



INVESTIGATION OF THE TECHNICAL PROPERTIES OF THE TYRE RETREADING COMPOUND FORMULATED WITH RSS/SCRAP RUBBER BLENDS

K. G. ALAHAPPEUMA,

Department of Manufacturing Technology, University of Vocational Technology, Ratmalana.

gayanthi111@yahoo.com

Due to higher demand of petroleum and petroleum based synthetic rubbers, the price of Ribbed Smoked Sheets (RSS) has been gone up. Therefore, local rubber industries, particularly re-treading tyre industry has started replacing RSS grade partly with a cheaply available scrap grade of Natural Rubber (NR) in their re-treading tyre compounds. It is reported that most of tyre re-treading rubber industries, with the sole aim of getting profits, blend the scrap rubber with RSS in arbitrary ratios even at the expense of quality of tyre re-treads. It is indeed a regrettable situation in the local rubber industries today. RSS grade, as the name implies is produced from the coagulum of latex, after smoke drying under control processes, whereas the scrap grade is prepared by just mixing the dried tree laces and cup lumps collected from plantation sites.

As a result, RSS grade possesses better technical properties (processing and strength properties) than the scrap grade rubber. The aim of the research was to find an appropriate economical blend of scrap rubber and RSS to produce optimum quality tyre re-treading compound.

Keywords: Technical properties. Tire retreading compound, Ribbed Smoked Sheets, Scrap rubber, Rubber blends