



MACKINA - WESTFALIA



ARMORED CHAIN CONVEYOR PF-00

Product description





ARMORED CHAIN CONVEYOR PF00

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PF00 Chain Conveyor is a double chain conveying machine, supplied with a special steel guided chain and pans with raising plates.

Even when the Norm length of the chain conveyor is 100 m, it has been used successfully in longer distances and steep slopes.

PF00 can be used as a conveying element that can be dismantled in mine faces where the slope is between -15° and +30° inclination.

PF00 chain conveyor is a conveying machine capable of working in all conditions and very easy to handle. It's especially for the coal extraction and as a guide for the exploitation of narrow coal seams, for coal transport and refill for preparation in mechanized exploitations for certain auxiliary works, to solve the transport issue in case of irregularities and accidents in the seams and the wall.

MOTOR HEAD

In order to activate the double chain, the chain conveyor can be equipped with a single driving station in one side of the conveyor or double in both sides of the conveyor. In the case of one single driving station, a tail end with a drum will be mounted on the other side, instead of the auxiliary driving station, which ensures the return of the chain when the conveyor is working.

The driving station is made up of the Chassis, the hauling drum, a middle piece (with both the main station and the auxiliary station) and the gearbox groups.

The driving stations can be:

- Single
- 1 x 45 kW
- 1 x 22 kW

- Double
- 2 x 22 kW

A special metallic frame (forged axle) replaces the second gearbox group frame, on the single driving station.

Chassis forms a welded block. The chains guidances are made of special steel and can be replaced when they become worn out. The chain traction is produced through a hauling drum divided into two parts by a horizontal plane. The chain anti-derailment devices are mounted on the chassis, and can be easily removed. Hauling drums can turn on both directions. If necessary, Chassis can be equipped with a special roller that prevents the engine to lean or plunge on the wall.

A middle piece called "middle pan" is set between the main and auxiliary driving station chassis and the ordinary pans.

Unloading of materials is ensured by an unloading plate bolted to the conveyor chassis.



Pieza o canal intermedio para cabeza motriz principal



Pieza o canal intermedio para cabeza motriz auxiliar

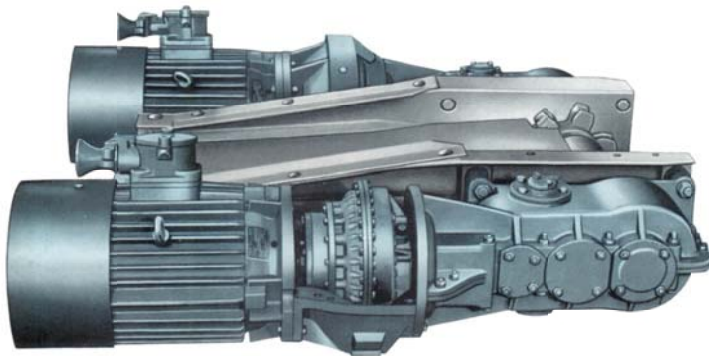
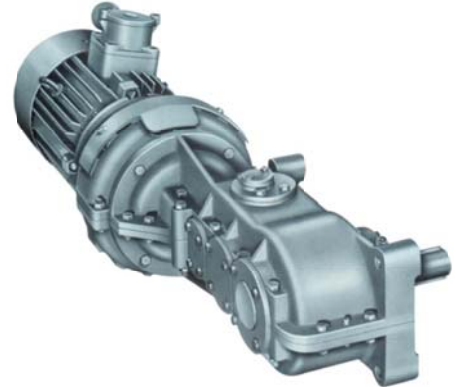
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GEARBOX GROUP

It is made up of a gearbox, a coupling and a motor forming together a block. These couplings can be installed on one or two chassis side faces in order to form a single or a double driving station.

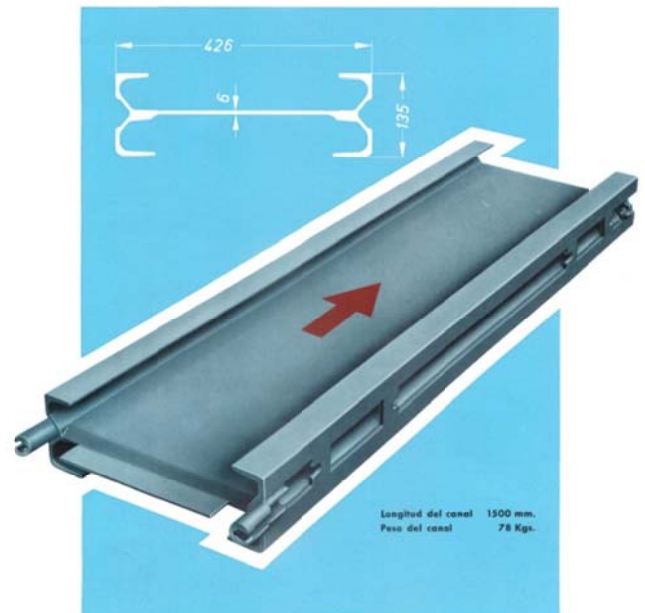
KSt III-30 gearbox is the one mounted on the 22 kW driving station and KSt III-55 gearbox is mounted on the 45 kW driving station. These are gearboxes with transmission in angle very similar to the heavy gearbox for the chain conveyor.

The engine is joint to the gearbox by an H 12.75 hydraulic coupling for 22 kW and HMWJ 14.5 for 45 kW. The coupling is protected by a cover. This cover is bolted on one side to the gearbox and on the other side to the electric motor.



PANS

These pans are made up of two sigma profiles welded to the bottom plate. The coupling elements (male and female) are positioned in the side profile slot and enable a side movement of the pans to both sides. The chain guidances prevent the scrapers or the rakes to get blocked especially in the bottom.

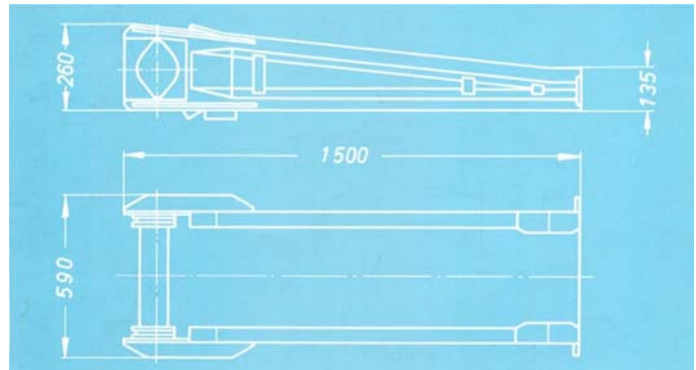




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RETURN END

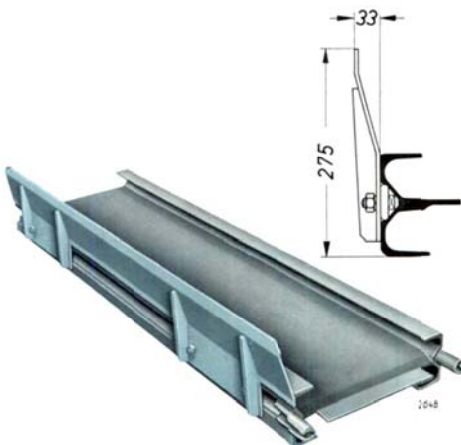
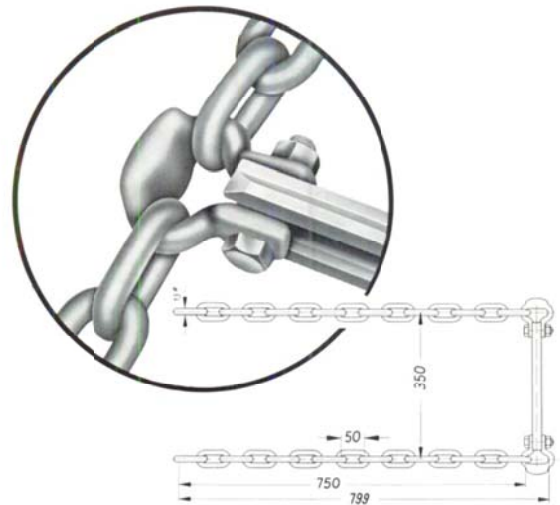
If the chain conveyor is equipped with a single driving station then the chain passes on the return end drum. This return end is made up of a widen wedge-shaped pan and the drum.



CHAIN

Chain with 41 Tm average breaking resistance is made up of 750 mm chain sections joint together by forged links. Scrapers are fixed to the forged links by bolts; they are easy to replace and they have a separation between the chains of 350 mm.

Adjustment chains enable the modification of the length of the chain.



RAISING PLATES

In order to increase the available pan section and thus preventing the coal could fall and mix with the overburden, pans can be equipped with bolted supplements.