



Sarl GODIN

Coopérative Essaada, Zhun
Aissat Moustapha
REGHAIA Alger - Algérie
contact.sarlcodin@gmail.com

00 (213) 666 931 900

00 (213) 557 239 211

DEVIS

**SUPPLIER OF ICP TYRE RECYCLING LINE 3000KG /HOUR CAPACITY
LOADING CONVEYOR**



- 2.2 kW motor with gearbox
- Length 6 mt.
- Width 80 cm.

DOUBLE SHAFT SHREDDER



Technical Specifications:

- 2 pcs. x 75 kW 900 rpm motor
- 2 pcs EK430-2 type 1/12 ratio gearbox
- 2 pcs. x 1500 mm length rotor
- Rotor shaft hexagonal shaped made of DIN 1.4140 steel material
- 31 pcs. Circular cutting blades with three cutter wings on each blade
- DIN 1.4140 steel blade material
- 31 pcs. stationary wiper blades
- 60 mm. Body wall thickness, reinforced body walls
- Gearboxes are attached to body with rubber



A typical tire recycling plant begins with a primary (double shaft) shredder, which shreds whole car tires into pieces smaller than 10 cm. X 10 cm. Tires larger than car tires such as truck tires or off-road tires first debanded and cut into smaller pieces by debander and cutter machines which is included in our offer and can be examined in following pages. Debanding is process of removing side steel wires from truck tires.

SHREDDER OUTPUT CONVEYOR

- 2.2 kW motor with gearbox
 - Length 4 mt.
 - Width 80 cm.
-



SECOND SHREDDER LOADING CONVEYOR

- 2.2 kW motor with gearbox
- Length 6 mt.
- Width 80 cm.

SINGLE-SHAFT SHREDDER

- Main Motor : 160 kW with gearbox
 - 1500x1000 mm. body
 - 30 cm. 10 pieces fixed blades
 - Rotor diameter: 600 mm.
 - Rotor speed: 80 d/
 - Force hydraulic ram, 11 kW hydraulic unit
 - Number of the rotor blades: 120 pieces
-



Output of primary (double shaft) shredder is fed into secondary (single shaft) shredder which shreds rubber pieces further into consistent pieces smaller than 35 – 50 mm granules. Steel wires start to be liberated from rubber after secondary shredder. Liberated wires are removed from material stream by magnetic conveyor.

Single shaft shredder has a single rotor that has small multiple knives (or “cutters”) mounted on it. Machine is equipped with a hydraulic ram that pushes the pre-shred into the rotor and a PLC panel controls the feed rate of that ram based on the current load of the main drive motor. The cutters on the rotor pass through a close tolerance to stationary bed knife to cut the rubber and pull the wire from the pre-shred. A stationary screen is situated around the outside half of the rotor. So nothing can get out of the machine until it is small enough to pass through that screen.

SHREDDER OUTPUT CONVEYOR

- 2.2 kW motor with gearbox
- Length 4 mt.
- Width 80 cm.

MAGNETIC SEPARATION CONVEYOR

- 2,2 kW motor with gearbox
- Length 2000 mm.
- Width 600 mm.
- Strong ferromagnet

Magnetic conveyor placed on top of output conveyor removes steel wires from rubber.

Additional size reduction is required after the secondary shredder. This size reduction is achieved by multiple stage crushing machines (Granulators). While crushing machines bring granules into uniform, reduced size, liberate more steel as well as fabric.

Car tires contain about 10 % nylon or polyester fabric in them by weight. Rubber granules has to be free of this fabric.

CRUSHING MACHINE LOADING CONVEYOR(2 pieces)

- 2.2 kW motor with gearbox
- Length 6 mt.
- Width 80 cm.

NPS 1200 CRUSHING MACHINE (2 pieces)

- main motor 75 kW.
- Body wall thickness 40 mm.
- Hydraulic opening rear hinged upper body
- Hydraulic unit 2.2 kW motor
- 60 cm. opening and closing stroke piston
- 550 kg x 2 piece flywheel, bushing pass
- 3-stage rotary blades 6 pcs, 60 cm blade length, 62 HRC hardened
- 4 fixed blade, 60 cm blade length, 62 HRC hardened
- Eccentric rotary cutters
- 120 steel box profiles chasis
- Body dimensions 1280 x 1280 mm.
- Special steel die cast bearing beds outside of the body, water cooled
- Complete electrical panel





CRUSHER OUTPUT CONVEYOR (2 pieces)

- 2.2 kW motor with gearbox
- Length 4 mt.
- Width 80 cm.

MAGNETIC SEPARATION CONVEYOR (2 pieces)

- 2,2 kW motor with gearbox
- Length 2000 mm.
- Width 600 mm.
- Strong ferromagnet

LOADING CONVEYOR (2 pieces)

- 2.2 kW motor with gearbox
 - Length 6 mt.
 - Width 80 cm.
-

NPS 1200 CRUSHING MACHINE (2 pieces)

- main motor 75 kW.
- Body wall thickness 40 mm.
- Hydraulic opening rear hinged upper body
- Hydraulic unit 2.2 kW motor
- 60 cm. opening and closing stroke piston
- 550 kg x 2 piece flywheel, bushing pass
- 3-stage rotary blades 6 pcs, 60 cm blade length, 62 HRC hardened
- 4 fixed blade, 60 cm blade length, 62 HRC hardened
- Eccentric rotary cutters
- 120 steel box profiles chasis
- Body dimensions 1280 x 1280 mm.
- Special steel die cast bearing beds outside of the body, water cooled
- Complete electrical panel

CRUSHER OUTPUT CONVEYOR (2 pieces)

- 2.2 kW motor with gearbox
- Length 4 mt.
- Width 80 cm.

MAGNETIC SEPARATION CONVEYOR (2 pieces)

- 2,2 kW motor with gearbox
- Length 2000 mm.
- Width 600 mm.
- Strong ferromagnet

MATERIAL TRANSFER BLOWER - FAN (2 pieces)

- 2.2 kw 2800 r / min engine
- Pneumatic System Blowers

ZIGZAG TEXTILE AND DUST REMOVER (2 pieces)

- Cyclon silo with air lock
- 2,2 kW airlock motor with gearbox

AIR SUCTION FAN FOR ZIGZAG (2 pieces)

- 5.5 kw 2800 rpm. Motor
-

VIBRATING SCREEN (2 pieces)

3-stage particle classification - dust removal system

3 kW vibration motor

MATERIAL FAN (6 pieces)

- 2.2 kw 2800 r / min engine
- Pneumatic System Blowers

TEXTILE SEPARATION GRANULE CLASSIFICATION CYCLONE SILO (6 pieces)

- 2,2 kW airlock motor with gearbox
- Dust removal system

Crushing machines are equipped with certain sized screens. Output granule size is determined by hole dimension of crusher screen. If screen holes are smaller, material's residence time inside crushing chamber extend. More time means more friction and more heat. When rubber is heated, it start to soften. Therefore residence time of material inside crushing chamber has to be limited. Because of this fact we use double stage of crushing process to bring down granules to required and mostly demanded smaller size. Crushing machine screens can be changed easily. By changing crusher screens with different hole sizes, different sized granules can be obtained, fulfilling customer demands.

Fabric separation is made by air separation principle. Because of gravitational differences of fabric and rubber, air suction is used for removing fabric from rubber stream. By locking air inside cyclon silos and zigzag separators, rubber granules are freed from lose fabric.

For steel separation we use magnetic separation conveyors in every step to gather steel free rubber granules.

DEBEADER (For Truck Tires)

- Motor : 11 kW motor
- PLB 35004 F IEC 132 planetary gearbox
- Debeading drum Ø 490 x 330 mm.
- 2 pcs. 24126 bearings
- Dimensions (,W-L-H): 1000 x 1600 x 1800



Tires larger than car tires contain thick steel wires at sides. In order to protect and extend blades life, these steel wires has to be removed. Debeader machines are used for this purpose. We supply debeader machine along with complete tire recycling lines.

TIRE CUTTING MACHINE (for truck tires)



Technical Specifications:

- Cut in the vertical direction to the removal of the tire
- semi-automatic, 3-kW engine power hydraulic unit
- Electrical panel
- Lower and upper limit safety switches points

Tire cutter machine is for reducing size of larger tires.

Total electric power: 750 kW

500 sq.meters of minimum machine working area is required. We can customize layout of the machines according to buyer's factory by using computer aided design.

Delivery: 90 – 120 work days

TERMS OF PAYMENT:

50% down payment at order placement.

50% at delivery

or

by irrevocable letter of credit at sight in our favour, to be confirmed by a first-class bank in Turkey and payable in Turkey.

All L/C expenses, including confirming expenses, to be borne by the buyers.

WARRANTY

One year against manufacturing or material defects for our machines, starting on final payment or not later than maximum two months after delivery.

Parts like knives, screens, V-belts that are subject to routine wear out, all electrical and electronic equipment, operator errors, damages that occur as a result of tramp object introduction inside the machine such as metals or inadequate maintenance and neglect of following the supplied instructions manual are exempt.

Any equipment not manufactured by SUPPLIER OF ICP bear their own manufacturer's warranty.

No liability or warranty will be accepted due to any damages resulting from using replacement and spare parts or modifications or repairs not provided or authorised by SUPPLIER OF ICP

Any parts damaged or with servicing requirements within the warranty limits will be sent to SUPPLIER OF ICP for revision or repair, with the condition that all labour, travel, customs, freight and insurance costs will be covered by the buyer.

The above given technical specifications are for information purposes only.

SUPPLIER OF ICP retains the right to change any of these data without damaging the customer's benefit in terms of purpose or throughput.

