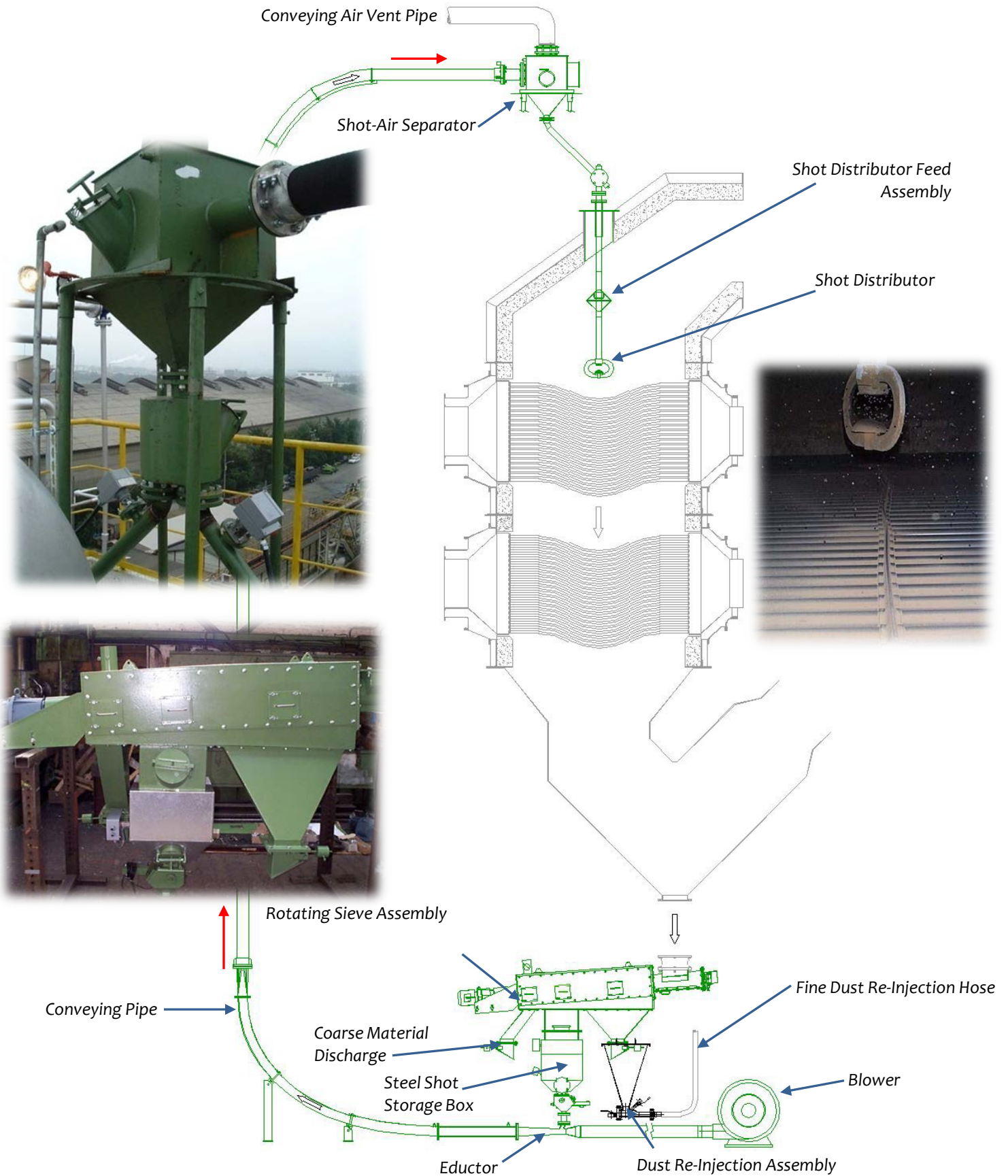


Steel Shot Cleaning System



Tube cleaning of the heat exchanger tower is achieved with a non-abrading steel shot cleaning system. A large number of soft steel shot is pneumatically conveyed from the shot hopper at the bottom of the tower to the top of the tower. A shot-air separator separates the shot from the conveying air. The conveying air is split off and returned to the tower flue gas outlet.

The shot falls through the shot distributor feed assembly onto an abrasion resistant, mushroom shaped distributor head which randomly spreads over the tube bundles in the heat exchanger tower. While passing over the tube bundles, it removes fine dust from the surfaces of the tubes.

The steel shot is separated from the falling dust at the bottom of the heat exchanger tower via a rotating sieve drum, metered, and conveyed back to the top of the tower. Dust fines are collected in a storage bin at the bottom of the tower. If equipped with a reinjection system, the dust is conveyed back into the crude gas ductwork to be captured by the emission system.

The shot recirculation cycle is adjustable, and is set to a point where the tubes are cleaned “just enough” so that tube wall abrasion is minimized.

