

Eldan Steel Cleaning System



Within tyre recycling the main objective has been to purify the rubber granulate. There is, however, also a substantial amount of steel wire in tyres, which previously has been overlooked in terms of a re-sellable material.

Due to the growing demand for cleaning of the steel, Eldan has developed systems to meet the specific customer requirements for cleaning and upgrading of the steel fraction originating from tyre recycling.

There are two systems offered – an inline solution and a “stand-alone” solution. The systems remove the textile and rubber residues from the steel, making it a steel fraction of high quality.



High quality steel deriving from tyre recycling, a material commonly used and requested by e.g steel works.

Inline system

These solutions are designed to be placed in line with an existing Eldan tyre recycling plant, screening the outlet steel from the plant.

Benefits

- Low running costs due to screening process
- Minimal operator control
- High quality steel output



| Inline | Option 1 | Option 2 | Option 3 |
|-----------------|---|---|---|
| Input | 0 – 15 mm steel wire, containing 10-15 % rubber and textile. | Up to 20mm steel wire, containing 15-20% rubber and textile. | Up to 25mm steel wire, containing 20-25% rubber and textile |
| Output | Approx. 96-98% clean steel wire, | Approx. 94-95% clean steel wire | Approx. 93-94% clean steel wire |
| Capacity | Up to approx. 2,5-3 ton/processing hour. | Up to approx. 2,5-3 ton/processing hour. | Up to approx. 2,5-3 ton/processing hour. |
| Density | Approx. 0,3 (300 kg/m3) | Approx. 0,3 (300 kg/m3) | Approx. 0,3 (300 kg/m3). |
| Middling | Approx. 5-25% oversize wire back to Rasper | Approx. 10-35% oversize wire back to Rasper | Approx. 15-50% oversize wire back to Rasper |
| | The figures above are based upon a maximum screen Ø15 mm in MPR | The figures above are based upon a maximum screen Ø20 mm in MPR | The figures above are based upon a maximum screen Ø25 mm in MPR |

Stand alone system

These solutions include a Multi Purpose Rasper and Screening System. The output purity and capacity depend on the type of rasper and screen used. The system can be placed either in-line with the tyre recycling plant or it can be operated as a separate unit.

Benefits:

- High density steel output
- High quality steel output
- Minimal operator control



| Stand alone | Option 1: MPR120 | Option 2: MPR160 | Option 3: MPR200 |
|-----------------|---|---|---|
| Input | Up to 50 mm steel wire, containing up to 30% rubber & textile | Up to 50 mm steel wire, containing up to 30% rubber & textile | Up to 50 mm steel wire, containing up to 30% rubber & textile |
| Output | Approx. 98-99% clean steel wire | Approx. 98-99% clean steel wire | Approx. 98-99% clean steel wire |
| Capacity | Solution up to approx. 1000 kg/processing hour | Solution up to approx. 2000 kg/processing hour | Solution up to approx. 3000 kg/processing hour |
| Density | Over 0,7 (700 kg/m³) | Over 0,7 (700 kg/m³) | Over 0,7 (700 kg/m³) |
| | The figures above are based upon a maximum screen Ø12 mm in MPR | The figures above are based upon a maximum screen Ø12 mm in MPR | The figures above are based upon a maximum screen Ø12 mm in MPR |

First choice in recycling equipment