

# Forged Molding Compound™



## Characteristics and Advantages

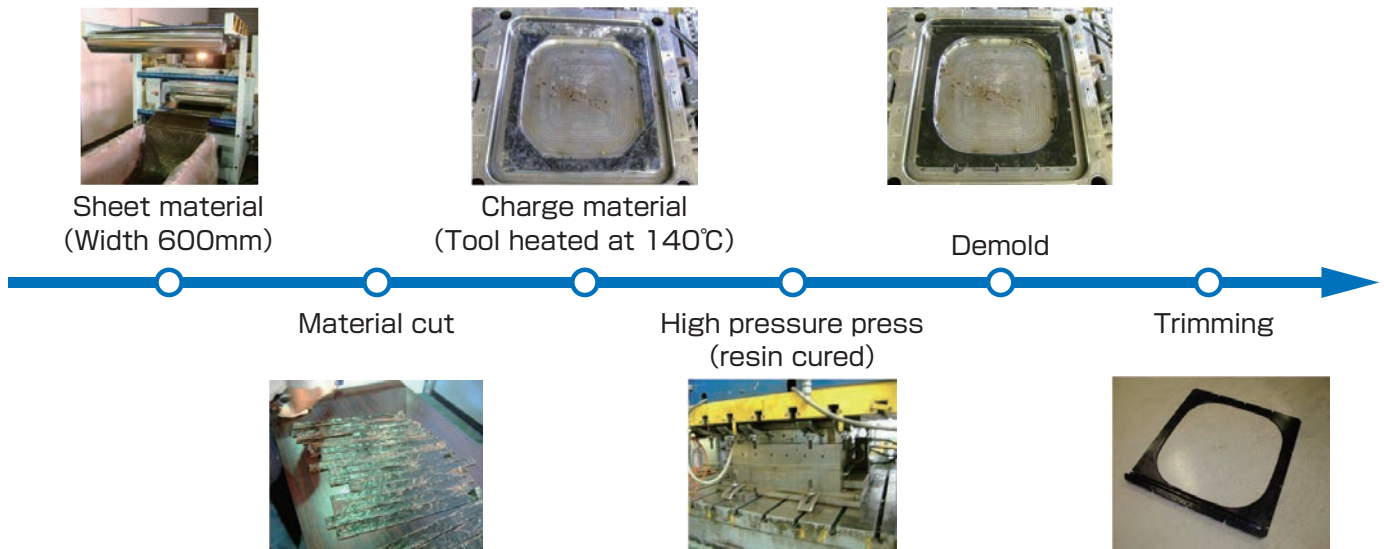
### ■ Characteristics of Chopped CF Reinforced Vinyl Ester

- Quick cure press molding (2 minutes at 140°C at 2mm thickness)
- Excellent flow (Large and complex shape feasible)
- Good mechanical properties (e.g. standard CF 53wt%)
  - Tensile strength 150MPa
  - Tensile modulus 30GPa

### ■ Advantage

- Light weight
- Short cycle time
- Complex parts and parts integration
- Less material waste

### ■ Molding Process



## Applicable components

- Toyota Prius PHV - Back Door Inner (40% Light weight against AL parts. The number of parts reduced by 20%)



- Lexus LC500h - Side door inner/Luggage inner



## Proposal for the future

- Original metal parts replacement, e.g. Forged AL/steel parts, casted AL/steel parts)
- Propose right design + Right process + Right material through development