Business Opportunity for Establishing Large Diameter Solid Wall HDPE Pipe Manufacturing Plants in Australia [PDF]

By PPN Editor

Introduction

Large-diameter HDPE pipe manufacturing represents a lucrative business opportunity, offering untapped potential for agile manufacturers. This niche market has significant potential due to the unique properties of large diameter HDPE pipes and the growing demand for large-scale mining and infrastructure projects particularly in the North of Australia.

This article teaches how to set-up large-diameter HDPE pipe manufacturing plants with limited capital expenditure (as little as USD500K). Even multiple sites can be established on a budget and with access to grant specialists the operation can almost entirely be funded by government grants.

The production of large diameter HDPE pipes presents a valuable business prospect for several reasons:

Limited Competition: Few manufacturers have the capability to produce HDPE pipes in large diameters especially in Northern Australia, creating a market with less competition and potentially higher profit margins.

Growing Demand: There is an increasing need for large diameter pipes in various applications, including:

- Wastewater treatment plants
- Storm water management
- Mine Dewatering
- Irrigation systems
- Coastal projects and marine outfalls

Transportation and Installation Benefits:

One of the most significant advantages of large diameter HDPE pipes is their unique transportation capabilities by water transportation.

Water Transportation: Large HDPE pipes can be floated on water in long lengths, which offers several benefits:

- Reduced road transport costs
- Minimized environmental impact from trucking
- Ability to transport longer pipe sections

Reduced On-Site Welding: Longer pipe sections mean fewer joints and less on-site welding, leading to:

- Faster installation times
- Lower labor costs
- Reduced potential for leaks at joints

Resin Sourcing and Procurement

For economic reasons it is critical to select quality PE100 resin from an Asian supplier in Thailand, South Korea or Taiwan rather than from the USA or Europe. The key here is to ensure the PE100 is approved for use of high-pressure PE pipe in the region of manufacturer and sale for example in Australia. The recommended specific grades of PE100 resin and their respective suppliers are listed in the table below. One can craft multiple emails by AI for enquiries to these suppliers to get the best pricing for the resin and to request for discounts and special pricing for bulk orders.

MANUFACTURER	MANUFACTURING SITE	MATERIAL
scgc	Rayong, Thailand Rayong, Thailand Rayong, Thailand	SCGC HDPE H1000PC SCGC HDPE H1000PBL Blue SCGC HDPE H112PC
Formosa Plastic Corporation	Kaohsiung, Taiwan	Taisox 8001BL (Black)
Hanwha TotalEnergies Petrochemical Co., Ltd.	Republic of Korea	XS10B (Black) XLS10B
PTT Global Chemical Public	Rayong, Thailand	HD8100 MB (Black)
IRPC Public Company Limited	Rayong, Thailand	P901BK
KPIC	Ulsan, South Korea	P600 BL

Verify Supplier Credentials

- Ensure the supplier is reputable and their PE100 resin is approved for use in high-pressure applications in your region.
- Check for relevant certifications and compliance with standards like AS/NZS
 4131 for Australia and New Zealand

Quality Assurance

- Request detailed PE100 resin material specifications and test reports.
- Consider independent third-party testing by NATA Accredited Polymer Testing Laboratories to verify material properties such as ExcelPlas Polymer Labs in Melbourne, Australia.

https://www.excelplas.com/

Local Regulations

- Familiarize yourself with local requirements for PE100 resin in high-pressure pipe applications.
- Consult with industry associations like PIPA (Plastics Industry Pipe Association of Australia) for guidance

Market-Specific Requirements

• Be aware of specific requirements in your target markets. For example, the Water Corporation in Australia requires PE100 HSCR (High Stress Crack Resistant) resin for certain applications.

Evaluate Multiple Resin Suppliers

- Compare offerings from various reputable suppliers, both domestic and international.
- Consider factors beyond price, such as consistency of supply, technical support, and track record.

Bulk Order Negotiations

When approaching suppliers for bulk orders, focus on:

- 1. Volume discounts
- 2. Delivery schedules
- 3. Quality guarantees
- 4. Technical support

Remember, the goal is to source high-quality PE100 resin that meets all safety and performance standards, ensuring the integrity and longevity of the piping systems you produce.

Manufacturing Considerations

To enter this market, manufacturers need to consider that specialized HDPE extrusion equipment is required to produce large diameter (1200 mm OD) HDPE pipes can normally be a significant upfront cost if purchased from European or North American vendors. However Asian manufacturers such as YILI Machinery can offer quality HDPE pipe extrusion equipment at a multiple of up to 10 times less in terms of capital expenditure (see offer attached as Annex A). Such a HDPE pipe extrusion line was recently purchase by Inkulu Pipelines.

Manufacturing large diameter HDPE pipes offers a promising business opportunity with significant market potential, especially for coastal and marine applications and remote mining operations. The unique properties of HDPE, combined with the transportation and installation benefits, make these pipes an attractive solution for many large-scale infrastructure projects.

Proposed Locations with Proximity to Mining Operations

Strategic Location #1 – Port Hedland (WA)

Port Hedland is located in the heart of the Pilbara region of Western Australia, which is home to numerous large-scale mining operations. The Iron Bridge Magnetite Mine, one of the largest and most sophisticated magnetite mining sites in Australia, is located near Port Hedland. This proximity would allow for easier and more cost-effective transportation of plastic pipes to mining sites.

Existing Infrastructure:

Port Hedland already has significant infrastructure in place to support mining operations:

- It serves as a major port for exporting minerals from the Pilbara region.
- There are existing transportation networks connecting Port Hedland to mining sites.
- The town has experience supporting large-scale industrial projects.



Demand for HDPE Piping Solutions in the Pilbara Region

The mining industry in the Pilbara region has a high demand for various types of piping:

- Dewatering pipelines: Cape, through its Aboriginal KCU JV, has been installing approximately 100 kilometres of dewatering pipelines annually for Fortescue in the region
- Water distribution: Major mining companies like BHP have undertaken significant water pipeline projects in the area.

By establishing a plant in Port Hedland, the business would be well-positioned to meet the diverse piping needs of the mining industry in the Pilbara region, while benefiting from existing infrastructure and proximity to major clients as shown in the graphic below.



Strategic Location #2 Mackay (QLD)

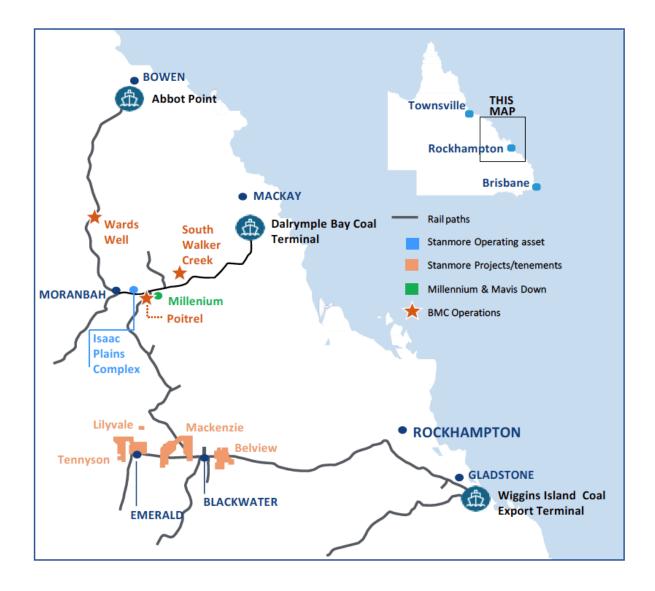
Establishing a HDPE pipe manufacturing plant close to Mackay would be advantageous due to its proximity to the coal mining region. This would reduce transportation costs and improve supply chain efficiency for servicing the mines.

Mackay offers well-developed infrastructure that could support a HDPE pipe manufacturing facility:

- It has a major port, which could be useful for receiving raw materials and potentially exporting finished products.
- The region has good road networks connecting to mining areas (see map below).

Mackay and surrounding areas have a population familiar with industrial and mining-related work, potentially providing a skilled workforce for the manufacturing plant.

Paget Industrial Area: This is an established industrial precinct in Mackay that could be suitable for a manufacturing facility.



Key strategic considerations for these locations include:

- 1. Access to raw material suppliers (PE resin imports)
- 2. Access to major transportation networks for distribution
- 3. Closeness to key markets (mining, agriculture, water management, construction)
- 4. Availability of skilled labour and technical expertise
- 5. Supportive local infrastructure and utilities
- 6. Potential for expansion and future growth

By establishing manufacturing facilities in these strategic locations, a company could effectively cover the major markets across Australia while minimizing transportation costs and maximizing market reach for large diameter PE pipes.

Sea Transport

By strategically locating the pipe extrusion facility near the coast such as in Port Hedland or Mackay the company can take advantage of sea-transport of long HDPE pipes thus avoiding costing road transport. An added advantage is that the HDPE pipe can be shipped in long-lengths thus reducing on site welding.

Hence locating pipe extrusion facilities near coastal areas allows for sea transport of large diameter HDPE pipes, which provides significant advantages:

- Reduced transportation costs: Shipping by sea is generally more cost-effective than road transport for long distances, especially for bulky items like large diameter HDPE Pipes
- Longer pipe lengths: Sea transport enables shipping of much longer continuous pipe sections compared to road transport. This reduces the number of on-site welds required during installation, saving time and improving overall system integrity.



Use of Government Grants

What if you didn't have to spend your own money on setting up a HDPE pipe manufacturing plant or multiple plants?

There are numerous government grants available to support plastic pipe manufacturing however knowing how to access and secure these grants requires specific and specialized knowledge. The Australian company **GrantHelp** cofounded by Trent Scheirs has an excellent track record securing Government Grants for a wide numbers of manufacturers including plastic pipe producers. See https://www.granthelp.com.au/about-us

For example the use of government grants of AUD550K can allow a potential HDPE pipe manufacturer to purchase a turnkey full-scale 1200 mm OD HDPE Pipe Extrusion Line (see budget quote in Annex A).

The Australian manufacturing sector, particularly plastic pipe production, has significant opportunities for growth and innovation through government grants. However, navigating the complex landscape of grant applications and securing funding can be challenging. This is where Grant Help comes in to assist manufacturers in accessing these valuable grants.

Grant Help has achieved remarkable results for its clients:

- Secured \$2.2 million for an agritech company through the Modern Manufacturing Initiative
- Obtained \$1.9 million for a recycling plant via the Queensland Recycling Modernisation Fund
- Helped a software company secure \$800,000 for international expansion With over 700 happy clients, Grant Help has demonstrated its ability to secure funding across various sectors.

Hiring Extruder Operators

Once you have installed your HDPE Pipe Manufacturing Line you will have to hire extruder operators.

Extruding pipe to precise measurements and quality standards requires attention to detail and monitoring skills. For the process to run well, it needs to start well. Once the process is underway it is about minimising downtime by making adjustments when required and rectifying problems at the root cause, and not generating scrap.

The following template can be used for employment ads.

What will you do?

- Operate the material handling and blend systems, extrusion lines and downstream equipment to established conditions and ensure pipe is packed to required standards and specifications
- Monitor and maintain the quality of pipe throughout manufacturing process
- Continuously strive to achieve targets related to the production of pipe to meet business needs in a safe and efficient manner
- Work as part of a team to create a culture of collaboration and embed recognised best practice and continuous improvement from across the manufacturing industry
- Work positively and proactively with other functions across the site, supporting an integrated and engaged operational workplace

Ideally You Will Have Previous Experience Controlling a Process Or Operating Machinery In a Manufacturing Environment Where Safety Is Paramount. Along With That You Will Need To Be Able To Demonstrate

- Know-how and understanding of quality control, safe work practices, manual handling, and workplace procedures
- Mechanical aptitude and an ability to use hand tools
- A strong work ethic with reliability and commitment
- An ability and willingness to work a 7-day 24-hour roster in a fast-paced environment

Promoting and Marketing Your HDPE Pipes

To promote and market your large diameter HDPE pipes to potential customers and to gain fast credibility in the market it is recommended that full page ads be placed in *The Australian Pipeliner* magazine.

The Australian Pipeliner reaches installers, contractors, and water authorities and mines in the PE pipe space who are potential customers this rapidly growing corner of the market.

Placing full-page advertisements in The Australian Pipeliner magazine can significantly enhance visibility among key stakeholders. This publication reaches manufacturers, contractors, water authorities, and mining companies, all of whom are potential customers in the growing HDPE pipe market.

To book ads in The Australian Pipeliner contact:

Jake Niehus, Business development manager,

jacob.niehus@primecreative.com.au M. 0466-929-675

The costs associated with advertising can be offset through available government grants. Contact Trent Scheirs from GrantHelp to learn how to access these specific grants. His email is trent@granthelp.com.au

Participating in industry conferences and trade shows can provide networking opportunities with potential clients and partners. Demonstrating the benefits of HDPE pipes through case studies or product displays can further establish credibility. By utilizing targeted advertising, leveraging funding opportunities, and engaging with industry stakeholders, your marketing efforts for large diameter HDPE pipes can effectively reach potential customers and establish a strong market presence.

Further Information Available on Request

Manufacturing Operations:

- Product Description and Insights
- Detailed Process Flow
- Identification of Unit Operations Involved
- Mass Balance Analysis and Raw Material Requirements
- Quality Control

Project Requirements, Details, and Costs:

- Site Development, Location, and Land Requirements
- Plant Layout
- Machinery Requirements and Associated Costs
- Raw Material Requirements and Associated Costs
- Packaging Requirements and Associated Costs
- Transportation Requirements and Associated Costs
- Utility Requirements and Associated Costs
- Manpower Requirements and Associated Costs

Project Financial Analysis:

- Capital Investments Analysis
- Operating Costs Analysis
- Expenditure Projections Analysis
- Revenue Projections Analysis
- Taxation and Depreciation Analysis
- Profit Projections Analysis
- Comprehensive Financial Analysis



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OFFER

Date: 2024-10-28

REFERENCE NO. YL20241028D







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Machine list and price sheet:

Item	Description	Qty	UNIT PRICE (USD)
1	PEG1200 HDPE PIPE PRODUCTION LINE	1 set	445,000
Total EX-works price:			445,000
Inland	Inland charge (Shipment takes SIX 40-feet HQ and ONE 40-feet FR		
containers)			7,000
Total Price FOB SHANGHAI			<mark>452,000</mark>

PEG1200 HDPE PIPE PRODUCTION LINE 1SET

A. Material: PE100

B. Pipe range: φ710mm-φ1200mm

B. Pipe pressure grade: SDR17, SDR11

C. Extrusion capacity: 1300kg/hr

D. Circumstance condition

Working place: Indoor

Power source: No dangerous area

3. Humidity: 85% no condensation

4. Temperature: 0~40°C

E. Condition use



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1. Power source: Motor drive : 3phase 400V ± 10% 50HZ

2. Heating control system: single phase 230V + 10% 50HZ

3. Cooling water: $\leq 15^{\circ}\text{C}$ 0.15-0.2MPa $\sim 15\text{m}^3/\text{Hr}$

4. Compressor air: ≥ 0.6 Mpa ~ 0.6 m³/min

Machine list and Price Sheet:

ltem	Description	Qty	Unit price (USD)	Amount (USD)
1	Mixscan 60L Gravimetric Feeder	1 set	8,000	8,000
2	SHD400E Hopper dryer (SHINI)	1 set	1,500	1,500
3	SAL-10HP-UG Vacuum Loader (SHINI)	1 set	2,000	2,000
4	SJ-120/38 High efficiency Single screw extruder	1 set	82,000	82,000
5	SJ25/25 Single Screw Extruder	1 set	3,000	3,000
6	HDPE pipe Mould φ500-φ1200mm	1 set	150,000	150,000
7	SJGFD1200A Vacuum tank 1	1 set	15,500	15,500
8	SJGFD1200B Vacuum tank 2	1 set	70,000	70,000
9	SJGFS1200 Water Cooling tank	3 sets	15,000	45,000
10	GFQY1200L Ten belt Haul-off	1 set	53,000	53,000
11	GFQG1000 No-dust cutter	1 set	37,000	37,000
12	GFDF1000 Roller type Stacker	2 sets	3,000	6,000



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1	16	PLC control system (Siemens) 1 set / /		/	
	Total Ex-works PRICE: USD 473		473,000		
		PRICE AFTER DISCOUNT:	Ex-works:	USD	445,000

Main Technical Data:

1. Mix	1. Mixscan60L Gravimetric Feeder 1 set		
1	Power supply	AC230V/50HZ	
2	Power consumption	about 60W	
3	Sensor range	10, 20, 30kg	
4	Sensor power supply	DC10V 350mA (MAX)	
5	Input impedance	10ΜΩ	
6	Zero point adjustment range	0.2 ~ 20mV	
7	Input sensitivity	0.5uV/d	
8	Maximum display accuracy	1/10000	
9	Control method	extruder control or traction control	
10	Hopper volume	60L	
11	Gravity automatic feeding device	1 set	
12	Extruder	United States	
	weighing/control/communication	Working voltage: DC24V	
	module Control chip	Power consumption: about 15w	



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13	Gravity sensor Measuring range:	Protection level: IP65
	20-50kg	Working voltage: DC10V 350mA (MAX)
14	Rotary encoder device	Working voltage: DC 12-24V 80mA
		Protection grade IP65
		Pulse range: 1000-3600





2. SHD400E Hopper dryer (SHINI) 1 set		SHINI) 1 set
1	Drying method	Hot air drying
2	Fan Power	0.45Kw
3	Heating Power	18Kw
4	Material capacity	400kg
5	Hopper size	1933mm*1339mm*893mm (H*W*D)



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3. SA	3. SAL-10HP-UG Vacuum Loader (SHINI) 1 set		
1	Main motor	7.5KW	
2	Main unit dimension	2020*720*840mm (H*W*D)	
3	Main unit weight	160Kg	
4	Hopper capacity	36L	
5	Conveying pipe dia.	2 inches	
6	Conveying capacity	1600kg/hr	



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4. SJ	4. SJ-120/38 High efficiency Single screw extruder 1 set		
1	Model	SJ120/38	
2	Screw Diameter	120mm	
3	L/D	38:1	
4	Material of Screw	38CrMoAl A (Nitriding processed)	
5	Thickness	≥ 0.6mm	
6	Material of barrel	38CrMoAl A (Nitriding processed)	
7	Thickness	≥ 0.6mm	
8	Motor power	400Kw	
9	Drive	AC Motor with DELTA/INVT Inverter	
10	Heating zone	11.5KW×5+10.8KW×1	
11	Heating mode	Ceramic heater	
12	Cooling way	by air	
13	Cooling fan	0.55KW×8	
14	Feeding part cooling	Forced water cooling	
15	Gearbox	With high force-pushing bearing, High torque output	



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		Hard surface gear wheel
16	Extrusion capacity	max 1350Kg/hr (PE)



5. SJ	5. SJ25/25 Single Screw Extruder 1 set		
1	Screw diameter	φ25	
2	Screw L/D	25:1	
3	Screw and Barrel material	38CrMoAl	
4	Reducer casing	hard gear surface (Sino-Germany joint venture)	
5	Main motor	0.75 kw frequency conversion	
6	Heating mode	cast-aluminum heating loop	
7	Heating zone	1.1KW×2	



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6. HDI	5. HDPE pipe Mould φ630-φ1200mm 1 set		
1	Model	Φ710mm-φ1200mm	
2	Specification	710mm, 800mm, 900mm,1000mm,1200mm	
3	Pressure grade	SDR17,SDR11	
4	Bushing	5 pcs	
5	Pin	7pcs	
6	Calibration sleeve	5 pcs, copper	
7	Mould support Trolley	1 set (Mechanism control)	
8	Die head	Spiral type	

Function and Structure:

For HDPE pressure pipes





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7. Vacuum Calibration Tank Model SJGFD1200A		1 set
1	Vacuum tank	Full vacuum spray
2.	Vacuum tank length	1500mm
3.	Pipe diameter	Φ710mm-φ1200mm
4.	Vacuum pump quantities	2 sets
5.	Vacuum pump power	7.5Kw+7.5KW
6.	Water pump quantities	2 sets
7.	Water pump power	7.5Kw×2 sets
8.	Pipeline installation	Two in and two out
9.	Movable motor power	Hydraulic transmission 0.75Kw
10.	Moving way	Rack moving
11.	Moving range (fore and back)	±600mm
12.	Moving range (up and down)	± 50mm
13.	Moving range (left and right)	± 30mm
14.	Center height	1500mm
15.	Tank material	Stainless steel 304
16	Stainless steel thickness	7mm
17	Tank cover material	Al cast
18	Eye view window	1
19.	Cooling type	spray



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20.	Cooling medium	Cooling water
21.	Spraying pipes	14 pieces stainless steel pipe
22.	nozzle	About 350pcs
23.	Specification of nozzle	New type
24	Vacuum pump air and water separator	2 pcs
25	Water tank filtering device	With
26	Flowmeter	With
28	Cycled water filter	2 pcs
29.	Splint type	Half-way splint
30.	Splint material	Nylon
31.	Water-level controlling way	Floating ball and angle seat valve
32.	Water inlet diameter	2"
33.	Water outlet diameter	1.5"
34.	Vacuum tank shape	Round
35.	No. of Vacuum calibration chambers	1

Function and Structure:

There are vacuum system and water system for calibrating and cooling in this vacuum tank. The water is used inside the tank by cycle and can be controlled for its temperature and level. Many nozzles spray water inside the tank like into fog, which ensure good cooling for pipes. Also inside the vacuum tank, there's U type Calibration plate.



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There also install the portrait movable device and manual device to control right-left, high-low in the vacuum calibration tank.

The vacuum calibration tank consist the following parts: machine shelf, vacuum tank, operation platform, fore and back adjusting device, right and left adjusting device, height adjusting device, vacuum system and water pump system.

8. Vacu	um Calibration Tank Model SJGFD1200B	1 set
1.	Vacuum tank	Full vacuum spray
2.	Vacuum tank length	10000mm
3.	Pipe diameter	Φ710mm-φ1200mm
4.	Vacuum pump quantities	3 sets
5.	Vacuum pump power	7.5Kw×3 sets
7.	Water pump quantities	4 sets
8.	Water pump power	7.5Kw×4 sets
	Water pump seal	Mechanical seal
9.	Pipeline installation	Two in and two out
	Movement of two vacuum tanks	Synchronous movement
10.	Moving way	Hydraulic tank
	Hydraulic tank motion	1200mm
	Forward and backward motor	2.2Kw
12.	Moving range (up and down)	± 50mm



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13.	Moving range (left and right)	± 50mm
14.	Center height	1500mm
15.	Tank material	Stainless steel 304
	Stainless steel thickness	7mm
	Tank cover material	Al cast
	Eye view window	4
17.	Cooling type	spray
18.	Cooling medium	Cooling water
19.	Spraying pipes	14 pieces stainless steel pipe
20.	nozzle	About 1000 pcs
21.	Specification of nozzle	New type
	Vacuum pump air and water separator	2 pcs
	Water tank filtering device	With
	Cycled water filter	4 pcs
22.	Splint type	Half-way splint
23.	Splint material	Nylon
24.	Water-level controlling way	Floating ball
25.	Water inlet diameter	2"
26.	Water outlet diameter	1.5"
27.	Vacuum tank shape	polygon



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28. No. of Vacuum calibration chambers 2

Function and Structure:

There are vacuum system and water system for calibrating and cooling in this vacuum tank.

The water is used inside the tank by cycle and can be controlled for its temperature and level.

Many nozzles spray water inside the tank like into fog, which ensure good cooling for pipes.

Also inside the vacuum tank, there's U type Calibration plate.

There also install the portrait movable device and manual device to control right-left, high-low in the vacuum calibration tank.

The vacuum calibration tank consist the following parts: machine shelf, vacuum tank, operation platform, fore and back adjusting device, right and left adjusting device, height adjusting device, vacuum system and water pump system.





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9. Water	Cooling tank Model SJGFS1200	3 sets	
1	Cooling tank length	5800mm	
2.	Pipe diameter	Φ710mm-φ1200mm	
3.	Water pump quantities	2 sets	
4.	Water pump power	7.5Kw× 2 sets	
5.	Water pump sealer	Mechanical sealer	
6.	Center height	1500mm± 50mm	
7.	Tank material	Stainless steel 304	
8.	Tank cover material	Al cast ZL102	
	sealer	"U" type anti-high	
		temperature	
	Sealing plate	silica gel plate	
	Plate thickness	3mm	
9.	Cooling type	spray	
10.	Cooling medium	Cooling water	
11.	Spraying pipes	12 pieces stainless steel pipe	
12.	nozzle	Around 320	
13	Sealing device	Profile window	
14.	Water inlet diameter	1.5"	
15.	Water outlet diameter	2"	



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16. Cooling tank shape With curtain

Function and Structure:

There are water pump system for cooling pipe inside water cooling tank. The water is used inside the tank by cycle and can be controlled for its temperature and level.

All of the elements in the tank are anti-rust. The recycled water is through filter.



10. Haul	off Unit Model GFQY1200L	1 set	
1	Haul-off type	Ten-arm	



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2.	Haul-off pedrail	Supporting blocks
3.	Pipe diameter	Φ710mm-φ1200mm
4.	Center height	1500mm± 50mm
5.	Driving motor power	0.55Kw*10
6	Haul-off Speed	0.04-0.4m/min
7	Compaction type	Pneumatic compaction and adjustment
8	Number of cylinder	10 pcs
9	Cylinder size	∮140×60mm
10	Effective length	≥3000mm
11	Chain distance	Double rank, P25.4
12	Remove and install clamping block	Bolt
13	Length calculation	Omron rotary coder
14	Adjusting	Transducer
15	Main electric elements	FUJI, Schneider, Siemens

Function and Structure:

The function of this machine is to provide the haul-off force and speed for the pipe which comes out from die head and has initial shape and size, then pull out the pipe stably and adjust the pipe wall thickness by controlling the haul-off speed.

To adjust the pedrail use mechanical way and installed with pneumatic pressing device, controlled by PLC.



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11. No (lust cutter Unit Model GFQG1200	1 set
1	Cutting Power	11KW
2	Cutting range	Φ710mm-φ1200mm
3	Cutting speed	1 m/min
4	Max cutting thickness	100mm
5	Cutting knife	Dagger knife
6	Cutting knife material	SKD11
7	Center height	1500mm± 50mm



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8	Cutting method	Blade cutting, manual/ Auto
9	Main electric elements	Schneider, Siemens

Function and Structure:

GFQG1200 no dust cutter is one large-scale cutter and have complete cutting character. Not only used for cutting the large diameter PE pipe, but also the elliptical hard pipes. It has high cutting precision, easily operation, low noise and safety reliable.



12. GFDF	1200 Roller type Stacker	2 sets
1	Length	7500mm
2	Control method	Controlled by PLC in cutter
3	Discharge way	Pneumatic



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Commercial items

- 1) **Price:** basis of FOB Shanghai defined in accordance with the provisions of the International Rules for the Interpretation of the International Commercial Terms (INCOTERMS) 2000.
- 2) Delivery Time: 100 days after receipt of down-payment, clarification of all technical and commercial items.
- 3) Packaging: painted with anti-corrosion oil, and covered with plastic film, then packed in wood box. Fumigation cost is on Buyer's side, if any.
- 4) **Terms of Payment:** 30% of total price as down-payment by T/T, 70% of total price shall be paid before delivery by T/T.
- 5) **Quotation Valid:** 30 days from the date of this offer.



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6) **Warranty:** 12 months is from the date of commissioning, or at the latest, 18 months from delivery.

- 7) **Documentation:** basic engineering layout will be delivered within 10 days after received down payment by Seller. 2 sets of operation manuals in English languages will be delivered with equipment.
- 8) **Commissioning:** The seller will send 2 engineers to Buyer's site for direction of installation and commissioning. The Buyer is responsible for mentioned engineers' round tickets (shanghai to Buyer's city), lodging, food and local transport and USD150 per day per person salary. The Buyer shall send the invitation accordingly, if any.