

GREEN BUILDING INDUSTRY AND TRADING LIMITED

EPS (expandable polystyrene) INDUSTRY









EPS Molding process diagram

EPS pre-expander line



EPS(Expandable polystyrene) Raw material



Pre-expander



pre-expanded material

Packaging production line

Shape molding production apply to:

- · Agricultural and fish box
- · Electronic parts package
- · ICF construction parts
- · Decoration parts
- · Other special application, such as helmet, model...etc.



Shape molding machine



EPS Mould

Block production line

Block molding production apply to:

- · Construction parts for decoration.
- · Heating-Insulation wall and ceilling
- · 3-D panel and sandwith panel
- · Other applications



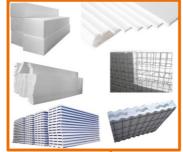


Block molding machine



Block cutter







EPS RECYCLE SYSTEM



EPS crusher







ENERGY SUPPLY:

- Electricity
- Steam system:steam boiler, steam accumulator.

Compressed air system:compressor, compressed air receiver

 Water system:water pump ,water cooling tower.







EPS block molding production line

Daily 300 cubic Meter EPS Block Production Line list

1	Batch Pre-expander SPJ150B Density :8-30g/l	1unit
2	EPS Block Molding Machine SPB400 With Vacuum System Length Length 4m x 1.2 mx 1m	1unit
3	Cutting Machine SPC400	1units
4	EPS Crusher	1unit
В	Auxiliary Equipment	
5	Silo(Semi-Auto) System	20units
6	Air compressor 3.6m3/min, 7 bar	1unit
7	Compressed Air Tank With Accessaries, 2M3	1unit
8	Steam Accumulator 12m3 volumn	1unit
9	Cooling Water Pump, Cooling Tower 50m3/hour, as well as 7.5kw pump.	unit
10	Steam Boiler 2 tons per hour, 1Mpa	1unit
	Total machine investment is around \$220,000	





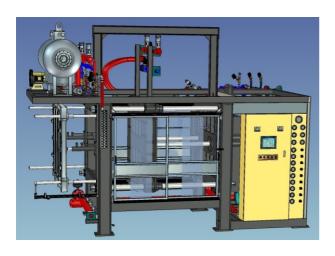
Expansion drum	Ø1,500		
First pass range	12~30g/I		
Tolerance	within +/-5%		
Second pass range	8~11g/l		
Capacity approx	12g/l=600kg/h		
	15g/l=900kg/h		
	20g/l=1200kg/h		
	30g/l=1500kg/h		
Second pass approx	8g/l=350kg/h		
	10g/l=450kg/h		

Item	PSB-DZ200	PSB-DZ300	PSB-DZ400	PSB-DZ600
Mould cavity size	2040*1240* 1030(mm)	3060*1240* 1030(mm)	4080*1240* 1030(mm)	6100*1240* 1030(mm)
Block size	2000*1200* 1000(mm)	3000*1200* 4000*1200* 1000(mm) 1000(mm)		6000*1200* 1000(mm)
Capacity	5min/cycle	6min/cycle	7min/cycle	8min/cycle
Power	20.5- 24.5kw	20.5-24.5kw	24.5-35.5kw	24.5- 35.5kw
Overall dimension	5700*4000* 2850(mm)	7200*4500* 3000(mm)	11000*4500 *3000(mm)	2600*3960* 2906(mm)
Weight	6000kg	7200kg	12000kg	15000kg
Room height required	6000mm	6000mm	6000mm	6000mm



EPS shape molding production line

EPS interior decoration cornice production line main machine list



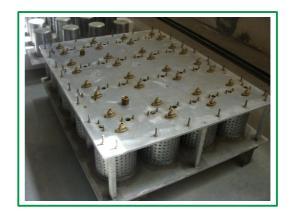
Туре	Mould size	Max product size			
1214	1400x1200	1200x1000x330			
1416	1600x1400	1400x1100x330			
1618	1800x1600	1600x1400x330			
1422	2200x1400	2000x1300x330			



SPJ70	130kg/h at density 18g/, density range : 12-50g/ll
SPJ110	400kg/h at ensity 18g/l, density range : 12-35g/l
SPJ130	700kg/hour at denisty 18g/l, density range : 12-30g/l

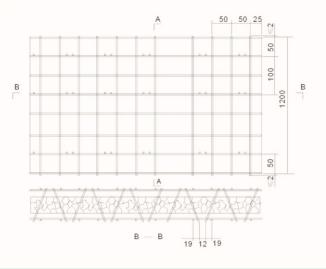


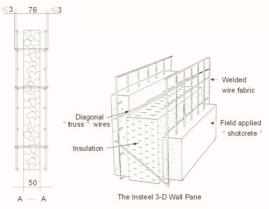
1	Batch Pre-expander SPJ70 Density :12-50g/l	1unit				
2	Automatic Shape molding machine Mould size:2200mmx1350mm The products size 2000x1200mm	1unit				
3	Cornice moulds -1 6-8 different shape moulds					
4	Lamp and ceiling board , moulds2	1unit				
В	Auxiliary Equipment					
5	Silo(Semi-Auto) System	6 units				
6	Air Compressor 3.6m3/min, 7 bar	1unit				
7	Compressed Air Tank With Accessary 2 m3	1unit				
8	Steam Accumulator 3 m3 volumn	1unit				
9	Cooling Water Pump, Cooling Tower 50m3/hour, as well as 7.5kw pump.	unit				
10	Steam Boiler 1 tons per hour , 1Mpa	1unit				
	Total machine investment is around \$180,000					

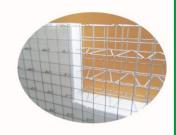




3D WIRE MESH PANEL PRODUCTION LINE







Length (mm) Width (mm) Thic		kness (mm)	Truss wire (mm)	Mesh size (mm)		
2400-4000	1220	ı	Max. 150	Ф2-3	50 x 50 100 x 100	
Со	nfigura	tio		3m³/min, 0.7MPa	a	
Produc	tion Capacity		Approx. 500-800m² / 8 hours			
EPS core	panel thicknes	s	50-130mm			
	EPS core pane	el	16kg/m³			
Wire	erequired		Cold drawing galvanized steel wire Compression strength: 550-750MPa			
Distance between wire mesh net & EPS core panel			10-30mm			





Building after the completion

Building before completion

The Whole production include the following equipments

use	no.	device	model	quantity	remark
Welded flat screen	1	Welded flat screen 3DW-A		1set	
		Including: elbow type vertical wire of wire coil 25, longitudinal wire straightening frame 1, resistance welding transformer cabinet 1, welding machine 1 Taiwan, cutting machine 1 sets, PLC control cabinet 1, 1 sets of water cooling device.			
Straightening and cutting Mesh ABB	2	Straightening and cutting machine Jz II		bent type,3 wire coils	Used for welding machine
3Dpanel welding	3	Insert wire welding machine	CH- I	1 set	
			machine,1 pair w 4 pcs roller frame C control cabinet	er	
Straightening and cutting machine 3D Panel The oblique inserting		Straightening and cutting machine	Jz II	bent type,3 wire coils	Insert wire Welding machine
patch welding		spot-welder	DH25- I	1 set	













EPS (expandable polystyrene) Resin







EPS(Expandable Polystyrene) is a lightweight, rigid, plastic foam insulation material produced from solid particles of polystyrene. Expandsion is achieved by virtue of small amounts of pentane gas dissolved into the polystyrene base material during production. The gas expands under the action of heat, applied as steam, to form perfectly clesed cells of EPS.

what is our advantagement?

- 1) 1.4 million ton yearly production, ensure your order delivery at anytime.
 2)our material have very stable performance, which ensure the stable quality of your products.
 3)high specification for expansion and fusion can ensure the same strength of EPS products with less material, For example, ZKF302 type. It can easily get 8 g/l with double expansion.

SPECIFICATION										
PKF-XJ High expansion						PKF-XS Fast cycle				
GRADE	BEAD SIZE(Dia meter)	Recomme ded Density	Expandale Rate(one time)	Applications	GRADE	BEAD SIZE(Dia meter)	Recomme ded Density	Expandale Rate(one time)	Applications	
	ММ	G/L	Times			ММ	G/L	Times		
PKF-301XJ	1.00-1.60	11-15	70-90	Heavy duty block sheet and light weight molding	PKF-302XS	0.80-1.25	15-22	45-65	Monitor and large packaging molding	
PKF-302XJ	0.80-1.25	12-16	65-85	Regular package and box molding	PKF-303XS	0.70-1.00	16-25	40-60	Precision and thin wall package molding s	
PKF-303XJ	0.70-1.00	13-17	60-75	Precision and thin wall package molding s	PKF-401XS	0.50-0.80	18-25	40-55	Precision and high density articles	
PKF-401XJ	0.50-0.80	14-19	55-70	Precision and high density articles	PKF-501XS	PKF-501XS 0.40-0.60 20-33		30-50	Precision and high density articles	
PKF-501XJ	XJ 0.40-0.60 15-20 50-65 Precision and high density articles									
PKF-XB High	strength				ZKF Flame retardant					
PKF-301XB	1.00-1.60	11-14	70-90	Large box and floor applications	ZKF 301	1.00-1.60	15-22	45-65	Heavy duty block sheet and light weight molding	
PKF-302XB	0.80-1.25	11-15	65-85	Large box and low density applications	ZKF 302	0.80-1.25	15-25	40-65	Heavy duty block sheet and light weight molding	
PKF-303XB	0.70-1.00	13-17	60-75	Middle size boxes and high density floor applications	ZKF 303	0.70-1.00	16-25	40-60	Middle density applications	
PKF-401XB	0.50-0.80	14-18	55-70	Precision and thin wall parts,boxes	ZKF 401	0.50-0.80	20-33	30-50	High density applications	
PKF-501XB	0.40-0.60	15-20	50-65	Precision and thin wall parts,boxes	ZKF 501	0.40-0.60	25-40	25-40	Heavy board and product for special use	

