

Braiding machines Gauge 80



RATERA[®]
Founded in 1942



The highest cost-effectiveness

Classic and 83L Systems: fight against wear

Considering its manufacturing conception and design the **Gauge 80** is the most precise small size braiding machine in the market and also the most suitable one for the making of small braids.

Not in vain has it been meant for braiding fine and delicate fibers as well as for the obtainment of products with a high quality level in its finished step. Its robust structure (oil-bath in upper & lower housing system), the quality of the materials used, its size, speed and bobbin capacity, the carriers' design and a wide range of accessories does the Gauge 80 the greatest credit.

The range for the Gauge 80 starts at 9 carriers and is able to reach 145 carriers, scaling up in sets of 4. Logically an odd number of carriers corresponds to machines intended for the manufacturing of rigid or elastic flat braids, whereas even ones are engaged in the manufacturing of all types of round braids as well as flat tubular/hollow (for special models, please check with our commercial department).

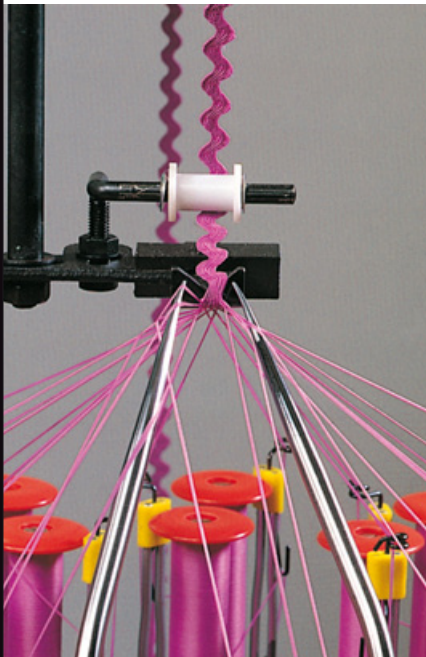
All small braid manufacturers know perfectly that their product gets paid at very low market prices and that a higher capacity, more expensive machine is difficult to pay off. Thus, Ratera's Gauge 80 series offers an optimal ratio between bobbin capacity and price, making it an extremely cost-effective model.

The Gauge 80 is manufactured in two different systems: Classic System and 83L System.

Classic System. Basically it consists in that both the horngears and the carriers' feet are made of perlitic iron melting, average hardness of 210 Brinell (± 20 points). It is the most economical system.

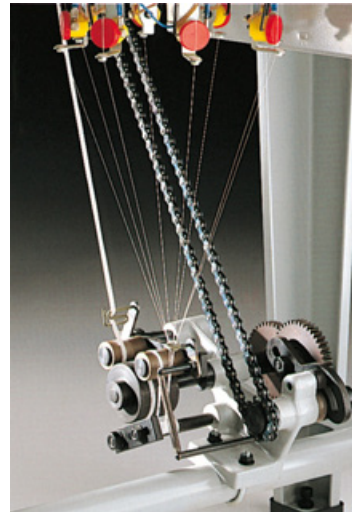
83L System (patented). Original by Ratera, it consists in that all those parts subject to wear are made of hardened, rectified steel, with an average hardness of 610 Brinell (± 20 points). The carriers' feet are made of three pieces: one of them is a slip-bushing that when runs into the horngear which transports the carriers avoids an impact by performing a gentle turn.

On the other hand, in the horngear, specifically in the slot where the carrier's foot is to fit, there is a plastic alloy insert, based on nylon, which softens the contact with the above mentioned carrier-foot slip bushing. These characteristics of the 83L System lead to three important results:



Flat elastic braid

17B - E80 Classic



Fine braids

12B - E80 (83L) Doble 1 motor



Carriers for fine and delicate yarns: perfect braidings.

- An increase in speed (production) between 18% and 25% –according to models and materials.
- Zero expense in maintenance (spare parts) in the mid or in the long run.
- A significant decrease in the acoustic level –variable depending on models.

Thanks to the quality of the materials used and to their robust structure, the Gauge 80's bobbins are excellent for the manufacture of fine fabrics. In other qualities and sizes risk is run of producing non-desired stretchings and deformations due to the great pressure the fine yarn sets on the bobbin's core and flanges.

Gauge 80 machines may be equipped with two size bobbins:

- Ø 42x110 mm, and a capacity of 125 cm³.
- Ø 42x153 mm, and a capacity of 173 cm³.

These capacities are not random as they have been meant to be used with fine and delicate yarns: the yarn travel is very gentle and all abrupt changes and sharp angles are eliminated, thus preventing the yarn from unraveling or splitting. This way, the yarn's tension is much more accurate which, in its turn, is necessary to obtain a perfect finished result of the manufactured product.

Carriers may be supplied in different versions. with or

without bobbin-holder, guides and yarn tensors, with either open hooks or open & round ceramics or porcelains enamel (depending on material).

However, it is advisable to use the bobbin-holder because of its accuracy, as well as the ceramics because of their durability.

Different types of springs with different tensions are available depending on each product (see table)

With bobbin-holder and bobbin Ø 42x110 mm

<i>Colour</i>	<i>Tension</i>
White	75 grams
Yellow	100 grams
Red	175 grams
Black	350 grams

With bobbin-holder and bobbin Ø 42x152 mm

<i>Colour</i>	<i>Tension</i>
White	125 grams
Yellow	175 grams
Red	225 grams
Black	400 grams
Blue	450 grams

All these characteristics make Gauge 80 the optimum method to braid rigid or elastic flat ribbons/tapes, phonies, rig-rag, passementerie items, fiberglass spaghetti, shoeseewing yarn, surgery yarn, small delicate electrical conductors, etc. In general, all those articles using fine yarns and whose braidings are thin and need a high accuracy in the braiding process.



Fine braids **12B - E80 (83L) Doble**

Glass fiber **80B - E80 (83L)**

Glass fiber **96B - E80 (83L)**



A world of accessories

Depending on the yarn used or the product braided, Ratera may supply different useful and necessary accessories so that the final desired product can actually be obtained. Some instances of those accessories are:

- Different types of gatherers at the braiding point.
- Different needle lengths and shapes in order to obtain perfect flat ribbon rims.
- Single releases or with tensors to control the standards.
- For the elastic braid, a tension-regulating device of the elastics called "Ratex" which, by means of an optimum combination of pinions, supplies the right tension to the elastic.
- Different pulling systems. For example, braid calendar for flat products, wheel calendar for the manufacture of fiberglass sleeves, etc.

A service adapted to all your requirements

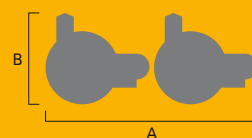
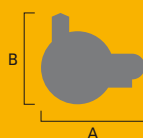
Ratera has an answer to all his customers' requirements:

Regarding the sample received of the product that the customer needs to braid, our technical department will suggest to you the suitable braider as well as a calculation of the production (rentability). Even when the customers does not have a sample, will be informed of what it needs to be done.

In this way, Ratera offers you the right machinery including all the necessary accessories in order to elaborate the required products.

Number of carriers per head	Motor power (HP)	Horn gear RPM		Measurements A x B (mm)	
		Classic System	83L System	Individual bench	Double bench
8	0'25	280	311	595 x 505	1115 x 505
9 doble	0'25	280	311	635 x 570	1270 x 570
12	0'25	280	311	595 x 505	1115 x 505
13	0'25	280	311	595 x 505	1115 x 505
16	0'25	280	311	595 x 505	1190 x 505
17	0'25	280	311	595 x 505	1190 x 505
20	0'25	280	311	635 x 520	1270 x 520
21	0'25	280	311	635 x 520	1270 x 520
24	0'33	280	311	690 x 570	1380 x 570
25	0'33	280	311	690 x 570	1380 x 570
28	0'33	280	311	730 x 635	1460 x 635
29	0'33	280	311	730 x 635	1460 x 635
32	0'33	265	296	770 x 695	1540 x 695
33	0'33	265	296	770 x 695	1540 x 695
36	0'50	265	296	775 x 850	—
37	0'50	265	296	775 x 850	—
40	0'75	265	296	775 x 880	—
41	0'75	265	296	775 x 880	—
44	0'75	255	270	820 x 930	—
45	0'75	255	270	820 x 930	—
48	0'75	255	270	850 x 940	—
49	0'75	255	270	850 x 940	—
52	0'75	250	265	875 x 1040	—
53	0'75	250	265	875 x 1040	—
56	0'75	250	265	1010 x 1020	—
60	0'75	250	265	1000 x 1120	—
64	0'75	250	265	1180 x 1100	—
65	0'75	250	265	1160 x 1100	—
68	1	240	255	1160 x 1390	—
72	1	240	255	1160 x 1390	—
76	1	240	255	1320 x 1500	—
80	1	240	255	1320 x 1500	—
84	1	240	255	1320 x 1500	—
88	1	240	255	1320 x 1500	—
92	1	240	255	1500 x 1570	—
96	1	240	255	1500 x 1570	—
97	1	240	255	1500 x 1570	—
100	1'50	200	215	1740 x 1890	—
120	1'50	200	215	1740 x 1890	—
121	1'50	200	215	1740 x 1890	—
144	2	200	215	2090 x 2220	—

(RPM depending on fibres)



Note: According to machinery directive 89/392 about safety for the European market, machines must be protected. However, in order to allow for a better display some of this catalog's illustrations 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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