

# Vibemac – The sturdiest sewing machines for denim jeans

The Italian pioneer with more than 30 years of experience in development of sewing automated denim jeans, Vibemac has been present in Bangladesh for the past 8 years and has more than 3000 sewing automates in operation throughout the country. The first sewing automate from Vibemac was installed in 1999 in Opex Industries. Originally operating in Bangladesh through their agent Aamra Resources, Vibemac has now opened offices in Dhaka and Chittagong for catering to the consistently increasing demand for denim manufacturing technologies of the company in Bangladesh. Presently, 78 top notch denim jeans manufacturers are using sewing automates from the company, like Pacific Jeans, Opex Group, Standard Group, Hamim Group, Mahmood Jeans, Kenpark Bangladesh (Bangladeshi concern of the Hirdaramani Group), Regency Garments, Ananta Group, Mahmud Jeans, Epic Garments Manufacturing and many more. **Enrico Guerreschi, Vibemac Sales Director for the Worldwide Market**, discusses with Apparel Online, some of the most sought-after technologies from Vibemac and the reasons for using automation manufacturing processes.

Out of the total 400 denim jeans manufacturers, Vibemac is in continuous dialogue with 200 of them, and by 2015 will aim to increase the customer base to 100, from the 78 satisfied customers today. “Due to the recent rise in labour wages, frequency of labour clashes and reducing factory areas, automation of their manufacturing processes is the only choice for denim jeans manufacturers of Bangladesh,” says Enrico. For the year 2012, Vibemac plans to generate business worth € 3.5 million and by 2015 the target will be € 5 million. “Presently a

six-person team which includes technicians trained directly from Italy are handling all the Bangladesh operations from sales to service. Since all our existing users are getting benefit after implementing our technology and getting best level service support from us, people are repeatedly buying our machines. For example Pacific Jeans (Chittagong), which is already using 700 sewing units since 2003, has recently installed 14 more Vibemac machines,” adds an upbeat Enrico, feeling positive about the future of Vibemac’s technologies in Bangladesh.

Whereas quality of denim jeans on one part depends on the finishing, but an important part is sewing critical components like the waistband, pockets, zipper fly, sideseam and inseams. Vibemac has specialized workstations for each and every part – 1010V41 automatic fly piece unit for that perfect J-stitch, the 3022 WB 406 automatic waistband unit, V100/V100H pocket pressing unit, V700 pocket hemmer and the 3022 BHE Trousers Hemming unit. Other machines include the pocket setting machine model 2516V4; feed-off the arm machine for serious yoke and crotch seams as well as inseam and sideseam, model 2261H/2262HP; and programmable

loop setter machine, model 4650EV7PR/4650EV8R. Few of the above mentioned technologies have been discussed in detail below.

## 2516V4 pocket setter with Double Colour Technology

Vibemac is known in every apparel manufacturing hub for its patented and one of a kind ‘Double Colour Technology’, which is available in its innovative 2516V4 pocket setter. The DCT makes it possible to stitch with two different colour threads, stitch lengths and thread thickness in a single operation. The 2516V4 pocket setter with DCT is renowned as a flexible working station due to



Enrico Guerreschi  
Sales Director, Vibemac

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► 2516V4 Pocket setter with Double Colour Technology

## Denim Jeans Statistics

Denim jeans production in Bangladesh has been increasing rapidly than that of knits. This is because, one the orders from Europe and US are shifting from China to Bangladesh. Also the emerging premiere level jeans brands in Europe, US and Japan have also set-up manufacturing units in Bangladesh, since the industry is partly supported by the denim mills. It is expected that the production in Bangladesh will double in the near future. Ranked among the top three denim trouser (Men/Boys) provider to the US and the EU, exporting near about 15,00,000 dozens of Men/Boys denim trousers to the US, a 9.84% of the total share, after Mexico and China. Whereas in case of Women/Girls Cotton Denim Trouser exports to the US, Bangladesh is the 6th largest exporter of denim jeans with a 5.06% share. Like every other country Bangladesh is also hit by recession trends in US and EU with value decrease in Men/Boys denim trousers by 21.75% and the values have increased by 5.54% in 2011. Similarly, for Women/Girl denim trousers, the volumes decreased by 14.64% and the values increased by 1.64%. The reason for increase in value but reduction in volumes is the dramatic increase in unit prices, reflecting the rising labour and other input costs in the country.

Despite all odds, Bangladesh is doing well in the EU. It is the second largest exporter of denim trousers with a share of 26.31%, just next to China. However, in case of Women/Girls Cotton Denim Trouser exports to the EU, it ranks third next to China and Turkey, with a 15.55% share. The volume-share for Women/Girls denim trousers from Bangladesh to EU increase by 25.33% and the value-share by 11.22%. In case of Men/Boys denim trousers, the volume-share increased by 26.31% and the value-share increased by 17.84%.

Not to lose out to denim giants like China, Turkey and Mexico, due to rapidly increasing labour costs, Bangladesh has taken to automation as the only option for not only reducing the manufacturing costs but also increasing the productivity with better quality.



▶ 4650EV7PR/4650EV8R programmable loop setters

the possibility of making the jigs directly in the factory workshop, saving a lot of money and time. The machines are so flexible that it can be converted into embroidery, velcro attaching, darts sewing and pleat-making machine simply by changing jigs and program.

The maximum sewing speed of the unit is 2800 RPM, which produces 800-900 pairs of jeans pockets in an 8 hour shift. The time required to change the jigs from a style/size to another is approximately 5 minutes. The maximum sewing area available for special applications is 300 mm x 250 mm, regarding pocket attaching operations the available area is 250 mm x 250 mm and the maximum stitch length that can be produced by the unit is 12.7 mm.

The unit can attach all shapes of pockets including darts & pleats.

### 2261H/2261HP feed-off the arm machines

This machine is particularly suitable for sewing yoke and crotch seams as well as inseam and sideseam. 2261H/2261HP feed-off the arm machines with front and reverse lap can match any kind of fashion production request, with smart puller system and DCP (dynamic pressure control presser foot) for a constant stitch length even on heavy fabrics. The DCP system avoids all the skip stitching troubles on the crotch arising due to double fabric thickness, most critical for any feed-off the arm machine.

In terms of productivity, 2261H can work at 5200 RPM thanks to several outstanding features, like oil feeding lubrication, design and construction quality, and special puller device. The special belt puller enables fast feeding and perfect matching between the sewn parts. Other important features are the hovered chain-cutter which allows the operator to work in a clean environment and the one leg adjustable stand which allows the operator to work at the preferred height.

“The feed-off the machines from Vibemac are the best and fastest in their class. Other

machines can only produce around 115 inseams in an hour but our machines right here can easily produce 300 inseams in an hour, so the difference is very high,” says Enrico. “Apart from the basic technologies like servo motor and pneumatic system, the one which makes the feed-off the arm machine fast is the fabric sensors present in it which monitors the thickness of the seam continuously and vary the air pressure accordingly, sewing an inseam in a single go,” adds Enrico.

### 4650EV7PR/4650EV8R programmable loop setters

The example of smarter combination of operations for better efficiency is the 4650EV8R loop setter, which is able to save sequences of 10 bartacks in its memory, while also having the ability to differentiate a brand creating customized bartack. Taking the case of H&M that wants first loop with an ‘H’, one can choose the 1st bartack to be an ‘H’ and then 4 normal bartacks. In the next cycle, the 1st loop will again be an ‘H’ and so on. It is even possible to have a sequence of 5 different bartacks which repeats itself at every cycle.

This programmable unit can store from 1 to 999 stitches per bartack with 9 different bartacks styles pre-fed in the memory. The production achievable is around 2000 pairs of jeans with 5 loops in 8 hours. The bartacks can be adjusted in both X and Y dimension. The length of the loop can vary from 20 mm to 85 mm, while the width of the loop and bartack can vary from 8 mm to 25 mm. It is easily programmable by PLC (Programmable Logic Controller), and the user can create sequences of loops without even touching the panel. With this unit, it is now possible to personalize bartack’s shape and design to suit brand logo. Moreover, fancy and designed bartacks (Double, Crossed, Square, etc.) are feasible in sewing area of 30 mm X 16 mm. The machine automatically loads and cuts the specified loop length with no fabric waste.