

## MSE-401

### PMCs

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- Polymers that are frequently used as composites are either thermosetting polymers, thermoplastic polymers or elastomers.

#### Advantages of PMCs:

- Low specific weight
- High material stability against corrosion
- Good electrical and thermal insulation
- Ease of shaping and economic mass production
- Attractive optical properties

#### Disadvantages of PMCs:

- Low strength and
- Stiffness

## **Production methods of PMCs:**

- + Hand lay-up
- + Vacuum moulding
- + Spray lay-up
- + Pultrusion
- + Resin transfer moulding (RTM)
- + Filament winding

## **Applications of PMCs:**

- + Automotive industry
- + Aircraft and aerospace industry
- + Marine
- + Sports goods
- + Biomedical applications.
- + Electrical
- + Protective equipment
- + Industrial
- + Structural