

Textile Applications Manufacturing braiding machines





Manufacturing braiding machines **Textile Applications**

- Technical insulation ●
- Leisure time ●
- Shoe lace industry ●
- Big diameters ●
- Maritime and fishing industry ●
- Natural fibers ●
- Elastic cords ●
- Passementerie ●
- Solid braid ●
- Sutures ●
- Flat braids ●
- Textile industry ●
- Complementary ●



History:

Growing on experience

Since 1942 **Ratera** has developed an important job in research and technological development in the braiding industry and its complementary machines.



R&D:

Technical office - Adaptability

Ratera keeps developing and improving constantly its products combining the highest technology in design using different computerized systems (CAD and CAM), with a deep knowledge in this field and all the requirements in the braiding industry.

Production and assembly: offering solutions.

At Ratera we offer a solution.

Thanks to the CAE system, we make dimensions simulations, budgets, tariff structures and production plans. Our printing technology 3D, provides a great versatility. Thanks of the process of implementing Lean Manufacturing, we achieve an optimal product.



Worldwide shipping and logistics.

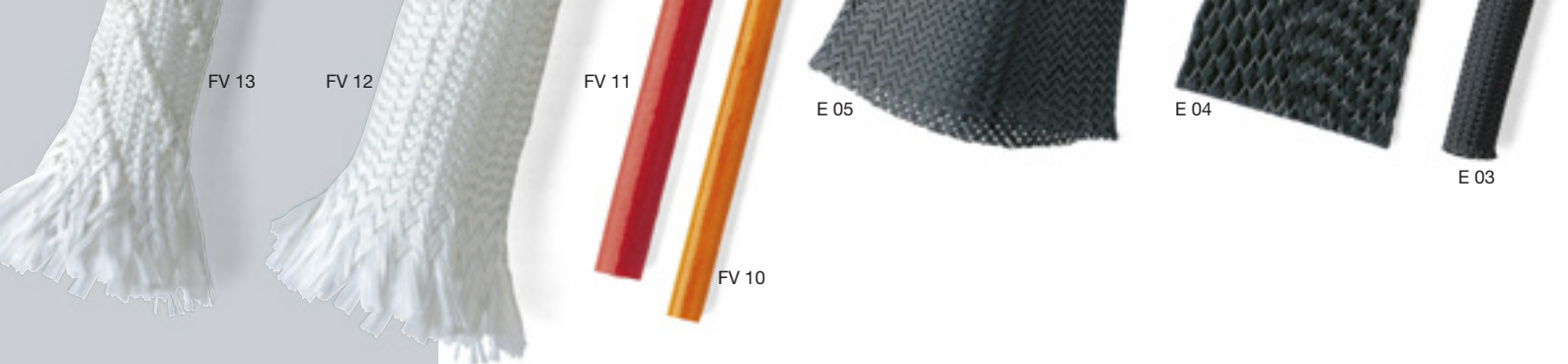
The worldwide size of **Ratera** is the key of its success: exporting the 90% of its production to more than 120 countries and more than 7000 customers. The average per year is more than 2500 machines.



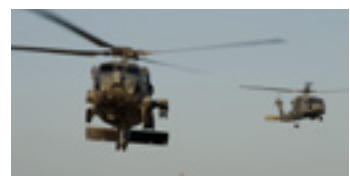
Final product

The range of our products covers over 450 different models, **Ratera** tries to cover all the needs of the braiding industry. Its versatility allows to adapt its models to each customer requirements in particular.





Technical insulation



40/80



- Number of carriers: 40
- Gauge: 80 mm.
- Bobbin dimensions: Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 296
- Carrier r.p.m.: 22,20

52/80



- Number of carriers: 52
- Gauge: 80 mm.
- Bobbin dimensions: Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 265
- Carrier r.p.m.: 17



80/80

- Number of carriers: 80
- Gauge: 80 mm.
- Bobbin dimensions: Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³
- Motor power: 1 H.P.
- Horn gear r.p.m.: 255
- Carrier r.p.m.: 9



120/80

- Number of carriers: 120
- Gauge: 80 mm.
- Bobbin dimensions: Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³.
- Motor power: 1,5 H.P.
- Horn gear r.p.m.: 215
- Carrier r.p.m.: 6,73

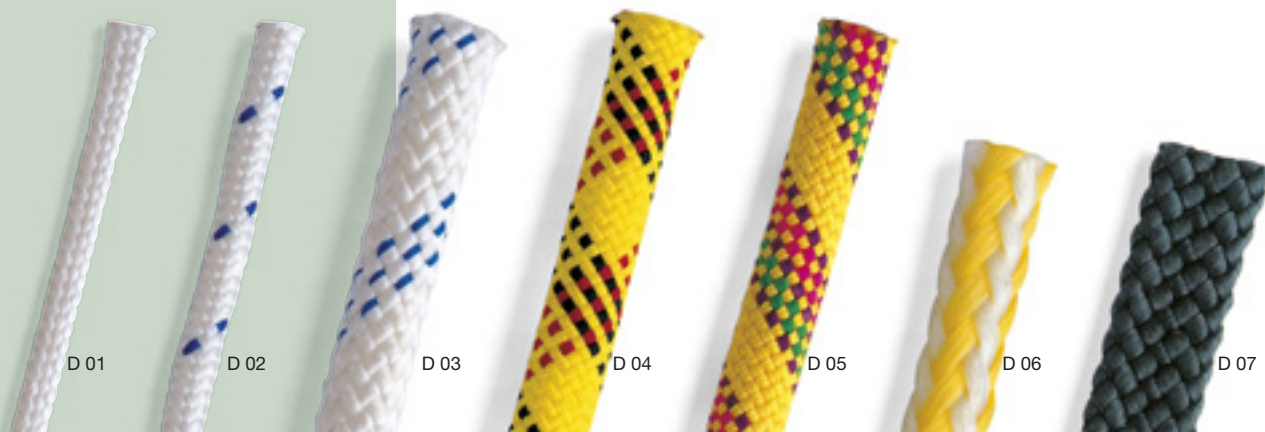
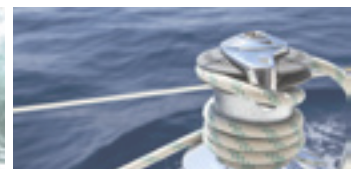
144/115

- Number of carriers: 144
- Gauge: 115 mm.
- Bobbin dimensions: Ø63x200 mm.
- Bobbin capacity: 549,48 cm³.
- Motor power: 4x1,5 H.P.
- Carrier r.p.m.: 215





Leisure time





16/115 double

- Number of carriers: 16
- Gauge: 115 mm.
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity: 547cm³ / 465cm³
- Motor power: 0,5 H.P. x 2 motors
- Horngear r.p.m.: 330
- Carrier r.p.m.: 82,50



36/115

- Number of carriers: 36
- Gauge: 115 mm.
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity:
547cm³ / 465cm³
- Motor power: 1 H.P.
- Horngear r.p.m.: 290
- Carrier r.p.m.: 32,22



48/115

- Number of carriers: 48
- Gauge: 115 mm.
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity: 547cm³ / 465cm³
- Motor power: 2 H.P.
- Horngear r.p.m.: 270
- Carrier r.p.m.: 22,50



24/140

- Number of carriers: 24
- Gauge: 140 mm.
- Bobbin dimensions:
Ø78x280 mm. Ø74x250 mm.
- Bobbin capacity: 1211cm³ / 962cm³
- Motor power: 1,5 H.P.
- Horngear r.p.m.: 220
- Carrier r.p.m.: 36,50





32/140

- Number of carriers: 32
- Gauge: 140 mm.
- Bobbin dimensions:
Ø78x280 mm. Ø74x250 mm.
- Bobbin capacity: 1211cm³ / 962cm³
- Motor power: 1,5 H.P.
- Horngear r.p.m.: 220
- Carrier r.p.m.: 27,5
- Take off system:
Capstan diameter 400 mm. + calander



32/140 Capstan diameter 400

48/140

- Number of carriers: 48
- Gauge: 140 mm.
- Bobbin dimensions:
Ø78x280 mm. Ø74x250 mm.
- Bobbin capacity: 1211cm³ / 962cm³
- Motor power: 3 H.P.
- Horngear r.p.m.: 210
- Carrier r.p.m.: 17,50





24/154

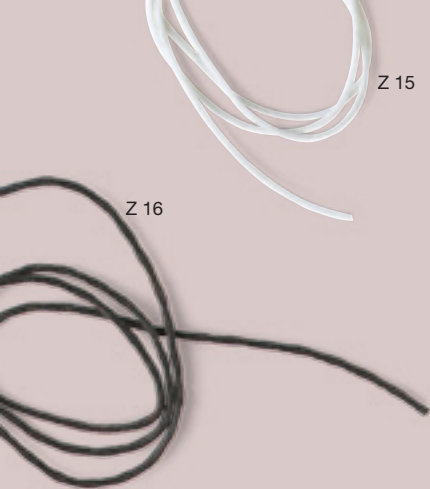
- Number of carriers: 24
- Gauge: 154 mm.
- Bobbin dimensions: Ø85x300 mm.
- Bobbin capacity: 1461cm³
- Motor power: 1,5 H.P.
- Horn gear r.p.m.: 195
- Carrier r.p.m.: 32,50



16/160

- Number of carriers: 16
- Gauge: 160 mm.
- Bobbin dimensions: Ø87x321 mm.
- Bobbin capacity: 1724cm³.
- Motor power: 1 H.P.
- Horn gear r.p.m.: 220

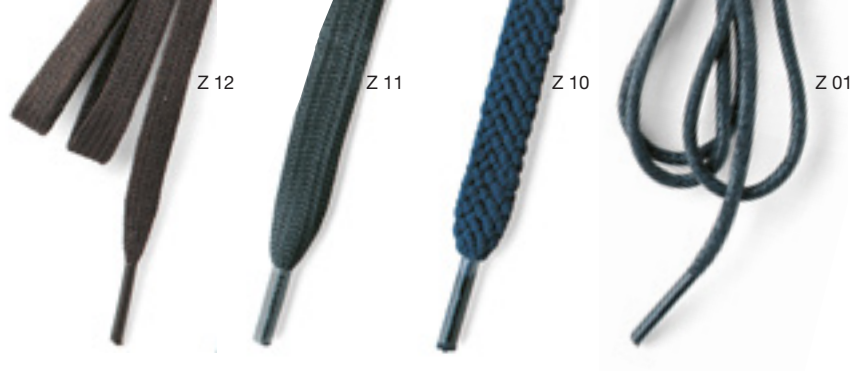




Z 15

Z 16

Shoe lace industry

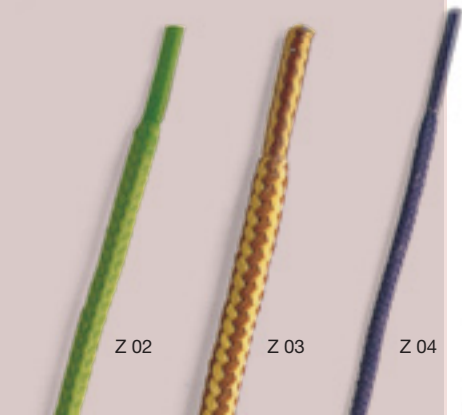


Z 12

Z 11

Z 10

Z 01



Z 02

Z 03

Z 04



Z 05

Z 06

Z 07

Z 08

Z 09



16/115 doble

- Number of carriers: 16
- Gauge: 115 mm.
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity: 547cm³ / 465cm³
- Motor power: 0,5 H.P. x 2 motors
- Horn gear r.p.m.: 330
- Carrier r.p.m.: 82,50



36/115

- Number of carriers: 36
- Gauge: 115 mm.
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity: 547cm³ / 465cm³
- Motor power: 1 H.P.
- Horn gear r.p.m.: 290
- Carrier r.p.m.: 32,22

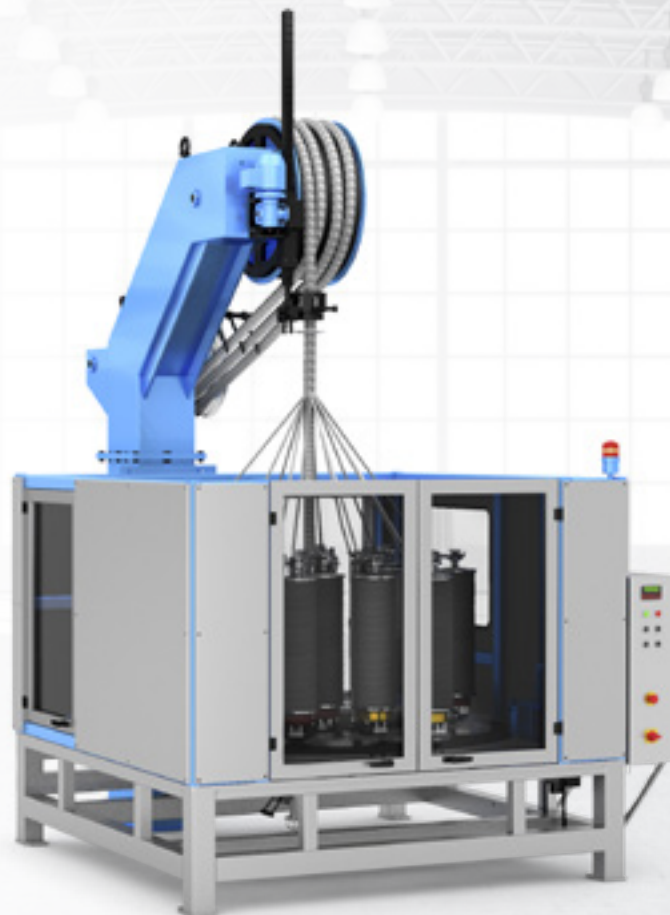


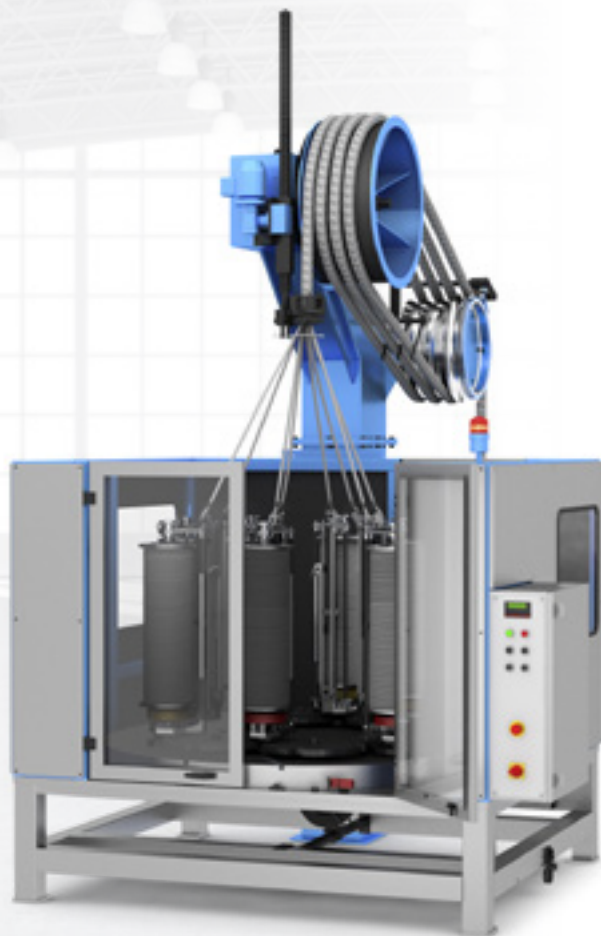
Big diameters



24/342

- Number of carriers: 24
- Gauge: 342 mm
- Bobbin dimensions: Ø 190 x 540 mm
- Bobbin capacity: 14.333 cm³
- Motor power: 2,2 Kw
- Horn gear r.p.m.: 60
- Carrier r.p.m.: 10 rpm
- Maximum rope: Ø 70 mm





12/432

- Number of carriers: 12
- Gauge: 432 mm
- Bobbin dimensions: $\varnothing 250 \times 650$ mm
- Bobbin capacity: 30.065 cm³
- Motor power: 3 Kw
- Horn gear r.p.m.: 50
- Carrier r.p.m.: 16,67 rpm
- Maximum rope: $\varnothing 70$ mm

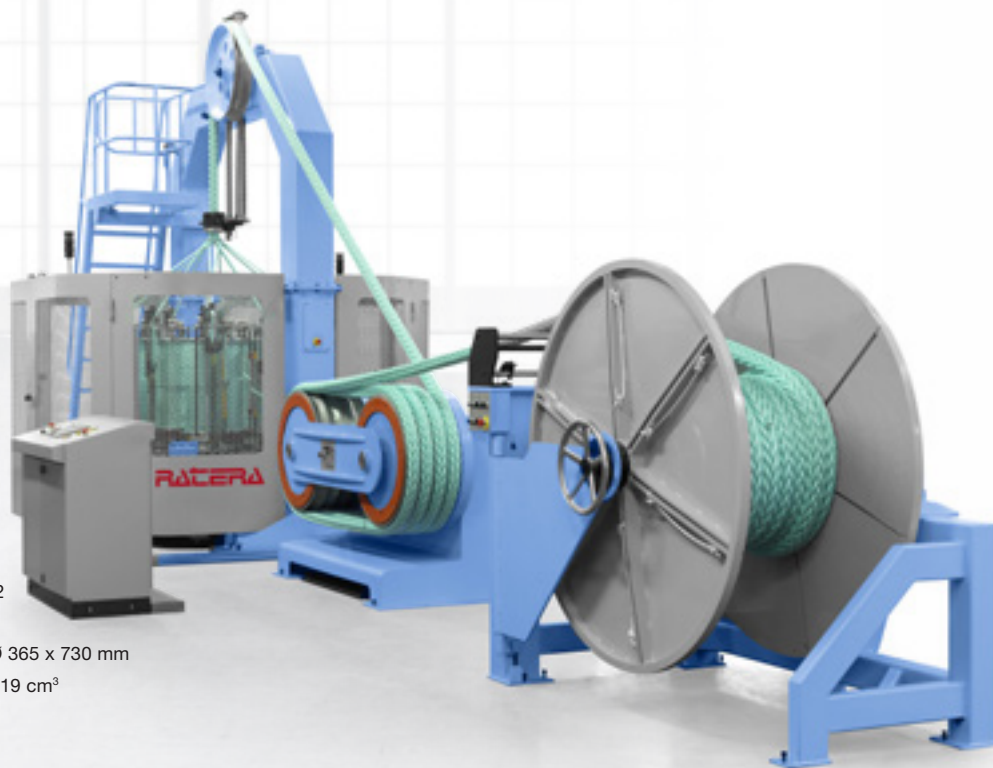
12/574

- Number of carriers: 12
- Gauge: 574 mm
- Bobbin dimensions: Ø 305 x 660 mm
- Bobbin capacity: 46.355 cm³
- Motor power: 5,5 H.P. + 4 Kw
- Horn gear r.p.m.: 40
- Carrier r.p.m.: 13,33 rpm
- Maximum rope: Ø 70 mm



12/680

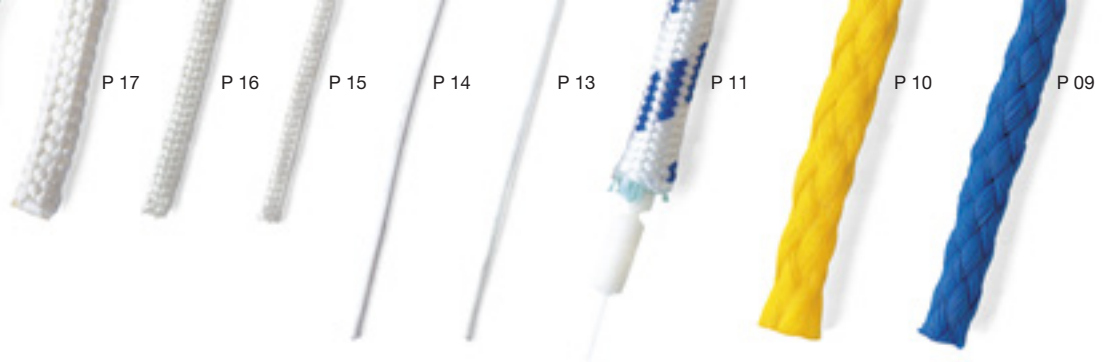
- Number of carriers: 12
- Gauge: 680 mm
- Bobbin dimensions: Ø 365 x 730 mm
- Bobbin capacity: 74.319 cm³
- Motor power: 7,5 Kw
- Horn gear r.p.m.: 33
- Carrier r.p.m.: 11 rpm
- Maximum rope: Ø 85 mm



8/724

- Number of carriers: 8
- Gauge: 724 mm
- Bobbin dimensions: Ø 335 x 730 mm
- Bobbin capacity: 62.280 cm³
- Motor power: 7,5 Kw
- Horn gear r.p.m.: 24
- Carrier r.p.m.: 12 rpm
- Maximum rope: Ø 60 mm





Maritime and fishing industry





16/115 double 2 motors

- Number of carriers: 16
- Gauge: 115 mm.
- Double 2 motors
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity: 547cm³ / 465cm³
- Motor power: 0,5 H.P. x 2 motors
- Horn gear r.p.m.: 330
- Carrier r.p.m.: 82,50



16/115 double 1 motor

- Number of carriers: 16
- Gauge: 115 mm.
- Double 1 only motor
- Bobbin dimensions:
Ø63x200 mm. Ø63x170 mm.
- Bobbin capacity: 547cm³ / 465cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 330
- Carrier r.p.m.: 82,50



16/140

- Number of carriers: 16
- Gauge: 140 mm.
- Bobbin dimensions:
Ø78x280 mm. Ø74x250 mm.
- Bobbin capacity: 1211cm³ / 962cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 235
- Carrier r.p.m.: 58,75

V 21

V 20

V 19

V 18

V 17

V 14

V 10

Natural fibers



V 09

V 11

V 12

V 13

V 15

V 16



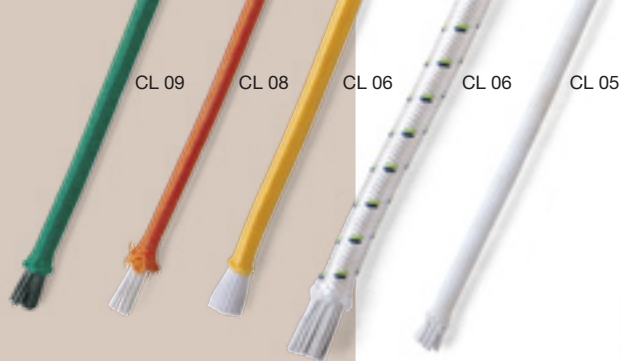
5/140 soutache DC

- Number of carriers: 5
- Gauge: 140 mm.
- Bobbin dimensions: Ø63x200 mm.
- Bobbin capacity: 547cm³
- Motor power: 0,33 H.P. x 2 motors
- Horn gear r.p.m.: 295

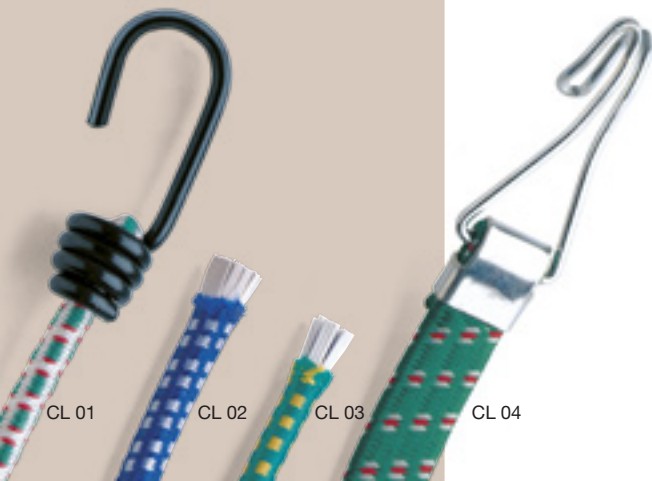


5/247,5 soutache

- Number of carriers: 5
- Gauge: 247,5 mm.
- Bobbin dimensions: Ø110x300 mm.
- Bobbin capacity: 2562cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 120
- Convertible of 5 carriers (2 braids with 2 cores) into: 5 carriers (1 braid with 3 cores), 5 carriers (1 braid with 4 cores)



Elastic cords



16/140

- Number of carriers: 16
- Gauge: 140 mm.
- Bobbin dimensions: Ø78x280 mm. Ø74x250 mm.
- Bobbin capacity: 1211cm³ / 962cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 235
- Carrier r.p.m.: 58,75

24/140

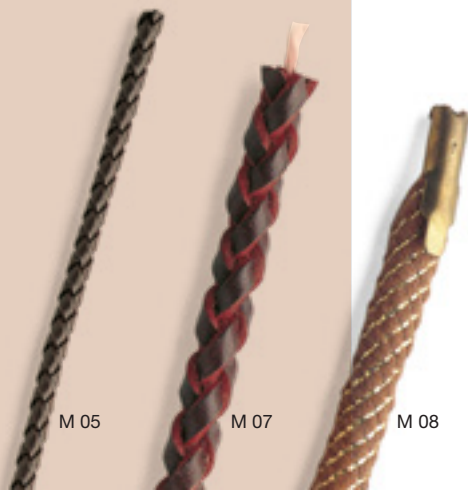
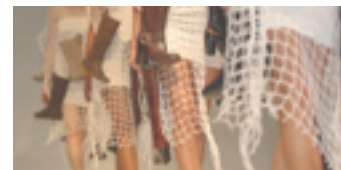
- Number of carriers: 24
- Gauge: 140 mm.
- Bobbin dimensions: Ø78x280 mm. Ø74x250 mm.
- Bobbin capacity: 1211cm³ / 962cm³
- Motor power: 1 H.P.
- Horn gear r.p.m.: 220
- Carrier r.p.m.: 36,67

Passementerie



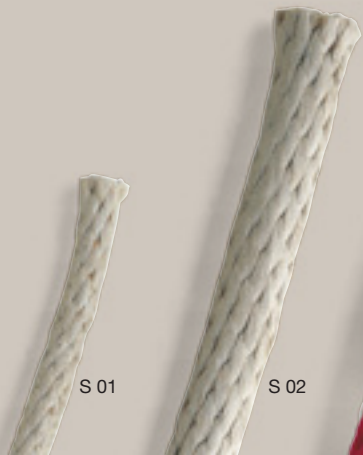
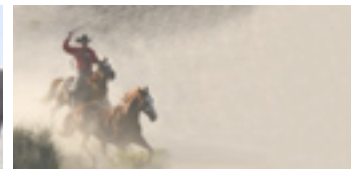
4/180 indian braid

- Number of carriers: 4
- Gauge: 180 mm.
- Bobbin dimensions: Ø111x65 mm.
- Bobbin capacity: 589cm³.
- Motor power: 0,33 H.P.
- Horngear r.p.m.: 70





Solid braid



S 01

S 02



S 03



S 04



S 05



S 06



S 07



12/115

- Number of carriers: 12
- Gauge: 115 mm.
- Bobbin dimensions: Ø60x200 mm. Ø78x280 mm.
- Bobbin capacity: 549,49cm³ / 1.211,27cm³
- Motor power: 0,37 Kw / 0.5 cv
- Horngear r.p.m.: 295/225 R.P.M.
- Carrier r.p.m.: 37/28
- Maximum recommended diameter with core: 5-7,5 mm.



20/115

- Number of carriers: 20
- Gauge: 115 mm.
- Bobbin dimensions: Ø63x200 mm.
- Bobbin capacity: 549,49cm³.
- Motor power: 0,55 Kw / 0.75 H.P.
- Horngear r.p.m.: 220 R.P.M.
- Carrier r.p.m.: 37/28
- Maximum recommended diameter: 7,5 mm.



12/154

- Number of carriers: 12
- Gauge: 154 mm.
- Bobbin dimensions: Ø84x300 mm. Ø84x330 mm.
- Bobbin capacity: 1461cm³ / 1565cm³
- Motor power: 0,55 Kw
- Horngear r.p.m.: 195 R.P.M.
- Carrier r.p.m.: 24
- Maximum recommended diameter with core: 25 mm.



18/154

- Number of carriers: 18
- Gauge: 154 mm.
- Bobbin dimensions: Ø85x330 mm.
- Bobbin capacity: 1.565cm³.
- Motor power: 0,75 / 1 H.P. Kw
- Horn gear r.p.m.: 158 R.P.M.
- Carrier r.p.m.: 20
- Maximum recommended diameter: 13 mm.



20/154

- Number of carriers: 20
- Gauge: 115 mm.
- Bobbin dimensions: Ø63x200 mm.
- Bobbin capacity: 549,49cm³.
- Motor power: 0,55 Kw / 0.75 H.P.
- Horn gear r.p.m.: 220 R.P.M.
- Carrier r.p.m.: 37/28
- Maximum recommended diameter: 7,5 mm.

20/208

- Number of carriers: 20
- Gauge: 208 mm.
- Bobbin dimensions:
Ø110x300 mm. Ø110x350 mm.
- Bobbin capacity:
2.562,36cm³ / 2.989cm³
- Motor power: 1,47 Kw
- Horngear r.p.m.: 90 R.P.M.
- Carrier r.p.m.: 11
- Maximum recommended diameter with core: 25 mm.



Solid braid

Sutures



8/80 double 2 motors

- Number of carriers: 8
- Gauge: 80 mm.
- Bobbin dimensions: Ø39x110 mm.
- Bobbin capacity: 96,85cm³.
- Motor power: 0,25 H.P.
- Horn gear r.p.m.: 250
- Carrier r.p.m.: 125





8/80 double 1 motor

- Number of carriers: 8
- Gauge: 80 mm.
- Bobbin dimensions: Ø39x110 mm.
- Bobbin capacity: 96,85cm³.
- Motor power: 0,5 H.P.
- Horn gear r.p.m.: 250
- Carrier r.p.m.: 125



12/80

- Number of carriers: 12
- Gauge: 80 mm.
- Bobbin dimensions: Ø39x110 mm.
- Bobbin capacity: 96,85cm³.
- Motor power: 0,25 H.P.
- Horn gear r.p.m.: 250
- Carrier r.p.m.: 83,3



16/80

- Number of carriers: 16
- Gauge: 80 mm.
- Bobbin dimensions: Ø39 mm.
- Bobbin capacity: 96,85cm³.
- Motor power: 0,25 H.P.
- Horn gear r.p.m.: 240
- Carrier r.p.m.: 60



Flat braids





17/80 double classic

- Number of carriers: 17
- Gauge: 80 mm.
- Classic system
- Bobbin dimensions:
Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³
- Motor power: 0,5 H.P. x 2 motors
- Horn gear r.p.m.: 280
- Carrier r.p.m.: 65,88



21/80 double classic

- Number of carriers: 21
- Gauge: 80 mm.
- Classic system
- Bobbin dimensions:
Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³
- Motor power: 0,25 H.P. x 2 motors
- Horn gear r.p.m.: 280
- Carrier r.p.m.: 53,33



8/104 double

- Number of carriers: 8
- Gauge: 104 mm.
- Bobbin dimensions:
Ø54x130 mm. Ø55x170 mm.
- Bobbin capacity:
289cm³ / 260cm³ / 350cm³
- Motor power: 0,25 H.P. x 2 motors
- Horn gear r.p.m.: 285
- Carrier r.p.m.: 140



21/104 double

- Number of carriers: 21
- Gauge: 104 mm.
- Bobbin dimensions:
Ø53x152 mm. Ø54x130 mm. Ø55x170 mm.
- Bobbin capacity:
289cm³ / 260cm³ / 350cm³
- Motor power: 0,5 H.P. x 2 motors
- Horn gear r.p.m.: 254
- Carrier r.p.m.: 48,38



25/104 double classic

- Number of carriers: 25
- Gauge: 104 mm.
- Classic system
- Bobbin dimensions:
Ø53x152 mm. Ø54x130 mm. Ø55x170 mm.
- Bobbin capacity:
289cm³ / 260cm³ / 350cm³
- Motor power: 0,5 H.P. x 2 motors
- Horn gear r.p.m.: 238
- Carrier r.p.m.: 38,08



E 01



V 01

Textile industry



V 02



E 02



64/80 classic

- Number of carriers: 64
- Gauge: 80 mm.
- Classic system
- Bobbin dimensions: Ø42x110 mm. Ø42x153 mm.
- Bobbin capacity: 125cm³ / 173cm³
- Motor power: 0,75 H.P.
- Horn gear r.p.m.: 250
- Carrier r.p.m.: 15,63
- Manual feeding

5/140 soutache

- Number of carriers: 5
- Gauge: 140 mm.
- Bobbin dimensions: Ø63x170 mm. Ø63x200 mm.
- Bobbin capacity: 465cm³ / 547cm³
- Motor power: 0,33 H.P. x 2 motors
- Horgear r.p.m.: 295



Complementary



Autonomus collector with an oscillating arm 800x400

- Spool Ø800x400 mm.
- Capacity: 150.796 cm³.
- Including a reducer motor
- Nucleous bore diameter: 400 mm.
- Distributing system:
by a distributer box
- Adjustable traverse from
50 mm. up to 400 mm.
- Adjustable pitch from
0 mm. up to 50 mm.



Collector 800x400

- Spool Ø800x400 mm.
- Nucleous bore diameter: 400 mm.
- Including a reducer motor and a clutch
- Capacity: 150.796 cm³.
- Distributing system:
by a distributor box
- Adjustable traverse from
50 mm. up to 400 mm.
- Adjustable pitch from
0 mm. up to 50 mm.



Parallel winding collector with no central nucleus 1200x700

- Flange diameter: 1200 mm.
- Nucleous bore diameter: 390 mm.
- Capacity: 706.335 cm³.
- Distributing system:
by a distributor box
- Adjustable traverse from 590 mm. up to 700 mm.
- Adjustable pitch from 16 mm. up to 80 mm.
- Take up tension: from 2 Kg. to 40 Kg.
- Take up speed: from 40 m/h up to 340 m/h



Parallel winding collector with no central nucleus 1700x765

- Flange diameter: 1700 mm.
- Nucleous bore diameter: 400 mm.
- Capacity: 1.649.637 cm³.
- Motor power: Motor reducer of 0,55 Kw.
- Distributing system: Motorized endless screw
- Adjustable traverse from 565 mm. up to 765 mm.
- Rope diameter: 20mm up to 85mm.
- Adjustable take up tension: from 4 Kg. to 80 Kg.
- Frequency shifter to control the take up tension
included.
- Take up pitch controlled electronically.

Alexander Winder

- Recommended cord maximum Ø to be wound: 7 mm.
- Spool maximum diameter: 350 mm.
- Spool maximum traverse: 300 mm.
- Motor power: 0,75 H.P.
- Meter-counter
- Linear speed: 200 metres per minute



2PVLU/220

- 2 spindles
- Bobbin maximum diameter: 80 mm
- Bobbin maximum traverse: 220 mm
- Speed (50 Hz): 1.500 r.p.m.
- Motor power: 0,37 Kw / 0,5 H.P.
- Pitch adjustment: by hand from 0 up to 10 mm
- Side thrust (Newtons): maximum 110 N
- Length: 400 mm
- Width: 300 mm
- Height: 450 mm
- Weight: 40 Kg



4PVLU/330

- 4 spindles
- Bobbin maximum diameter: 80 mm
- Bobbin maximum traverse: 330 mm
- 3 speeds (50 Hz): 1.160 / 2.175 / 3.262 r.p.m.
- Motor power: 0,75 Kw / 1 H.P.
- Pitch adjustment:
by hand from 0 up to 11 mm
- Side thrust (Newtons): maximum 110 N
- Length: 835 mm
- Width: 775 mm
- Height: 1.655 mm
- Weight: 193 Kg



2PVLU/350

- 2 spindles
- Bobbin maximum diameter: 110 mm
- Bobbin maximum traverse: 350 mm
- Speed (50 Hz): maximum 2.175 r.p.m.
- Motor power: 0,75 Kw / 1 H.P.
- Pitch adjustment:
by hand from 0 up to 11 mm
- Side thrust (Newtons): maximum 110 N
- Length: 850 mm
- Width: 650 mm
- Height: 1.567 mm
- Weight: 191 Kg



4PVLU/450

- 4 spindles
- Bobbin maximum diameter: 140 mm
- Bobbin maximum traverse: 450 mm
- Speed (50 Hz): maximum 2.175 r.p.m.
- Motor power: 1,1 Kw / 1,5 H.P.
- Pitch adjustment: from 0 up to 11 mm
- Side thrust (Newtons): maximum 220 N
- Length: 813 mm
- Width: 1.000 mm
- Height: 1.750 mm
- Weight: 284 Kg



2PVLU/650

- 2 spindles
- Bobbin maximum diameter: 250 mm
- Bobbin maximum traverse: 650 mm
- Speed (50 Hz): 81 r.p.m.
- Motor power: 1,5 Kw / 2 H.P.
- Pitch adjustment: by hand from 0 up to 16 mm
- Side thrust (Newtons): maximum 160 N
- Length: 900 mm
- Width: 1.200 mm
- Height: 1.800 mm
- Weight: 355 Kg



1PVLU/850

- 1 spindle
- Bobbin maximum diameter: 365 mm
- Bobbin maximum traverse: 730 and 820 mm
- Maximum heads speed: 430 r.p.m.
- Maximum yarn speed: 80 meters per minute
- Motor power: 2,2 Kw / 3 H.P.
- Pitch adjustment:
by hand from 3 up to 40 mm
- Side thrust (Newtons): maximum 520 N
- Length: 750 mm
- Width: 1.500 mm
- Height: 1.600 mm
- Weight: 525 Kg



NX-100

- Fully automatic winding machine of 4 spindles
- Distribution box to adjust the pitch between 0 to 5 mm
- For flanged bobbins of Ø 38 mm to 80 mm
- For traverse bobbins of 100 mm to 220 mm
- Head speed from 1.000 r.p.m. to 5.300 r.p.m.
- Yarn speed from 100 to 500 meters per minute
- All the movements are controlled by a PLC
- Automatic bobbin feeding
- Meter-counter



BA-4U/140

- Fully automatic winding machine of 4 spindles
- Distribution box to adjust the pitch between 0 to 16 mm
- For flanged bobbins of Ø 55 mm to 78 mm
- For traverse bobbins of 170 mm to 280 mm
- Head speed from 77 r.p.m. to 3.000 r.p.m.
- Yarn speed from 60 to 330 meters per minute
- All the movements are controlled by a PLC
- Automatic bobbin feeding
- Meter-counter



ML-100

- Fully automatic winding machine of 4 spindles
- Electronic distribution system with linear motor to adjust the pitch between 0,3 to 8 mm
- For flanged bobbins of Ø 38 mm to 80 mm
- For traverse bobbins of 100 mm to 220 mm
- Head speed from 1.000 r.p.m. to 5.300 r.p.m.
- Yarn speed from 100 to 500 meters per minute
- Electronic control of traverse length and pitch
- Storable recipes data base
- Automatic bobbin feeding
- Interchangeable headsets
- Meter-counter



Touch screen



Precision



5 minutes
flexibility



Operation



Manufacturing braiding machines

Textile Applications





Textile Applications Manufacturing braiding machines



globus.es

NOTE: According to machinery directive 83/392 about safety for the European market, machines must be protected. However, in order to allow for a better display some of this catalog's illustration have been made without the mandatory protections. The company reserves the right to modify and improve the characteristics of its products without notice.

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Your Braiding Industry

Talleres Ratera SA

Av. dels Dolors, 13 · Apt. Correos (PO Box) 228

08243 Manresa · Barcelona · Spain

Tel. +34 93 878 49 50 · Fax +34 93 877 26 82

e-mail: ratera@ratera.com



www.ratera.com