Design and assembly of a novel pump concept

Variable displacement pumps deliver only the necessary flow. This feature helps reduce hydraulic losses. However, cost is one disadvantage of fixed displacement pumps, which limits its application. Variable displacement pump are much more expensive than fixed displacement pumps, because they need a complex control and adjustment mechanism. As solution to this problem, a novel control concept for adjusting the flow in discrete steps was developed at ifas.

The scope of the work is to design the system and components of a working prototype followed by its assembly and installation. In previous work, a basic guideline for the design of the control have been formulated and a simulation-model have been created.

Your tasks:
- Design of parts to be manufactured
- Selection of the necessary components with help of the simulation model
- CAD-Modeling of the test rig
- Assembly of the prototype

Your strengths:
- Methodical and independent work ethic
- Self-motivated and proactive attitude

What we offer:
- Interesting topic
- Fast work schedule possible
- Comprehensive support
- Unlimited coffee

By interest just message or call me.

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18.10.2019