

FAQ

Modul-3: Chain drives

1) Where do we use duplex and triplex roller chains?

Duplex and triplex chains have double and triple capacity of power transmission respectively compared with single chain drive. If the power rating of single roller chain is one unit and the power to be transmitted by the drive is 1.2 units, then we must use duplex chain drive.

2) Chain drives are mostly used in blow room why?

Chain drive transfers periodic motion which will not critically affect the mass flow rate of material in blow room, since materials are kept as buffer in most of the machines of blow room. Further, the delivery of materials from blowroom, either through chute feed or lap is carried out with appropriate control systems that regulate mass flow rate of material.

3) Can we use chain drive for driving drafting rollers?

No. It creates periodic waves in the drafted material. It is against the fundamental requirement of drafting.

4) When chain drive transfers periodic speed why do we use it to drive the drafting rollers that feed sheath fibres on friction spinning machine?

The sheath fibres are accommodated into yarn as layers. The first layer near the core filaments are fed from the slivers near the feeding side

and the outer layers come from the sliver placed near the delivery side. The cyclic variation occurs across all the layers of yarn, which will have insignificant effect on the irregularity of yarn. Further the proportion of sheath fibres in the yarn are around 40% to 60%.