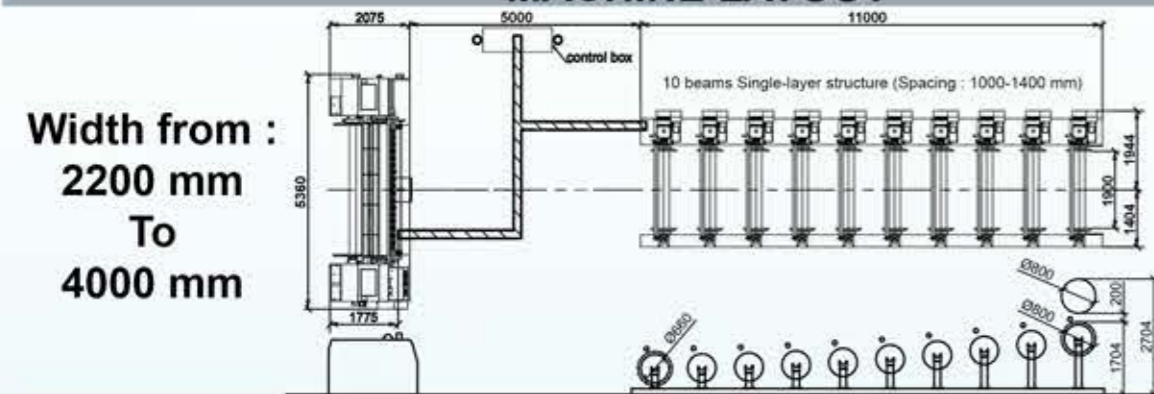


## TECHNICAL SPECS OF ML- 416 SERVO BEAMING MACHINE/ ASSEMBLY WINDER

Speed of Warping Beam	Upto 300 mpm depending on Yarn & number of beam in use
No of warping beams	8-16 stands. Also available in double deck
Winding Tension	40 kg-1200 kg
Standard Working width	1200-4000 mm
Weaver beam Dia	800, 920, 1000 mm
Expanding Reed Adjustment type	Electric
Up-Down movement of weaving beam	By Hydraulic Cylinder
Unwinding tension Control	Auto control by Servo motor of 5.5-7.5 kW & Load cell technology
Taper tension control	Auto control by Frequency conversion motor of 15-18.5 kW & Load cell technology
Winding Tension control mode	Tension feedback for AC vector drive
Expanding Godet Roller	Upto 3600 mm width
Display type ,PLC ,Inverter	Touch operated Display - INVT
Power Capacity	120 kVA
Total length of machine	17000-21000 mm

### MACHINE LAYOUT



Width from :  
2200 mm  
To  
4000 mm

Available  
upto 16 stands

Available in  
DOUBLE  
DECK

### ML- 416 PARTS

#### SCREEN

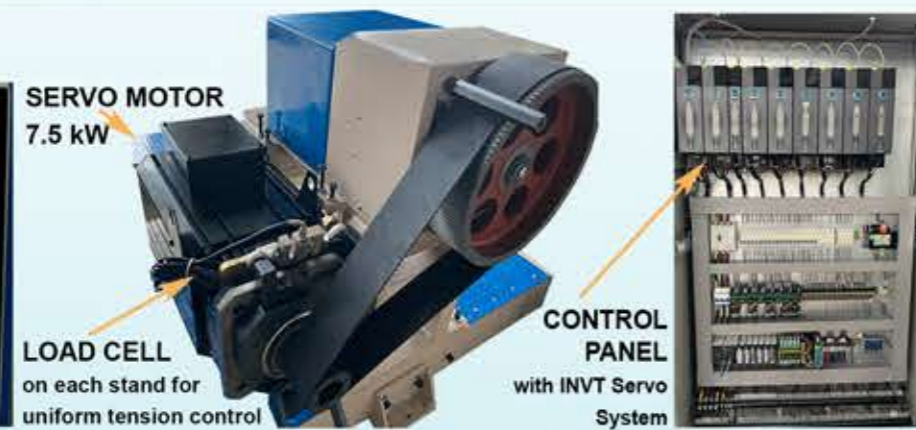
showing Uniform Tension from start to end of Beam



#### SERVO MOTOR 7.5 kW

LOAD CELL  
on each stand for  
uniform tension control

#### CONTROL PANEL with INVT Servo System

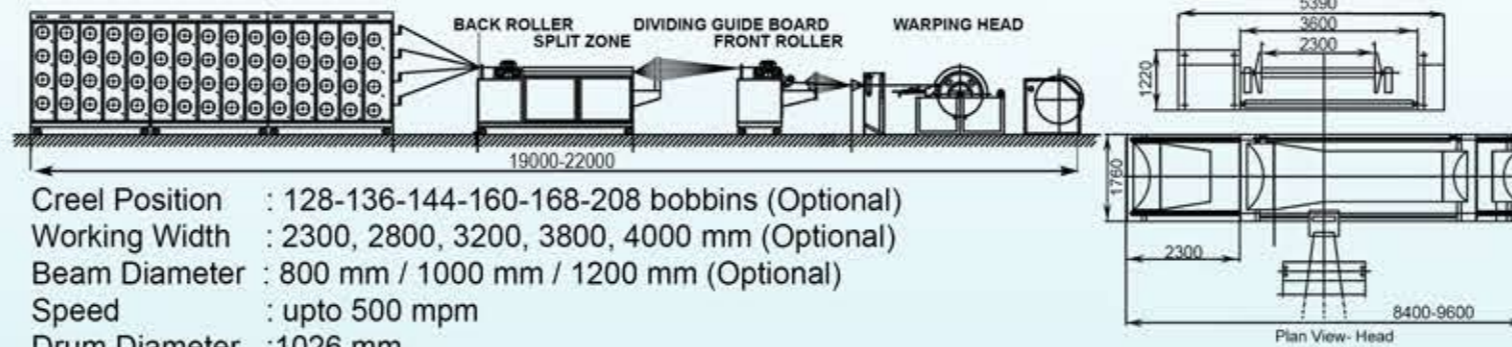


ML- 416

## SECTIONAL SPLIT WARPING FOR WEAVING



Production : 15T +/- 5 Tons  
Space Reqd : 160 sq ft /Ton Production



Creel Position : 128-136-144-160-168-208 bobbins (Optional)  
Working Width : 2300, 2800, 3200, 3800, 4000 mm (Optional)  
Beam Diameter : 800 mm / 1000 mm / 1200 mm (Optional)  
Speed : upto 500 mpm  
Drum Diameter : 1026 mm  
Cone length : 1010 mm  
Drum Motor : 7.5 -11 kW  
Beam Motor : 11-15 kW

Machine produces about 15 +/- 5 tons of 20 / 30 / 40 Mono yarn beams directly by splitting Polyester / Nylon Mother Yarn of 200-500D, saving on energy, wastage and labour cost compared to split yarn cops- sectional warping. Simultaneously, producing high quality beams with equal yarn tension over whole yarn sheet. The machine is ideally suited for operations with low monthly production volumes.

**MILAN**  
TEXTILES  
MACHINERY DIVISION



Add : "Global Point", P.No.:224/5C, Khatodara, Ring Rd, Surat-395002, Gujarat, INDIA  
Ph : +91 9374720485  
Web : www.milantextile.com  
E-mail : machines.milan@gmail.com



**MILAN**

TEXTILES  
MACHINERY DIVISION

DIRECT SPLIT WARPING MACHINE  
For WEAVING & KNITTING BEAMS



ML-758  
For Weaving

Production : 33 +/- 7 Tons  
Space Reqd : 100 sq ft /Ton Production

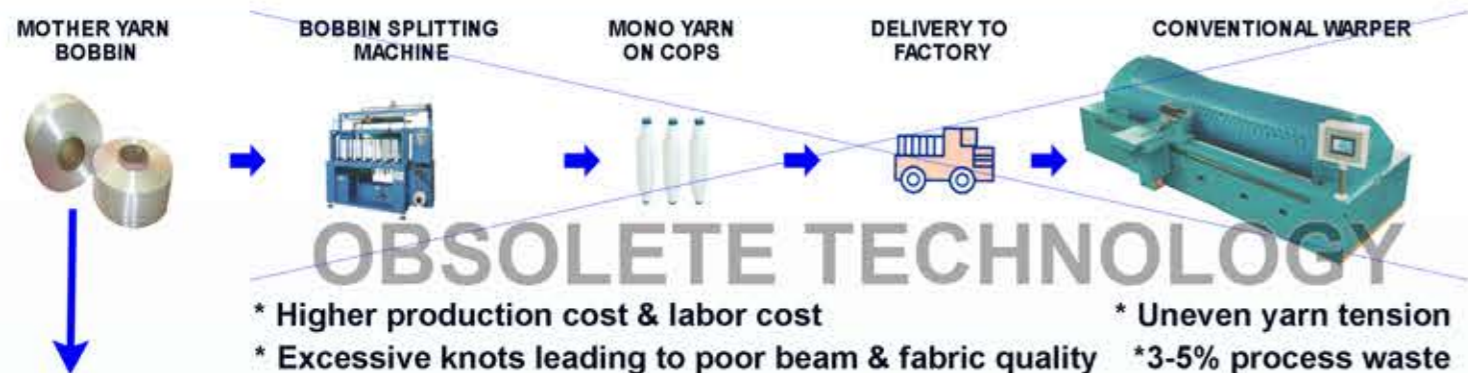


ML-358  
For Knitting

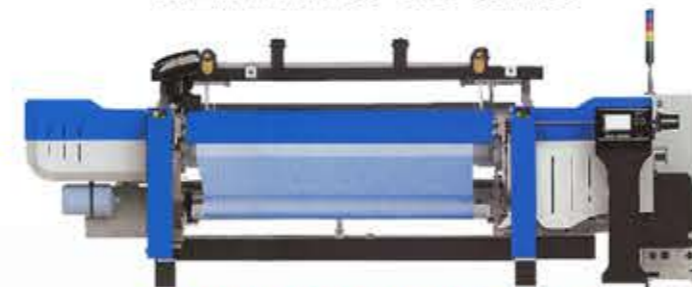
Production : 15 +/- 5 Tons



**TRADITIONAL METHOD OF MANUFACTURING MONO YARN BEAMS**



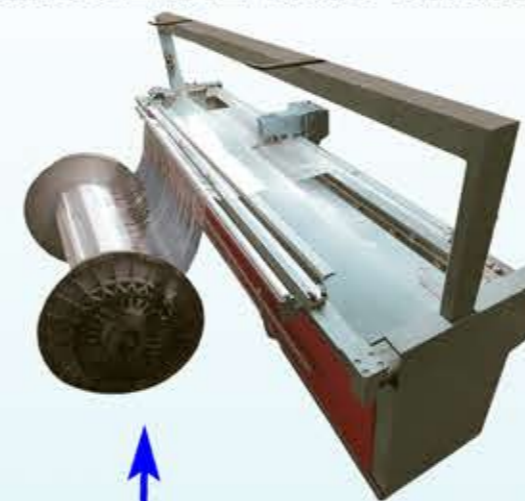
**HIGH SPEED AIRJET - WATERJET WEAVING LOOMS**



**Avg 150 knots / Beam**  
**Efficiency on Weaving 70-80 %**

**Avg 15 knots / Beam**  
**Efficiency on High speed looms upto 90-96 %**

**LEASING DEVICE- AUTO DRAWING MC**



**Process wastage <1%**



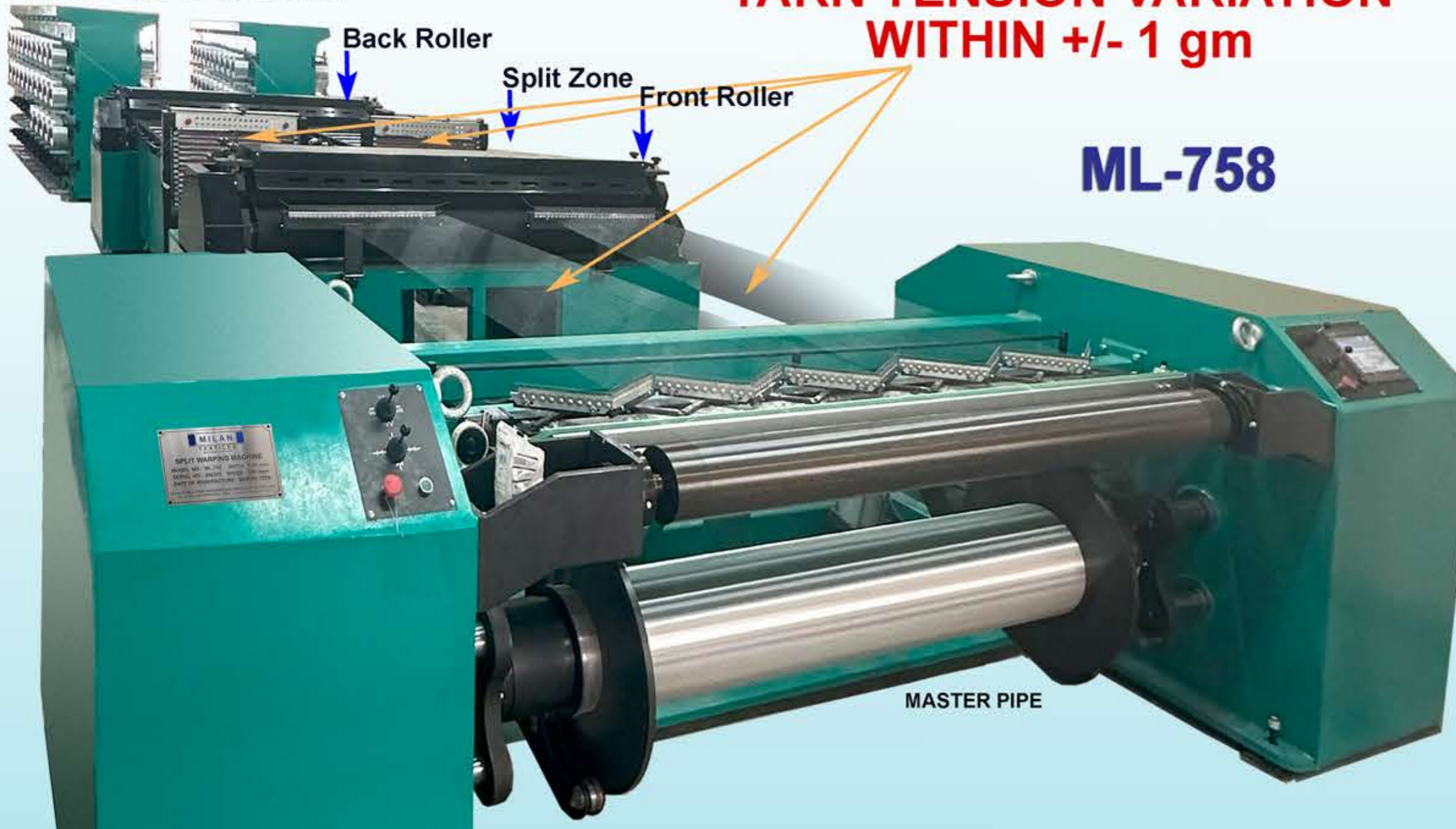
**Servo Motor & Load cell based Accurate Tension control on each stand**

**GUARANTEED YARN TENSION VARIATION WITHIN +/- 1 gm**

**ML-758**

**NEW TECHNOLOGY**

**CREEL - 128-208 Bobbins**



**For Weaving Beams of 65"- 85" width & 30"- 40" dia Upto 24000 Ends**

**ML-358**

Speed :: Upto 700 mpm  
 Creel Position :: 56 - 80  
 Braking Distance :: < 3 metres at speed of 500 mpm  
 Rated Power :: <= 35 kw, Running Power load of 12-16 Amp  
 Beam Size :: 21"x 21"/ 21"x 30"

Working Width :: 21"  
 Head Motor :: SIEMENS 7.5 - 11 kW  
 Back Roller :: 3.5 - 4.5 kW  
 Front Roller :: 3.5 - 4.5 kW

**ML-758**

Speed :: Upto 600 mpm  
 Creel Position :: 128-208  
 Braking Distance :: < 4 metres at speed of 500 mpm  
 Rated Power :: <= 60 kw, Running Power load of 22-30 Amp  
 Beam Size :: 21"x 21"/ 21"x 30" TWIN, 21"x 42" 75"x 30" ( for Master pipes)

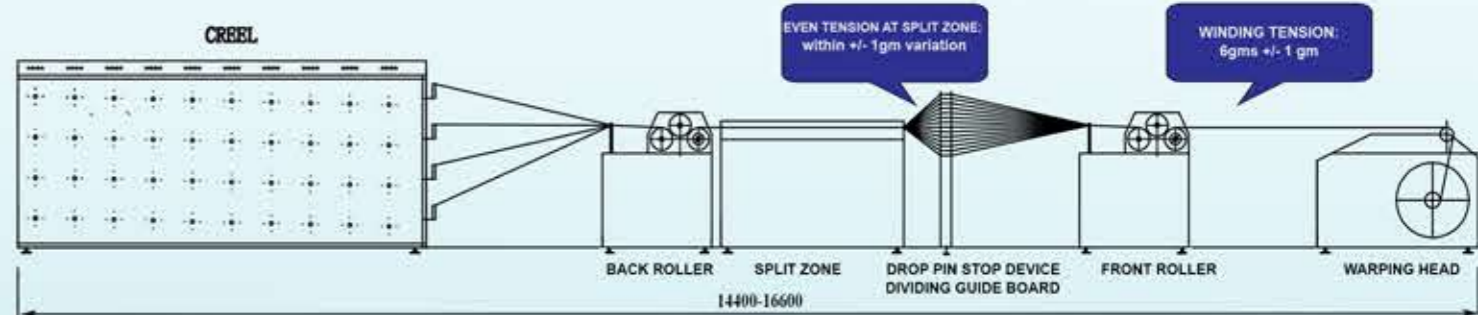
Working Width :: 1800 / 2000 / 2200 / 2400 mm  
 Head Motor :: SIEMENS 18.5 - 22 kW  
 Back Roller :: 7.5 - 11 kW  
 Front Roller :: 7.5 - 11 kW

- Two sections of tension rollers - Pneumatically controlled , 3 rollers - state of the art technology
- Splitting Zone with Hard Chromed steel tubes for variable tension control
- Splitting Guide with Drop Pin Stop Motion made of specialized alloy for trouble free reliable operation
- Fully synchronized Speed Control based closed loop electronic control system to achieve adjustable tensions divided in 3 separate zones
- Mother yarn Bobbins :: Complete set of adaptors suitable for paper tube ID of 94,110,120 mm
- Inverters :: Schneider - INVT, PLC : Omron , Japan

**OPTIONAL SUPPLIES**

- Warping head customised to beam size
- Drop pin stop motion aided by infrared device
- Laser stop device and Camera stop device
- Auto Tension Control device
- Beam Diameter : 660~800 mm
- Leasing Device

**DIRECT SPLIT WARPING FOR WEAVING BEAMS USING BEAMING MACHINE 120~ 208 SPINDLE POSITION**



**COMPARISON :: TRADITIONAL vs IMPROVED METHOD**

- |  |  |
|--|--|
| 1) Uneven Tension                                  | 1) Uniform Tension on Weaver's Beam              |
| 2) Cost of Production - USD 0.5 / kg               | 2) Cost of Production - USD 0.16 / kg            |
| 3) Avg Knots / Weaver's Beam :100-150 knots / beam | 3) Avg Knots / Weaver's Beam :10-15 knots / beam |
| 4) Efficiency on Weaving 70-80 %                   | 4) Efficiency on Weaving 90-96 %                 |

**ACTUAL WORKING DATA**

- Lowest Prod cost / kg upto approx USD 0.16/kg for Splitting-Beaming
- Lowest knots / Weaver's Beam : Avg 15 knots / beam
- Splitting yarn Production 33 +/- 7 Tons / month, Efficiency upto 80%
- Actual production speed achieved > 500mpm
- Space required approximately 100 sq ft / ton of production
- High production efficiency on High Speed WJ/AJ looms upto 96%
- Lowest price / performance ratio in comparable technology
- Process Waste < 1%