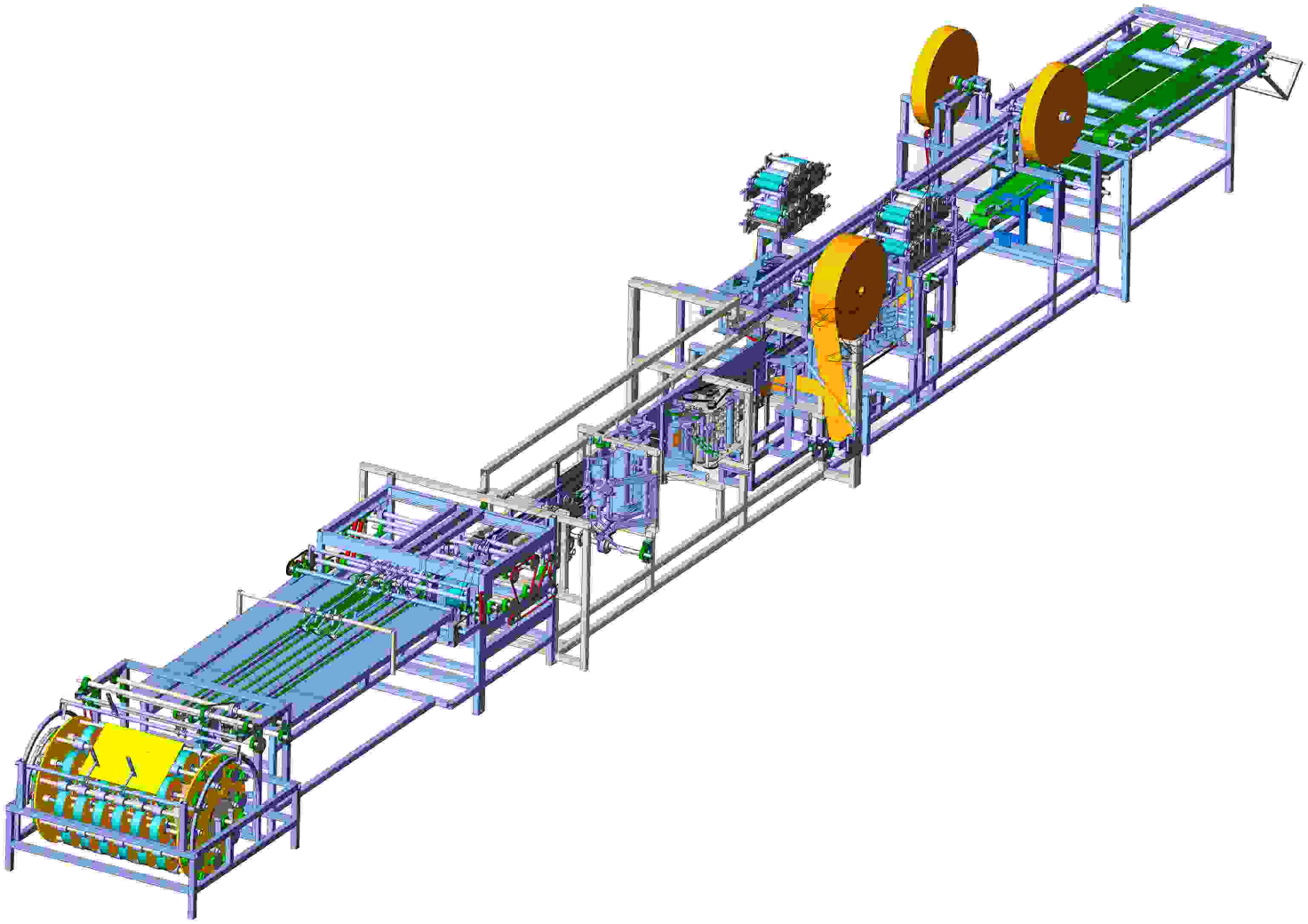
BOTTOMER MACHINE. SERIES DU



BOTTOMER MACHINE. SERIES DU

1 Technical characteristics

1. Bottomer Machine series DU is assembled on a multi-purpose frame allowing to make both open and enclosed valve sacks.
2. Sack making operations are performed in an automatic mode except for ready produce packaging at the processing line output.
3. Service personnel (people) – 3.
4. Bottom-tape printing: 1 to 4 colors, anilox roll – rubber or ceramic.
5. Productivity – at least 100 sack per minute.
6. Overall size (LxBxH) (m) – 17,0 x 2,20 x 2,05.
7. Mass (t) – 4,2.
8. Supply voltage (V/Hz) – 3 x 380/50.
9. Installed capacity (kW) – 10,0.
10. Air consumption (ltr/min) – at least 350.

2 Service conditions

1. Operating mode: 8-20 hours per day.
2. Temperature conditions: 5-40 C^0.
3. Humidity: up to 95%.

3 Raw stock and materials

1. Tube:
   - Kraft paper.
   - Kraft paper density (kg/cm2) – at least 65.
   - Kraft paper use of various density inside the tube – permitted
   - Kraft paper layers amount (pcs) – from 2 up to 4.
   - Film between the kraftpaper layers: permitted. Laminated kraftpaper – permitted.
   - Maximum deviation in length, breadth, diagonally (mm) – 3.
   - Lengthwise glueing: uninterrupted, without squeezing the glue atthe seams; distance between the tube edge and the seam (mm) (size D, Fig.1) – at least 100.
   - Interlayer glueing: dotted, without squeezing the glue at the seams; distance between the tube edge and glue dots line (sizes F;G;E,F';G';E' Fig. 1) (mm) – 20.
2. Roll material:
   - Bobbins for making bottom tape: kraft paper, density (kg/sm^2) – at least 70; diam (mm) – at most 600.
   - Bobbins for making valve tape: kraft paper, density (kg/sm^2) – at least 70; diam (mm) – at most 400.
3. - Bobbins are wound on the spool, inner diameter (mm) – 76.
   - Kraft paper winding density in a bobbin – high.
4. Glue.
   - Starch-based.

   Paint for flexoprinting.
   - Water-based.

Fig. 1

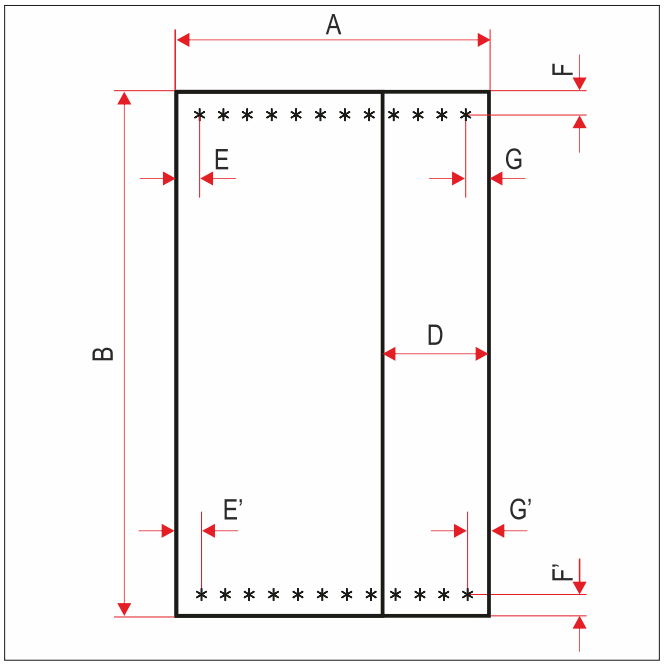


Fig. 2

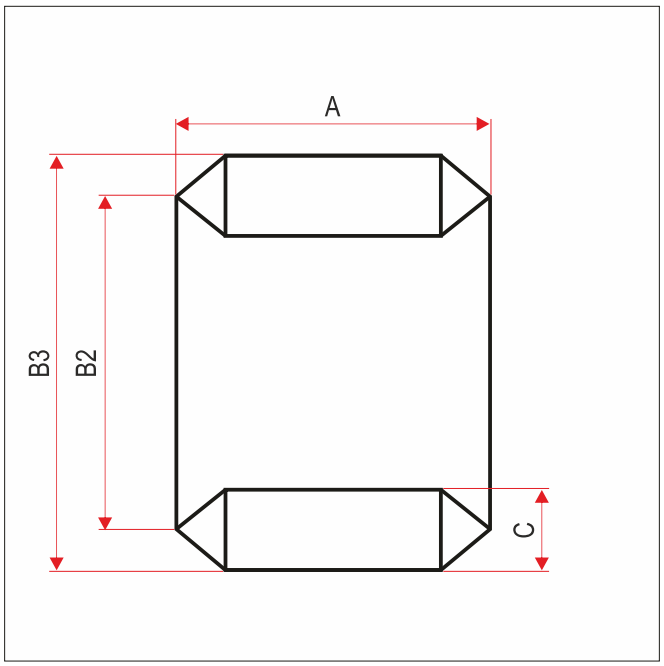
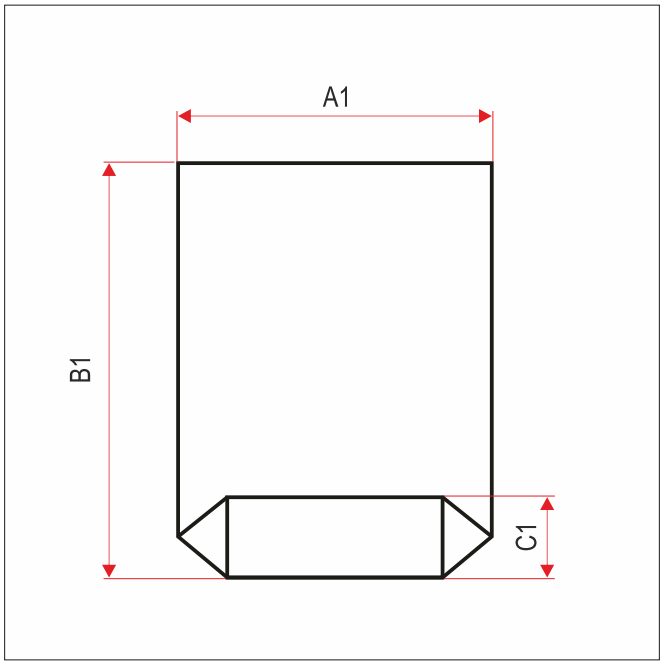


Fig. 3



4 Tube and sack technical characteristics

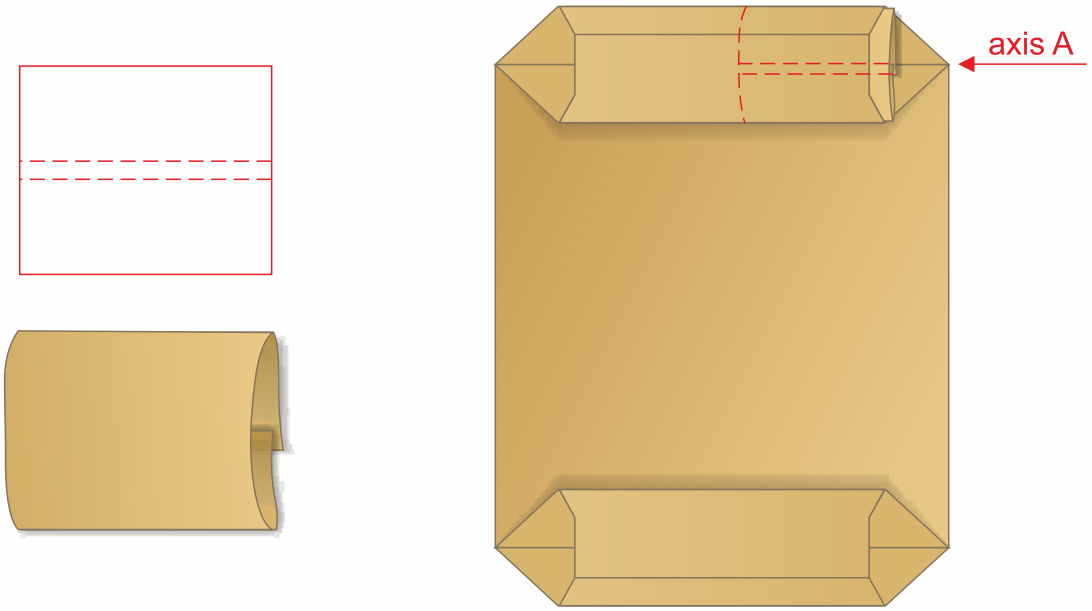
1. Open sack.
   - Length (size B,Fig. 1) (mm)– 450-1100.
   - Breadth (size A,Fig. 1) (mm)– 340-500.
   - Bottom breadth (size C1,Fig. 3) (mm)– 90-160.

2. Enclosed valve sack.
   - Length (size B,Fig. 1) (mm)– 530-1100.
   - Breadth (size A,Fig. 1) (mm)– 340-500.
   - Bottom breadth (size C,Fig. 2) (mm)– 90-160.
   - Distance between sack bottom centers (size B2,Fig. 2) (mm)– from 310 up to 800.

5 Valve

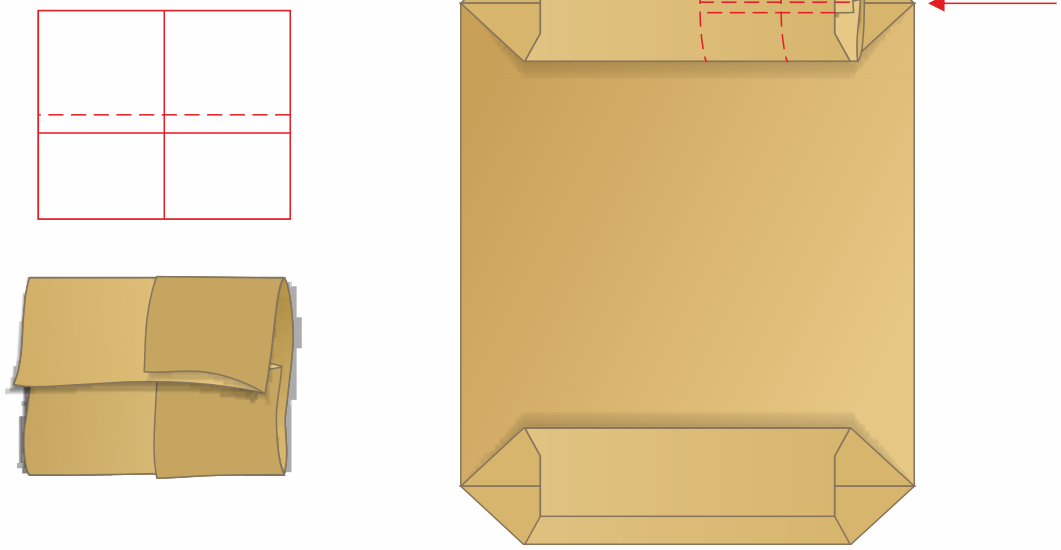
The equipment makes and pastes four types of valves into the bag.

1. Tubular.
   - One detail.
   - Kraft paper.
   - Possibility of valve displacement along axis A.



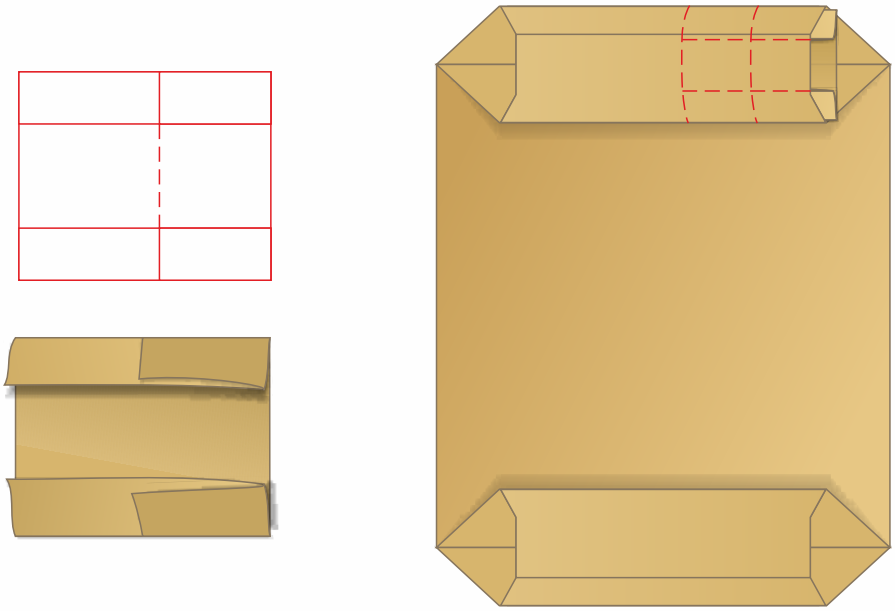
*With the aim of a more visual demonstration of the valve, a compulsory detail of the sack – the bottom tape – is not sketched on the picture.

2. Reinforced tubular.
   - One detail.
   - Kraft paper.
   - Possibility of valve displacement along axis A.



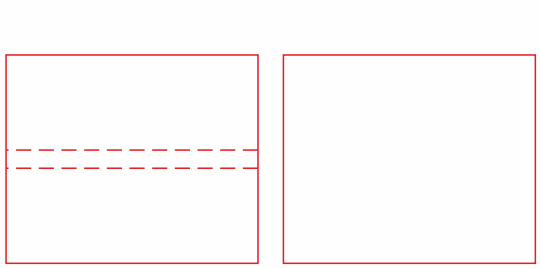
*With the aim of a more visual demonstration of the valve, a compulsory detail of the sack – the bottom tape – is not sketched on the picture.

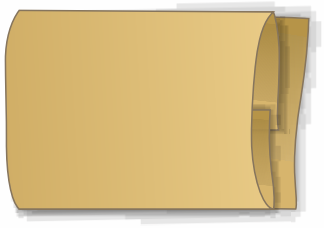
3. Reinforced simple.
   - One detail.
   - Kraft paper.

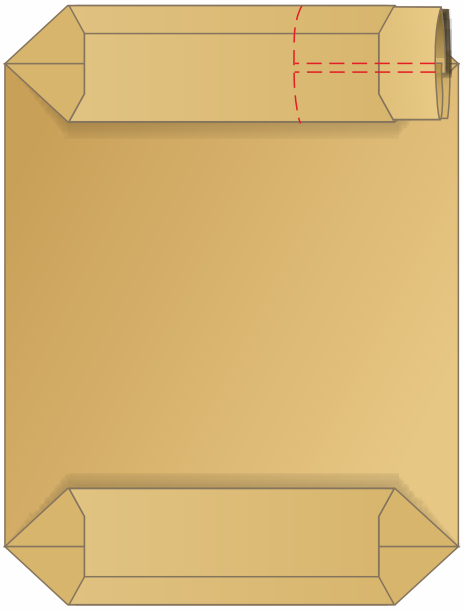


*With the aim of a more visual demonstration of the valve, a compulsory detail of the sack – the bottom tape – is not sketched on the picture.

4. Tubular with ultrasonic sealing.
   - Two parts.
   - Tube - kraft paper with a polymer layer (inside the tube).
   - Reinforcement stripe – kraft paper.







*With the aim of a more visual demonstration of the valve, a compulsory detail of the sack – the bottom tape – is not sketched on the picture.

6 Completeness

1. Automatical high speed tubes feeding unit (pcs)–1.
2. Tubes alignment section (pcs)–1.
3. Notching and cross-scoring section (pcs)–1.
4. "Envelope"- forming and valve installation section (pcs)–1.
5. Flexography, bottom tape making and gluing section (pcs)–1.
6. Press-conveyer (pcs)–1.
7. Receiving tray (pcs)–1.
8. Glue tank (pcs)– 2.

7 Additional equipment

1. Air compressor.
   - Operating pressure (atm) – 6-12.
   - Productivity (ltr/min) – at least 350.
   - Receiver (ltr) –100.
2. Bobbin cutter.
   - Winding density – high.
3. Forklift truck.
   - Lift capacity (kg) – 2000.
4. Glue making device.
   - Tankage (ltr) –200.

8 List of obligated works performing by the buyer at his operations site

1. Preparation of the Bottomer Machine DU installation site according to the foundation grounds plan, provided by the Seller.
2. Power wiring of the Bottomer Machine DU installation site according to the scheme, provided by the Seller.
3. Air distribution of the Bottomer Machine DU installation site according to the scheme, provided by the Seller.

9 Installation, setup, staff training

1. The Seller carries out start-up and setup operations at the Buyer's site.
2. The Seller carries out staff training at the Buyer's site.
3. Staff training at the Buyer's site is possible on condition that necessary quantity of tubes and expendable materials is provided by the Buyer.
4. Additionally the Buyer refunds return ticket and accommodation costs, as well as two engineers' work pay, or this refund can be put into the equipment price.
5. The Buyer is responsible for his staff qualifications being trained during the start-up and setup operations period.
6. For the period of start-up and setup operations the Buyer is to provide tubes in agreed with the Seller amount and quality.
7. For the start-up and setup operations period the buyer is to provide all the necessary expendable materials and tooling.
8. Delivery of the equipmentis carried out after its workable condition acceptance by the Buyer at the Seller's site.

10 Packaging

1. The equipment is to be packed in over-the-road position with the use of carpentry and wooden boxes.
2. A set of the standard equipment is loaded onto a bolster-type tractor with a semitrailer or 40ft shipping container.

11 Terms of payment

1. 30 % payment of general price of the equipment as a prepayment.
2. 70% payment of general price of the equipment after its acceptance at the Seller's site before shipping.

12 Delivery time

6 months from the prepayment date.

13 Guarantee & service

1. Six months from the date of signing the Acceptance Certificate.
2. Life-long service.
3. Life-long spare parts at basic cost.

14 Final provisions

1. The given above information provides general idea of the Bottomer machine series DU as of an engineering product.
2. The given technical characteristics refer to the Bottomer machine series DU basic model.
3. The product's technical characteristics correction is possible according to the Buyer's demands.