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Abstract Details

Title: Optimum Performance of Nonwoven Geotextile through Combination of Bonding Methods

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Abstract: Nonwoven geotextile have proved to exhibit significant potential in several application such as road and railway construction, landfills, erosion control, flood protection work, slope stabilization etc. Such applications require geotextiles to perform more than one function. Owing to the fact that, with an increase in both necessity and demand of nonwoven geotextile products in several applications, research activities are ever increasing in geotextile field for manufacturing of new products. One of such product is nonwoven geotextile produced through combination of bonding method at manufacturing stage. Experimental work is performed in the laboratory on mechanically-thermally bonded (MTB) products and its mechanical test results are compared with mechanically bonded (MB) i.e., needle punched and thermally bonded (TB) nonwoven geotextile of similar mass per unit area. The results show that MTB product ensures optimum performance at lower weight.

Keywords: Geotextiles, Needle punched, Manufacturing, Mass per unit area.