JELU-WERK

JOSEF EHRLER GMBH & CO. KG

Foundation
- 1908

Turnover
- 20 million €

Employees
- 70

Key bio-based products
- JELUXYL® product range - pure – grade wood flours
- JELU WPC – wood plastics composites
- Cellulose fibres and powders
- Wood fibres

Company

JELU processes wood fibres and plastics such as polypropylene and polyethylene to produce homogeneous WPC granulates with different filler concentrations. Many years of experience, high-grade contents and our own test series guarantee our customers superb quality.

Products

Several years ago, JELU developed its own process for manufacturing WPC. Depending on the requirements of our customers, we use wood fibres, plastics and additives in different proportions. JELU's innovative composite material is characterised by convincing features such as exceptional product properties, a high degree of design flexibility, outstanding processing attributes and competitive prices. Our WPC granulate has already proved its worth in numerous applications. With our JELUXYL® product range, we also offer pure-grade wood flours of the best quality for the production of individual high-quality compounds.

Profiles made from JELU WPC granulate using the coextrusion technique

The composition of the WPC granulate makes different demands on the processing machines. Our technicians have extensive experience and advise our customers regarding the processing of WPC in their own companies as well as on the manufacture and processing of individual compounds.

Products made from JELU WPC granulate using the extrusion technique

Product characteristics

Our compacted WPC granulate is suitable for extrusion, injection moulding, panel pressing and thermoforming. For rotational moulding, only free-flowing and plastic-coated wood particles are used. Depending on the forming techniques and additives used, the finished products are suitable for outdoor and indoor use and have many competitive characteristics:

- Visually appealing owing to their fibrous wood structure
- Mouldable to your needs and in three dimensions
- Dimension-stable
- Sound-absorbent
- Weather-resistant
- Moisture-resistant
- Lighter than plastic products
- Protected from attacks by insects and fungi
- Resistant to rot even in direct contact with earth
- Recyclable

Link to Agrobiobase

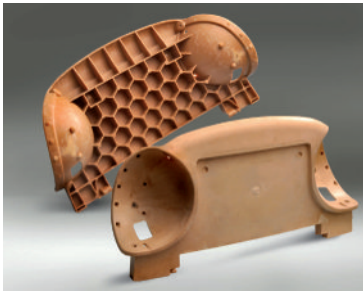
Test results* for JELU WPC granulates

JELU WPC granulates are inspected for standard values by an independent institute. The table below shows the measured data of some WPC granulates. If you are interested, we will be happy to provide more composition options for granulates and their measured data.

JELU – WPC No. 1H: polypropylene, wood content 70%, light beige colour
JELU – WPC No. 2H: polypropylene, wood content 58%, light beige colour
JELU – WPC No. 12H: polypropylene, wood content 50%, natural colour
JELU – WPC No. 19H: polypropylene, wood content 60%, natural colour

Measurement parameters	Standards	Units of measure	1H	2H	12H	19H
Density	ISO 1183	g/cm³	>1,25	1,2-1,25		
Flexural modulus in elasticity	DIN EN ISO 178	MPa	3070	4838	3949	4799
Tensile modulus in elasticity	ISO 527	MPa	2555	4435	4497	5043
Tensile strength	ISO 527	MPa	9	19	44	45,1
Elongation at break	DIN EN ISO	%	ca. 0,35	ca. 0,35		
Brinell hardness (ball diameter 10 mm)	DIN EN 1534	N/mm	x	ca. 115		
Charpy impact strength 23°	ISO	kJ/m²			20,69	13,73
Notched impact strength 23°C	ISO 179/1eA	kJ/m²	1,74	2,95	3,36	3,17
Coefficient of linear thermal expansion 23°C – 80°C, parallel / transverse	ISO 1183-1	10-6/°C				
Flammability UL 94 (d = 1.6 mm)	IEC 60695-10-11	Class	No classification achieved			

*The profiles used for measurements were manufactured using extrusion and injection moulding techniques. The standards are derived from the plastics industry and reflect only part of all information available. Any change in formulation leads to different test results.



Headrests made from JELU WPC granulate using the injection moulding technique

Contact

JELU-WERK
Josef Ehrler GmbH & Co. KG
Ludwigsmühle
73494 Rosenberg
Germany
Phone: +49 (0) 7967 90 910
Fax: +49 (0) 7967 90 91 70
team@jelu.de
www.jelu.de

Contact persons

Jens Schienke
j.schienke@jelu.de

Markus Hesse
m.hesse@jelu.de