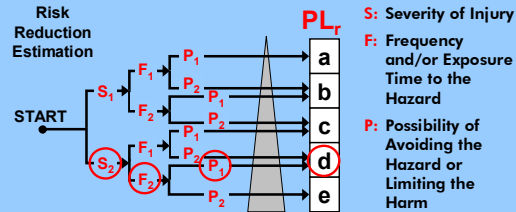


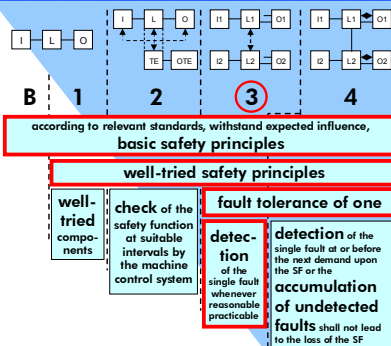
Safety of Industrial Automated Systems 2005

prEN ISO 13849: A Practical Standard for Control Systems

SAFETY FUNCTION AND REQUIRED PERFORMANCE LEVEL PL_r



CATEGORIES



MTTF_d, DC_{avg} and CCF

Good Engineering Practice Method

Parts Count Method

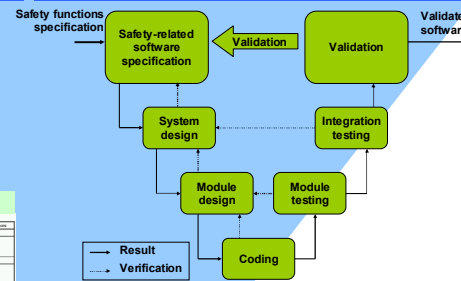
$$MTTF_d = \frac{1}{\frac{1}{MTTF_{d1}} + \frac{1}{MTTF_{d2}} + \dots}$$

DC: Tables for Estimates

CCF: Scoring Process

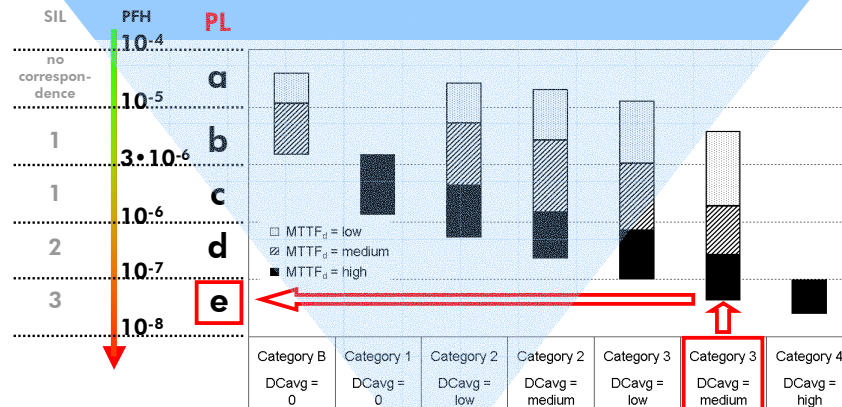
$$DC_{avg} = \frac{DC_1 \cdot DC_2 \cdot \dots \cdot DC_n}{MTTF_1 \cdot MTTF_2 \cdot \dots \cdot MTTF_n}$$

SOFTWARE/SYSTEMATIC FAILURE



SUPPORT BY THE BGIA

PERFORMANCE LEVEL



REAL EXAMPLE

