

子在应力作用下, 引发并控制银纹的发展, 从而提高复合材料的抗冲击性能。

(4)按照最佳工艺和最佳共混条件, PP 为 100 份, 胶粉为 20 份, ENR 和 PP-MAH 均为 6 份时, 制得复合材料的冲击强度为 $14.1 \text{ kJ} \cdot \text{m}^{-2}$, 拉伸强度为 18.5 MPa , 相对于简单共混, 冲击强度提高了近两倍, 拉伸强度提高了约 35 %。

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Effect of ENR/PP-MAH Two-component Compatibilizer on Waste PP Toughened with Ground Tire

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Abstract The effect of the blending procedure, the amount of compatibilizer, and the amount and particle size of ground tire on the physical properties of the waste PP/ground tire composite compatibilized with ENR/PP-MAH (maleic anhydride grafted polypropylene) two-component compatibilizer was investigated. The results showed that the chemico-physical bonding between ENR and ground tire formed through the shearing action and the crosslinking with DCP to make ENR/PP-MAH compatibilizer more effective; the impact strength of the resultant composite was $14.1 \text{ kJ} \cdot \text{m}^{-2}$ and its tensile strength was 18.5 MPa when the optimal blending procedure, 100 parts of PP, 20 parts of ground tire, 6 parts of ENR and 6 parts of PP-MAH were used; the compatibility on the boundary between PP and ground tire improved by the addition of two-component compatibilizer from the view of SEM on the impact cross-section.

Keywords ENR, PP-MAH, PP, compatibilizer, ground tire, toughening

超低温粉碎机开发成功

浙江绍兴丰利粉碎设备有限公司嵊州市特种粉碎设备厂和浙江大学联合开发成功 DFJ 超低温粉碎机。

该设备主要由物料冷却、输送、粉碎、产品分离和收集系统组成, 并采用液氮致冷剂,

可以对热敏性塑料、橡胶等高分子材料进行超低温粉碎。

该设备能提高物料粉碎细度, 改善其流动性。此外, 该设备在封闭系统中进行操作, 噪声低, 无粉尘污染, 同时操作安全。

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