R&D-Coach

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Project description

Project Manager - EMC Certification

A high power pulse machine is a large source of electromagnetic interference (40 GA/s and 30 TV/s). For a laboratory application, this machine had to comply with the requirements for EMC in an industrial environment. In addition, the internal control system, in particular the safety control system, must not be affected by the interference.

To achieve this, I have consistently relied optical sensors in highly exposed areas. I also adjusted the shielding. The individual steps were checked by internal emission measurements and approved by final measurements in a certified laboratory.

Despite the measures I chose, the simple and safe operation of the machine remained guaranteed.

Targets and key figures



- ✓ Machine complied with EN 61326-1
- ✓ No EMC-induced emergency stops of the control system
- ✓ Boundary conditions (dimension, costs) met
- ✓ Reduce development costs of subsequent machines by establishing general rules
- ✓ Equipment for internal emission measurements evaluated and procured



October 2011 - November 2012



Budget CHF 100,000



Cooperation with two employees



Mechanical and electrical engineering industry



