

Precision welding
at its finest...

Introducing the **PUK 5**



Select the metal... choose your mode...
weld with confidence!

PUK 5

The PUK 5... developed for goldsmiths.

Weld on findings, easily add metal, weld adjacent to Stones and pearls, weld silver (alloys), fill porosity, attach workpieces prior to soldering, weld seams, and much more - all no problem with the PUK 5.



Compact and versatile impulse welding device:

The PUK 5 is very close to laser welding in terms of working method and range of applications. On workpieces with a thickness of 0.2 mm or greater, it is an effortless process to produce robust welds.

The PUK 5 precision welder puts a whole host of possible applications for jewelry production at your fingertips. Structures made from sheet or wire elements can be just as easily done as tack welds and repairs to jewelry parts, restoring missing parts or filling of pores by applying welding wire - and many more options, the PUK 5 is able to produce anything from the smallest of repairs to volume production, and even the most extraordinary of new creations.

PUK's operating principle is as simple as it is ingenious:

If the tip of the electrode on the welding hand piece touches the workpiece, the welding process starts automatically. At the contact point, under an inert gas atmosphere, a melting process with a diameter of between 0.3 and 3.0 mm takes place (depending on material and setting). In addition to many precious metal alloys such as gold, silver and platinum, many non-ferrous metals such as copper and tin alloys, many steels, titanium and aluminum alloys are suitable for welding. All alloys suitable for laser or TIG welding can also be welded with the PUK 5.



Facts that speak for themselves.

1. Superior welding characteristics

- Consistently reproducible high-quality welding results with all materials suitable for welding
- Precise positioning of the spot welds
- Very low, controllable development of heat
- Welding possible on even the thinnest of materials
- Welding in protective atmosphere

2. Quality "Made in Germany" by Lampert

- 3 year warranty!
- Tested product safety: CE conformity
- DIN CERTCO certified eye protection in all Lampert optic systems
- Very low initial costs and for consumer materials, maintenance-free technology - excellent price/performance ratio



3. Compact size

- Fits into every workshop
- Simple and intuitive to operate

Upgrades over previous models:

The patent-pending system for welding process monitoring

- New software for contact monitoring of the hand piece
- Prevention of welding errors through interruption of weld if excessive pressure is applied to the electrode
- Increase in service life of electrode tip
- Prevention of tungsten inclusions on sensitive surfaces or on workpieces and materials that still require further processing
- Improvement in the overall weld quality through more uniform processing
- Error prevention in the handling: Increase in process reliability and more consistent quality for larger quantities
- Learning function: More rapid and simpler learning of correct welding procedure, especially for beginners.

Faster progress to better results

- "Blind operation" with single-handed operation. Concentration remains focused on the workpiece.

Smoothing function in response to rising temperatures on the welding area

- Further improves the flow properties of certain metals (e.g. of highly conductive metals such as silver)

Preselection of two different welding cycles

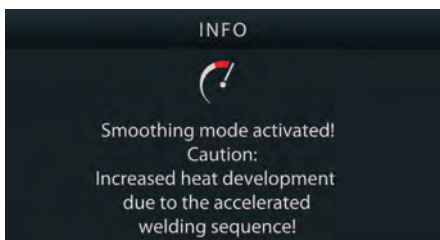
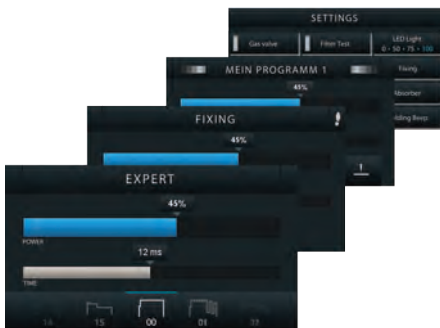
Even higher-performance LED lighting in our new premium welding microscopes

- More uniform illumination of the working area - more flexible use of the microscope. These microscopes can also be used as fully equipped workplace microscopes - not just for welding.

Individual device set-up using the settings menu

- Preselection of welding cycle, calling operating levels up on screen and hiding them again, program memory, expert level, tack welding...

The operating concept for the PUK 5: **simple, intuitive, user-friendly.**



New look & design, New features, and New upgraded technology.

Extremely simple touchscreen operation

NEW: Now with slide function!

Select metal - select welding situation - weld!

Easily review the optimum setting ranges for the selected welding task

Pre-set programs for standard metals such as gold, silver and platinum, and for common welding situations

NEW: Setting of parameters for "Power," "Time," and menu navigation with a single rotary controller.

NEW: Setting of "Power" and "Time" also by a swiping action on the high-contrast display.

Help and assistance functions accessible at any time

NEW: Optimized "Settings" menu with scope on demand for enabling or disabling practical additional functions such as the expert menu with 15 different welding curves, the program memory for 20 proprietary programs or the fix-welding function.

The selection of basic functions such as lighting, welding sequence or choice of language is a quick and easy process.

NEW: The smoothing function accelerates the weld cycle, increasing the heat generated in the welding zone on workpieces. This can facilitate the welding process, e.g. on highly conductive metals and alloys such as silver or aluminum. The surfaces are easier to smooth and model because of the improvement in flow characteristics. At the same time, this function causes greater heating of the workpiece and should therefore also be used with caution.

NEW: The patent-pending system for welding process monitoring intervenes actively for you if excessive pressure is applied to the tip of the electrode during the welding process, and/or if the workpiece is guided in too rapidly. In this situation, the process is interrupted automatically and an optical signal in the eye protection system signals operator error. This can prevent a welding malfunction from occurring.

Welding with different levels of contact with the electrode distorts the selected parameters and makes it difficult to obtain consistently uniform welding results. It can cause the electrode get stuck to the workpiece, or can introduce undesirable amounts of tungsten to the surface of the workpiece. This new function improves the total performance of the welding process. It gives rise to more uniform results while also improving the electrode service life, resulting in a more constant quality in your welding results. At the same time, this function helps the newcomer to PUK to learn from Day One how to work properly with the PUK 5.

PUK Accessories



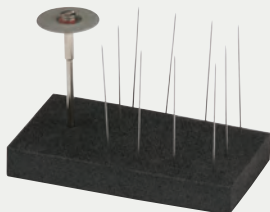
PUK Flow Regulator 830-1516 **\$270.00**

An important prerequisite for dependable welding results is the correct flow rate of argon gas. *(Comes supplied in PUK 5 packages.)*



Foot Pedal 830-0993 **\$68.95**

As an alternative to the automated welding process, each weld can be triggered individually using the foot pedal.



Replacement Electrode Tips 830-0978 **\$49.95**

Replacement electrode tips sold in packages of 10. Used tips may be ground to like-new condition with the diamond grinding wheel included. Fit all PUK Welders. Contain no thorium oxide (non-radioactive).



Electrode Sharpener 830-1528 **\$155.50**

Simple and rapid sharpening of PUK electrodes. Care of the electrode tips, which is vital to very good welding results, is carried out by the sharpener in the blink of an eye.

The PUK 5 System



Choose the **PUK 5 system** that best suits your application & budget!

PUK 5 Control System Includes

- PUK 5 Control Unit
- Precision Handpiece
- Set of electrodes with diamond grind wheel
- (2) Alligator clips
- Fiberglass brush
- 9ft. gas hose for regulator
- Argon flow regulator

PUK 5 Base Unit with Accessories 830-1534 **\$3,500.00**

Choose the **optic system** that suits your welding applications. **4 Packages Available:**

1



SM5 Microscope

- High-caliber microscope with 10-fold magnification, individual adjustment
- Powerful LED lighting that can be controlled with 4 brightness levels, optimum illumination of the working area. LED lighting integrated in the housing of the eye protection system.
- The SM5 can be turned in no time at all into a workplace microscope, simply by swiveling away the hand piece arm from the field of view.
- Hand supports for comfortable and precise operation
- Height and tilt adjustment assure optimum workplace comfort and an ergonomic working position.

SM5 Microscope Only 830-1537 **\$1,295.00**
PUK 5 + SM5 Microscope 830-1542 **4,795.00**

2



Articulated Microscope

- Microscope lens with 10-fold magnification, individual adjustment
- Powerful LED lighting in the head of the microscope that can be controlled with 4 brightness levels, optimum illumination of the working area.
- Hydraulic articulated arm, rotary and pivot action in every direction, making work particular ergonomic, even on bulky objects.
- Bench stand for individual bench mounting.
- Individually adjustable headrest
- Microscope can be used as a workplace or observation microscope.

Articulated Microscope Only	830-1538	\$2,200.00
PUK 5 + Articulated Microscope	830-1543	5,700.00

3



SM03 Microscope (Economical)

- Low cost for the budget minded person (entry level)
- Microscope lens with 10-fold magnification, individual adjustment
- LED lighting in the hand piece retaining arm, optimum illumination of the working area

SM03 Microscope Only	830-1536	\$1,100.00
PUK 5 + SM03 Microscope	830-1541	4,600.00

4



Classic Optic Visor

- Magnifying glass light, equipped with magnifying lens, 2.25-fold magnification (5 dpt)
- Glare-free LED lighting, 7.5 W
- The optic unit is particularly well suited to large workpieces that cannot be processed under the microscope.

Classic Optic Visor Only	830-1535	\$650.00
PUK 5 + Classic Optic Visor	830-1540	4,150.00



PUK 5 shown with SM5 Microscope

Born in Germany.
Supplied by Gesswein.

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www.gesswein.com