

COAL/ Limestone Impactor

- [Description](#)

Application:

Persisetent EK Series Impactor is a horizontal shaft, slow speed, non-reversible, fixed blade impact crusher. Because of its unique design configuration it is ideally suitable for fluidized Bed Boiler requiring coal size below 6mm with limited quantity of fines which is not possible to achieve from conventional Impactor or Ring Granulator. These impact crushers are also employed for sponge iron and washery application.

Operating Principle:

Feed material entering into feed end at the top gets shattered by the impact blows from rotating blow bars against the grinding wall. At the lower portion of the crushing chamber it is subjected to shearing and attrition to some extent producing finer product size with limited quantity of fines, thus, overcoming the limitation of a swing hammer mill and conventional impactor. Uniform feeding across the entire width at controlled rate by suitable feeding system is essential to ensure uniform wearing pattern and consistency of product granulometry.

Salient Features:

The performance-wise it is a crusher between a swing hammer mill and conventional impactor having a combination of few salient features of both type i.e. high reduction with limited fines. Persistent series impactor is ideally suitable for fluidized bed boiler as well as coal washery and sponge iron plant.

Available Sizes:

Diameter: 800mm to 1800mm **Width:** 800mm to 2900mm Capacity range for coal up to 600 TPH for 15mm product Higher model can be offered on request.

Constructional Features:

The housing is of multiple section with inspection doors and with upper portion hinged for opening (mechanically or hydraulically) to have easy access for maintenance. It has a one piece curved breaker wall (similar to Hammer mill) with grinding gibs of wear resistant cast material, hinged at the top and supported by spring loaded threaded spindle assembly at the bottom for gap adjustment and safety device against un-crushable. Rotor drum keyed to a robust shaft is fabrication from MS, adequately ribbed and fitted with 6 Nos. blow bars of wear resistant cast steel through counter shank bolts. Blow bars are reversible to compensate wearing. Open bottom design avoids chocking. Drive transmission is through vee belts and flexible or fluid coupling from motor. Manual or centralized grease lubrication is provided. Water spray arrangement can be provided if needed.

