

SUNFLOWER BASED GREASE FOR HEAVY DUTY APPLICATIONS

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ABSTRACT

There is a great consumption of grease in an excavator. This large amount of lubricant is poured directly to the environment in specially sensitive areas. A grease based in sunflower oil and polymer thickener has been developed. An extensive tribological characterisation has been carried out in order to ensure a good compromise between EP and AW properties so that the grease could be used in two different applications: in the reduction gear (crown) and in the articulations (bushing/pin). The performance of the grease has been compared with two reference mineral lubricants.