9.1 The PUK-Features of the 3. Generation

**Softstart - and Impulse modeling**

Now with intelligent energy distribution within the individual welding impulses, the finished result has been substantially improved.

Results are now less harsh enabling longer electrode life and more consistent welds.

**Gap Mode / Silver Mode**

Due to the energy distribution in this impulse, successful welding is possible even on silver and silver alloys which are normally very difficult to weld because of their higher heat conductivity.

This setting is also extremely suitable for deep joints or welds in angles.

**Micro - Mode**

Finely tuned welding impulses and pulse lengths allow micro - welds of sheet material only 0.10mm in thickness and 0.25mm wire thickness!

With this impulse modelling old restraints of the PUK-technology are newly defined.

**Speed**

The operating speed has been doubled by using more efficient main power transformers and by adapting the speed of the gas flow.
9.2 The PUK-Features of the 3. Generation

**Program memory**

The memory function with 5 memory cells where the user can store his own settings makes the “plus” a must for the professional user. This function allows the user to access proven settings instantly.

**Important!**

We recommend at the beginning of working with the device to always work within the "blue range (blue LED’s)" PUK 3 professional 7ms/PUK 3 professional plus 8ms. Thus to change “only” the welding output. If you are familiar with the technology you can of course change the welding time.

The automatic controller for the pulse time/welding time regulates how many milliseconds the welding energy affects. Dependent on the angle of the electrode to the workpiece the penetration depth and direction of the melted metals change.

If the electrode is led vertically to the workpiece, the penetration depth is largest.

**Welding power increase**

Although all of the important innovations are already incorporated in the "PUK 3 professional", the "PUK 3 professional plus" adds still more functions and performance. The welding energy increased with the “professional” by 20% and with the “plus” by 40% in relation to the previous model and much finer adjustments were realised.

**Memory function**

The machine stores automatically after each welding procedure the current welding parameter in the background memory.

By pressing the weld power dial the last welding parameter is recalled, also when switching on the machine the last welding parameter used is recalled.