

# IQZ

## Institut für Qualitäts- und Zuverlässigkeitsmanagement GmbH

*We cut your corporate risks*



Your customer demands an extended warranty period? You are facing challenges with respect to functional safety or warranty management? You need safety and reliability analyses? If so, IQZ is your competent partner.

The IQZ is one of the leading consultancy companies when it comes to the integrated implementation of safety and reliability beyond a product's life-cycle. Our experts not only come up with the necessary processes with your help but also fill these with the latest state-of-the-art methods. Our spectrum of clients ranges from SMEs in mechanical engineering through to DAX-30 companies from the aerospace industry.



**Ihr Qualitäts-Zulieferer.**

Institut für Qualitäts- und Zuverlässigkeitsmanagement GmbH

[www.iqz-wuppertal.de](http://www.iqz-wuppertal.de)

### Our services / your benefits

- » Process advice and organisation
- » State-of-the-art portfolio of methods
- » Experience in interdisciplinary and international projects
- » Close cooperation with universities (e.g. Bergische Universität Wuppertal, HAW Hamburg, HWR Berlin)
- » Broad-based network and involvement in numerous committees (VDI, VDA, COG Deutschland, Maschinenbaunetzwerk Bergisch Land)

### Priority fields

- » Quality management
- » Reliability management
- » Functional safety
- » Warranty management
- » Risk management
- » Risk simulation
- » Spare parts management
- » Site-Specific risk assessment
- » Machine reliability



# WARRANTY MANAGEMENT

*How do I react to a pending recall or serial damage? How is warranty management implemented in the company? What are the future challenges?*

A number of companies have turned their attention to warranty management – also called guarantee management – particularly through the offer of extended warranties – e.g. in the automotive sector - or "flat-rate contracts" in the field of MRO (Maintenance, Repair and Overhaul) services. A valid database is hereby of crucial importance – alongside a well-coordinated organisational structure – so as to be able to quantify technical, and consequently also financial risks on the warranty management process. The challenges here are diverse and usually entail high risks for the companies involved. Risks that are hard to quantify, such as the loss of image due to large-scale product recall, are particularly critical.

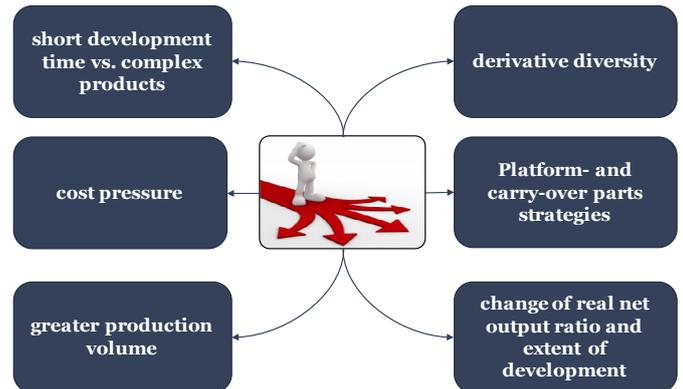


In order to cope with these challenges, an integrated warranty management concept has to be internalised in an early phase of the product development process and carried on through to the follow-up phase. This ensures that knowledge from the individual phases of the product development process as well as the product life-cycle can be collected, processed and then provided as a source of information in the other phases. Warranty management is thus not just the professional response to recourse, recall or spare parts stocking, but a company-wide strategic approach to avoiding risks and costs.

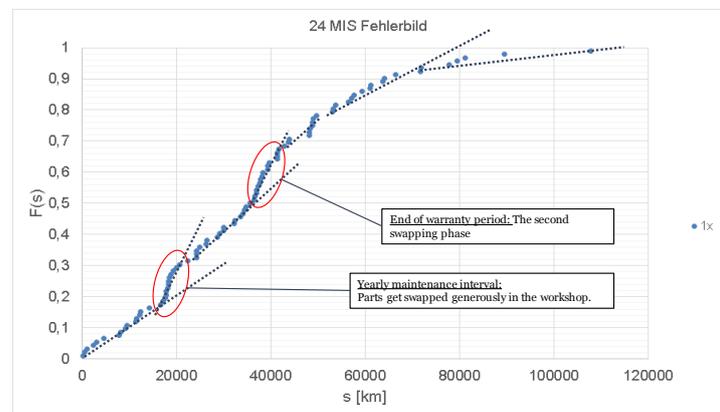
## Our services

- » Organisation of workshops, training sessions and GAP analyses
- » Establishment of KPI-based management systems
- » Support during regular and special recourse
- » Advice and risk assessment for field campaigns (e.g. recall), extension of warranty period etc.
- » Calculation of serial replacement requirements, warranty reserves and final stocking quantities
- » Exposure of warranty fraud

Topics such as platform and identical parts strategies in particular favour high-volume recalls or serial damages. The costs of these can threaten the existence of a company.



The following example shows the systematic and unjustified exchange behaviour of a component that was settled as a warranty case by the manufacturer.



## Portfolio of methods

- » Complaints management
- » Field data acquisition and analysis
- » Pareto analyses / layer lines / Weibull analyses / Wuppertal reliability forecast model
- » Simulation of technical failure behaviour and determination of critical field loads
- » Preventive reliability methods