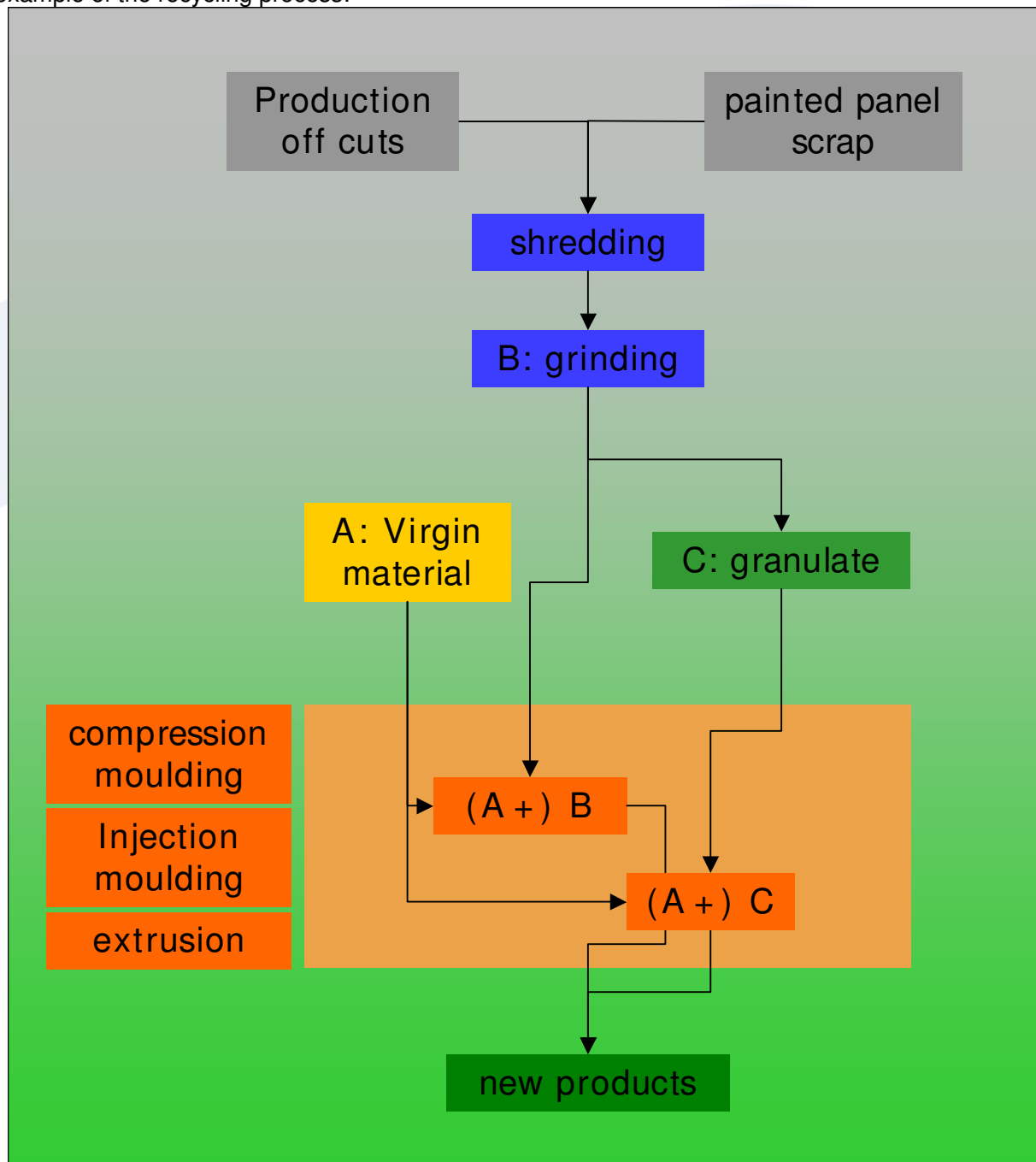


# Recycling the Omnia panel

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:



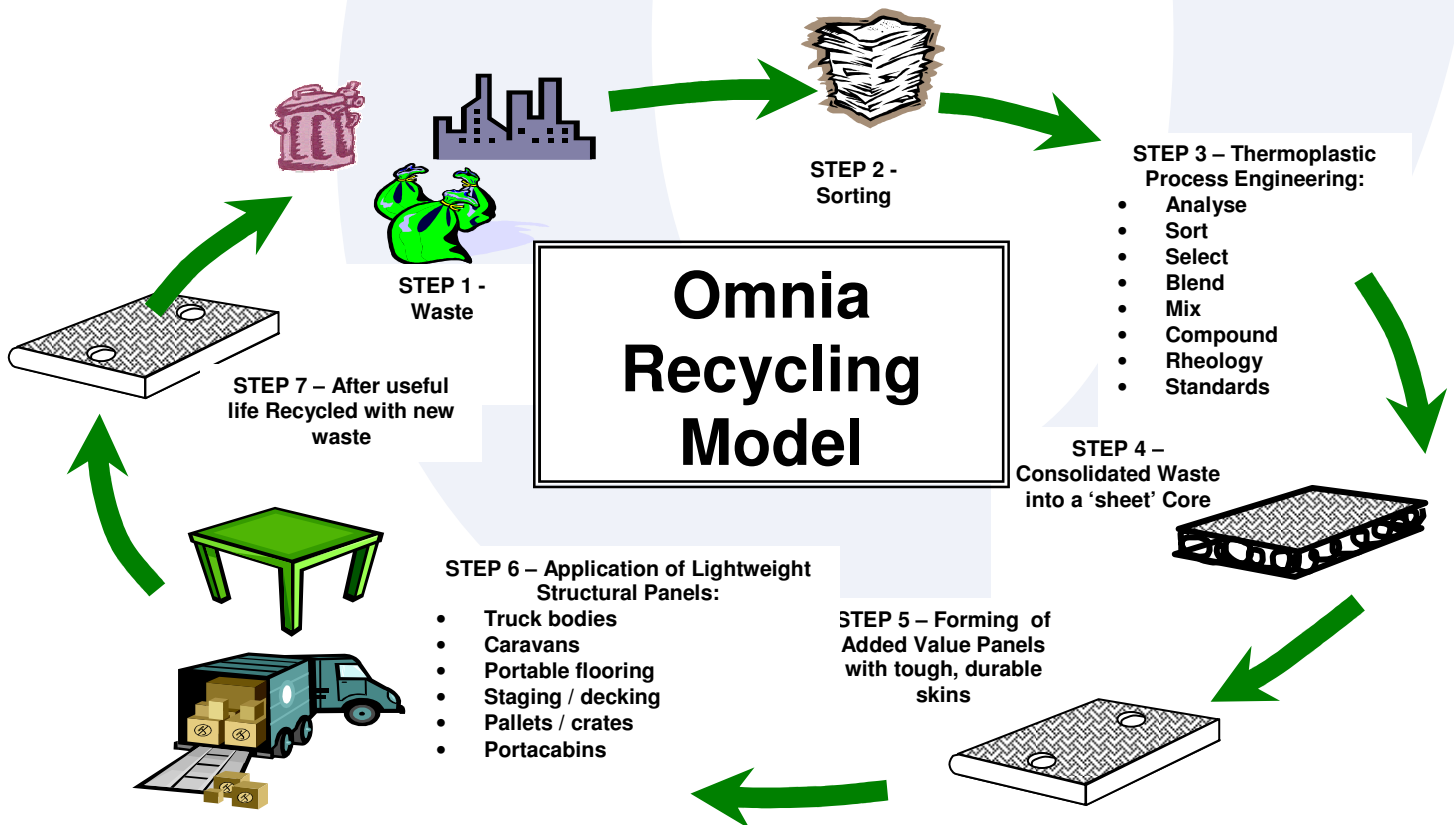
**colour key:**  
level of recycling | high energy usage | low energy usage

Two renowned research institutes (TITK and IKV) in Germany have studied the recyclability of the panel material. As a result are 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

Additives to improve the processability were used.

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



## Recycling the Omnia panel

# Omnia

(C.S.) Ltd

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The specifications in this data sheet represent the current state of our technical knowledge and its purpose is to inform about the Omnia Panel and its applications. The specifications therefore do not guarantee particular properties or suitability for a specific application. We reserve the right to make changes in accordance with technological processes and other developments. We guarantee faultless quality in accordance with our conditions of sale.

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