

BLUMENBECKER Prag Ltd.

Process automation

RETROFITS

Old-fashioned CKD changers

Changers of DC and frequency changers of CKD Prag were delivered over the 80'ies in a big number into the former Soviet Union countries and to the countries of the third world basically for the control of regulated drives in various industrial branches like metallurgy, open-pits, paper industry and sugar plants.

The production of these changers was ended several years ago and along with them also all spare parts needed. At present, many problems have raised regarding maintenance and keeping these equipments or production lines using CKD changers going. This problem seems to be extremely hard to solve, whereas these plants are equipped with a big number of drives where the outage of one machine automatically causes the outage of the whole production line and consequently considerable losses in production as well.



In an effort to help in solution this problem, the specialists of Blumenbecker Prag (that are same ones who made projects and participated on commissioning of the CKD drives in the past) prepared a technical solution so-called retrofits.

The main feature and advantage of that solution is as follows: Cost-effective and relatively fast replacement of CKD changers with guarantee of full functionality.

The biggest advantage of our solution is that replacement of all CKD changers of the whole equipment can be done partially in so-called step-by-step method.

The fundamental principle resides in supplies of fully equipped control cabinets in which all SIEMENS changer blocks are built in already along with both all electro components and user software needed.

Our technical solution provides the fully compatible and cost-effective method how to replace the old-fashioned CKD changers by the most modern SIEMENS ones, which brings the high reliability in operation and user-friendly and comfortable diagnostics of the whole renewed equipment.



The regulators of changers are the only digital ones and they have extremely stable parameters. So putting into operation takes very short time thanks to the automatic optimization and parameterization of changers.

Comfort in diagnostics and commissioning could be even improved by using PC and the program **SW Drive Monitor**.

The replacement of control cabinets with CKD changers can be done by step-by-step method. All replaced modules can be used like spare parts for remaining and not yet renewed control cabinets.

After ending replacement of all control cabinets the quite new communication features of changers are provided to the user, namely in wireless communication towards the upper control system and in mutual communication among changers themselves.

From the replacement point of view, new SIEMENS changers fulfill following requirements:

- choice of output power alongside with customer's actual requirements
- analogical both labeling and function of individual terminals as it was done at original CKD changers
- same placing and dimensions of terminal boxes allowed connection of existing cables
- connection of various speed sensors incl. Tacho generator RETA
- signal compatibility with control cabinets and SIEMENS PLC control systems (SIMATIC)



For those who are interesting in retrofit application Blumenbecker Prag offers:

- Training for customer's maintenance staff at our seat in the Czech Republic. The content and term of this training is fully up to the customer's requirements so that the maintenance staff should be able to self-provide commissioning and operating of the drives.
- Technical help from our side is supposed to be provided at customer's place within minimal range, for example in case when the first changers are putted into operation or when some unexpected and more complicated failures or obstacles over commissioning would occur.