

List 45

Textile machinery for man-made fibre and yarn industry:-

(1) Machinery for continuous polymerization plant:

- (a) Polymerizing equipment, including esterification reactor, vapor separator, pre-polymerization reactor, polymerization reactor, static mixers, polymer pumps and automatic chipping system; pre-polyester pumps, spray condensers, probe assemblies, vacuum pumps, vacuum equipment such as ejectors, jacketed valves and jacketed control valves, pre-poly filters, mechanical seals and cooling system of polymerization reactors;
- (b) Slurry and additive preparation system, such as high shear agitators, mill feed pumps filters and injection systems for additive and slurry pumps;
- (c) HTM (Heat Transfer Medium) and heating system HTM pumps;
- (d) PTA conveying system, including container unloading platform and rotary feeders;
- (e) Polymer transfer line equipment, including polymer coolers and jacketed polymer pumps, tandem drives on-line master batch and additive injection system;
- (f) Solid state polymerization equipment, including pre-crystalliser, crystalliser and rotary feeders;
- (g) Process control equipment, including viscosity measuring equipment (Viscometer) and, Distributed control system;
- (h) Atomic absorption spectrometer, X-ray fluorescence spectrometer;
- (i) Extraction tower with accessories like centrifugal dehydrator and blower;
- (j) Chip conveying system and accessories like blowers, filters and rotary and screw feeders;
- (k) Solid State polymerization system including blowers and nitrogen plant;
- (l) Crushing and melting system for caprolactum;
- (m) V.K. Tube;
- (n) Screw Feeder;
- (o) Centrifugal dehydrator;
- (p) Drying Tower;
- (q) Circulating Blower;
- (r) Fuel Oil Bowler;

(2) Machinery for synthetic fiber plant:

- (a) Spinning equipment, including manifold spinning beams, pre-heating ovens and finish applicators;
- (b) Polymer transfer line, including extruder, color blender and continuous polymer filter (CPF) polymer valves;
- (c) Draw-off equipment, including take-up equipment, thread cutters and aspirators, spin defect detectors, draw off unit, tow guide equipment, lace-up or suction gun and tow suction unit traversing units;
- (d) Draw line (Fibre line), including creel, tow guide stand, draw frames, drawing bath, heat set calender/thermosetting/annealer unit, tow assembler, draw-off unit, tensiometer roll, steam box, crimping machine, spray box, tow guide system, cable dryer, tow cutter and grinding machine and tow cutter reels;

- (e) Hydraulic baling press, strapping machine, dock levelers and automatic bale handling equipment;
- (f) Process control equipment, including precision anemometer, thermo-hygrograph, aspiration psychrometer, ultrasonic cleaning unit, spinneret inspection system, infrared pyrometer, optical temperature measuring instrument; pack cleaning equipment with hydrolysis and vacuum pyrolysis and pack press;
- (g) Textile laboratory equipment for fibre testing, including favimat, fafegraph HR, coring machine, stereo microscope, crimper tester, fibre shrinkage tester, refractometer, conductivity meter;

(3) Machinery for synthetic filament yarn plant:

- (a) Spinning equipment, including manifold, spinning beams and pre-heating ovens;
- (b) Polymer transfer line, including extruder, color blender and continuous polymer filter (CPF);
- (c) Take-up equipment, including take-up frames, oil application unit, godet rollers, yarn guides, thread cutters and aspirators, lace-up/suction gun, take-up and draw winders;
- (d) Packing and automation equipment, including automatic doffers, automatic bobbin storage and handling system;
- (e) Draw texturising machine, including creel, intermingling jets, ceramic guides, doffers;
- (f) Textile laboratory equipment for yarn testing, including automatic tensile tester, projection microscope, denier skein reel, entanglement tester, denier auto count, dynafil, uster tester, online finish checking instrument.

(4) Other capital goods for synthetic fibre/yarn industry:

- (a) Spin draw winding machine;
- (b) Spindles;
- (c) Yarn guides;
- (d) PSM Rings;
- (e) Ballon Control Rings;
- (f) Travellers;
- (g) Extruders;
- (h) Extruder barrel;
- (i) Online filamentation detector;

(5) Machinery for Regular/HWM Viscose Staple Fibre Plant:

- (a) Sintered Filer Media;
- (b) Automatic High Speed centrifugal separator;
- (c) Fibre production lines;
- (d) Fibre Cutter;
- (e) Fibre Dryer;
- (f) Pneumatic Fiber Fidders;

- (g) Baling Press;
- (h) Plate Heat exchanger;
- (i) Graphite heat exchanger;
- (j) Neno filtration plant;

(6) Machinery for Lyocell Fiber Plant:

- (a) High viscosity handling equipment including pulper;
- (b) Reactor for cellulose dissolution;
- (c) Thin film evaporator with accessories;
- (d) Spinning module;
- (e) Air quenching systems and associated control systems;
- (f) Fiber washing and treatment machines;
- (g) Baling Press;

(7) Process and quality control equipment for artificial man-made cellulosic fibre/yarn industry:

- (a) Robotic Fiber sampler;
- (b) Spectrophotometers for fiber color evaluation;
- (c) Automatic absorption spectrophotometer;
- (d) X-ray phloroscence spectrometer;
- (e) Automated oil pick up analyzer;
- (f) Automated titrator;
- (g) Textile laboratory equipment for testing of fiber properties such as denier, tenacity, elongation, spinning fault, UV value and microscope with fibre imaging system;

(8) Machinery for production of Non-Woven from Regular/ HWM Fibre: Complete production-lines for spun-laced (hydro-entangled) non-wovens upto rolled-goods preparation/ packing; Omitted w.e.f.17th July,03

(9) Machinery for Lyocell based Non-Wovens: Omitted w.e.f.17th July,03

- (a) Spun bonding and melt blowing heads and take up conveyers;
- (b) After treatment lines, dryers and rolled goods preparation / packing equipment;
- (c) Complete production lines for spun laced (hydro entangled) non-wovens;

(10) Machinery for Viscose Rayon Filament Yarn/ Rayon Tyre Yarn:

- (a) Twin rolls press;
- (b) Ageing Drum Hopper;

- (c) Blowers and Fans for Alkali Cellulose Transport system;
- (d) Slurry Pumps including VFDs;
- (e) Automatic Pulp handling system;
- (f) Simplex/Churn;
- (g) Plate and Frame Filter Press;
- (h) Viscose Pumps (Gear/Screw Pumps including VFDs);
- (i) Evaporator;
- (j) Heat Exchanger- Hastalloy Plate and Frame Type;
- (k) Crystallizer;
- (l) Vacuum System - Ejectors, Boosters, Vacuum Pump and Vacuum Filter;
- (m) Auto bagging and weighing system;
- (n) Sand Filters;
- (o) Centrifugal Pumps including VFDs;
- (p) Pot Spinning Machine;
- (q) Spinning Pots and Pot Motors;
- (r) Metering Gear Pumps for Viscose;
- (s) Automatic cake wrapping system;
- (t) Air Splicer for Knotting Yarn;
- (u) Automation for Cone Weighing and Cone Doffing;
- (v) Auto Cone Packing and Palletizing;
- (w) Environment Monitoring like Gas Monitors for Carbon-di-Sulfide (CS₂), Hydrogen Sulfide (H₂S) Sulfur Dioxide (SO₂);
- (x) BOD and COD Monitors;
- (y) Textile Laboratory Equipment for Yarn testing namely, Universal Computerised automatic Tensile Tester and Denier Tester;
- (z) Gas Chromatography and Mass Spectrometer.

11. Other machinery for man made fibre and yarn industry :

- i)Pulp slurry with automatic slurry control systems
- ii)Alkali Cellulose Cooler-Fludized with automatic temperature control
- iii)Press lye Filter

- iv) Xanthator with automation
- v) Rough and Fine Grinders for Viscose
- vi) Viscose Filters
- vii) Viscose deaerators
- viii) Color slurry injection pumps
- ix) Slurry homogeniser system
- x) After treatment line for washing fibre, conveying of fibre and chemical treatment
- xi) After treatment chemicals filtration system
- xii) Pneumatic fibre squeezing system
- xiii) Wet fibre opener
- xiv) Dry fibre opener
- xv) Online fibre contamination and removal system
- xvi) Automatic bale handling system
- xvii) Bale inspection system
- xviii) Automatic candle filters for spin bath filtration
- xix) Dry condensing system for low pressure vapour removal in evaporators, crystallisers and viscose deaerators
- xx) Low temperature multi effect distillation (LT-MED) system and mechanical vapour compression for effluent treatment by water desalination process.
- xxi) Electrical protecting devices and relays falling under tariff item 8536 4900
- xxii) Flame proof motors falling under tariff item 8536 90 90
- xxiii) Process monitoring and control equipment falling under tariff item 8538 1010
- xxiv) Distributed control system falling under tariff item 8537 10 10
- xxv) Precision gear pumps for highly viscous polymers
- xxvi) Hydraulic screen changing type continuous filters for viscous polymers
- xxvii) Static mixers for high viscosity polymers
- xxviii) High Pressure stainless steel micro spinnerettes (less than 80 micron hole size) for high viscosity polymers
- xxix) High efficiency fibre dryer for lyocell fibres
- xxx) High capacity fibre openers suited for lyocell fibres
- xxxii) Solvent purification system including ion exchange and membrane based systems falling under tariff item 8445 19 30

xxxii) Energy efficient multi staged evaporators/distillation columns for columns for solvent recovery falling under tariff item 8445 1930

xxxiii) Open end spinning machine

xxxiv) Autoconer

xxxv) Uster Tensorapid

xxxvi) Positive rapier loom

xxxvii) Jacquard

Note :

Total Import Duty 20.91%

{5%(BCD)+10.81%(CVD)+4.63%(SP.CVD)+0.47%(EDU.CESS)}