## "floats on water" AFS (Aluminum Foam Sandwich) material

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#### 1. AFS structured Metal Foam

- An Aluminum Foam Sandwich (AFS) structure is a composite consisting of an aluminum foam core with two dense metallic face sheets.
- The AFS structured material can be used as the light-weight structural components with high stiffness and high energy/vibration absorption properties.

#### 2. AFS product appearance

(AFS structured panel)



(AFS structured cylinder)



# 3. New "Friction Stir Processing (FSP)" for fabricating AFS structure

- The low cost "AFS structured material" i.e. panel, cylinder, pipe is developed by using the "Friction Stir Processing (FSP)".
- Newly developed "metal bonding method" is highly productive and NO adhesive is necessary for "AFS structured material".
  - \* FSP was developed from the basic principles of friction stir welding (FSW), which is a solid-state bonding process.

### **Patent Licensing Available**

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