

## Digital Power



The Digital Power project has been developed by KBF S.r.l. to provide customers with an innovative and reliable sintering solution with improvements in the management and efficiency of power management. Customers using traditional sintering machines have to bear the considerable costs of power supply, plus extra charges due to power factor due to inductive loads generated by the heating transformers. They also have to cope with unbalanced power, mostly with single-phase sintering machines, which is no longer acceptable in modern power mains.

The Digital Power start by the experience with similar systems previously manufactured but outdated, the analysis for over ten years of the previous units has allowed to solve and improve with new components and innovative ideas all the problems identified in the time and to define a set of parameters that make the system completely flexible and stable.

Modifying all the components used in the old project and turning the structure of the system from analog to full digital we have the possibility to control with different dedicated microprocessors the different sections of the unit: on board electronic and data transmission, wave generator, machine interface, human interface.

The operator can control all system values by a touch screen panel that also allows to modify the working parameters.

The digital control improves the performances of the system because allow the generation of parameterized waveform optimized depending on the applied load.

One part of the Touch Screen Panel is a real PLC that can translate digital and analog signal from the machine Plc to the Digital Power system in a way to work with any system.