



**Penguin
Braiders**

**Heavy Duty
Flech X**



HORIZONTAL WIRE BRAIDER Hydraulic Hoses for Export / OEM

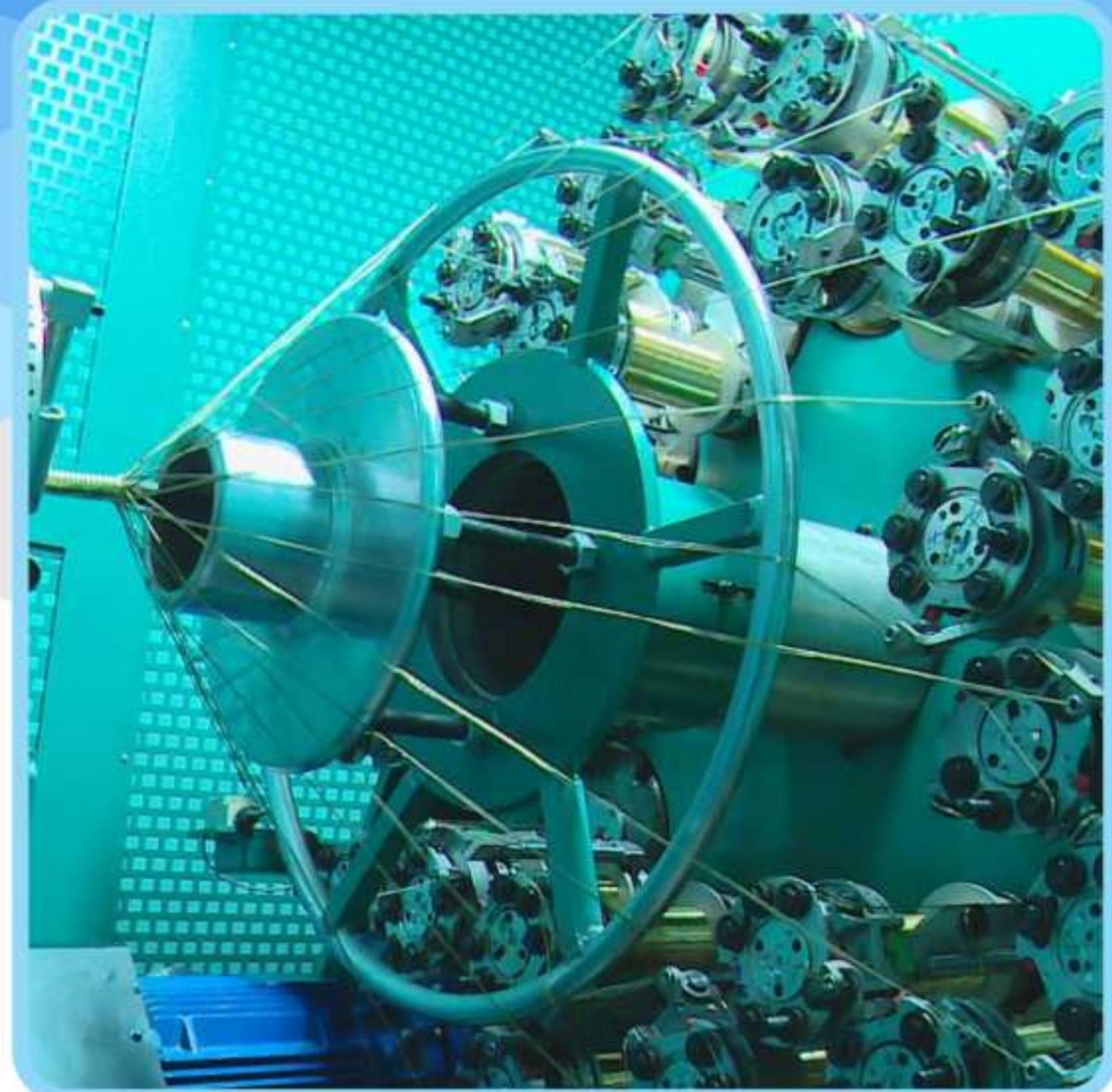
Penguin braiding machines are built with design and material perfected over years of experience in building a range of braiding machines & are engineered for precision braiding of high performance high pressure hoses. The modular design makes it possible to tailor the machine to suit the requirement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

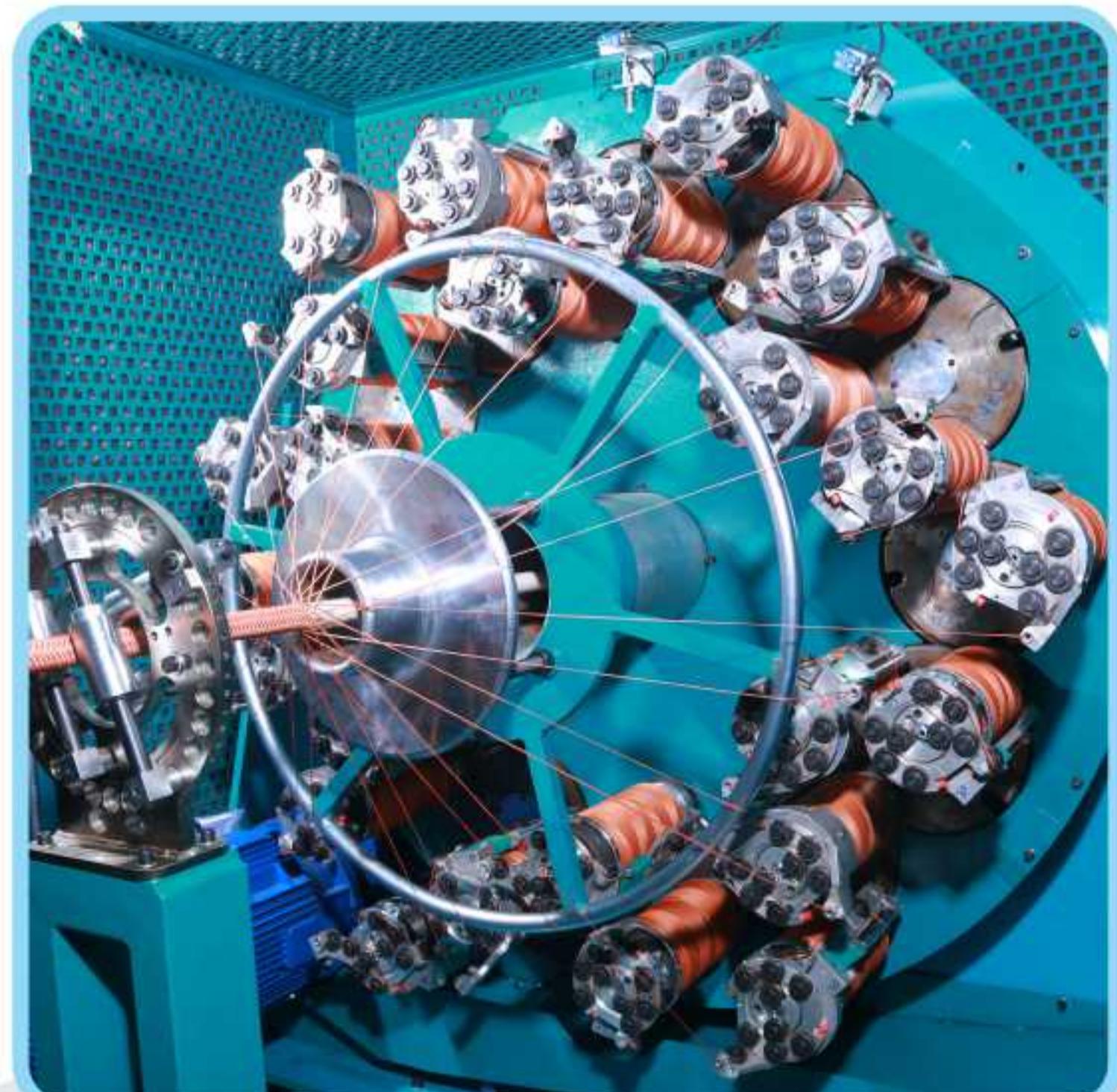
- 100% carriers and bobbins included in the machine price and supplied along with machine
- Built-in Haul-off with separate geared motors for each jaw suitable for flexible and rigid hoses
- Latest Technology – No top plate braider
- Heavy duty horn gears for high pressure braiding
 - Tension from 3 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



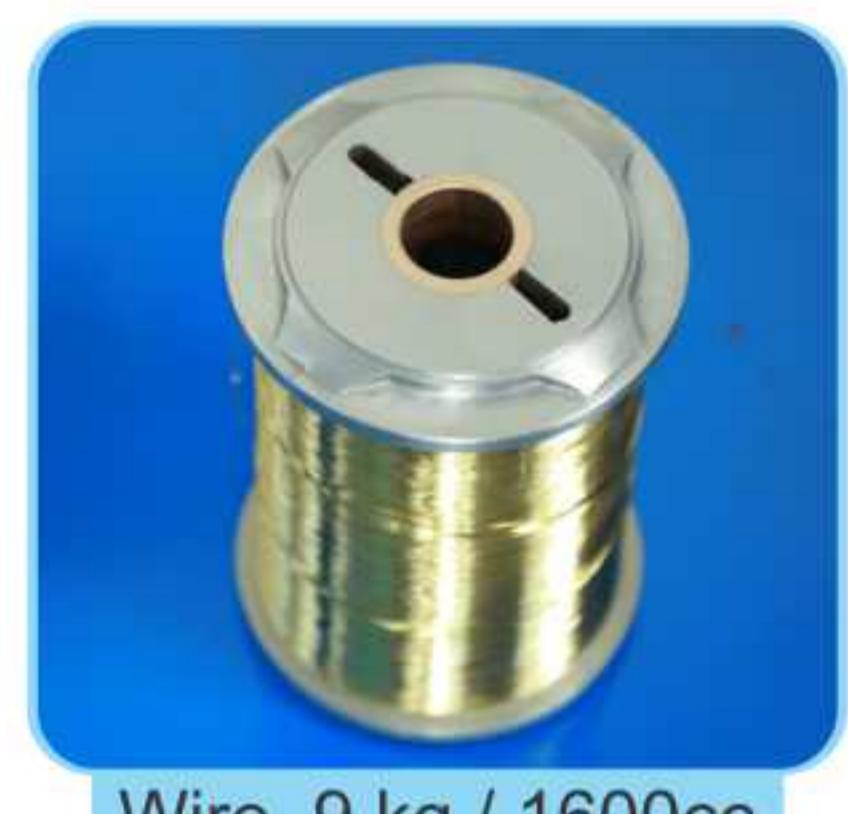
24 Carrier Horizontal Yarn Braider

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

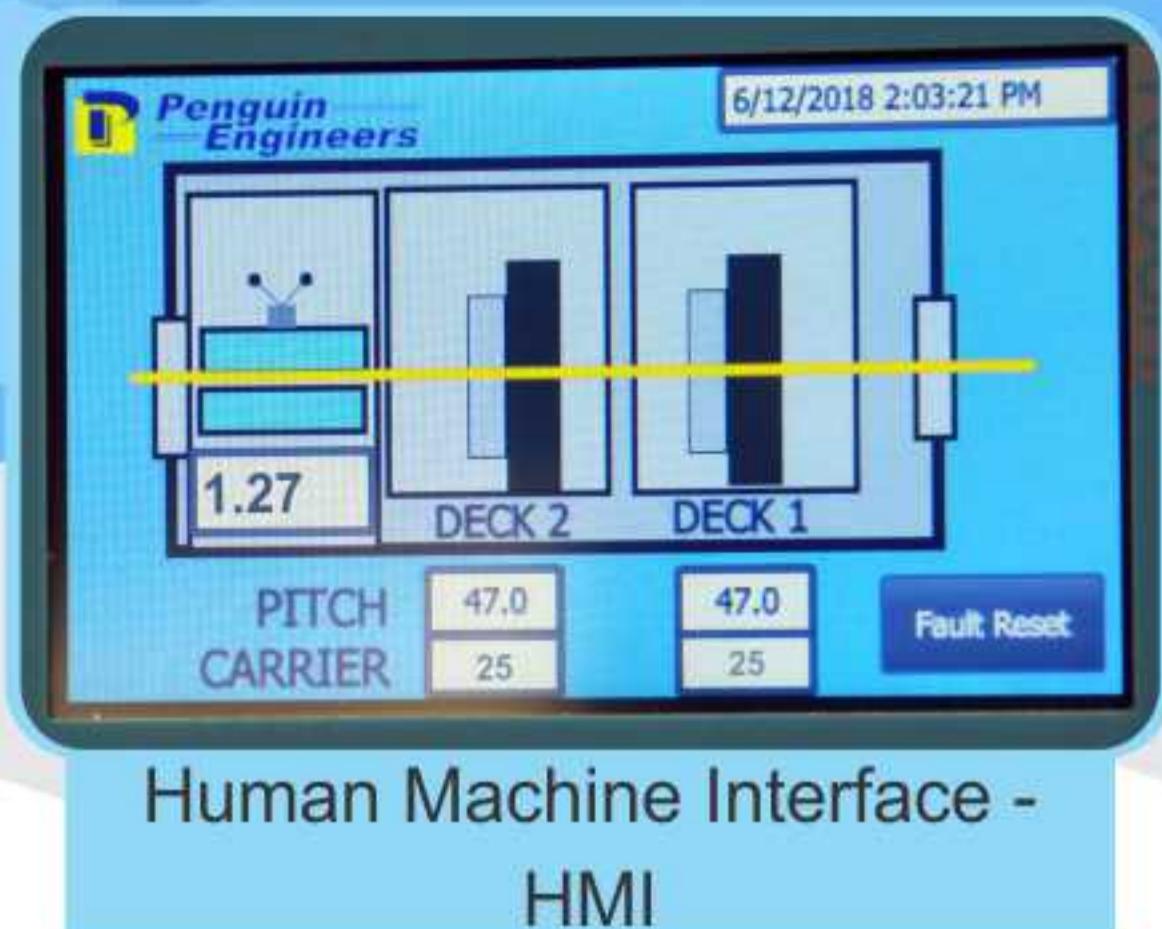


Adjustable guide rollers for different hose diameters



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 Spiraler



Braider TAKE - UP



HOSE WRAP / UNWRAP
- For Flexible Hoses



HOSE WRAP / UNWRAP
- For Rigid Mandrel Hoses

Manufactured by



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