



Converter / Lance position: New solution for positioning of the oxygen lance

- No need of complex encoder constructions
- Higher accuracy
- Easy configuration of switching points
- Precise and reliable positioning



Before: Mechanical cam limit switch and absolute encoder mounted by using an additional distribution gear.



After: Electronic position switches and absolute encoder in one unit directly mounted without distribution gear.

Task

The customer needed a solution to detect the lance position for precise and reliable positioning. The old solution included an absolute encoder for current position values and a mechanical cam limit switch for position range monitoring. The limited positioning accuracy due to mechanical play was caused by the necessary installation of an additional distribution gear.

The task was to find a new solution instead of the old one with mechanical cam limit switch and absolute encoder.

The Hübner Giessen solution

To get the same outputs as before Hübner Giessen provides the universal encoder system U-ONE(-SAFETY)-Compact with both outputs in one unit:

- Absolute encoder
- Electronic position switches

The unit can be mounted directly to the application shaft without using any distribution gear. For this Hübner Giessen provides special double-joint couplings. The switching points are easy to configure and the system can be restarted fastly after preset.

Optionally available with safety certification SIL 2 / PL d.

Products

- Universal encoder system USC 42 (SIL 2) or UOC 40
- Double joint coupling, type HKDS