

The Agency of Industrial Science and Technology (AIST) of Japan has developed and patented a series of novel, fiber-reinforced thermoplastic matrix composites.

APPLICATIONS OF THE OPPORTUNITY

Glass Mat Thermoplastics and those made with more advanced material components have uses in many applications including:

- *Automotive Industry:* Seat frames, battery trays, bumper beams, valve covers, rocker panels, and under engine covers.
- *Aerospace Industry:* Stabilizer fins for missiles and other aircraft, wing ribs & panels, fuselage wall linings, overhead storage compartments, ducting, fasteners, engine housings, and helicopter fairings.
- *Construction Industry:* Pipes, concrete rebars, and lightweight structural and insulating panels.
- *Materials Handling:* Cargo containers and pallets.

KEY PROPERTIES

These compositions can be customized to suit a range of temperature and environmental conditions. Other properties include:

- High Strength;
- Low Density, hence light weight;
- Good insulating properties;
- Good Toughness;
- Good Environmental Resistance; and
- Can be remolded.

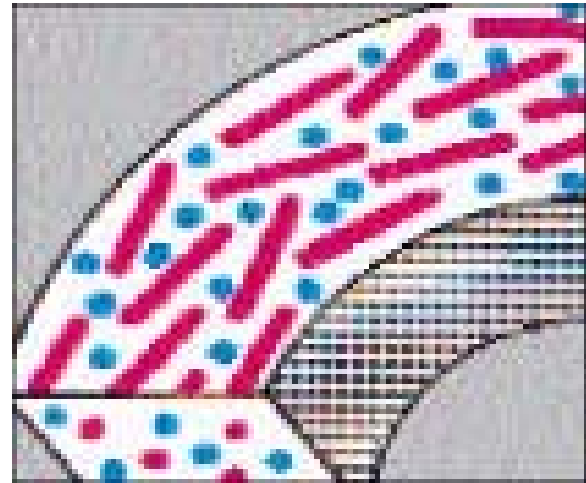
The ratio of thermoplastic resin to reinforcing fibers is 55 – 70:45 – 30.

INTELLECTUAL CAPITAL

On April 1, 2001, Japan's National Institute of Advanced Industrial Science and Technology began operations as the "new" AIST.

The new AIST is a research organization that comprises 15 research institutes previously under the former Agency of Industrial Science and Technology in the Ministry of International Trade and Industry and the Weights and Measures Training Institute.

AIST is Japan's largest public research organization with research facilities and more than 3,200 employees across Japan.



PATENTED TECHNOLOGY

Current U.S. patents granted that protect the technology include:

| <i>US Patent</i> | <i>Features</i> |
|------------------|--|
| 5,537,718 | <ul style="list-style-type: none"> • Method for production of material for composite article. • Matrix of fiber-reinforced thermoplastic resin. • Mixing ratio of the components varies in the direction of thickness. |
| 5,858,152 | <ul style="list-style-type: none"> • Method for production of composite material and composite material produced thereby. • Thermoplastic resin matrix with surface coated with thermosetting resin. • Matrix voids filled with thermosetting resin and reinforcing fibers. |

FOR MORE INFORMATION

AIST is seeking to license these technologies and assist with their commercialization success to qualified organizations.

Consideration will be provided to a range of financial, strategic, and commercial investment options.

Certain circumstances will warrant consideration for nominal funding from AIST.

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