01]
1/24	• • • Making window openings [1, 2006.01]	1/48	• • • • by folding or tucking in locking flaps [1, 2006.01]

- 1/50 • • • • by interengaging tongues and slots [1, 2006.01]
- 1/52 • • by reciprocating or oscillating members, e.g. fingers other than plungers and dies [1, 2006.01]
- 1/54 • • • operating on moving material [1, 2006.01]
- 1/56 • • by rotary members co-operating with blades [1, 2006.01]
- 1/58 • • by moving endless belts [1, 2006.01]
- 1/60 • • • • • Uniting opposed surfaces or edges; Taping [1, 2006.01]
- 1/62 • • by adhesives [1, 2006.01]
- 1/64 • • by applying heat or pressure [1, 2006.01]
- 1/66 • • • high-frequency electric heating [1, 2006.01]
- 1/68 • • by stitching, stapling, or riveting [1, 2006.01]
- 1/70 • • • by corner stapling [1, 2006.01]
- 1/72 • • by applying and securing strips or sheets [1, 2006.01]
- 1/74 • • • • • Auxiliary operations [1, 2006.01]
- 1/76 • • • • • Opening and distending flattened articles [1, 2006.01]
- 1/78 • • • • • mechanically [1, 2006.01]
- 1/80 • • • • • pneumatically [1, 2006.01]
- 1/82 • • • • • Attaching windows [1, 2006.01]
- 1/84 • • • • • Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies B60C 29/00) [1, 2006.01]
- 1/86 • • • • • Forming integral handles or mounting separate handles (making separate handles by multi-step processes B31D 1/06) [1, 2006.01]
- 1/88 • • • • • Printing or embossing [1, 2006.01]
- 1/90 • • • • • Attaching accessories not otherwise provided for, e.g. opening or closure devices, tear strings [1, 2006.01]
- 1/92 • • • • • Delivering [1, 2006.01]
- 1/94 • • • • • singly or in succession [1, 2006.01]
- 1/96 • • • • • in overlapping arrangement [1, 2006.01]
- 1/98 • • • • • in stacks or bundles [1, 2006.01]

Machinery for making boxes or cartons

- 3/00 Machinery characterised by making boxes or cartons by folding single-piece sheets, blanks, or webs (B31B 5/00 takes precedence) [1, 2006.01]**
- 3/02 • • • • • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 3/14 • • • • • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 3/26 • • • • • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 3/28 • • • • • around mandrels, including bottom-forming operations [1, 2006.01]
- 3/30 • • • • • the mandrels moving [1, 2006.01]
- 3/32 • • • • • in circular paths [1, 2006.01]
- 3/34 • • • • • about their own axes [1, 2006.01]
- 3/36 • • • • • by continuously feeding same to stationary members, e.g. plates, ploughs, cores [1, 2006.01]
- 3/44 • • • • • by plungers moving through folding dies [1, 2006.01]
- 3/46 • • • • • and interconnecting side walls during such movement [1, 2006.01]
- 3/48 • • • • • by folding or tucking in locking flaps [1, 2006.01]
- 3/50 • • • • • by interengaging tongues and slots [1, 2006.01]

- 3/52 • • • • • by reciprocating or oscillating members, e.g. fingers other than plungers and dies [1, 2006.01]
- 3/60 • • • • • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 3/64 • • • • • by applying heat or pressure [1, 2006.01]
- 3/72 • • • • • by applying and securing strips or sheets [1, 2006.01]
- 3/74 • • • • • and having means for effecting auxiliary operations [1, 2006.01]
- 5/00 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 [1, 2006.01]**
- 5/02 • • • • • and having means for feeding or positioning sheets [1, 2006.01]
- 5/14 • • • • • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 5/26 • • • • • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 5/36 • • • • • by continuously feeding same to stationary members, e.g. plates, ploughs, cores [1, 2006.01]
- 5/60 • • • • • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 5/74 • • • • • and having means for effecting auxiliary operations [1, 2006.01]
- 5/76 • • • • • Opening and distending flattened articles [1, 2006.01]
- 5/78 • • • • • mechanically [1, 2006.01]
- 5/80 • • • • • pneumatically [1, 2006.01]
- 7/00 Machinery characterised by making lined or internally-reinforced boxes or cartons (B31B 11/00 takes precedence) [1, 2006.01]**
- 7/02 • • • • • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 7/14 • • • • • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 7/26 • • • • • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 7/28 • • • • • around mandrels, including bottom-forming operations [1, 2006.01]
- 7/30 • • • • • the mandrels moving [1, 2006.01]
- 7/32 • • • • • in circular paths [1, 2006.01]
- 7/44 • • • • • by plungers moving through folding dies [1, 2006.01]
- 7/46 • • • • • and interconnecting side walls during such movement [1, 2006.01]
- 7/60 • • • • • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 7/74 • • • • • and having means for effecting auxiliary operations [1, 2006.01]
- 9/00 Machinery characterised by making boxes or cartons having shouldered walls [1, 2006.01]**
- 9/02 • • • • • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 9/14 • • • • • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 9/26 • • • • • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 9/60 • • • • • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 9/74 • • • • • and having means for effecting auxiliary operations [1, 2006.01]

- 11/00 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) [1, 2006.01]
- 11/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 11/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 11/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 11/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 11/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 13/00 Machinery characterised by assembling drawer-and-shell boxes or cartons** [1, 2006.01]
- 13/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 13/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 13/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 13/28 • • around mandrels, including bottom-forming operations [1, 2006.01]
- 13/30 • • • the mandrels moving [1, 2006.01]
- 13/32 • • • in circular paths [1, 2006.01]
- 13/34 • • • about their own axes [1, 2006.01]
- 13/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 13/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 15/00 Machinery characterised by making covered or externally-reinforced boxes or cartons** [1, 2006.01]
- 15/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 15/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 15/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 15/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 15/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 17/00 Machinery characterised by making other boxes or cartons by assembling several separate sheets, blanks, or webs** [1, 2006.01]
- 17/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 17/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 17/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 17/28 • • around mandrels, including bottom-forming operations [1, 2006.01]
- 17/30 • • • the mandrels moving [1, 2006.01]
- 17/32 • • • in circular paths [1, 2006.01]
- 17/44 • • by plungers moving through folding dies [1, 2006.01]
- 17/46 • • • and interconnecting side walls during such movement [1, 2006.01]
- 17/52 • • by reciprocating or oscillating members, e.g. fingers other than plungers and dies [1, 2006.01]
- 17/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]

- 17/74 • and having means for effecting auxiliary operations [1, 2006.01]

Machinery for making envelopes or bags

Note(s)

Machinery for making boxes or cartons as well as envelopes or bags is classified in groups B31B 3/00-B31B 17/00.

- 19/00 Machinery characterised by making rectangular envelopes or bags of flat form, i.e. without structural provision at the base for thickness of contents** (B31B 21/00, B31B 23/00 take precedence) [1, 2006.01]
- 19/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 19/10 • • Feeding or positioning webs [1, 2006.01]
- 19/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 19/16 • • Cutting webs to form sheets or blanks [1, 2006.01]
- 19/18 • • Slitting webs longitudinally [1, 2006.01]
- 19/20 • • Cutting sheets or blanks [1, 2006.01]
- 19/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 19/36 • • by continuously feeding same to stationary members, e.g. plates, ploughs, cores [1, 2006.01]
- 19/52 • • by reciprocating or oscillating members, e.g. fingers other than plungers and dies [1, 2006.01]
- 19/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 19/62 • • by adhesives [1, 2006.01]
- 19/64 • • by applying heat or pressure [1, 2006.01]
- 19/66 • • • high-frequency electric heating [1, 2006.01]
- 19/68 • • by stitching, stapling, or riveting [1, 2006.01]
- 19/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 19/82 • • Attaching windows [1, 2006.01]
- 19/84 • • Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies B60C 29/00) [1, 2006.01]
- 19/86 • • Forming integral handles or mounting separate handles (making separate handles by multi-step processes B31D 1/06) [1, 2006.01]
- 19/88 • • Printing or embossing [1, 2006.01]
- 19/90 • • Attaching accessories not otherwise provided for, e.g. opening or closure devices, tear strings [1, 2006.01]
- 19/92 • • Delivering [1, 2006.01]
- 19/94 • • • singly or in succession [1, 2006.01]
- 19/96 • • • in overlapping arrangement [1, 2006.01]
- 19/98 • • • in stacks or bundles [1, 2006.01]
- 21/00 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** [1, 2006.01]
- 21/02 • and having means for feeding or positioning sheets or blanks [1, 2006.01]
- 21/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 21/26 • and having means for folding sheets or blanks [1, 2006.01]
- 21/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]

- 21/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 23/00 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 B31B 21/00) [1, 2006.01]
- 23/02 • and having means for feeding or positioning webs [1, 2006.01]
- 23/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 23/26 • and having means for folding webs [1, 2006.01]
- 23/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 23/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 25/00 Machinery characterised by making pointed or tapered envelopes or bags** [1, 2006.01]
- 25/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 25/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 25/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 25/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 25/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 27/00 Machinery characterised by making interconnected envelopes or bags** [1, 2006.01]
- 27/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 27/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 27/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 27/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 27/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 29/00 Machinery characterised by making envelopes or bags with structural provision at the base for thickness or contents** (B31B 31/00-B31B 37/00 take precedence) [1, 2006.01]
- 29/02 • and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]
- 29/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 29/26 • and having means for folding sheets, blanks, or webs [1, 2006.01]
- 29/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 29/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 29/84 • • Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies B60C 29/00) [1, 2006.01]
- 31/00 Machinery characterised by making envelopes or bags with structural provision at the base for thickness of contents, from sheets or blanks, e.g. from flattened tubes** (B31B 33/00, B31B 35/00 take precedence) [1, 2006.01]
- 31/02 • and having means for feeding or positioning sheets or blanks [1, 2006.01]
- 31/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 31/26 • and having means for folding sheets or blanks [1, 2006.01]
- 31/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 31/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 33/00 Machinery characterised by making envelopes or bags with structural provision at the base for thickness of contents, from sheets or blanks, e.g. from flattened tubes, the longitudinal axes of the envelopes or bags being parallel to the direction in which the sheets or blanks are fed** [1, 2006.01]
- 33/02 • and having means for feeding or positioning sheets or blanks [1, 2006.01]
- 33/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 33/26 • and having means for folding sheets or blanks [1, 2006.01]
- 33/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 33/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 35/00 Machinery characterised by making envelopes or bags with structural provision at the base for thickness of contents, from sheets or blanks, e.g. from flattened tubes, the longitudinal axes of the envelopes or bags being perpendicular to the direction in which the sheets or blanks are fed** [1, 2006.01]
- 35/02 • and having means for feeding or positioning sheets or blanks [1, 2006.01]
- 35/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 35/26 • and having means for folding sheets or blanks [1, 2006.01]
- 35/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 35/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 37/00 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 or blanks from webs and working them to form such envelopes or bags B31B 31/00) [1, 2006.01]
- 37/02 • and having means for feeding or positioning webs [1, 2006.01]
- 37/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]
- 37/26 • and having means for folding webs [1, 2006.01]
- 37/60 • and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]
- 37/74 • and having means for effecting auxiliary operations [1, 2006.01]
- 39/00 Machinery characterised by making lined envelopes or bags** [1, 2006.01]
- 39/02 • and having means for feed or positioning sheets, blanks, or webs [1, 2006.01]
- 39/14 • and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]

39/26	• and having means for folding sheets, blanks or webs [1, 2006.01]	43/00	Machinery characterised by making containers by shaping, otherwise than by folding, sheet material under pressure [1, 2006.01]
39/60	• and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]	45/00	Machinery characterised by making containers having corrugated or pleated walls [1, 2006.01]
39/74	• and having means for effecting auxiliary operations [1, 2006.01]	47/00	Hand tools for making envelopes, bags, boxes or cartons [1, 2006.01]
39/84	• • Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies B60C 29/00) [1, 2006.01]	47/02	• for making envelopes or bags without preshaped bottoms [1, 2006.01]
41/00	Machinery characterised by making envelopes or bags of other specific form or construction [1, 2006.01]	47/04	• for making envelopes or bags with preshaped bottoms [1, 2006.01]
41/02	• and having means for feeding or positioning sheets, blanks, or webs [1, 2006.01]	49/00	Machinery, accessories or processes not provided for in groups B31B 1/00-B31B 47/00 (forms or constructions of boxes, cartons, envelopes or bags B65D) [1, 2, 2006.01]
41/14	• and having means for cutting, e.g. perforating, punching, slitting, trimming [1, 2006.01]	Note(s) [2]	Processes dependent on the use of specific machinery provided for in groups B31B 1/00-B31B 45/00 are classified in those groups.
41/26	• and having means for folding sheets, blanks or webs [1, 2006.01]	49/02	• for making boxes or cartons [1, 2006.01]
41/60	• and having means for uniting opposed surfaces or edges, or for taping [1, 2006.01]	49/04	• for making envelopes or bags [1, 2006.01]
41/74	• and having means for effecting auxiliary operations [1, 2006.01]		