

Steel by-products

Process	By-products	Origin	Use
BF/BOS	Coke Ovens Gas	Coke Making	On site fuel
BF/BOS	BTX	Coke Making	Manufacture of styrene and polystyrene
BF/BOS	Coal Tar	Coke Making	Pitch - Electrodes for Aluminium Industry Carbon Black - Manufacture of rubber, ink and other products Naphthalene - Cement Additive
BF/BOS	Ammonium Sulphate	Coke Making	Fertiliser Additive
BF/BOS (BlueScope Steel)	Bug Sludge	Water Treatment	Recycled to Coke Ovens
BF/BOS (BlueScope Steel)	Sinter Fines	Sinter Plant	Recycled into Sinter Plant
BF/BOS (BlueScope Steel)	Gypsum	Sinter Plant	Cement Additive
BF	Slag	Blast Furnace Process	Granulated Slag (BlueScope Steel) - Supplementary Cementitious Material Air Cooled Slag Aggregate - Concrete Aggregate - Use as construction/fill material - Pavement applications - Base & Sub-base (ridge and flexible) - Filter Aggregate - Scour protection - Rockwool
BOS	Slag	Steel Making Processes	Sealing aggregate (skid resistant) Asphalt aggregate Rail ballast Pavement base and sub-base layers Engineering construction fills Subsoil drains Grit blasting
EAF (Arrium Mining and Materials)	Slag	EAF Melt shop steelmaking processes	Sealing aggregate (skid resistant) Asphalt aggregate Base, sub-base Construction fills Subsoil drains Grit blasting
BS/BOS	Blast Furnace Gas	Blast Furnace	On site fuel
Hot-Rolling Mills	Mill Scale	Rolling Mills	Used for high iron content, either recycled into process or sold for iron recovery
Coating Mills	Zinc/ Aluminium recovery	Coating Mills	Reused in coating mill or sold on for metal recovery
Coating Mills	Acid reuse	Coating Mills	Used for off-site water treatment
Coating Mills	Waste Paint and Solvent	Coating Mills	Cement process fuel
BF/BOS (BlueScope Steel)	Slurry / Dust	All Areas	Recycled into Coke Ovens and Sinter Plant
BF/BOS	Post Combustion Gases	All Areas	Heat is recovered from production process to save energy
BF/BOS, Rolling, Coating, etc.	Scrap	All Areas Downstream of Coke Making	Used for high iron content, recycled into steelmaking process