Bale Breaker

Bale breaker mainly used for breaking waster paper bales and screening light and small contaminants under dry process and facilitating the removal of big rejects after breaking bales.

Advantages

- Scientific arrangement of screen holes on the screen cylinderand internal stock guide plates provides favorable conditions for removingsmall-size rejects mixed in waste paper.
- Dry screening process greatly reduces wear of cutting wheel, disc, pump, pipe, cleaner, pressure screen and other downstream pulping and screening equipment.
- Greatly improve the efficiency of pulping system, especially re-pulping system. Broken waste paper increases the pulping efficiency by 15-25% and saves energy by 10-20%.

Structure And Principle

Bale breaker of this series is constructed including cylinder, feeding device, cylinder supporting roller, support frame, rejects tank, cylinder axial positioning wheel, outer shield and power transmission system, etc. Lifting board, spiral band and rejecting perforations are arranged inside the cylinder.

Lifting board and spiral band are fixed on inner wall of cylinder and rejecting perforations are through-holes opened on cylinder body.

Two raceways are fixed around outer side of cylinder and fall onto the cylinder supporting rollers. Rejects tank is made of two sloping plates set on the bottom part of cylinder. Cylinder axial positioning wheels are set on the bottom center inside the two raceways. Feeding device is installed on the feeding connection of cylinder.

Features

- lmprove efficiency
- lmprove product quality
- lmprove working environment
- Reduce labor, power. maintenance cost

Before

After

- Reduce the use amount of the forklift.
- Improve the efficiency of the follow-up equipment.

Before

After

- Forklift deliver the materials batch by batch results in much oil consumption.
- Bale breaker running with small motors.

- The removal of heavy impurities from the early stage extends the lifespan of all equipment and wearing parts downstream.

Auxiliary Equipment And Technological Process:

This machine and feeding chain conveyor and sorting chain conveyor (or sorting belt conveyor) work together as a complete set of waste paper bale breaking and dry screening system.
Technological process: waste paper-chain conveyor-bale breaker-sorting chain conveyor (or belt conveyor)-pulper.

Working Principle

Tightly baled waste paper is transferred to feeding device by chain conveyor, and then enters the rotating cylinder for breaking and primary screening. Lifting boards lift materials to a certain height and then loose. Materials freely fall and hit the spiral band, other lifting boards and inner wall of cylinder, and then are thrown, pressed, smashed, crushed, stabbed and torn.
At the same time, materials move forward under functioning of spiral band. This process repeats again and again. Then tight bales is broken. Hard particle impurities are separated through the holes and then fall into the rejects tank. Loosened waste paper is put on sorting chain conveyor through outlet of bale breaker, then sorted manually and conveyed to pulping system.

Technical Parameter

Model	SBJ12	SBJ13	SBJ14	SBJ15
Drum Diameter (mm)	Φ3000	Φ3250	Φ3500	Φ3750
Hole Size (mm)	Φ25-Φ40			
Handling Capacity (T/D)	200-500	500-800	800-1200	1200-1500
Motor Power (kw)	37	30×2	37×2	37×2
Material Dimension (mm)	＜1200×1200×600		＜1200×1200×600	
Moisture (%)	＜15			

Project