



Penguin Braiders



HORIZONTAL WIRE BRAIDER Hydraulic Hoses for Export / OEM

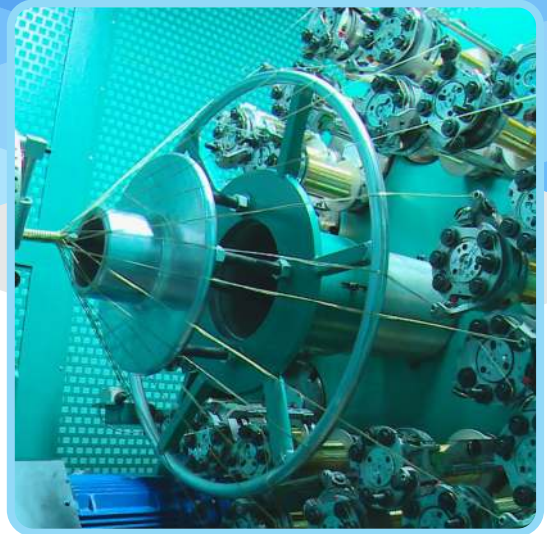
Penguin braiding machines are built with design and material perfected over years of experience in building a range of braiding machines & are engineered for precision braiding of high performance high pressure hoses. The modular design makes it possible to tailor the machine to suit the requirement of the customer.

These Braiding machines are characterized by high productivity, simplicity and excellence in performance. The hoses manufactured by these machines are far superior to conventional hoses in strength, appearance and durability.

Penguin Braiding Machines are indigenously designed and Penguin is the only indigenous manufacturers of the heavy duty machines in India and one among the very few quality manufacturers in the world.

SALIENT FEATURES

- 100% carriers and bobbins included in the machine price and supplied along with machine
- Built-in Haul-off with separate geared motors for each jaw suitable for flexible and rigid hoses
- Latest Technology – No top plate braider
- Heavy duty horn gears for high pressure braiding – Tension from 3 to 13 kg / carrier
- Acoustic enclosure
- Sufficient suction fans for temperature control
- Large bobbin capacity upto 9 kg wire / bobbin and 1.25 kg yarn / bobbin – Reduced bobbin change time
- Carriers require minimum compensation
- Heavy duty deck plates
- Ergonomically designed doors and openings
- Smooth carrier transfer by “carrying type” horn gears
- Specially crafted heavy duty horn gear and smooth track
- All springs included in the supply of carriers; Clutch springs & Torsion springs
- Hose guides at each braiding point and Haul-off ends
- Suitable for braiding – High tensile brass coated steel wire, Stainless steel wire, Different yarns like Kevlar, Aramid, Nylon, Polyester (Coated and Uncoated)
- Upto 48 carrier braiders for maximum coverage upto 75mm braiding diameter
- Electronic gearing for "On the Go" pitch control
- Independent deck drive motor and control
- Complete Electronic drives, controls, PLC, Touch panel and Pitch control
- Start / Stop / Jog push buttons at convenient places
- Soft Start / Stop system
- Single wire cut, Bobbin empty, Full wire cut sensors included for efficient quality braiding
- Interlock switches for door openings
- Top indication lights for operator convenience
- Preform pin for “No flare” hose



- Carrier transfer controlled by positive horn gears
- Quality braiding with braiding ring

Optional features at extra cost:

- **Dual purpose:** Same wire braiding machine can be run as yarn braiding machine by changing the tension spring and bobbins using the same carriers
- Facility to braid two single braids of same diameter hose from a double deck braider (Tandem Braiding)
- Additional carriers and bobbins at extra cost
- Carrier tension setting device for easy operation and maintenance
- Fischer bolt anchor and epoxy grouting



24 Carrier Horizontal Yarn Braider

TECHNICAL SPECIFICATIONS

| | | | |
|--|---|-----------------------------------|-----------------------------------|
| Number of carriers | 24 | 36 | 48 |
| Carrier Speed | 27 rpm | 18 rpm | 13 rpm |
| Dimension of the machine - Excluding caterpillar (L x B x H in mm) | Double deck 3765 x 2060 x 2200 | Double deck 4825 x 2620 x 2690 | Single deck 2850 x 3200 x 3700 |
| Power requirement | 16 kW | 20 kW | 16 kW |
| Power supply | 415V / 3 Phase | | |
| Carrier tension | 3 to 13 kg | | |
| Weight of wire / bobbin | 9 kg (1600 cc) | | |
| Weight of yarn / bobbin | 1.25 kg (1600 cc) | | |
| Machine configuration | Horizontal / Vertical | | |
| Number of decks (Optional) | Single / Double / Triple | | |
| Haul off caterpillar type | Chain drive with PU lugs 600mm long pulling / Capstan | | |
| Type of braiding | Wire / Yarn | | |
| Type of wire / yarn carrier | Heavy duty carrier with interchangeable shoes | | |
| Design pitch | 22 to 75 mm | | |
| Horn gear diameter | 270 mm (PCD) | | |
| Height of heavy duty long shoe | 118 mm | | |
| Horn gear speed | 160 rpm | | |
| Wire bobbin size | 125mm OD / 147mm Traverse | | |
| Yarn bobbin size | 125mm OD / 150mm Traverse | | |
| Electronic control | PLC and digital drives | | |
| Pitch control | Electronic pitch control (No change gears) | | |
| Oil lubrication | Automatic force feeding recirculating type | | |



Wire carriers with Preformer



Wire 9 kg / 1600cc



Single yarn cut sensor



Torsion springs from 3 to 13 kg



Yarn 1.25kg / 1600cc

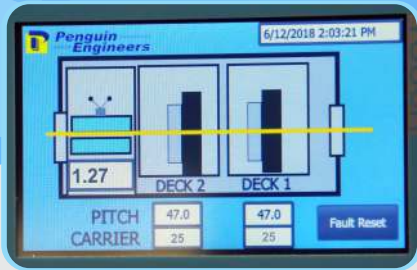


Adjustable guide rollers for different hose diameters

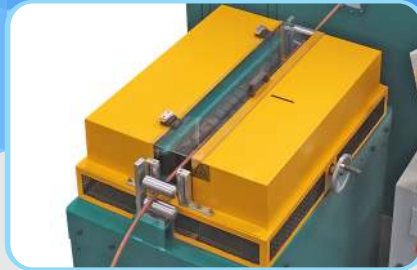


Bobbin empty and Wire cut sensors

- Heavy duty horn gear
- Braid path guiding track
- Heavy duty long guide shoe
- High tension heavy duty carrier (13 kg)
- Big bobbin with 9 kg. wire



Human Machine Interface - HMI



Chain drive caterpillar with PU lugs



Control Panel

Other Products from PENGUIN for Rubber Hose Industry



WIRE WINDER Heavy Duty - Electronic Pay-Off



WIRE WINDER Heavy Duty - Mechanical Pay-Off



Yarn Spialer



Braider TAKE - UP



HOSE WRAP / UNWRAP - For Flexible Hoses



HOSE WRAP / UNWRAP - For Rigid Mandrel Hoses

Manufactured by



Factory:

3 / 184, Kondayampalayam
Vaiyampalayam Post
Coimbatore - 641 110. Tamil Nadu INDIA
Tel: +91 - 94436 77432, +91 - 94436 77804
✉ info@penguin.in

🌐 www.penguin.in

Office:

"The Rookery", 46-B, KRK Road
Krishnasamy Nagar II Layout
Ramanathapuram
Coimbatore - 641 045. Tamil Nadu INDIA
Tel: +91 - 422 - 231 56 40 / 41 / 44