LSS90/50-1200 Three-layer Co-extrusion Sheet Production Line

Process material: PS、PP
Max sheet width: 900㎜ adjustable
(layer A -10%, layer B - 80%, layer A - 10%)
Sheet thickness range: 0.25～2.0 mm
Line speed range: 3-20 m/min

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LSS 90 single screw Extruder

Driving motor power: 75kw  Screw type: Separate type  Screw L/D 33: 1  max extrusion capacity: 180-200KG/H  Heating zone: 5 Heating power: ~40Kw
Driving motor power: 11kw  Screw diameter: 50mm
Screw L/D 32:1  Screw type: Separate type
Heating zone 4 Heating power: 15kw  Cooling zone 4
Dryer of material: Weight of batch for material: 150 kg  motor power: 18.5kw
HMC-II computer

Computer control of the whole line: ——HMC-II system, Siemens PLC S7-300 system adopted, 10”color operation panel, advanced control system internationally

While our competitors not use Simens system or use lower class with less stability and not so durable

Cables: 3 phase, 4 cables

We only use international famous brands for all electrical parts to guarantee the stability working for the extrusion lines
Main electric part supplier:
- Inverter of main motor: ABB
- Thermo regulating meter: RKC
- Contactor: Siemens
- Breaker: Siemens
- Solid state relay: CELDUC, France
With double –position Hydraulic pressure auto-change sieve plate device 2 sets, one set for 90 extruder, the other for 50 extruder
Sieve plate exchange mode - Hydraulic pressure auto-change sieve plate without stopping machine
Voltage: 220V
Electric-thermal rod heating power: 4 kW x 2, enclosed wire connection
Sieve plate material 38CrMoAlA ,double position.
Hydraulic pressure control system, composite of Motor, oil pump, oil tank, switch box ,pressure regulator valve ect..
Sealing adopted tin bronze
Melting pump for extruder LSS-90-33
Motor power: 7.5 kW
Motor type: Variable frequency
Speed adjusting mode: Frequency control of motor speed ABB

Melting pump for extruder LSS-50-32
Motor power: 2.2 kW
Motor type: Variable frequency
Speed adjusting mode: Frequency control of motor speed ABB
T-Mould include co-extruder distributor

Mode T-type die head cloth rack type – 1 set
Available width of sheet: min 530 mm – max 900 mm
For PP, HIPS, GPPS
Width of die head: 1100 mm
Have 3 layer distributor, thickness can be adjustable – 1 set
Mould die set material: 5CrNiMoV steel with hard chrome surface plating, Thickness 0.03 - 0.04 mm
Method of adjustment for width: Outside plug up
Adjustable thickness range: min 0.2 mm – max 2.0 mm
Heating mode: Stainless steel heating rod control by 5 sects heating voltage 220V, 50Hz, power of each sect: within 4 kW
W/ bearing under mould
Mode of wire connection: with protecting cap totally enclosed
Press roller: Ø 316 mm x 1200 (W) mm, rigidit:HRC49-51
Middle roller: Ø 415 mm x 1200 (W) mm, Cooling roller: Ø 415 mm x 1200 (W) mm
Additional cooling roller Ø 160 mm x 1200 (W) mm
Roller line speed: V max = 24 m/min
Cooling medium: oil, Driving motor: 2.2 kW x 3

Precision mirror polishing: 12
Thickness of chrome: 0.10 - 0.12 mm
Drive mode inverter
Type adopt stand tri-barrel mode L type
W/ hydraulic pressure station motor power: 1.5 kW
W/Tri roller independent motor with spiral gear box
Speed adjust: AC motor and Hamsam gear
Width of polishing rolls: 1200 mm
Three roller heating exchange

Oil circulation temperature control system
Heating power: 3 x 6 kW
Oil pump power: 2.2 kW x 1, 3 kW x 2
Cooling convey device

Steel roller: Ø 80 mm  x 1200 mm
Material: aluminium
With movable support frame
Saw motor cutting unit with speed adjustable function
Edge cutting device

PS sheet  With brown color testing  10% cristal GPPS + 90% OPS with HIPS also with brown masterbatch (OPS 60% +40% HIPS)

Edge cutting device:  1set
Two roller hauling unit

Hauling rubber roller: Ø 205 mm x 1200 (W) mm, 2 pcs

Gap adjust method: air cylinder

Speed: inverter

Motor: 2,2 kW
Haul speed: Vmax = 24 m/min
Waste material winder (Moment motor 2N*M) - 2 Sets
Double position winding unit

Winding motor \( \geq 12 \text{ Nm} \)
Change mode: manually
Overturn motor: 3 kW
Thickness for sheet: 0.2-2 mm
Delivered with two shafts
diam. 75 mm
Maximum winding Diameter: 800 mm
Maximum winding width: 1100 mm
Finished products

Product specification
Extrusion line produces two types of sheet:
Polymer 3-layers sheet from polypropylene (PP)
Polymer 3-layers sheet from high impact polystyrene (HIPS) sheet
Ranges of sheet width: min 530 mm – max 900 mm
Thickness of Sheet: min 0.2 mm – max 2.0 mm
for HIPS (layer A -10%, layer B - 80% , layer A - 10%)
Thickness of Sheet: min 0.35 mm – max 1.5 mm  for PP (layer A -10%, layer B - 80% , layer A - 10%)
For other information of the machine, please refer to the machine specification.

Look forward to a Win-win business