

ABSTRACT

In the company, machines necessary capital. Sometimes in production process occurs machine damage, so it is needed to prevent to avoid fatal damage. For that reason it must be built application programme expert system-based to diagnose damage that occurred. In this final task will be discussed about application programme to diagnose *Thermoforming RXC 660* machine damage. In this application programme, knowledge representation which used is production rules with inference engine backward chaining and forward chaining. This application programme developed with *Microsoft Visual Basic 6.0* and uses *Microsoft Access 2007* database. The result from application programme is expected to help giving solution how to repair type of machine damage that occurred.

Keywords : *Thermoforming RXC 660* machine damage, *Forward chaining*, *Backward chaining*.