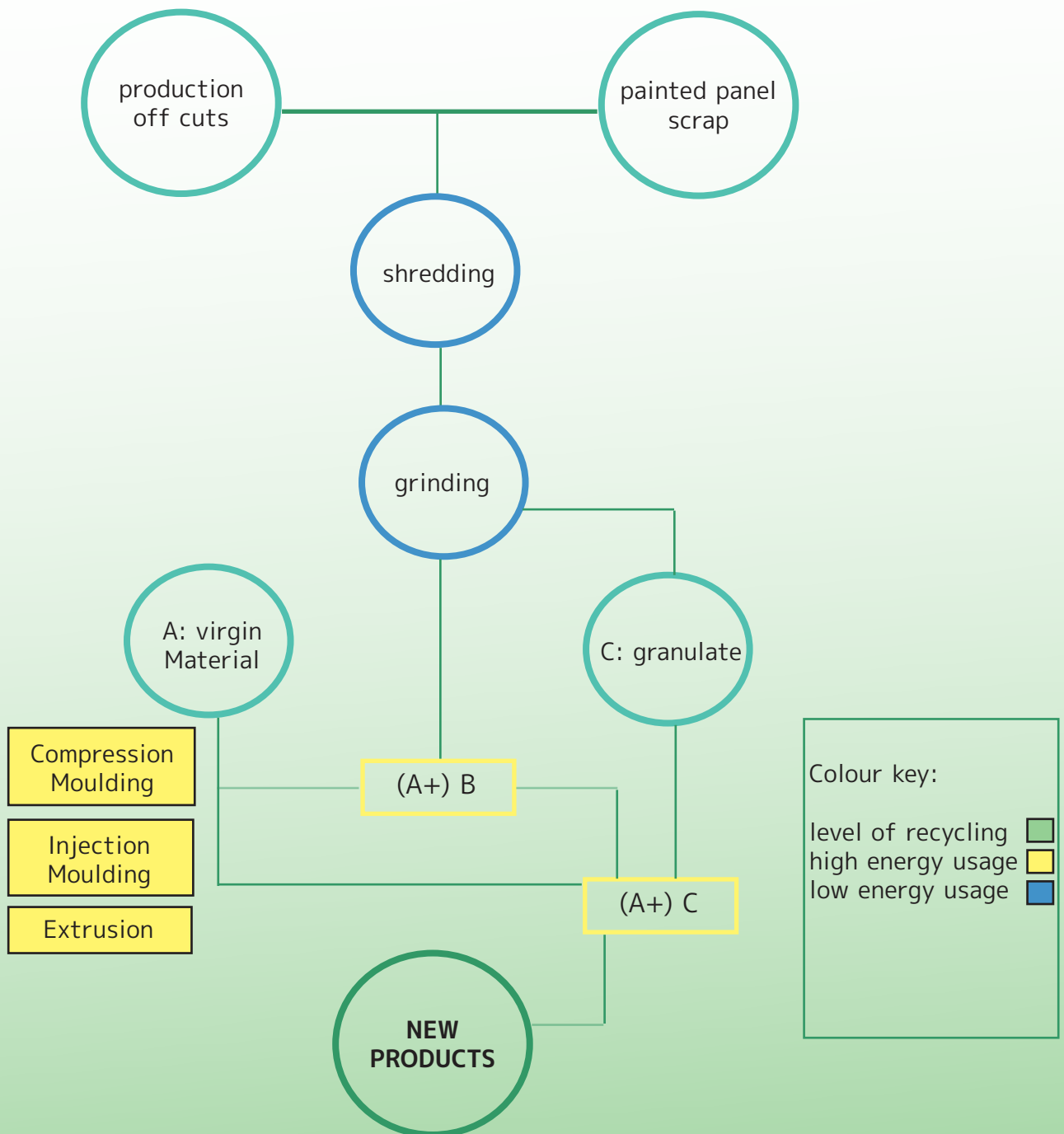




The Omnia panel is a product well suited for recycling because of the material component: polypropylene, a thermoplastic that can be melted and reused and glass fibres that functions a high quality additive to strengthen the polypropylene, as a long fibre or chopped.

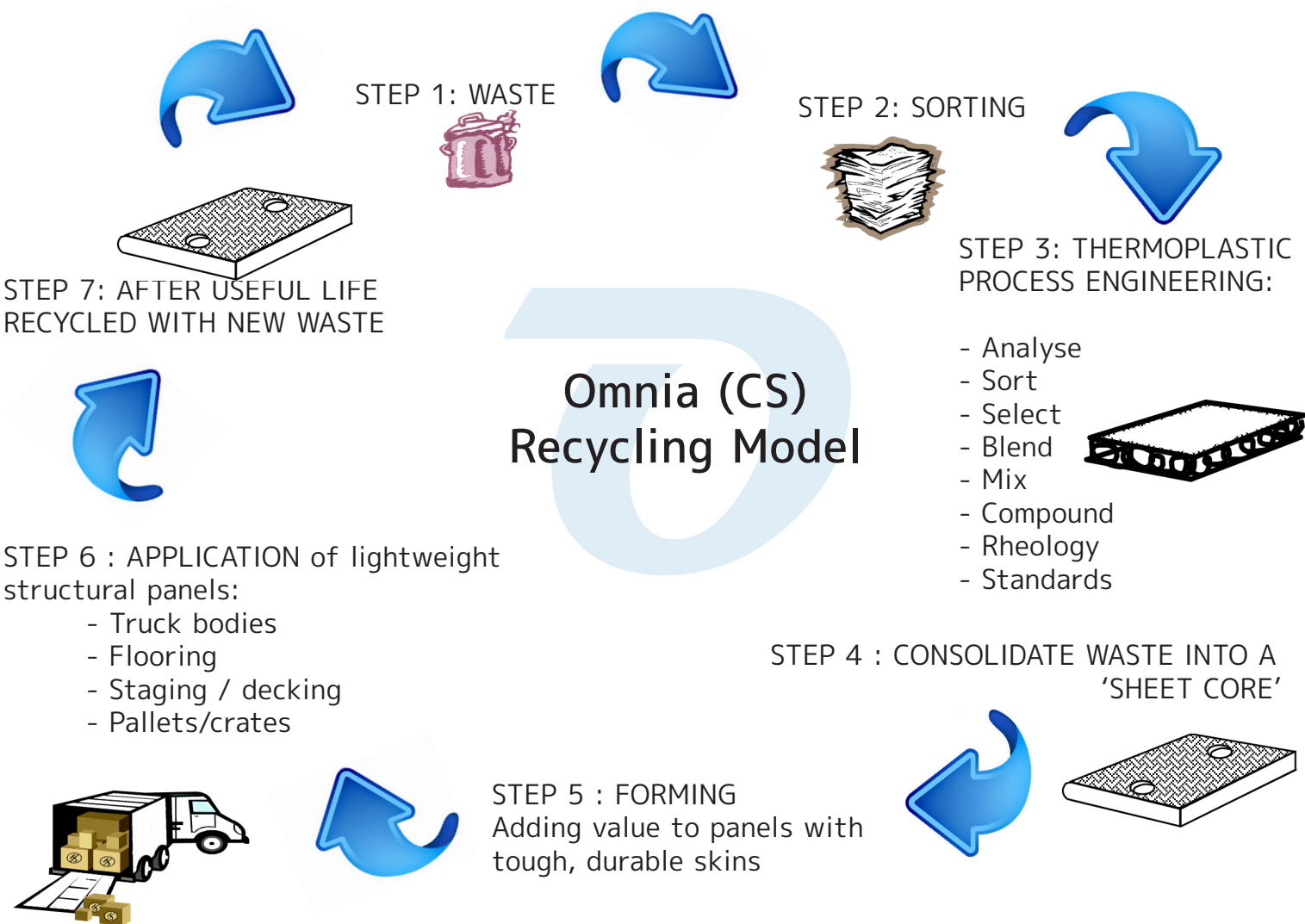
**An example of the recycling process:**



Two renowned research institutes (TITK and IKV) in Germany have studied the recyclability of the panel material. As a result the following exemplary mechanical properties are given:

Property	Unit	Testing method	Value
Ash residue	%	DIN EN	60 23 - 27
Density	g/cm <sup>3</sup>	DIN 55 990	1.06 – 1.09*
MVI (230°C/2,16kg)	cm <sup>3</sup> /10min	DIN 53 735	2.6 – 4.3
MVI (230°C/2,16kg)	g/10min	DIN 53 735	2.3 – 4.1
Tensile module	N/mm <sup>2</sup>	DIN EN ISO 527	3700 – 5000
Tensile strength	N/mm <sup>2</sup>	DIN EN ISO 527	35 – 39
Elongation to break	%	DIN EN ISO 527	2.0 4.3
Flexural module	N/mm <sup>2</sup>	DIN EN ISO 178	3000 – 3900
Flexural strength	N/mm <sup>2</sup>	DIN EN ISO 178	55 – 61
Flexural elongation	%	DIN EN ISO 178	2.7 – 4.1
Hardness	N/mm <sup>2</sup>	DIN ISO 2039 T1	69 – 76
Impact energy			
Charpy 23°C	kJ/m <sup>2</sup>	DIN EN ISO 179	12 – 22
Charpy Notched 23°C	kJ/m <sup>2</sup>	DIN EN ISO 179	4.1– 7.9

A more complete and complex material recycling model could look like this:



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The mechanical properties in this datasheet represent our current state of technical knowledge. As variations are possible in production, we cannot guarantee particular properties or suitability for any specific application and the data should not be used to establish specification limits nor used alone as basis of design. This information may be changed as new knowledge and experience becomes available. All products are sourced from Holycore Co. and have no liability in connection with this information