

Case study : Energy saving with *Moplen EP542V*

High flow polypropylene block copolymer for Automotive compound

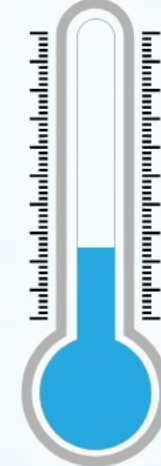
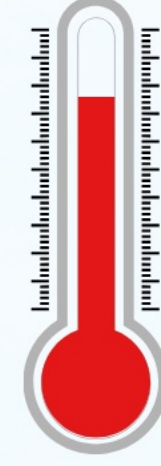
Injection Temperature Reduction



10 - 15°C
Reduction

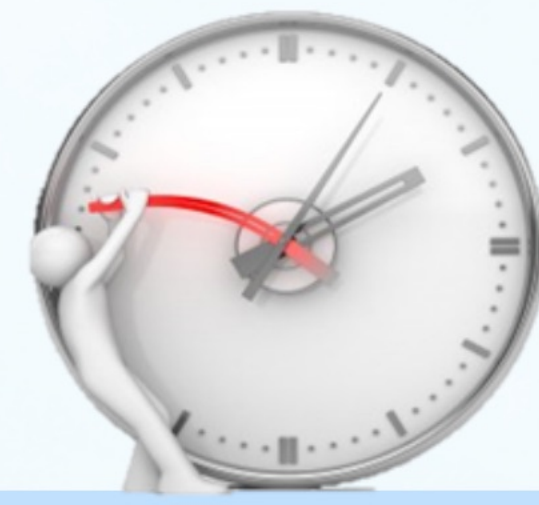
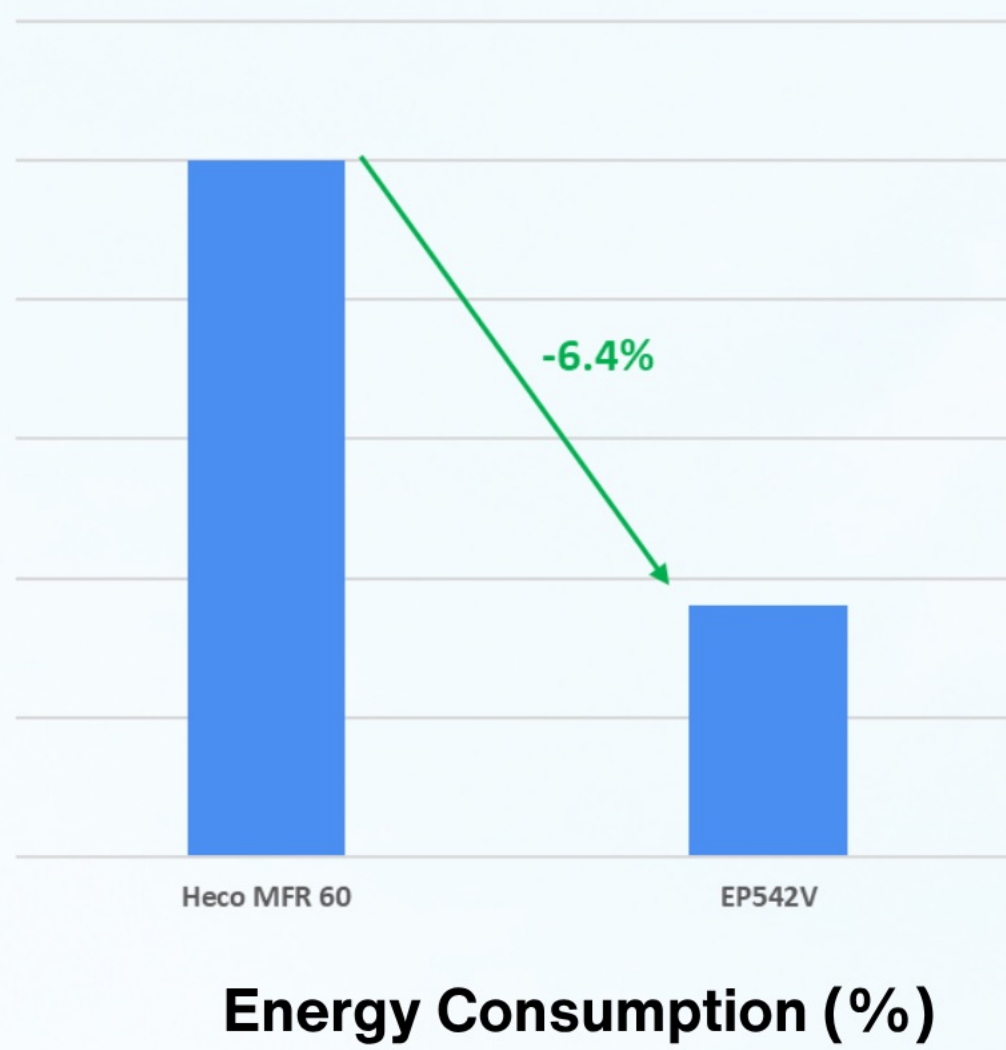
HECO MFR 60

Moplen EP542V



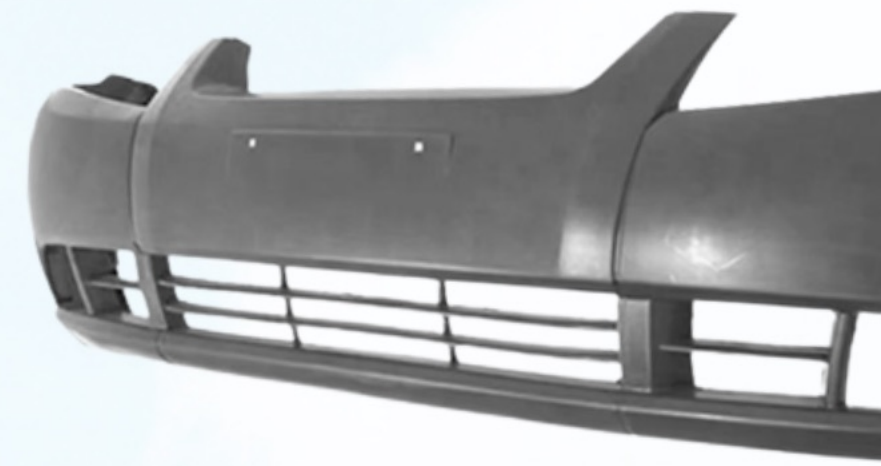
Cycle Time Reduction

Moplen EP542V delivers exceptionally higher MFR, enabling easier flow and supporting energy-efficient processing versus the market's HECO MFR60 grade.



Cycle time
~ 8% lower

EP542V (MFR 110) vs Copolymer PP (MFR 60)



Key Application and Technical Data

Application :

- **Thin Wall Injection (TWIM) products**
Cups Plastic containers
- **Automotive compounds**
Interior and exterior parts
- **Flow promoters in compound building block**

Trends in automotive compounding :

- Light weight / downgauging
- Final MFR of compound increasing without sacrificing mechanical performance
- Lower Total volatile content (TVOC) and odour (mainly for interior components)
- Improved aesthetics / scratch resistance

Properties	Value
Melt flow rate (230°C / 2.16 kg), dg/min	110
Tensile strength at yield, MPa	25
Flexural modulus, MPa	1540
Notched izod impact strength at 23°C, J/m	34
Deflection temperature, at 455 kPa, °C	114

Advantages of ex-reactor high flow PP grades :

- Final MFR of compound can be achieved without flow promoters
- Good building blocks for Filler / glass filled compounds
- Ex-reactor grades have lower TVOC and odour than peroxide cracked high flow grades
- Good part aesthetics due to high flow

