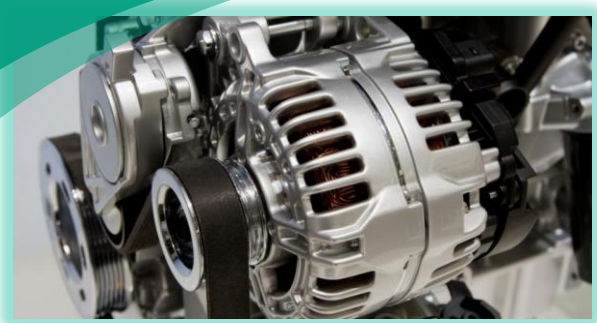
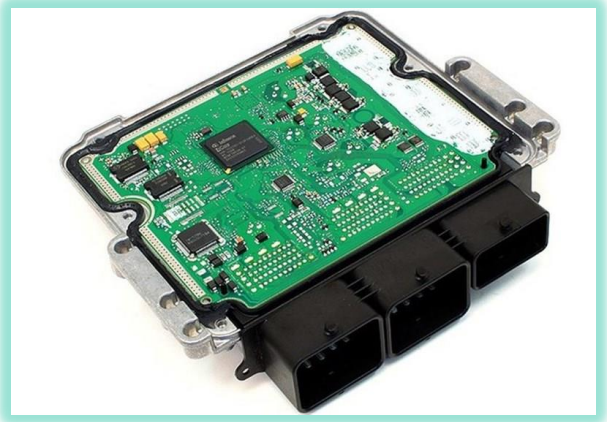


GRAFT POLYMER

COMBINE INCOMPATIBLE

BLOCK-COPOLYMER GRAFTAKIT E-GMA

2021



INTRODUCTION

Graft Polymer introduces alternating copolymer of ethylene and glycidyl methacrylate

(~80% Ethylene & ~20% Glycidyl Methacrylate by weight) GRAFTAKIT™ E—GMA.

GRAFTAKIT™ E—GMA is a random copolymer of ethylene with epoxy moieties that enables to compatiblize polyolefins with polyesters as PET, PBT, PPS.

GRAFTAKIT E-GMAH CHARACTERISTICS

- ✓ High reactivity to various compounds or polymers with functional groups
- ✓ Elasticity and ductility
  - Glass transition temperature (Tg) : Tg -25
  - Tensile strength(TS) : TS 130kg/cm2
  - Elongation(E) : E 500%
  - Stiffness modulus : 400~1000kg/cm2
- ✓ High processability in extrusion or injection molding.
  - Pellet Type

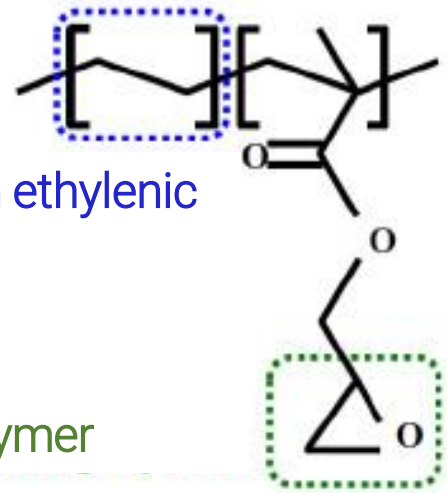
KEY FEATURES of GRAFTAKIT™ E—GMA

GRAFTAKIT™ E—GMA has the following key features

- High reactivity of epoxy group
- Extremely low glass transition temperature
- High processability

GRAFTAKIT™ E—GMA has been used to develop a variety of new Engineering Thermoplastics and their alloys as a toughener and/or a compatibilizer.

GRAFTAKIT™ E—GMA is the copolymer of ethylene and glycidyl methacrylate (GMA, containing epoxy group)



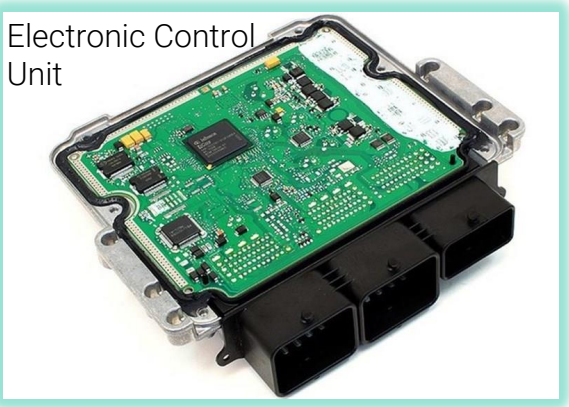
Olefin structure is compatible with ethylenic polymer

Reactive with metal and polar polymer

MAIN APPLICATIONS

- Automotive parts
- Electrical and electronic parts
- Building material parts
- Cable
- Recycle PET modifier
- Film etc.

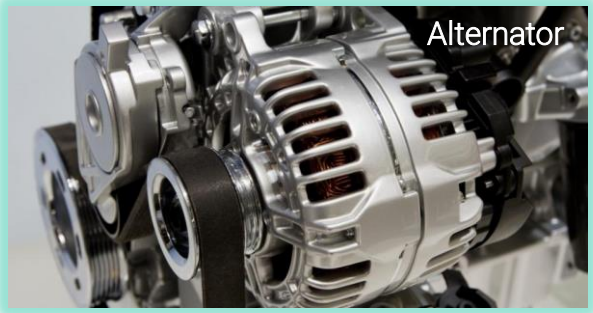

Power Module


Electronic Control Unit

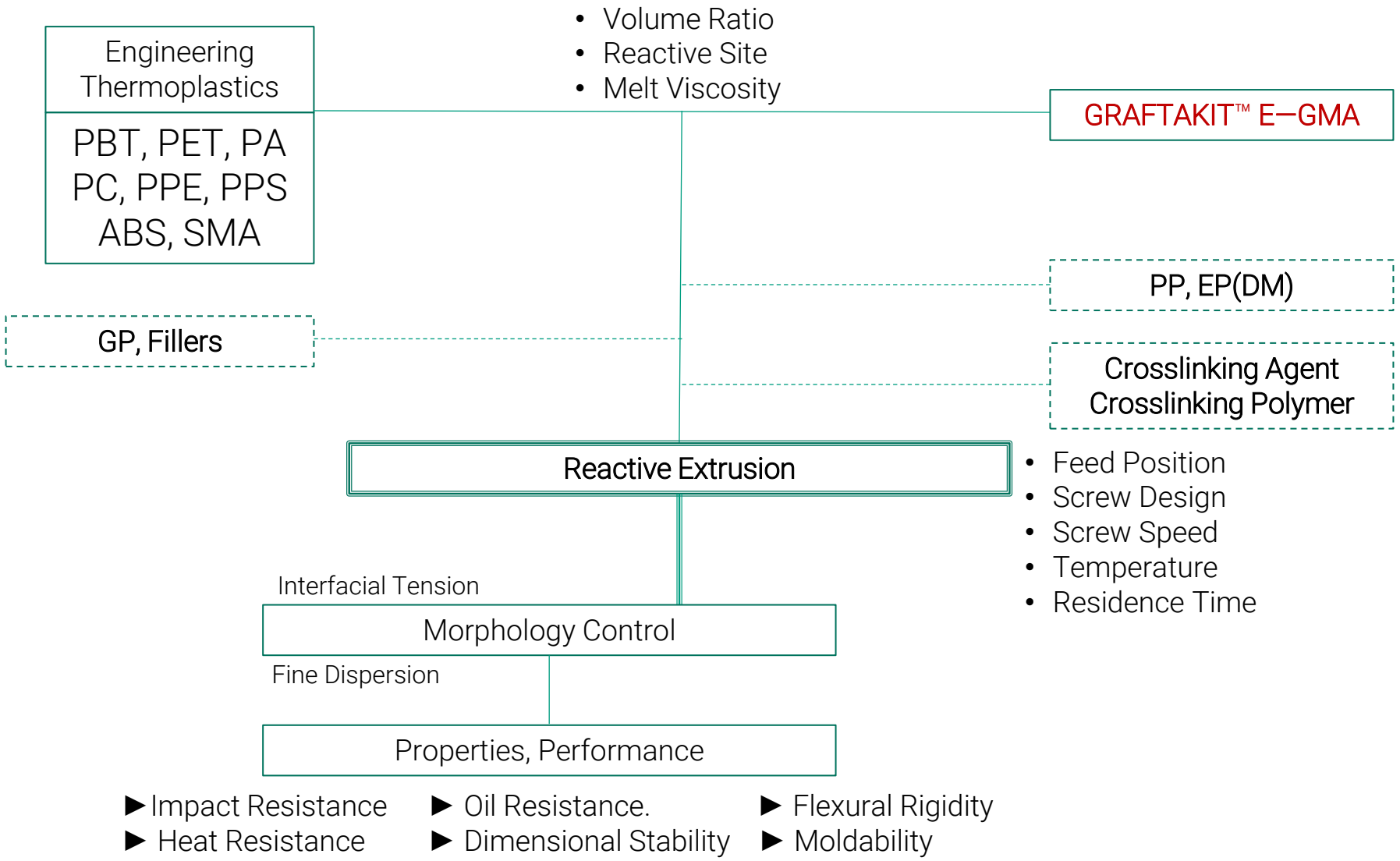

Motor Brush Holder


Ignition coil


Lamp Reflector


Alternator

GRAFTAKIT E-GMAH



WHAT MAKES GP UNIQUE

- Use **proprietary co-agents** and **redox initiating system** for grafting
- Use of **Nitroxide Mediated Polymerization** for controlled grafting reactions
- **Co-continuous nano-morphology** approach for creation polymeric alloys
- **Interpenetrating Polymer Networks (IPN)**
- **Thermo-Reversible Crosslinking polymers** and **Vitrimers**
- **Smart Polymers**
  Self-Healing polymers
- In-house synthesis of unique "**nitroxide stable radicals**" (TEMPO) for high-tech composite materials – proprietary process

BUSINESS MODEL: INNOVATIONS

GRAFT / BLOCK POLYMERS

POLYMERIC NANO ALLOYS

CROSSLINKING

POROUS

SYNTHESIS

INNOVATIVE TECHNOLOGIES

- Flow induced crystallization
- Solid Phase Grafting
- Solution Grafting
- Fillers Treatments
- Powders Hybridization
- Hot ozonolysis/plasma modification
- Nitroxide Mediated Polymerization
- Micro/Nano Porous polymer carries

To support its unique modification technologies, GP has built the **R&D** center including **Laboratory** and **Synthesis facilities**

GRAFT POLYMER
COMBINE INCOMPATIBLE

Contact information

Anjeza Kuhar | Sales Manager
English / Italian / Albanian
Phone: +386 40 380 668
anjeza.kuhar(at)graftpolymer.com

Ekaterina Kulevskaia | Sales Manager
English / Russian / Slovenian
Phone: :+386 31 399 366
ekaterina(at)graftpolymer.com

Pavel Kobzev | English / Hebrew
Business Development & Sales Director
Phone: +386 40 867 937
Pavel(at)graftpolymer.com

www.graftpolymer.com
Info(at)graftpolymer.com