

Transforming **Waste** to **Wealth**

Cutting-Edge **Recycling Technology**



SHREDDING >>> CRUSHING >>> GRINDING >>> SEPARATING >>> DUST COLLECTING

Turning Waste into Value The End Products of Our Recycling Process

Lakshmi Precision Technologies Limited (LPT) is an ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and 5S Excellence Certified Company established in 1983. Headquartered in Coimbatore, India, the city known for textile machinery and manufacturing. LPT is associated with Lakshmi Machine Works Ltd. (LMW), a world leader in textile machinery. LPT Specializes in manufacturing of Thin Wall Pressure Die casting Components, Gravity Die casting Components, sheet metal manufacturing and assembly, sub-assemblies for engineering and textile industries.

New Venture:

Recycling Machines Expanding into sustainable solutions, LPT is now venturing into the manufacturing of advanced recycling machines. These machines are designed to optimize waste management, enhance resource efficiency, and support environmental sustainability.

SPECIFICATION

Model	Capacity (kg/h)	Power(kw)	Weight (kg)	Dimension (m)
ZCJ-200	200	4.85	450	1.67*0.97*1.4
ZCJ-500	500	6.75	1100	2.1*1.27*1.74
ZCJ-1000	1000	11	2180	2.74*1.83*2.43

PCB COMPONENT DISMANTLING MACHINE

APPLICATION

This Automatic dismantling machine is used to remove the electrical components from the waste PCB. Because the components are with different precious metals and some parts can be sell directly with a better price. And the mother boards after remove the components are easily to crush and separate the copper. It reduces the works of the next step, and make the precious metals can be recovered more.



WASTE PCB RECYCLING PLANT

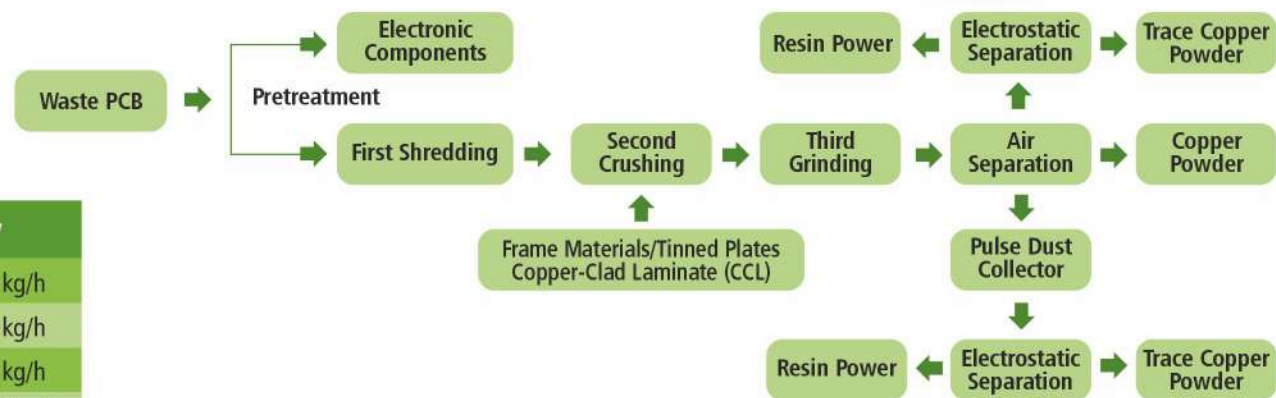


APPLICATION

It is used for waste circuit board motherboard, copper-clad boards, circuit boards, and the separation of leftover material of the mixed metal and nonmetal materials.

SPECIFICATION

Model	Power	Weight	Size (m)	Capacity
ZY-PCB150	65 kw	7.5 ton	12 x 6 x 5	100-150 kg/h
ZY-PCB300	102 kw	15 ton	20 x 5 x 5	200-300 kg/h
ZY-PCB500	134 kw	20 ton	25 x 6 x 5	400-500 kg/h
ZY-PCB1000	238 kw	40 ton	35 x 8 x 5	800-1000 kg/h





LITHIUM-ION BATTERY RECYCLING LINE

Product Introduction

The research of the recycling of waste Lithium-ion battery is mainly focused on the recovery of the high-value cathode precious metals cobalt and lithium. Our company adopts an environmental-friendly physical separation process to realize efficient separation and recovery of waste lithium-ion batteries. The lithium-ion battery recycling production line is used for recycling the soft package battery, car battery, cell phone battery, shell battery, cylindrical battery, etc. The final products are black mass, aluminium granule, copper granule, plastic, iron shell and separator plastic.



Soft Lithium Battery



Hard-shell Lithium Battery



Cylindrical Lithium Battery



Positive and Negative Plates

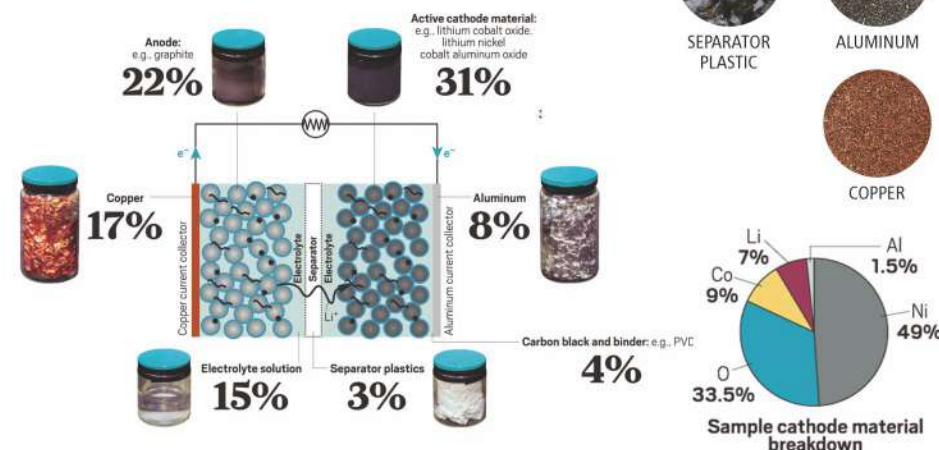
TECHNICAL STANDARD

Recovery rate of metallic aluminium	> 98%
Powder recovery rate	> 98%
Content of powder in metal aluminium	< 2%
Content of metallic aluminium in powder	< 2%
Black mass purity	> 99%
Copper purity	> 95%
Aluminium purity	> 95%

Contain dust collection equipment and will not pollute the environment

SPECIFICATION

Model	Size	Power	Capacity
LDC-500	40m*11m*8m	361 kw	400-600 kg/h
LDC-1000	50m*12m*8m	300 kw	800-1200 kg/h



SOLAR PANEL CRUSHING & SEPARATING PROJECT

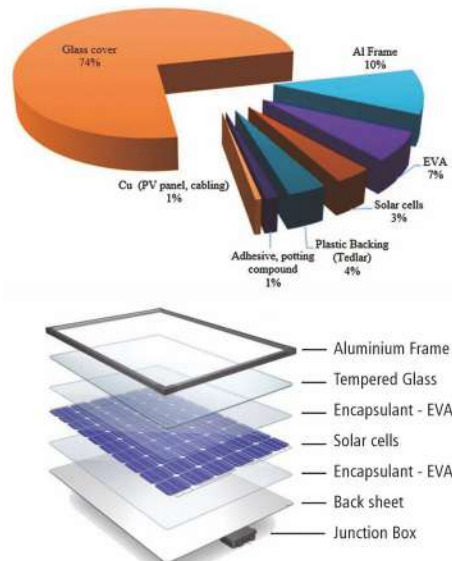
Foreword of Solar Panel

As normal, the service of one batch solar photovoltaic panels is about 25 years. With the development of emerging technologies and rapid product changes, the first batch of photovoltaic panels may be scrapped by 2025. Then there will be about 9.57 million tons scrap solar panels generated by the year of 2050. Therefore, recycling the waste photovoltaic panels will attract more and more attention.



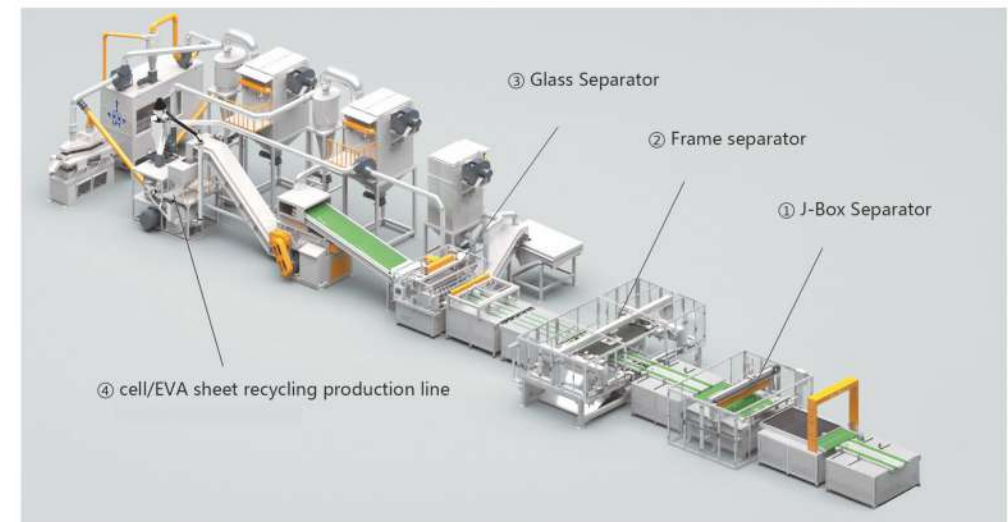
Value of Solar Panel

Solar panels contain high content of glass, aluminium, adhesive sealant, silicon, silver and components, as well as rare metals such as cadmium and gallium, which have very good resource utilization value. RECYCLE equipment recycles waste photovoltaic panels through physical means such as automatic dismantling, crushing and sorting so as to achieve the purpose of recycling useful components.



Solar Panels Recycling Plant

Components of solar panels includes high-quality glass, aluminium frames, polymers, silicon, copper and silver paste (for the printed conductors on each cell), all of which make up our equipment and can be successfully recycled. The recovery rate is above 95%. The figure below is the composition of our recycling line.



Final Products

Aluminium frame is product of frame removing machine, the purity is 100%

Glass granule and glass powder two products from glass remover, the purity is 99%

The metal powder is copper powder and silver powder, the purity is 99%

Silicon powder and a small amount of glass powder, the purity is 99% (Silicon about 80%)

Powder plastic all from crusing & sorting part, the purity is 99%



Aluminium Frame



Glass



Copper



Silicon Powder



Plastic

SCRAP CABLE RECYCLING LINE



APPLICATION

It mainly used for processing waste communication cables, car cables, computer cables, telephone cables, home appliances wires and such these no oil pollution cables. The final Product is plastic granule and copper wire.

SPECIFICATION

Model	Capacity	Weight	Size (m)	Power
ZY-200	100-200 Kg/HR	1800 kg	1.8*1.8*2.5m	25kw
ZY-300	200-300 Kg/HR	3700 kg	4.5*2.5*4.0m	60kw
ZY-500	400-500 Kg/HR	7500 kg	6*3*4.0m	85kw
ZY-800	600-800 Kg/HR	10000 kg	12*5*4.5m	115kw
ZY-1000	800-1000 Kg/HR	15000 kg	20*10*4.5m	185kw

SINGLE MACHINE SERIES

Double Shaft Shredder



APPLICATION

Double-shaft shredder is suitable for the waste recycling requirements of various industries, such as: scrap metals, plastic, wood, household garbage, waste clothes, waste tires, pallets, electronic waste, cartons, etc.

SPECIFICATION

Model	ZY-D800	ZY-D1000	ZY-D1200	ZY-D1500	ZY-D2000
Motor Power	22*2Kw	30*2Kw	45*2Kw	55*2Kw	110*2Kw
Capacity	1-1.5T/H	1.5-2T/H	3-4T/H	4-5T/H	10-15T/H
Blade Number	20 pieces	34 pieces	24 pieces	20 pieces	20 pieces
Feed Hopper Size	800*1200 mm	1000*1500 mm	1500*2000 mm	2000*2500 mm	2500*3000 mm

Single Shaft Shredder



APPLICATION

Single shaft shredder properties as follows: strong, durable. It is suitable to recycle a variety of bulk solid materials, refractory materials, plastic containers and plastic barrels, plastic films, fibers, paper. Shredder particles can be small to 20mm according to different needs. We can provide all kinds of feed hopper; low speed rotary cutter in accordance with customer needs, which will be low noisy and energy saving.



SPECIFICATION

Model	XR600S	XR800S	XR800S	XR1200S
Power (kw)	22	30	40	55
Feeding mouth	600*700	600*1100	800*1100	1500*1500
Rotary blades(pcs)	26+4	46+6	49+4	64+4
Fixed blades (set)	1	2	2	2
Capacity (kg/h)	600	800	1000	1000-1500
Weight (kg)	2800kg	4000kg	5500kg	7000kg
Dimension(L*W*H mm)	1700*1130*1780	1865*1420*1800	2470*1420*2000	3500*2300*2200

Crusher

USING

Crusher is used to crush various wastes into small pieces of granule materials. Reduce transportation costs and increase reprocessing speed. The discharge size of crusher is easy to adjust. Our crusher includes knife-type crushing and hammer-type crushing. Crushable materials include plastic, alloy, metals, etc. The knife crusher is suitable for crushing small-volume plastic. Hammer crushing is suitable for crushing various metal wastes, of which heavy hammer crushing is suitable for crushing large metal waste such as motor stators, compact metals, copper-aluminium radiators, etc.





www.lptindia.com



LAKSHMI PRECISION TECHNOLOGIES LIMITED

Arasur - 641 407, Coimbatore District, Tamil Nadu, India
Ph: +91 422 617 3500 / +91 82203 71114 / +91 82203 81114
Email : support@lptindia.com / mayil.m@lptindia.com
www.lptindia.com

Follow us on      /lptindia