ANNEX 3 – TECHNICAL SPECIFICATIONS – RFP-ALA-PCRB-220

Plastic Recycling Plant

It is used to recycle HDPE plastic like bottle caps, detergent bottles, plastic baskets, barrels...

The plastic recycling production line is mainly used to deal with waste hard flakes, where the common raw material is HDPE plastic collected by the facility's workers or bought from facility's clients.

The production line mainly consists of Plastic crushing machine (already exists at facility), Rinsing tank, dewatering machine, Cooling tank (Purifier), Pelletizing machine (granulator) equipped with cutter and storage bin.



1- Rinsing Tank (Washing Machine)

The rinsing tank is used for rinsing the broken material to precipitate impurities. It is made of stainless steel or iron plate. There are many toothed plates in the tank, it can force plastic chips to move forward and shift the material in the pool from this end to the other end of the pool.



2- Dewatering machine (Dryer)

To Remove the water from PP, PE pieces. Horizontal dewatering machine is specially used for cleaning and dewatering of waste plastic flakes and granules. High degree of dehydration, dehydration rate of over 97%, low power consumption, high efficiency, high degree of automation, and greatly reduced labor intensity.



3- Pelletizing Machine (Granulator)

To Heat and melt the PP, PE pieces, then extrude them with strip shape. Waste plastic granulation extruder is a device for extruding, cooling, and dicing HDPE plastic to produce plastic granules. The granules produced are widely used and are ideal for PP PE plastic recycling.

This equipment is matched with the crushing and cleaning machine and the pelletizer. Broken and cleaned plastic can be directly put into extrusion granulation. Simple process, advanced technology, and suitable for different waste plastics. Equipped with cutter for cutting the hard strip plastic to pellet.



4- Cooling tank

The plastic cooling tank is a very important part of the plastic pellets production line. The cooling temperature has a very large effect on the quality of the plastic pellets. It is a necessary machine in the recycling line. If you want to process the waste plastic into plastic pellets, our cooling tanks can help you make high-quality plastic pellets more efficiently.



<u>Budget</u>

Item	Description	Specifications	Usage	Qty
1	Rinsing Tank	Stainless Steel, multiple	used for further cleaning and	1
		toothed agitators, sewage	rinsing of waste plastics after	
		automatic discharge	crushing	
		2x2x2.5 m		
2	Dewatering	Stainless steel, aluminium	used for the dehydration	1
	Machine	crust,high dryness	function	
		2x2x1 m		
3	Pelletizing	Screw diameter 125mm,	Used for extruding, cooling,	1
	Machine	capacity	and dicing plastic into pellets	
	(Granulator)	1ton/day,equipped with		
		cutter and storage bin		
4	Cooling Tank	Stainless steel	Used for cooling the hot	1
		2x0.5m	plastic strips extruded by the	
			granulator	
Total				

The final product of this production line is used as a raw material for pipe producing machine that produces HDPE water pipes and electric conduits.