

Accumulator charging

System development

of charger electronics for lead-gel accumulators

Customer requirement

The task was the development of intelligent charger electronics for a contrast agent injector consisting of hard- and software. For the customer a priority was preventing damage while charging the accumulator.

In addition variants should be developed which are capable of charging two or four accumulators. This was necessary because the system had to be integrated into several injectors.

comlet solution

Various charging processes were implemented to allow for non-damaging charging of the accumulator. Different factors were taken into consideration, e.g. the current state of charge or the surrounding temperature – also with the aim to guarantee a long accumulator lifespan. Information about the current status of the charging process was transmitted by means of serial communication to an existing control element. Additionally a debug and diagnostics interface was developed.

On the hardware side, comlet implemented the variants using an assembly option. In contrast, the software developed is the same for all variants.



Technologies used:

C, Fujitsu Softune Workbench, Eagle, Fujitsu μ C from the MB91460 family

