

TECHNOLOGY EQUIPMENT PRODUCTION MACHINES DRIVE BELTS

I. Logush, A. Flonts, I. Chvartatsky, Ph.D.

A. Grabar, Senior Lecturer

*Separated subdivision NUBiP of Ukraine «Berezhany Agrotechnical
Institute»*

Creating new types of machines and mechanisms of transport and technological systems and their drives promotes the economic development and expansion of their range, increase productivity through technological progress.

Widely used in machine drives instead of chain drives have become smooth conveyor belt or open trapezoid projections for engagement with the corresponding spline drive shafts for performances, providing transfer rotary motion without slipping and distortions.

The aim - to develop a theoretical justification of technological equipment to connect the ends of the closed contour belts vulcanization method and the formation of lateral profiles using high frequency currents.

Analytical dependences to determine the cutting forces conveyor belts and power outage in the area to be cut during the formation of drive belts and conveyor belts Conveyor belt. Designs of technological equipment for the manufacture of drive belts machines, forming lateral profiles and installation for curing them all.

Technological equipment for the manufacture of drive belts. Installation for the formation of lateral profiles threaded flat belts designed as a frame, which is rigidly set horizontal roller, chain drive motor with transmission and driving sprocket. To frame rigidly fixed inductor, which is designed as a screw elipsnoho solenoid tubes with circular or rectangular cross section.

Inside the inductor at the edges, forming guides available, a form corresponding lateral movement parts, which are rigidly attached to the frame by means of plates.

The advantages of the inductor belongs improve productivity and quality of operations forming edges rubber cotton tapes.

Installation for curing connecting threaded ends flat drive belts or conveyor belts designed as a frame, bottom plate, which is rigidly mounted on the thread matrix with the possibility of axial and circular cranking known methods. To plate rigidly fixed two vertical guides that are installed on the edges of plates parallel to each other, with the guide sleeve and the possibility of axial movement. Last rigidly fixed to the middle plate, which is parallel to the bottom plate, with the possibility of axial movement. To limit the displacement of the middle plate using two vertical, parallel to each other constraints that are installed on the edges of the middle plate adjusting nuts. The upper end limiters are rigidly fixed to the upper plate 8 with vertical rails that are parallel to the middle and lower plates.

Middle middle plate rigidly upright cylindrical casing found that top is designed as a conical containers that communicates with a mixture of alluvial periodic outage in the area of heating (in the drawing is shown).

The internal diameter of the cylindrical casing installed azbestoizolyatsiynny open cylinder, which communicates the inner diameter of the heating element (solenoid), giving the branch which is designed as a tubular helical solenoid with rectangular or circular cross-section, and branch diverter solenoid is designed as a straight tube axis which parallel to the axis of the solenoid. In addition, the inlet and outlet of the cooling system is connected to a cooling system (not shown in the drawing). By the end of the solenoid connected cheeks also known designs, which are in turn connected to the installation of high frequency current design. The inner diameter of the solenoid through the gap interacts with the matrix cylindrical shape with face down and exit hole for the molten mass of the matrix. The hole, which closes an appropriate mechanism in a period known structures, the drawing is shown. Matrix rigidly attached to the socket bottom cylindrical casing. At the lower end of the cylindrical outer casing made directing the belt width restrictors with the possibility of regulation that interact with the ends of the belt for their connection to the matrix.

On top of the cylindrical casing firmly established punch cylindrical shape, which is fixed to the cylinder from above and set the top plate into the hole with the possibility of periodic axial movement. Hydraulic cylinders firmly fixed on top in the center of the top plate, it is driven by electric hydropower from the corresponding control panel installed on the bottom plate.