BESTON
RECYCLING FOR BETTER LIFE

Waste Plastic Pyrolysis

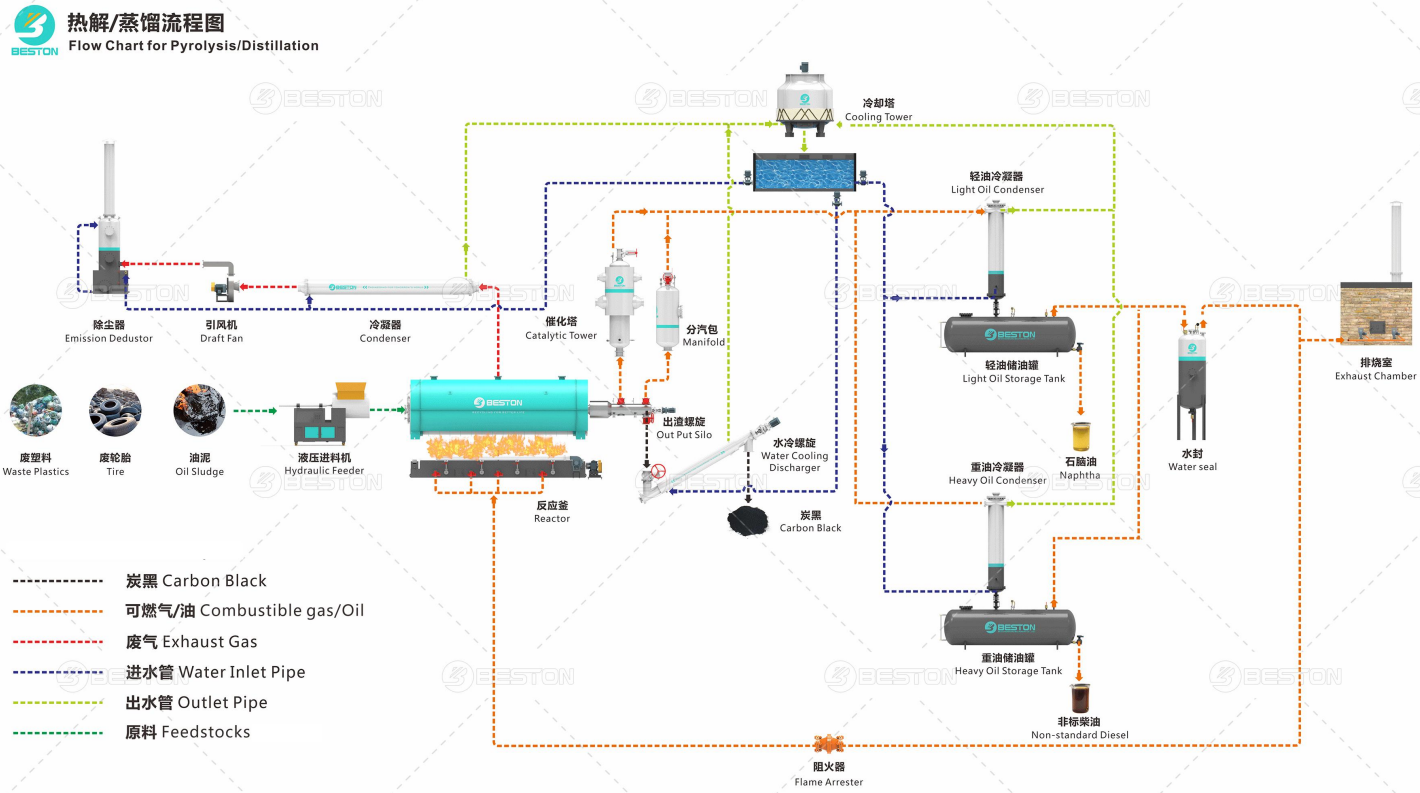
BLJ-20 Batch Plant Brochure

BESTON GROUP CO., LTD.

3D Image

BLJ-20 BATCH PYROLYSIS PLANT

3D Layout & Work Flow



01 Raw Material Pre-Treatment

Waste tires, plastics, oil sludge, and other materials are crushed and cleaned as required, then fed into the system via spiral or hydraulic methods, reducing labor costs.

02 Reactor Heating

The raw materials are first preheated with natural gas/diesel/heavy oil, then the combustible gas generated during heating is used to supply heat to the main reactor. The pyrolysis process occurs under anaerobic conditions at temperatures below 500 °C.

03 Fraction Cutting

During the heating process of the pyrolysis furnace, when the temperature is below 200°C, the corresponding valve opens to collect light oil. When the temperature exceeds 200°C, the corresponding valve pipeline opens while the light oil pipeline closes to collect heavy oil.

04 Pyrolysis Product Processing

High-temperature pyrolysis oil and gas are condensed into fuel oil for storage, while non-condensable gases are partly reused as fuel or flared. Flue gas is treated with SCR desulfurization and denitrification to meet emission standards.

Three Core Values Of BLJ-20

High-quality Oil Products

Naphtha + Non-standard diesel

Integrated pyrolysis & distillation technology

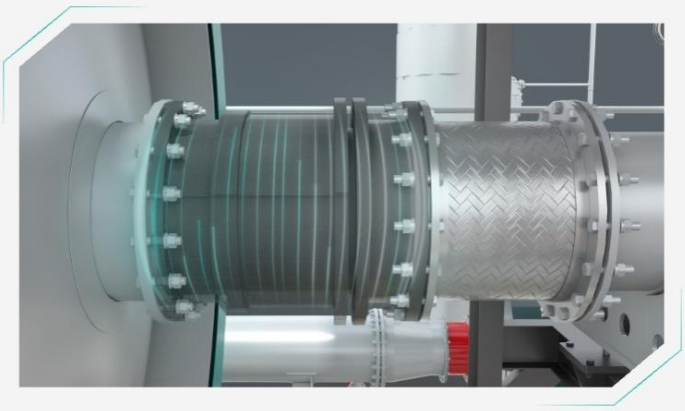
- Increase added value of oil products
- Save distillation investment
- Reduce energy consumption & costs

High Processing Capacity

Increased by 50%, bring higher production efficiency

Large capacity design of furnace (φ2800*10000)

- Waste plastic ↑ 12-13 tons/day
- Waste tires ↑ 18-20 tons/day
- Oil sludge ↑ 20-25 tons/day



High safety factor

Significantly improve operational comfort and safety

Safety valve + bursting disc protection technology

- Dynamic sealing & heat insulation
- Eliminate oil, gas leaks & open flames
- Reduce thermal hazards

Parameters

Model	BLJ-20
Manufacturer	BESTON
Time to Market	2025
Motor Brand	Chinese brand
Suitable Raw Materials	Waste plastics; Tires; Oil sludge
Input Capacity (Max.)	Waste plastic pellets: 12-13t/d Tire: 18-20t/d Oil sludge:20-25t/d
Working Method	Batch
Final Oil Quality	Pyrolysis oil, Non-standard diesel and naphtha
Reactor Material	Q345R Boiler steel and 304/316L/310S Stainless steel
Reactor Life Span (Years)	Q345R Boiler steel 2-3 304/316L Stainless steel 5-8 310S Stainless steel 8-10
Guarantee (Months)	12
Delivery Time (Calendar Days)	60
Land Space Required (L*W*H*m)	40*13*8
Packing	1*40FR+4*40HQ
Installation Period (Calendar Days)	45

Plastic Pyrolysis Solution ROI Report

Cost Category	Cost Description	Unit	QNT/T	Unit Price ($)	Cycle (days)	Cost($)
Fixed cost	Benchmark electricity cost			0.1	25	**$175**
	pyrolysis production electricity cost (kWh)	℃	2300	0.1	25	**$5,520.00**
	Maintainance fee				25	**$285.71**
	Salary				30	**$3,685.71**
	Management fee	person	1	18.43	30	$552.86
	Labor	person	9	6.41	30	$1,658.57
	Technician		2	12.29	30	$737.14
	Staff		2	12.29	30	$737.14
	Fuel (diesel)			285.71	4	**$1,142.86**
	Meals			42.86	30	**$1,285.71**
	Other uncontrollable costs					**$5,714.29**
	Subtotal					**$20,491.43**
Variable cost	Raw material	ton	30	64.29	25	$48,214.29
	Package					$4,628.57
	Subtotal					**$52,842.86**
Revenue	Fuel oil	ton	13.5	500	25	$168,750.00
	Carbon black	ton	9	31.43	25	$7,071.43
	Stainless steel wire		7	16	25	$2,800.00
	Subtotal					**$178,621.43**
Profit						**$105,287.14**

Cost Category	Estimated Price ($)	说明
Land acquisition	$160,000.00	Purchase
Land Development and Infrastructure	$85,714.29	Includes site leveling, roads, water and electricity access, etc.
Factory Construction	$214,285.71	Calculated based on approximately XX yuan per square meter, for XX square meters.
Permit and Compliance Costs	$21,428.57	Includes environmental impact assessment, construction permits, operational permits, etc.
Equipment cost (include installation/commissioning)	$1,374,285.71	Including pyrolysis reactor, feeding and discharger conveyor,control system etc.
Initial Operating Capital	$71,428.57	The operating costs for the startup phase, such as raw material procurement, staff training, etc.
Total Investment Cost	**$1,927,142.86**	

Indicators	Values	Unit
Annual Net Profit	$1,295,631	
Payback Period	**1.49**	Year
(ROI)	**67.23%**	
Project Lifecycle	8	Year
Total Net Profit (8 years)	**$10,365,051.42**	

Notes:

The report focuses on plastic recycling investment opportunities in XX countries in the Southeast Asian market, mainly targeting resource processing projects using waste tires as raw materials. Through a systematic analysis of the local policy environment, raw material acquisition, production process, product sales channels and cost structure, the report comprehensively evaluates the project's operating profit potential and overall feasibility, aiming to provide investors with scientific and detailed decision-making basis.

If you need to focus on environmental protection policies, market prospects or investment returns, we can also adjust the content.

THANKS FOR WATCHING

If you want to be as focused as we are on recycling and improving the global environment,
Then join us!

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