


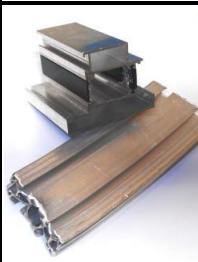

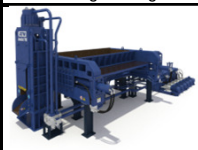




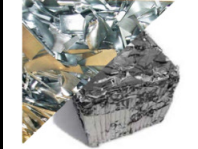
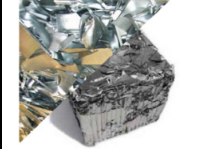





Nomenclature	Post-consumer scrap (Old scrap)	Cable scrap	Wrought alloys		
Characteristics	Unalloyed aluminium scrap	Wire and cable scrap	Scrap of a specific wrought alloy	Material of two or more wrought alloys of the same alloy type	Material of two or more wrought alloys
Description	1) Scrap from the production of sheets, strips and tubes 2) New and old lithography materials 3) Sorted post-consumer scrap (Old scrap)	1) Pre-consumer scrap (New scrap) from the production of wires and cables 2) Post-consumer scrap (Old scrap) from the decoating and/or pretreating	1) Pre-consumer scrap (New scrap) from the production of sheets, tapes, tubes, profiles and remainders from pressing etc.	1) Scrap consisting of sheets, strips, tubes and bar extrusion profiles 2) Defectives 3) Sorted post-consumer scrap	1) Preferably post-consumer scrap like dinnerware, TV antennas, traffic signs and vehicle number plates, window frames etc. 2) Scrap from demolition works
Example of materials					
Preliminary processing	Milling	Milling	Milling, grading	Milling, grading	Milling, grading
Main processing step	Cutting / Baling	Cutting / Baling	Briquetting/ Baling	Briquetting/ Baling	Briquetting/ Baling
Exemplary machines for the central processing step					
Machine for the central processing step	Scrap shear / Baling press	Scrap shear / Baling press	Baling press	Baling press	Baling press
Representation of the (intermediate) product					
Intermediate product	Loose scrap/ package	Loose scrap/ package	Briquette/ package	Briquette/ package	Briquette/ package
Category no. (Normative base)	EN 13920-2:2003	EN 13920-3:2003	EN 13920-4:2003	EN 13920-5:2003	EN 13920-6:2003
Number of scrap category (ISRI scrap specification)	Tablet; Tabloid	Talon; Tann; Tassel; Taste	Tata; Tutu; Treat	Toto	-
Melting output [%]	95 % typ.	95 % min.	95 % min	88 % min.	88 % min.
Composition of the sample melt	0.25 % Si; 0.40 % Fe; 0.05 % Cu; 0.05 % Mn; 0.05 % Mg; 0.07 Zn; 0.05 % Ti; others each 0.05 %; balance aluminium	<u>Unalloyed</u> : 0.25 % Si; 0.40 % Fe; 0.05 % Cu; 0.05 % Mn; 0.05 % Mg; 0.07 % Ti; others each 0.03 %; aluminium content 99.5 % <u>Si/Mg alloy (6 xxx)</u> : 0.60 % Si; 0.30 % Fe; 0.60 % Mg; 0.60 % Si; 0.30 % Fe; 0.05 % Cu; 0.60 % Mg; 0.05 % Cr; 0.07 % Zn; 0.10 % Ti; others overall 0.05 %; balance aluminium	Material analysis according to EN 573-3	<u>Scrap analysis (general)</u> : 0.70 % Si; 0.70 % Fe; 0.40 % Cu; 0.40 % Zn; 0.50 % Mn; 0.60 % Mg; 0.10 % Pb; 0.10 % Sn; others each 0.10 %; balance aluminium; also specified for scraps of the alloy groups 2xxx, 3xxx, 5xxx, 6xxx and 7xxx	<u>Scrap analysis grade A:</u> 1.0 % Si; 0.80 % Fe; 0.80 % Cu; 0.50 % Zn; 0.20 % Ti; others each 0.10 %; balance aluminium <u>Scrap analysis grade B:</u> 1.5 % Si; 1.2 % Fe; 1.0 % Cu; 0.70 % Mn; 1.0 % Mg; 0.70 % Zn; 0.20 % Ti; others each 0.15 %; balance aluminium
Explanatory notes	Min. 0.2 mm thick; Free from coated material, oil, grease, plastics, etc.	Min. 0.8 mm thickness of wire; free of ropes etc. made of steel; including uncoated wires; free of residues from combustion, oil, grease, dirt, plastic, etc.; in the form of packets, briquettes and coils; cutted or chopped	Min. 0.2 mm thick; Free from coated material, oil, grease, plastics, etc.	Max. share of content of 5 % of oil, grease, dirt, plastic or others non-metallic impurities, free of metallic impurities	Max. share of content of 5 % of oil, grease, dirt, plastic or residues from combustion; free of materials of the alloy group 2xxx and 7xxx; inter alia metallic impurities

Nomenclature	Casting scrap	Shredded scrap		Beverage can	Cooler (radiator) scrap
Characteristics	Casting scrap	Shredded scrap for further processing	Preliminary processed shredded scrap	Scrap of beverage can	Al/Cu-Cooler (radiator) scrap
Description	1) Pre-consumer scrap, for example risers, feeder head, defectives 2) Post-consumer scrap from the recycling of ELV's, machinery, kitchen equipment 3) pistons, wheels, rims	Mixtures of Al-containing materials with other metals and non-metals	Preferably preprocessed (by sink-float separation) casting scrap	Completely emptied cans from various collection systems	Cooler (radiator) from vehicles, refrigerators and other cooling systems
Example of materials					
Preliminary processing	Milling, grading, sorting	Milling, grading, sorting		Milling, grading, sorting	Milling, grading, sorting
Main processing step	Crushing	Briquetting/ Baling	Briquetting/ Baling	Briquetting/ Baling	Baling
Exemplary machines for the central processing step					
Machine for the central processing step	Crusher	Baling press	Baling press	Baling press	Baling press
Representation of the (intermediate) product					
Intermediate product	Loose casting scrap	Briquette/ package	Briquette/ package	Briquette/ package	Briquette/ package
Category no. (Normative base)	EN 13920-7:2003	EN 13920-8:2003	EN 13920-9:2003	EN 13920-10:2003	EN 13920-11:2003
Number of scrap category (ISRI scrap specification)	Tense; Trump; Twist; Troma	Zorba; Twitch; Tweak	Twitch	Talcred; Taldon	Talk; Tally
Melting output [%]	90 % min.	90 % min.	90 % min.	88 % min.	
Composition of the sample melt	9.0 % Si; 1.1 % Fe; 3.5 % Cu; 0.50 % Mn; 0.30 % Mg; 0.30 % Ni; 1.2 % Zn; 0.15 % Ti; 0.20 % Pb; 0.10 % Sn; others each 0.15 %; balance aluminium	Composition of the sample melt of the sorted Al fraction equals to casting scrap; except for 0.50% Mg		0.30 % Si; 0.50 % Fe; 0.20 % Cu; 1.1 % Mn; 1.3 % Mg; 0.01 % Ni; 0.05 % Zn; 0.01 % Pb; 0.01 % Sn; others each 0.05 %; others overall 0.15 %; balance aluminium	min. 40 % Cu; max. 0.70 % Fe; max. 0.20 % others; balance aluminium
Explanatory notes	Max. size 600x600x400 mm; max. 2 % volatile components, max. 2 % non-metallic components, max. 2 % metallic impurities	Min. 20 % Al; min. 15 % other metals; size between 10 and 200 mm	Max. share of content of 2 % of oil, grease, dirt and non-metallic components; free of metallic impurities; size between 10 and 200 mm	<u>Packages:</u> max. size of 800x1000x1200 mm with 200-350 kg/m ³ <u>Briquettes:</u> max. size of 400x400x400 mm with 350-700 kg/m ³ ; max. 2 % moisture; max. 5 % volatile components; free from other metals, especially iron and lead	Free of moisture, oil, grease, dirt, plastic, iron, brass and impurities; size of 500x500x250 mm

Nomenclature	Aluminium chips		Aluminium packagings		Waste materials
	Characteristics	Chips of a specific alloy	Chips of two or more specific alloys	Used aluminium packagings	Used aluminium packagings, decoated
Description	Chips from milling, turning and drilling; Chips of wrought or casting alloys	Chips from milling, turning and drilling; Chips from the processing of plates, extrusion profiles, castings etc.	1) Used food packagings like meal trays, aluminium foil, yogurt cover etc. 2) Aerosol cans, bottle caps (e.g. crown cap) etc.	Equals to "Used aluminium packagings" but these materials are thermally, mechanically and/or chemically decoated	Refuses, drosses, products of the treatment of salt slags etc.
Example of materials					
Preliminary processing	Milling, grading	Milling, grading, sorting	Milling, grading, sorting	Milling, grading, sorting	Milling, grading, sorting
Main processing step	Briquetting	Briquetting	Briquetting/ Baling	Briquetting/ Baling	Briquetting
Exemplary machines for the central processing step					
Machine for the central processing step	Briquetting press	Briquetting press	Baling press	Baling press	Briquetting press
Representation of the (intermediate) product					
Intermediate product	Briquette	Briquette	Briquette/ package	Briquette/ package	Briquette
Category no. (Normative base)	EN 139205-12:2003	EN 139205-13:2003	EN 139205-14:2003	EN 139205-15:2003	EN 139205-16:2003
Number of scrap category (ISRI scrap specification)	Teens	Telic	Tesla; Tetra	Terse	Thirl
Melting output [%]	90 % min.	90 % min.	28 % min.	80 % min.	30 % min.
Composition of the sample melt	Material analysis according to EN 573.3, EN 1706 or other specifications	9.0 % Si; 1.0 % Fe; 3.5 % Cu; 0.50 % Mn; 0.30 % Mg; 0.30 % Ni; 1.5 % Zn; 0.15 % Ti; 0.20 % Pb; 0.10 % Sn; others each 0.15 %; others overall 0.45 %; balance aluminium	1.0 % Si; 1.0 % Fe; 2.5 % Cu; 0.405 Mn; 0.20 % Mg; 0.80 % Zn; 0.20 % Pb+Sn; others each 0.10 %; balance aluminium		According to agreement
Explanatory notes	Max. content of 0.5 % of magnetic material, max. content of 5 % of moisture and oil; free of impurities; fines < 0.59 mm (30 mesh) is subtracted from the shipping weight		<u>Packages:</u> 800 to 1000x1200 mm with max. 500 kg <u>Briquettes:</u> 300x300x400 mm with max. 30 kg; max. 5 % of steel packaging, contains no free plastic, paper and blister packs, max. 60 % volatile components	Contains no free iron, free of non-metallic impurities and fines < 1 mm	<u>Dross lumps:</u> size max. 600 mm <u>Finely divided material:</u> grain size min. 0.8 mm