Quotation

**BABY DIAPER MACHINE Model XE-40\*\***

**Детские подгузники**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name & Type of the machine | Unit | Quantity | Guangzhou  Factory Price | Delivery Time | Place of Delivery |
| XE-40\*\* | Set | One | ￥8，880，000.00 | 180days | Guangzhou |

* 1. **BASIC SPECIFICATION**

1. Right handed machine Material flow from right to left (TBD)
2. Product size 4 sizes
3. Working speed 400PPM (M size)
4. Surface speed 200MPM
5. Efficiency: >85%
6. Wastage: <3%
7. Defibration capacity 15kg.min
8. Power Supply required 350KVA, 380V, 3ph, 50hz
9. Air consumption 2000L/min
10. Air pressure 80 – 120psi
11. CE Safety standard

* 1. **Mill –fixed rotor mill for drum former with the following features**

1. 37kw electric motor
2. Greased bearings with temperature readouts and alarm for overtemp
3. Easy removal of breaker bar
4. Carbide tip Chevron style rotor noise reduction style
5. Pulp feed rolls on pneumatic nip for easy unjamming
6. Pulp side guides and in feed tray
7. Adjustable ventilation
8. Two spindle unwind stand for pulp
   1. **Drum Forming core with the following features**
9. Continuous 3D pad formation to produce pads as per attached drawings
10. The pad was over wrap by tissue with calendar embossing
11. Quick changeover features between sizes
12. Guaranteed total indicated run out of +- 2mm
13. Guaranteed fluff weight variability of less than +- 5% from target
14. Scarfing rolls – adjustable gapping
15. Appropriate internal baffling for discrete forming
16. Filter for filtration of process air including main fan and media cleaning fan.
17. Forming fan
    1. **SAP system**
18. Volumetric sap system for sap introduction into the drum former using compressed air
19. Guaranteed pad to pad weight variability to not exceed 5% from target
20. Sap nozzles with 3 coordinate adjustment to optimize distribution
21. 10gram per product maximum capability
22. Operator input for various pad weights
    1. **Calendar and Embossing**
23. Stepped calendar section for setting bottom pad density
24. Adjustable gap mechanism
25. Feature to prevent excessive pad growth on discrete pad
26. Adequate transfer plates between sections to assure pad integrity
27. Emboss section for diamond pattern embossing Torque protection

**1.6 Pad End-cutting knife**

1. Flex knife style with automatic knife oilers
2. Torque protection
3. Dust collector
   1. **Elastic waist Band back ear applicator**
4. Applicator designed for elastic nonwoven laminated with non-elastic nonwoven material on line by Hotmelt and thermal type
5. Off-line back ear nonwoven and elastic nonwoven unwinding and laminating unit
6. C-fold and fixed by thermal type after lamination
7. Dual spindle unwind with splicer, 40” max dia and 3” I.D. cores
8. Die cutting for left and right size Back ears
9. Camera feedback positioning registration control system
10. Combining drum to be coated with adhesive release coating
11. Separate dedicated vacuum fan for back ears
12. Glue heads applying adhesive directly to back ear material
13. Adhesive applicator to have one pump per head (dual stream pump)
14. Torque protection
    1. **Acquisition layer**
15. Cut and place acquisition layer applicator for placement on top sheet.
16. Vacuum drum style with flex knife cutoff
17. Separate dedicated vacuum fan
18. Knife to have automatic oilers
19. Torque protection
    1. **Textile backsheet**
20. Textile nonwoven laminated with the backsheet on-line by hotmelt
21. Dual spindle unwind with splicer, 40” max dia and 3” I.D. cores
22. Glue head applying adhesive to textile nonwoven
23. Adhesive applicator to have one pump per head
24. Lamination embossing unit
25. Camera feedback Graphic Back sheet positioning registration system
    1. **Leg elastic**
26. Elastic unwind stand with capability to run up to 8 strands of elastic on 12” diameter spools
27. Spacing as per product drawings
28. Easily adjustable mechanism for spacing adjustment from center line
29. Glue heads applying adhesive directly to elastic
30. Adhesive applicator to have one pump per head

**1.14 Fastening**

1. Qty2 /product, vacuum drum style, placement on the back ear material
2. Separate dedicated vacuum fan for fastening tape unit
3. Flex knife with knife oilers
4. Tape unwindstand with tension adjustment
5. Fingerlift sensor
6. No tape detectors
7. Open tape detectors
8. Tape in wrong spot detectors
9. Tape system to be easily adjustable for various product widths and lengths
10. Torque protection

**1.15Frontal Tape**

1. Vacuum drum style cut and place application with positioning controlled.
2. Separate dedicated vacuum fan for frontal tape
3. On-line Hotmelt coating
4. Graphic positioning registration control system
5. Flex knife with knife oilers
6. Dual unwind for split tape and independent tension control with autosplicing feature
7. Unwinds to have 24” diameter capability with 3” I.D. cores
8. Tape web break detection
9. Torque protection

**1.16Inner leg gather**

1. Machine to haveribbon style Inner leg gather unit
2. Total of two adhesive heads for elastic and two for ribbon attachment to top sheet with Mechanical Sealing unit.
3. Elastic unwind capable of 4 strands with 12” diameter spools
4. Easily adjustable head and strand bracketry with rules for operator documentation of good run settings

**1.17Leg Cutout die section**

1. Load pressure to be indicated
2. Leg cutout vacuum fan
3. Cutout receptacle for waste
4. Die to have automatic oiler
5. Torque protection
6. Unit to have easily adjustable trim takeaway chutes for various product sizes
7. Unit to be provided with the following dies and anvils

**1.18Longitudinal fold**

1. Section to have adjustments with markings or rules for operator documentation and setup of good run settings.
2. Folding rails to have adhesive release coatings.

**1.19Final knife**

1. Flex knife style with automatic knife oilers
2. Torque protection

**1.20Cross folder**

1. Tri-fold
2. Folding fingers to have adhesive release coatings
3. Single reject station for out of spec products
4. Torque protection

**1.21Unwinds**

1. All unwinds to be independently controlled with motors following main machine speed with a tension sensing devise (dancer) providing trim.
2. Splicers have automatic feature with manual override
3. All splices will be tape
4. Splice detection photoeyes to see vendor splices and machine splices
5. Web break detectors provided on all unwinds
6. All webs to have automatic web guides properly designed before critical applications. Edge guides to keep web alignment within +- 1/8” of target
7. Air shafts for cores – designed for 3” I.D. cores
8. **Stacker**
9. Stacker to be able to handle all products with a minimum of chain pitch changes
10. Minimum count capability is (8) eight
11. Maximum count capability is (40) forty
12. Quick change features
13. Dual discharge with ability to work both together at same time from 2 exits
14. **Drive**

Mitsubishi J4 servo drives on all tooling and conveyor, Invertor drive unwinding unit.

1. **Controls**
2. 24V DC control circuit.
3. Power circuit according to the specification requirements of the end user.
4. Mitsubishi PLC.
5. E-stop lifeline running entire length of machine on operator and drive side.
6. E-stop circuit hardwired into all E-stop pushbutton, guard doors and lifeline.

**5 Operator control**

1. Provide hardwired E-stop mushroom style buttons at each operator station.
2. Provide normal stop mushroom style buttons at each operator station.
3. Mitsubishi touch screens for control of functions, setup and fault messaging.

**6 Adhesive system**

1. ITW DynatecHotmelt system
2. Every applicator head to have a dedicated pump or dual stream pump on dual applications
3. Control of on/off and phasing to be accomplished through touch screen (Digital CAM)
4. Manual purge, auto and off functions for all applications.
5. The following applications are needed
   1. Leg elastic gun (QTY 2)
   2. Leg elastic dual stream pump
   3. Backsheet - core construction glue gun
   4. Backsheet– core construction glue pump
   5. Textile Backsheetnonwoven– Back sheetconstruction glue gun
   6. Textile Backsheetnonwoven – Backsheet construction glue pump
   7. Topsheet construction – topsheet to core glue gun
   8. Topsheet construction – topsheet to core glue pump
   9. Tissue construction glue gun
   10. Tissue construction glue pump
   11. Acquisition layer - Topsheet construction glue gun
   12. Acquisition layer - Topsheet construction glue pump
   13. ILG elastic gun (QTY 2)
   14. ILG elastic dual streampump
   15. ILG ribbon to Topsheetgun (QTY 2)
   16. ILG ribbon to Topsheetdual stream pump
   17. Frontal tape to backsheet construction glue gun
   18. Frontal tape to backsheet construction glue pump
   19. Back ear - Topsheet construction glue gun (QTY 2)
   20. Back ear - Topsheet construction glue dual stream pump
6. **OEM components**
7. Web guides – BST
8. Controls/drives – Mitsubishi PLC, touch screens and J4Servos
9. Low voltage parts, switch, AC contactor, thermo relay : SChNEIDER
10. Sensor – Keyence, Omron, Sick
11. Bearings –SKF, FAG, UBC, Peer
12. Pneumatics – FESTO / SMC / ARK
13. Safety guard switches – Schmersal
14. Timing belts – Gates, Opticbelt
15. Conveyor belts –Habasit