



BEIER MACHINERY CO., LTD

PVC Pipe Production Line

(Pipe Diameters: 10"-24")



(The picture is only for reference)

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In: Canada, U.S.A. & Mexico Contact person: Fraser Reid Tel: 773-234-3795 E-Mail: Fraser@beieramerica.com Thank you very much for your inquiry. We are pleased to offer you the following based on our enclosed general terms and conditions of delivery and sale.

1. Project evaluation

1.1 General information

Raw material & formulation	PVC resin powder & CaCo3, Lubricants, Stabilizers, Pigments, Antioxidants	
Melt capacity	Max: 800kg/h (depending upon the pipe dimension and the material)	
Central height	1m	
Haul-off speed	Maximum 1.2m/min	
Machine color	Standard color: RAL7016 (Anthracite grey) RAL9002 (Grey white)	
Picture of final product		

1.1.1 Pipe specifics and size list:

Schedule 40 Dimensions

Nom. Pipe Size (in.) O.D.		Average I.D.	Min. Wall	Nom. Wt./Ft.	Max. W.P.	
*	10	10.750	9.976	0.365	7.966	140
*	12	12.750	11.889	0.406	10.534	130
*	14	14.000	13.073	0.437	12.462	130
*	16	16.000	14.940	0.500	16.286	130
*	18	18.000	16.809	0.562	20.587	130
*	20	20.000	18.743	0.593	24.183	120
*	24	24.000	22.544	0.687	33.652	120

Schedule 80 Dimensions

Nom. Pipe Size (in.)	0.D.	Average I.D.	Min. Wall	Nom. Wt./Ft.	Max. W.P.
10	10.750	9.493	0.593	12.635	230
12	12.750	11.294	0.687	17.384	230
14	14.000	12.410	0.750	20.852	220
16	16.000	14.213	0.843	26.810	220
18	18.000	16.014	0.937	33.544	220
20	20.000	17.814	1.031	41.047	220
24	24.000	21.418	1.218	58.233	210

1.2 Work conditions (Provide by the customer)

Warehouse/Workshop	Construction of foundations, construction works, earthworks, and wall works. Supply of cranes, fork-lifts or other lifting equipment, mounting materials and tools. Dimension (M): 37(Length)×2(width)×2(Height)
Temperature & Humidity	≤40 °C, ≤95%
Power supply	460/3/60
Wire/cables/water hose	Wires/cables: From the power supply to the control cabinet of this production line and all electrical cables from the control cabinet to each machine. Water delivery: Supply water to the equipment and reservoirs.
Cooling Water	Without dissolved or suspended minerals as phosphor, sulphur, iron, etc. Inflow temperature T1: max. 15°C; Outflow temperature T2: T2=T1+5°C; Hardness: 5-8°dH; Reflux: without pressure
Lubrication oil	Exxon mobile
Compressor	Supply compressed air
Ancillary staff	3 People

1.3 Energy consumption

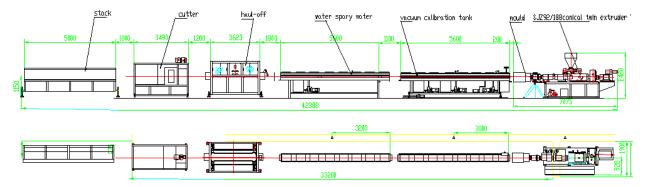
Installation power	310 KW
Cooling Water	≤20°C, ≥0.3Mpa, ~15M³/hr
Compressed air	0.6m ³ /min, 0.4Mpa-0.8Mpa

1.4 Main commercial terms

Project	10"-24" PVC pipe production line
Price	FOB Shanghai INCOTERMS 2000
Payment terms	50% down payment by W/T 50% by W/T before delivery and after inspection
Delivery time	90 days from the date of receiving the down payment
Packaging	Wood pallet covered by plastic film
Warranty period	13 months from the date of the bill of lading



1.5 Flow line picture



1.6 Machinery list and unit prices:

No.	Machine	Qty.	Unit Price (USD)			
1	ZJF700 material feeder	1 set				
2	BRP110/28 parallel twin-screw extruder & electrical panel	1 set				
3	Pipe Dies and All Tooling	2 sets				
4	Vacuum Calibration tank	1 set				
5	Spraying cooling tank	1 set				
6	Haul-off (six claw)	1 set				
7	Planetary cutter	1 set				
8	Tilt Table	1 set				
Total	price EX Works INCOTERMS 2000					
	d transportation cost to Shanghai port (2×40'GP+1×20'GP ainer)					
Pack	Packaging cost					
Total	amount FOB Shanghai INCOTERMS 2000		\$403,325.00			

Remarks:

Beier Machinery will set-up and trial the pipe extrusion line in their facility for customer acceptance, before shipment. All material costs for the trial are the responsibility of the customer.



2. Technical data

2.1 10"-24" PVC pipe production line

No.	Name	Photo of machine	Technical specifications		
1	ZJF700 feeder		Rated transmission capacity: 1000kg/h		
		Motor power: 2.75 KW			
		Spring diameter: Φ59			
		Material: Stainless steel			
		Screw:	Melt capacity: 850 kg/h		
		Diameter parallel:110 mm			
		Material of the screws: 38CrMoAIA, treatment by alloy process			
		L/D: 28:1			
	BRP110/28	Capacity: 800 kg/h			
	parallel	Surface treatment: Nitride with thickness: 0.5 ~	• 0,7mm, hardness: HV740~940,		
2	twin-screw	Polished			
	extruder	Screw speed (counter rotating): 1-38 rpm			
		Barrel:			
		Inner processing: Nitride with thickness: 0.5 ~ Heating zones: 6	0.7mm, hardness≥HV740~940		
		Heating mode: Cast Aluminum heater covered	with stainless steel		
		Heating power: 46.5KW			
		Range of temperature control: 50~300 $^\circ\!\!\!\!\!^\circ$			
		Cooling mode: Blower 3 Sets*0.37kw			
		Gear box:			
		Material: 20CrMoTi			
		Drive motor:			
		Motor power: AC 90 Kw			
	Dosing feeding system:				



		Material of hopper: stainless steel		
		Motor: 0.75Kw		
		Feeding sleeve with water recirculation cooling system		
		Vacuum dehumidifying system:		
		Vacuum pump: 1 set		
		Power: 1.5kw		
		Vacuum degree = 0 ~ 0.075 Mpa		
		Thermostat:		
		Heating power: 6kw		
		Range of temperature control: 50~300°C		
		Motor power: 0.75kw		
		Work pressure: ≤0.2 Mpa		
		Adaptor: (Interflow Section):		
		Material: #40 steel Chrome plated, inner convergent flow type		
		Connection method with the die: Clamping block and bolt		
		Melt pressure sensors and thermocouples		
		Main electrical suppliers:		
		Extruder and the extrusion line control: Siemens PLC S7-200 with a 10.4"		
		touch screen.		
		Inverter: Hitachi, ABB or Schneider		
		Contactor: Siemens		
		Air Switch: Schneider		
		Relay: Omron		
		Self protection system:		
		Over current protection of the motor		
		Over pressure protection of the screws		
3	Pipe Dies	Including calibration sleeves		
		Material:		
		Made from 40Cr.		
		Inner surface polished		
		Diameter specifications & wall thicknesses: As per the "Pipe specifications		
		and size list"		



		Heating:		
		Quantity of heating zones: 30		
		Heating power:120KW		
		Vacuum system Water spray system Adjustment & carriage movement system		
		Dimensions:		
		Length: 5600mm		
		Two chambers		
		Vacuum pump:		
		Power: 4 KW×2		
	Vacuum	Water pump:		
4	calibration	Power: 5.5KW×2		
	tank	Three directions adjustment:		
		Forward and Backward movement: 1.5KW motor		
		Range: ±400mm		
		Up and down: left and right manually adjusted		
		Range: Up and Down: ±50mm		
		Left and right movement: ±50mm		
		Tank material: Stainless steel		
		Tank cover material: Duralumin		
		Seal: silica gel anti-friction panel and Q235 galvanized panel		
		Inner pipe support: Nylon wheels		
		Water temperature and level control: Controlled electronically and with		
		stainless steel ball floats		
		Vacuum gauge: 0.03-0.06Mpa		
5	Spray cooling tank	Spray nozzles: ABS		



		Dimensions:		
		Length: 5600mm		
		Water pump:		
		Power: 5.5 KW		
		Direction adjustment: Up and down, left and right manually adjusted		
		Up and Down, Range: ±50mm		
		Left and Right movement: ±50mm		
		Seal: silica gel anti-friction panel and Q235 galvanized panel		
		Inner pipe support: Nylon wheels		
		Water temperature and level control: Controlled electronically and with		
		stainless steel ball floats		
		Spray nozzles: ABS		
		Six claw		
6	Haul off (6 claws)	Motor:1.1×6 KW		
		Claw length:: 2200mm		
		Claw width: 80mm		
		Maximum haul off speed: 1.2m/min		
		Maximum traction force:45000N		
		Pneumatic clamping: with anti-friction rubber blocks		
		Electrical components:		
		Inverter: Hitachi or ABB		
		Low voltage electrical parts: LG or Schneider		
		Length detecting: by encoder		
7	Planetary Cutter	Scrap collecting with independent control system		
		Cutting method: planetary cutter		



		Diameter of the saw: 230mm		
		Cutting motor: 5.5KW		
		Rotating motor: 2.2KW		
		Cutting saw: steel alloy.		
		Duralumin clamping for accurate and repeatable cutting		
		Dust collection motor power 1.5KW		
		With chamfering function		
		Electrical components:		
		Low voltage electric parts: Schneider or LG		
		PLC control: Siemens		
8	Tip Table		Discharge: Pneumatic	
		Length: 5,000mm		

2.2 Spare parts list (free of charge)

No.	Name	Qty.	Application
1	Thermocouples	3 pcs	Extruder
2	Rubber blocks	15 pcs	Haul-off
3	Sealing gasket	10 m	
4	Sprayers	15 pcs	Vacuum tank and spray cooling tank
5	Small contactors	2 pcs	
6	Buttons and switches	2 pcs	Electrical cabinet
7	Relays	2 pcs	

2.3 Spare part list (not included in quotation)

No.	Spare part	Qty.	Application
1	Screws and barrel	1set	Extruder
2	Complete set of barrel heaters	1set	Barrel

2.4 Auxiliary equipment (optional equipments)

No.	Spare part	Qty.	Application
1	High Intensity Mixer	1set	Blending material compound
2	Printer	1set	Printing characters



3. After-sales service

3.1 Technical documents

All labels on machines and lay-out drawings, electrical diagrams and user manuals, will be in English.

3.2. Arrangement for inspection, installation and testing

a. After all the ordered equipment has been delivered to the customer's factory; the Buyer is responsible for all preparation work, e.g. electrical supply, water supply, labor and cranes, etc.

b. BEIER will prepare visa applications for their engineers, who are responsible for the supervision of the machine installation and testing at the Buyer's factory.

c. The Buyer will buy a round-trip air ticket for the engineers, if the visa application is approved. The buyer is also responsible to bear expenses generated, e.g. visa formalities, meals, accommodation and an allowance of USD125.00 per day for each engineer.

d. Engineers will give free training to personnel in the buyer's factory.

e. If the buyer does not request installation and commissioning by the Seller's engineers within four months from the date of the bill of lading, it will be taken that all the supplied equipment has been successfully tested by the buyer.

3.3. Quantity and quality guarantee

a. Quantity/Quality Discrepancy to destination port during transportation:

In case of quality/quantity discrepancies to the destination port the customer should file claims within 30 days from the arrival of the goods at their destination. The insurance company and the shipping company will be responsible for any discrepancies or product damage caused by the shipping company or other transportation organizations.

b. Guarantee period and after-sales services: 13 months from the date of the bill of lading.

During this guarantee period, BEIER will provide spare parts at no charge in cases of quality discrepancy caused by us. If the malfunctions are caused by incorrect operation of the equipment, BEIER will provide the buyer spare parts at cost price.

c. Long-term service:

BEIER will charge the buyer cost price of spare parts beyond one year and provide long-term technical guidance.

3.4. Validity: Three months from the quotation date.

Kind Regards,