

TSR's list of steel scrap

Specification	Description	Dimension	Density [t/m ³]	Steriles ⁽¹⁾
Old scrap				
E 3	Old thick steel scrap, predominantly more than 6mm thick, in sizes not exceeding 1.5 x 0.5 x 0.5m, prepared in a manner to ensure direct charging. May include tubes and hollow sections. Excludes vehicle body scrap and wheels from light vehicles. Must be free of rebars and merchant bars, free of metallic copper, tin, lead (and alloys), mechanical pieces and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.	Thickness ≥ 6mm Dimensions ≤ 1.5 x 0.5 x 0.5m	≥ 0.6	≤ 1 %
E 1	Old thin steel scrap predominantly less than 6mm thick, in sizes not exceeding 1.5 x 0.5 x 0.5m prepared in a manner to ensure direct charging. If greater density is required it is recommended that maximum 1 metre is specified. May include light vehicle wheels, but must exclude vehicle body scrap and domestic appliances. Must be free of rebars and merchant bars, free of metallic copper, tin, lead (and alloys), mechanical pieces and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.	Thickness < 6mm Dimensions ≤ 1.5 x 0.5 x 0.5m	≥ 0.5	< 1.5 %
New scrap – low residuals, uncoated ⁽²⁾				
E 2	Thick new production steel scrap predominantly more than 3mm thick prepared in a manner to ensure direct charging. The steel scrap must be uncoated unless permitted by joint agreement and be free of rebars and merchant bars even from new production. Must be free of metallic copper, tin, lead (and alloys), mechanical pieces and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.	Thickness ≥ 3mm Dimensions ≤ 1.5 x 0.5 x 0.5m	≥ 0.6	< 0.3 %
E 8	Thin new production steel scrap predominantly less than 3mm thick prepared in a manner to ensure direct charging. The steel scrap must be uncoated unless permitted by joint agreement and be free of unbound ribbons to avoid trouble when charging. Must be free of metallic copper, tin, lead (and alloys), mechanical pieces and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.	Thickness < 3mm Dimensions ≤ 1.5 x 0.5 x 0.5m (except bound ribbons)	≥ 0.4	< 0.3 %
E 6	New production thin steel scrap (less than 3mm thick) compressed or firmly baled in a manner to ensure direct charging. The steel scrap must be uncoated unless permitted by joint agreement. Must be free of metallic copper, tin, lead (and alloys), mechanical pieces and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.		≥ 1	< 0.3 %
Shredded				
E 40	Shredded steel scrap. Old steel scrap fragmentised into pieces not exceeding 200 mm in any direction for 95% of the load. No piece, in the remaining 5%, shall exceed 1000mm. Should be prepared in a manner to ensure direct charging. The scrap shall be free of excessive moisture, loose cast iron and incinerator material (especially tin cans). Must be free of metallic copper, tin, lead (and alloys), and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.		> 0.9	< 0.4 %

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Specification	Description	Dimensions	Density [t/m ³]	Steriles ⁽¹⁾
Steel turnings ⁽³⁾				
E 5 H	Homogeneous lots of carbon steel turnings of known origin, free from excessive bushy. Should be prepared in a manner to ensure direct charging. The turnings must be free from all contaminants such as non-ferrous metals, scale, grinding dust and heavily oxidized turnings or other materials from chemical industries. Prior chemical analysis could be required.			(*)
E 5 M	Mixed lots of carbon steel turnings, free from excessive bushy and free from turnings from Free Cutting Steel. Should be prepared in a manner to ensure direct charging. The turnings must be free from all contaminants such as non-ferrous metals, scale, grinding dust and heavily oxidised turnings or other materials from chemical industries.			(*)
Thin alloyed scrap with high residual content				
EHRB ⁽⁴⁾	Old and new steel scrap consisting mainly of rebars and merchant bars prepared in a manner to ensure direct charging. May be cut, sheared or baled and must be free of excessive concrete or other construction material. Must be free of metallic copper, tin, lead (and alloys), mechanical pieces and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.	max. 1.5 x 0.5 x 0.5m	≥ 0.5	< 1.5 %
Scrap with high residual content				
EHRM ⁽⁵⁾	Old and new mechanical pieces and components not accepted in the other grades prepared in a manner to ensure direct charging. May include cast iron pieces (mainly the housings of the mechanical components). Must be free of metallic copper, tin, lead (and alloys) and pieces such as bearing shells, bronze rings and others as well as steriles, to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.	max. 1.5 x 0.5 x 0.5m	≥ 0.6	< 0.7 %
Fragmentised scrap from incineration				
E 46	Fragmentised incinerator scrap. Loose steel scrap processed through an incinerating plant for household waste followed by magnetic separation, fragmentised into pieces not exceeding 200mm in any direction and consisting partly of tin coated steel cans. Should be prepared in a manner to ensure direct charging. The scrap shall be free of excessive moisture and rust. Must be free of excessive metallic copper, tin, lead (and alloys) and steriles to meet the aimed analytical contents. Refer to points B) and C) of the general conditions.		≥ 0.8	Fe content ≥ 92 %

(1) Corresponds to the weight of steriles, not adhering to the scrap, remaining at the bottom of the vehicle after unloading by magnet.

(2) Coated material must be notified.

(3) Free from all contaminants (non-ferrous metals, scale, grinding dust, chemical materials, excess oil).

(4) Rebar and merchant bar must be classified apart due essentially to the copper content which could place them out with old scrap and new scrap low residual grades.

(5) Mechanical and engine components must be classified apart principally due to their Ni, Cr and Mo content which could place them out with the thick old scrap and heavy new scrap low residual grades.

(*) To date, no clear method to determine these values.