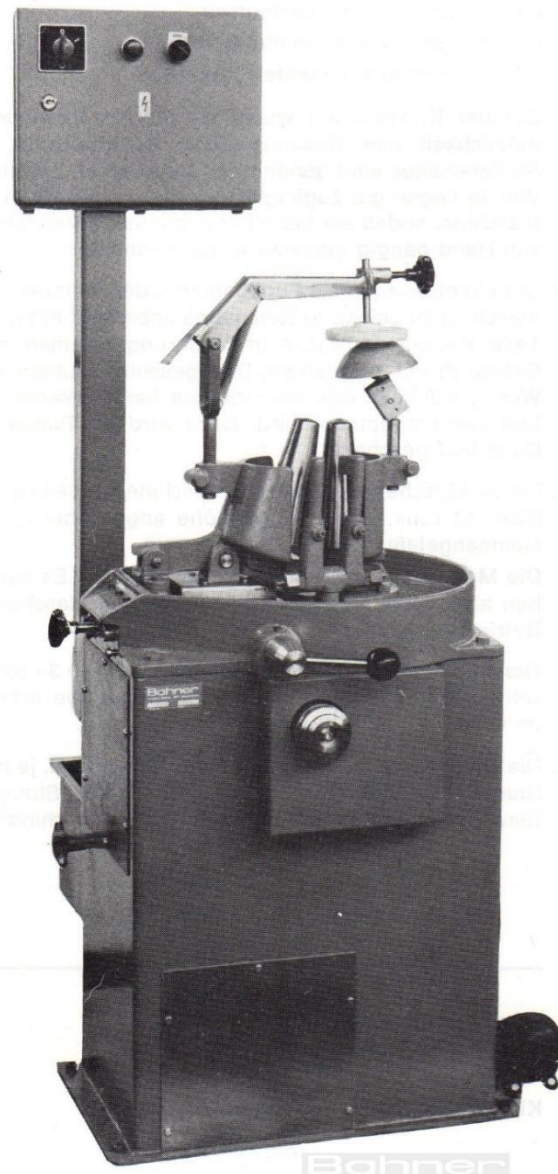


Automatic Hat Body Stiffening Machine Type 303 (Edition 2017/08)



With

- automatic, separate adjustable time expiry for inject and dry run.
- adjustable pressure of the cone shafts
- hat bodies hold device
- big, replaceable stiff containers
- separate switch case for the electric installation

The task of the hat body stiffening machine is finishing the Brim of man`s and ladies´ hat bodies from wool or hair.

An important condition for a proper stiff result is the acid amount in the hat bodies. The acidity in the felt core should lie with approx. 2 – 3 % (sulfuric acid). One reaches this if by the last wet operation an acid value is kept by PH 4 3,5.

The hat body stiffening machine guarantees a regular stiff effect as a result to various regularities.

1. The proper run of the hat bodies without any formation of folds is reached by the choice one of the hat bodies form of suitable squeeze cone pair

Slim cones: for tight hat body forms

Wide cones: for hat bodies with basic width

The exchange of the cone pairs is simply practicable.

With a by hand operated shear off lever pressing the squeeze cone pair can be interrupted

immediately, if the hat body runs not properly.

2. Both hose nozzles spray the hat body brim of both sides. They are adjustable by the height and in the spray equipment. The delivery of liquid of both nozzles is adjustable separately.
3. The cone calotte (cup) is selected after the hat body form. There are 3 calottes available (mountable with height adjustement of calotte and position of spray unit, the brim zone to be steffened can be adjusted easily). Typically the stiffed part in the ready hat is approx. 2 – 2,5 cm above the bandline edge.
4. During the stiff process the hat body hold device presses the hat body on the cone calotte (cup) and prevents cone climb up (automatic hand). The operator can operate of the second and third automatic hat body stiffening machine.
5. The pressing force of the squeeze cones determines the amount of the remaining

chemical finished agent in the felt. About a regulation button the pressure can be put between 25 kg and 50 kg.

6. The term of stiffening time and the following drying time are put independently of each other. The inject-time will be set in such a way that the stiff is pushed by both squeeze cones till the felt core (felt middle). During the immediately starting dry time, the excessive stiffening liquid is removed. The stiffening liquid is distributed by both processes evenly in the felt. The Duration of the dry run is absolutely longer to choose than the spraying duration (for example. spray time = 5 seconds, dry term = 7 seconds).
7. The stiff containers are large and easily replaceable. On request, we make other, also big stiff containers, interchangeable to store different percentage mixtures of liquid. On request, we equip the stiff containers with an electric heating.
8. The stiff process runs off as follows:
 - Introduce of the hat body between both squeeze cones
 - Closing the hat body hold device
 - Turning on with foot switch
 - inject- and dry term

- opening the hat body hold device

9. With the construction the easy cleaning possibility of the complete system was considered. The stiff containers are arranged removable. All valves lie well accessible outside, so that they can be cleaned as necessary.
10. To guarantee a proper functioning of the hat body stiffening machine, it is absolutely necessary to clean all parts which get into contact with the stiffening liquid, after use. This can be done easily, using hot water in stiff container. In addition the pump is switched to endurance run.
11. The electric control is in a control cabinet, which is arranged in eye level. Machine is delivered ready for connection. No other costs incurred to start running this machine.
12. The machine is nearly maintenance free. The main gear is running in oil bath.
13. The capacity of one machine in 8 hours, according to hat bodies quality, is between approx. 1200 and 1800 hat bodies. An operator serves from 2 to 3 machines.

Technical Data

Measurements		
Length	680 mm	26,8 inch
Width	780 mm	30,7 inch
Height	1700 mm	67 inch
Dimensions of cases		
Length	830 mm	32,7 inch
Width	930 mm	36,6 inch
Height	1850 mm	72,8 inch
Weight		
net approx.	380 kg	837,8 lbs
gross approx	500 kg	1102,31 lbs
power required	0,7 kW	

