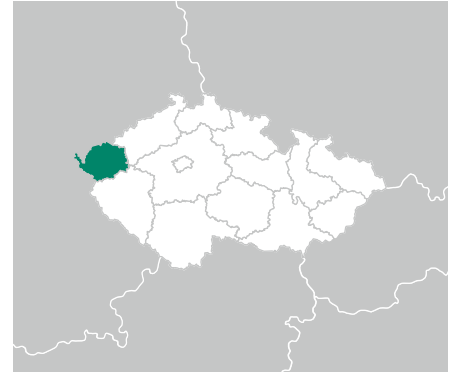


72 KARLOVY VARY - CZECH REPUBLIC

Year	2016
Client	METROSTAV s.a.
Operator	SOKOLOVSKA' UHELNA' s.a.
System description	RDF production
Waste processed	Mixed municipal waste
Plant capacity	60,000 t/year



Sorting of mixed MSW (Municipal Solid Waste) is accomplished in this plant to recover ferrous and non-ferrous metals and produce SRF (Solid Recovered Fuel) to be beneficially co-fired in a power station.



Pre-shredding of mixed MSW (Municipal Solid Waste) is required to facilitate the following sorting process. A slow-speed primary shredder is used to open and empty the bags containing the waste and, at the same time, reduce the particle size of the various waste components.

Sorting of ferrous metals takes place in a vibrating flat screen provided with an unbalanced shaft. The screen panels are arranged in cascades and have efficient screen openings.

The screen undersized fraction, rich of organic materials and small-sized inerts which are separated to increase the heating value of the waste, is sent to a composting line, while the oversized fraction is processed by an air separator.

The separator has an "air knife" which sorts the light materials, such as plastic film and paper, from the heavy components that fall and are collected by a conveyor. A rotating drum is used to assist in the separation process.

The light waste components settle on an inclined conveyor, contained by an enclosure for collecting the air used in the sorting process, which is recycled back to the air knife fan. This design is beneficial because it substantially reduces the volume of air which requires to be exhausted from the machine and treated for dust control.

The light fraction sorted by the air separator is combined with another stream of combustible waste coming from a post-treatment line and processed by an Eddy current separator to recover non-ferrous metals.

The high-speed rotating magnet, installed in the driving drum of the belt conveyor of the separator, forcefully rejects the non-ferrous components which fall into a collection chute.

The SRF (Solid Recovered Fuel) is finally processed by a secondary screen to further reduce its particle size and produce a fluff fuel which is sent to a densification line.

