Technical Criteria METALLIC MINUTERY

1. Production

Appearance: **Scrap production**

Description: **Minimisation and sustainable management of processing residues, production process waste**

Criterion 1	Percentage of scrap sent for recycling or reused as by-product		
How to measure	The criterion is measured by applying the following formula: $$\% \, recicled \, scraps = \frac{weight \, of \, scrap \, sent \, for \, recycling}{produced \, scraps \, weight} \times 100$$ Both the weight of off-cuts sent for recycling or reused as by-products and the weight of off-cuts produced must refer to the same production interval (e.g. production batch, daily production, annual...).		
Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	> 95%	> 80%	> 70%
How it occurs	The verifier must be able to verify how the calculation was carried out and the correspondence with the data from the management system, waste register.		

Appearance: **Consumption of resources (energy, water) in the production process**

Description: **Maximising efficiency in the use of natural resources**

Criterion 2	Water consumption efficiency (tumbling)
How to measure	The criterion is calculated by applying the following formula: $$\% \, replenished \, water = \frac{replenished \, water}{water \, used \, in \, one \, cycle \times n° \, cycles} \times 100$$ Both the amount of water replenished and the amount of water used per production cycle must refer to the same production interval (e.g. production batch, daily production, annual...). The criterion applies to the tumbling process only.

Thresholds	Gold' level threshold	Silver' level threshold	Bronze' level threshold
	make-up < 5%	make-up < 10%.	reintegration < 15%

How it occurs	The company must provide evidence of how the calculation was applied and how the quantities were measured. The verifier will be able to verify the data used by examining its sources, which may be data from meters, water bills, other management systems.

Criterion 3	Average energy consumption (kWh) per 1000 pieces produced
How to measure	The criterion is measured by applying the following formula: $$energy\ consumption\ by\ 1000\ items = \frac{electricity + heat\ energy}{n°\ manufactured\ items} \times 1000$$ Both the amount of energy and the number of pieces produced must refer to the same production interval (e.g. production batch, daily production, annual...).

Thresholds	Gold' level threshold	Silver' level threshold	Bronze' level threshold
	< 3 kWh	< 5 kWh	< 7 kWh

How it occurs	The company must provide evidence of how the calculation was applied and how the quantities were measured. The verifier will be able to verify the data used by examining its sources, which may be meter data, energy bills, etc.

Criterion 4	Use of electricity from renewable sources for production
How to measure	The criterion is measured by applying the following formula: $$\%\ renewable\ energy = \frac{self - generated\ and/or\ purchased\ renewable\ energy}{energy\ consumption}$$ Both the amount of renewable energy and the amount of total energy consumed must refer to the last complete calendar year. The calculation must be carried out at the level of the company applying for certification.

Thresholds	Gold' level threshold	Silver' level threshold	Bronze' level threshold
	> 50% self-produced	>15% self-produced + > 25% purchased or 100% purchased	> 50% purchased

How it occurs	The company must provide evidence of how the calculation was applied and how the quantities were measured. The verifier will be able to verify the data used by examining the sources, which can be meter data, energy invoices, certificates of origin issued by the producer.

Appearance: ***Surface treatments***

Description: ***Efficiency in surface treatment processes***

The following criterion applies only to products that undergo PVD (physical vapour deposition) or galvanic treatments:

Criterion 5	Sustainability of coating processes
How to measure	The criterion is evaluated alternatively in the case of PVD treatment or galvanic treatment. In the case of PVD treatment, the criterion is measured by the presence or absence of the process. In the case of galvanic treatment, the criterion is measured by applying the following formula: $$\% \, replenished \, water = \frac{disposed \, water}{volume \, of \, water \, used \, in \, the \, galvanic \, bath} \times 100$$ In the formula, both the quantity of water disposed of and the volume of water used in the bath must refer to the same production interval (e.g. production batch, daily production, annual ...).

Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	PVD yes or make-up < 5%	PVD no and make-up < 10%.	PVD no and make-up < 15%

How it occurs	The verifier will verify that the indicated treatment is carried out. In the case of galvanic treatments, the company must provide evidence of how the calculation was applied and how the quantities were measured. The verifier will be able to verify the data used by examining its sources, which may be data from meters, water bills, other management systems.

Appearance: ***Transport***

Description: ***Minimisation of material transport impacts along the supply chain***

Criterion 6	Distance travelled by direct suppliers		

How to measure	Percentage of transport carried out by direct suppliers at a distance of less than 250 km from the production site.
	
	Transport means those of:
	  - Raw materials (one-way)
	  - Components (one-way)
	  - Products from toll manufacturing (adding round trip distance)		

Thresholds	**Gold' level threshold**	**Gold' level threshold**	**Gold' level threshold**
	90%	70%	50%
How it occurs	The company must provide evidence of the list of first-tier suppliers and their distances from the production site, also by consulting the Transport Documents (DDT).		

Appearance: ***Supply chain responsibility***

Description: ***Responsible supply chain***

Criterion 7	Compliance with conventions and commitments to respect human rights and the environment along the supply chain		
How to measure	The criterion is fulfilled if it can be certified that the production chain respects the principles of corporate social responsibility.		
Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	Yes	No, but the company audits suppliers	No, but the company audits suppliers
How it occurs	For each supplier, the company must produce evidence of the application of corporate social responsibility principles by presenting documentation proving the adoption of one or more of the main standards or adherence to nationally and internationally recognised social responsibility programmes. The following standards and programmes are considered valid: • SA 8000:2014 - Social Accountability 8000 International Standard by Social Accountability International • UNI ISO 26000:2010 - A guide to social responsibility • GRI Standards Guidelines, prepared by the Global Reporting Initiative		

- Accession to the UN Global Compact
- EcoVadis recognition (with an *overall score* of at least 40)
- B-Corp certification (www.bcorporation.net)
- Sedex Member Ethical Trade Audit Programme (Sedex SMETA)
- Responsible Care' programme - https://www.federchimica.it/servizi/sviluppo-sostenibile/responsible-care)
- Other equivalent documentation to be assessed by the verifier

Alternatively, for Silver and Bronze levels, the company is required to implement a supplier audit programme in which social sustainability aspects are assessed.

2. Distribution

Appearance: **Packaging**
Description: **Using sustainable packaging**

Criterion 8	Percentage of recycled material in packaging		
How to measure	The criterion is measured by applying the following formula: $$\% \; recycled \; material = \frac{recycled \; material \; weight}{packaging \; weight} \times 100$$		
Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	95%	85%	75%
How it occurs	The company must provide evidence of how the calculation was applied and how the quantities were measured. The content of recycled materials must be demonstrated in the following ways: • GRS certification • Self-declaration according to ISO 14021 • FSC Recycled • Other equivalent documentation to be assessed by the verifier		

The following criterion applies only to packaging containing paper, cardboard, wood and cork:		
Criterion 9	FSC/PEFC certifications for packaging	
How to measure	The criterion is fulfilled if the materials are certified.	
Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	yes	yes	yes
How it occurs	The content of sustainable materials must be demonstrated through the above-mentioned certifications provided by the supplier.	

Criterion 10	Recyclability of packaging	
How to measure	The criterion is fulfilled by applying the following formula expressing the percentage acceptability of the waste in recycling chains and proving that the packaging is disassemblable: $$\% \, recycling \, material = \frac{recycling \, material \, weight}{packaging \, weight} \times 100$$ Flows that are considered recyclable are those for which a recycling system is sufficiently widespread that the end-of-life can reasonably be considered to be sent to that system. A monomaterial is defined in the regulations as a material with less than 5 per cent secondary materials.	
Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	Single recyclable material	100% disassemblable and recyclable	Disassemblable and recyclable > 75 per cent
How it occurs	The company must provide evidence of how the calculation was applied and how the quantities were measured.	

3. Use

Appearance: **Restricted substances**

Description: **Responsible use of potentially hazardous substances**

Criterion 11	Responsible use of potentially hazardous substances		
How to measure	The criterion assesses both the use phase and the use of hazardous substances during production (e.g. in surface treatments). The criterion is fulfilled if the thresholds defined by ANFAO in its PRSL are met.		
Thresholds	**Gold' level threshold**	**Silver' level threshold**	**Bronze' level threshold**
	yes	yes	yes
How it occurs	The auditor will check the actual adoption of ANFAO's PRSL or otherwise verify compliance with its requirements.		