# LFT Material Formulation - A Key to Part Performance

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# Abstract:


- Long fiber reinforced thermoplastics (LFT) are cost-effective materials for substitution of metal and engineering thermoplastics in automotive applications. These composite materials, typically based on Polypropylene and glass fibres are conquering more and more applications and the use of LFT materials is growing in double digit numbers every year.

  Key to the success is the possibility to design maximum mechanical properties performance required by different automotive LFT applications and high quality assurance of the final part. New improved black additive and coupling agent formulations (combi-masterbatches) address these performance and safety requirements at lower system-costs than before. Addcomp´s new ADD-VANCE® masterbatch technology (also available from Dow Automotive: CMPP 13.xx product range) allows the LFT manufacturer to choose from a range of masterbatches each optimized for the various applications such as Underbody Panels, Instrument Panel Carrier, Door Modules, Seat Structures, Bumper Beams, Lift Gates, Spare Wheel Tubs, Battery Trays, and other structural parts. As a result, the LFT manufacturer can better utilize the design freedom from the in-line compounding process during the LFT part development process to achieve the optimum in mechanical properties performance at lower costs. For this reason LFT will continue to replace GMT and also continue to find new applications all around the world. The presentation will give an overview about the mechanical properties performance of the latest generation of LFT materials for current and future applications.

  This presentation is now available from the SPE website: http://www.speautomotive.com/comp.htm






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