Introduction of TPEE Materials

TPEE, also known as polyester rubber, is a class of linear block copolymers containing PBT (polybutylene terephthalate) polyester hard segment and aliphatic polyester or polyether soft segment. TPEE is a new type of thermoplastic elastomer with excellent elasticity of rubber and processability of thermoplastic plastics, adjustable softness and hardness, and free design.

Elastomeric properties:

TPEE features:

- 1. Excellent bending fatigue resistance
- 2. Excellent instantaneous high temperature performance
- 3. Excellent impact resistance, especially at low temperature (-40 C)
- 4. Good tear resistance and wear resistance
- 5. Excellent chemical and weather resistance
- 6. Excellent electrical performance
- 7. Excellent Charge Bearing Capacity
- 8. Excellent adhesion with ABS, PBT and PC
- 9. Excellent adhesion with paint, glue and metal
- 10. Processing diversity and ease of processing, good melting fluidity, stable melting state, low shrinkage, fast crystallization.

TPEE has been widely used in automobile parts, hydraulic hoses, cables and wires, electronic and electrical appliances, industrial products, cultural and sports goods, biological materials and other fields because of its outstanding mechanical strength, excellent resilience and wide use temperature. TPEE is the most widely used in automobile industry, accounting for more than 70%.

Elastomer applications:

TPEE is mainly used in areas requiring shock absorption, shock resistance, flexibility, sealing and elasticity, oil resistance, chemical resistance and sufficient strength. Such as: polymer modification, automotive parts, telescopic telephone soft wire, hydraulic hose, shoe material, transmission belt, rotary forming tire, gear, flexible coupling, muffling gear, elevator slideway, anti-corrosion, wear-resisting, high and low temperature materials in pipeline valve parts of chemical equipment, etc.