

# PENGUIN - Hose Knitting Machine



## Continuous Line Process - High Speed Online with extruder

Penguin Hose Knitting machine is used for knit-reinforced hoses used extensively in automobiles as radiator hoses and for similar low pressure applications.

This machine is characterized by high productivity, simplicity and excellent performance.

The knitting is done over the inner lining. The machine can be used with both cotton or rayon yarn. The knitting process is closely controlled to ensure a perfect knit structure that is built over the hose at suitable tensions. Thus high performance can be achieved from the end product. The machine is provided with ergonomically located controls and workspace. The centerline of the machine can be adjusted so that hoses of different diameter can be made to rest on the roller stands conveniently.



The machine operates with belt drive, with infinitely variable electric motor, which ensures quite running. The knitted layer provides excellent internal reinforcement and provides superior adhesion of the two rubber layers. Penguin hose knitting machine is highly recommended for automotive, rubber and ancillary industries.



# Features & Specifications

## Features

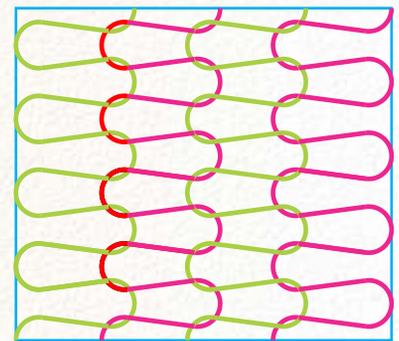
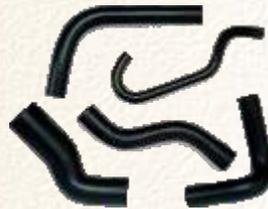
- Suitable for low-medium pressure knitted hose
- Minimum distortion from the manufacturing process
- Precision cams for efficient knitting
- Large yarn capacity - Big bobbins
- Variable speed drive
- Precision pulling caterpillar
- HMI - Multi function
- Complete interchangeable Knitting head
- Front door opening protected with safety switch
- Automatic PLC Control system

## CATERPILLAR:

- Contact length ~ 680mm, width 90 mm
- Linatex coated timing belt - 2Nos.
- Control system with communication to the knitting machine drive
- Speed adjustment by potentiometer with digital display
- Encoder for measuring real product speed

## Specifications

Number of Yarn / Feeder	: 8
Hose diameter	: 10 - 110 mm
Bobbin dimensions (Ø x L)	: 180 x 175 mm
Knitting module power	: 5 HP
Caterpillar power	: 3 HP
Interchangeable heads	: Optional
Head speed	: 300 rpm
Type of needle	: Crank type
Line speed	: 4 - 18 m/min.
Knitted reinforcement	: Circular knitting type, plain stitch
Yarn type	: Dipped or un-dipped (Aramid, Polyester, Rayon)
Yarn package type	: Cross-wound on cylindrical standard bobbins type
Rubber types	: EPDM, NBR, NBR/PVC, CR, EACM, CSM, CPE .
Knitted hose types	: Radiator hoses, fuel hoses and other hoses



**Structure of Knitted hose**



**Radiator hoses**

\* **Note:** The line speed is depending on hose diameter, pitch / stitch size, rubber compound and viscosity, die resistance, max. allowed output temperature etc.

**Manufactured by**



**Factory:** 3 / 184, Kondayampalayam, Vaiyampalayam Post, Coimbatore - 641 110.  
Phone: +91 - 422 - 650 5006 / 07, 265 4194 Fax: +91 - 422 - 265 3560

**Office:** "The Rookery", 46-B, KRK Road, Krishnasamy Nagar II Layout, Ramanathapuram  
Coimbatore - 641 045. INDIA Phone: +91 - 422 - 231 5640 / 41 Fax: +91 - 422 - 231 5644

**E-mail: [info@penguin.in](mailto:info@penguin.in)**

**[www.penguin.in](http://www.penguin.in)**