

UPM FORMI BIO-COMPOSITES

SUSTAINABILITY MEETS PERFORMANCE



UPM Biocomposites

- **who we are**

UPM Formi SP/HP

- **enhancing sound performance, reducing noise**

UPM Formi EcoAce

- **sustainable design based on almost 100% renewable resources**

UPM Formi 3D

- **outperforming traditional designing with wood like materials**

UPM Formi FibCo

- **high performance concentrate enabling the access to sustainable growth**

UPM Formi SP/HP - Abstract

enhancing sound performance, reducing noise

- UPM Formi loud speaker enclosures
- compared with traditional plastic materials
- compared with MDF materials



Specific Modulus up to
100 % higher

Dynamic Loss up to
300 % higher

Natural Frequencies up to
35 % higher

WiFi Signal Strength up to
100 % higher

Total Cost up to
80 % reduction



UPM Formi 3D - Abstract

outperforming traditional designing with wood like materials



3D printed casting mould

Advantages compared to CNC milling:

- Faster lead time
- Scrap rate close to zero
- 35% weight reduction
- Some complex shapes not even possible by CNC milling
- Good water resistance due to coated fibres
- Cost savings total of ~40%

- Structures can be combined with Plywood Structures



UPM

The Biofore
Company