



BACHELOR THESIS

Failure Analysis Process for Vulcanized Parts

Are you looking for an opportunity to write your thesis in an industrial environment or obtain valuable industry experience, during or after your technical education? Here is one of many interesting topics we have on offer. We are also very open to your own ideas in order to create a matching opportunity for you at VAT.

Innovation has always been the driving force at VAT since the company was founded over 50 years ago. This has made us the world leader in vacuum valves and vacuum sealing technology. This pioneering spirit motivates us daily to meet our customers' requirements with enthusiasm. Together with our employees we stand for passion, innovation and quality. VAT is headquartered in Haag (Switzerland) and employs approximately 2 000 people worldwide. It has production centers in Haag (Switzerland), Penang (Malaysia) and Arad (Romania) as well as a production facility in Xinwu (Taiwan). With our customers mainly being situated in the United States and Asia, this provides a great opportunity to start an international career.

What you will explore:

Within VAT "failure analysis" is used to determine a reason or root cause for why a part became a non-conformity. The failure analysis process follows known techniques like fishbone analysis and is setup for each individual case. A guided system (e.g. Excel based tool) could improve the process by predefining all aspects to look at and providing a selection format which guides the users to the measures needed to find a failure or root cause.

- Analyze existing process and techniques
- Define solution for a guided approach to failure analysis
- Economic calculation (ROI)
- Create failure analysis tool and test functionality

What you will need:

- Good knowledge in engineering or quality management
- Experience in failure analysis and quality management tools
- Sufficient knowhow in software programming (e.g. Excel macro)
- Curiosity and ability to think outside the box

Are You Ready for the Challenge?

Then we look forward to receiving your **electronic application sent to Joe Kaelin**.

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