

TITLE: "Maintenance Scheduling in the Oil Industry Using SMT Techniques"

ABSTRACT: Scheduling problems in the oil industry are characterized by a large number of absolute safety constraints. These require an extension of the well-known jobshop model with cumulative resources. We discuss methods of modelling cumulative resources in the presence of safety constraints, and evaluate strategies for dealing with these constraints. We compare solutions obtained using SMT techniques with those obtained by other techniques.