

Programmable power source for current transducers testing

DESCRIPTION

Programmable power source for current sensors testing was developed in cooperation with Iskra Amesi, Kranj - for the foreign customer MBS, Germany. The output current (switchable between direct and alternating) can be adjusted in the range of 1 A to 300 A with settings accuracy below 0.1%. High achieved accuracy is possible due to the repetitive controller implementation. The frequency range of the generated AC current extends from 20 Hz up to the 1 kHz, providing the nominal value of current. Above this frequency limit, the maximum frequency of 6 kHz can be reached – at reduced amplitude down to the 25%. The generated current is virtually without ripple thanks to the implemented hybrid amplifier, combining the benefits from both techniques – a *linear amplifier* ensures low distortion and wide bandwidth, while a *switched-mode amplifier* guarantees high efficiency and high current capability.



Fig: Installation and commissioning of a programmable source in MBS production line

KEY ADVANTAGES/SKILLS

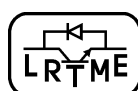
Hybrid -, linear -, SMP amplifier, repetitive control,

PUBLICATIONS

1. Internal report of the project.

Contact: peter.zajec@fe.uni-lj.si

Phone: +386 1 4768 479



Laboratory
of Control Engineering and
Power Electronics

University of Ljubljana
Faculty of Electrical Engineering

