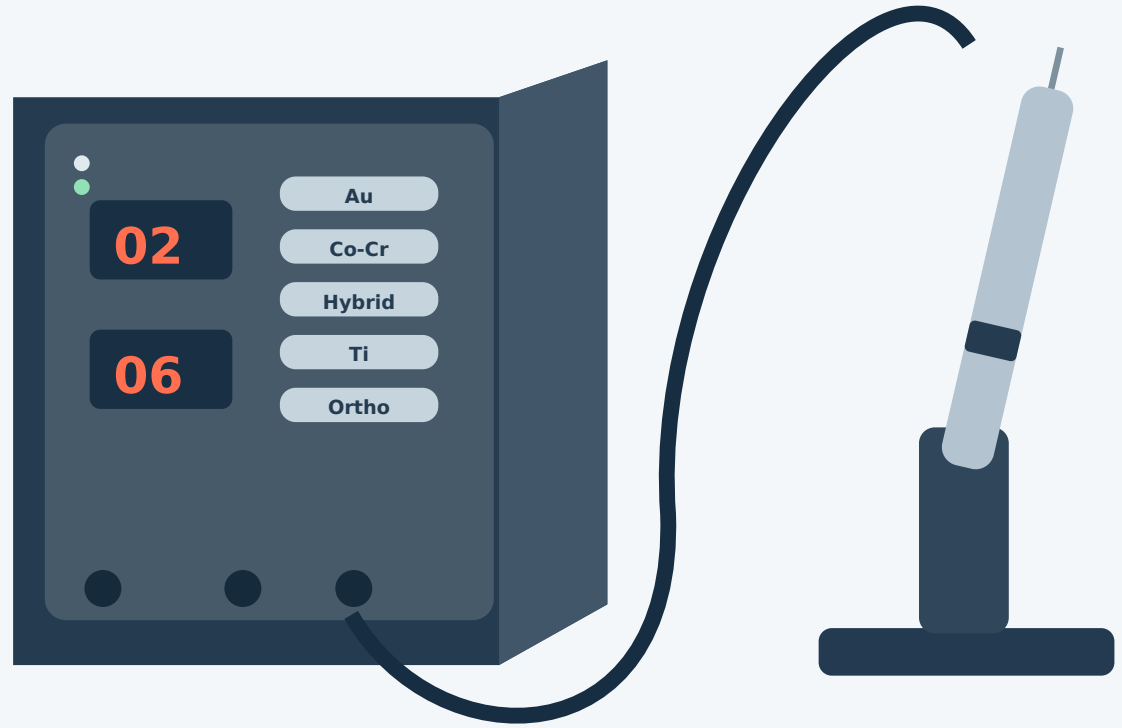
PULSE ARGON-ARC SPOT WELDER

Dental laboratory and jewelry workshop applications

www.dentalsalemall.com

5 PRESETS | PULSE CONTROL | ARGON SHIELDING



Illustrative product configuration - not a dimensioned drawing

AT A GLANCE

100 W	5–600 A	3–30 ms	1 Hz
Listed input power	Listed welding current	Pulse duration	Max. welding rate

PRODUCT DESCRIPTION

Compact pulsed argon-arc spot welding equipment intended for controlled joining and repair of small metal workpieces in dental laboratories and jewelry workshops. Five material/application presets are provided, with adjustable pulse and power settings for tuning the welding spot to the workpiece.

Identification: Catalog reference ADL001697. Supply-voltage selection and the actual delivered accessories should be checked against the ordered variant and machine rating label.

PUBLISHED OPERATING DATA

Technical specifications

ELECTRICAL AND WELDING

Power supply	110 V or 220 V AC version; 50/60 Hz
Listed power consumption	100 W
Welding voltage	40 V
Welding current	5–600 A (published range)
Welding pulse duration	3–30 ms
Maximum welding frequency	1 Hz
Enclosure protection	IP21 (indoor environment)

ARGON AND PHYSICAL CHARACTERISTICS

Minimum gas supply pressure	0.1 MPa or greater, per published specification
Maximum argon consumption	5 L/min (published maximum)
Approximate listed weight	8.5 kg
External dimensions	Not reliably confirmed; see dimension caution below.

DIMENSIONAL DATA REQUIRES CONFIRMATION

The listing gives “280 mm × 160 mm × 230 cm,” which contains an implausible unit for a compact benchtop machine. The third dimension must not be treated as 230 mm without confirmation from a manufacturer drawing or physical measurement.

IMPORTANT INTERPRETATION

The 100 W figure is listed input consumption, not a statement of instantaneous pulse output power. 110 V and 220 V are ordering options; universal automatic voltage switching is not established. Confirm the nameplate before energizing.

PROCESS CAPABILITIES

Preset programs & control

The machine has five built-in preset categories. They are starting points only: joint geometry, alloy composition, material thickness, surface condition, shielding and local test results determine the actual operating settings.

Au	Gold and related precious-metal workpieces
Co-Cr	Cobalt-chromium dental alloy applications
Hybrid	Mixed precious/non-precious alloy joining
Ti	Titanium workpieces and dental components
Ortho	Orthodontic applications and standby selection

ADJUSTABLE CONTROL PARAMETERS

POWER

Used to tune welding energy and spot penetration.

PULSE TIME

Adjustable within the listed 3–30 ms range.

INACTIVITY BEHAVIOR

The published description states that after about five minutes without operation, the controller automatically switches to the Ortho program. This is a program-selection behavior, not proof that mains power or electrical output is disabled.

Note: No certified welding procedure settings are supplied for specific alloys or repairs.

COMMISSIONING GUIDANCE

Installation & technical checks

BEFORE FIRST USE

01 Verify supply voltage

Match the delivered unit, plug and protective earth to the mains circuit; do not assume automatic 110/220 V switching.

02 Prepare the gas supply

Use an appropriate argon cylinder, regulator and leak-checked connection. Confirm the required operating pressure with the device documentation.

03 Protect the operator

Use suitable arc-rated eye/face and hand protection, local ventilation, and an uncluttered nonflammable work area.

04 Validate welding settings

Make controlled trial welds using scrap or coupons of the actual alloy, then inspect quality before welding valuable workpieces.

PURCHASE / ENGINEERING VERIFICATION

- [ ] Exact product overall dimensions and free space around the handpiece holder
- [ ] Whether unit includes regulator, gas hose, foot switch, electrodes, and torch support
- [ ] Power input version, plug standard, protective-earth connection, and manual
- [ ] Compatible filler wire/electrode and validated workpiece material limitations

SAFETY BOUNDARY

For trained dental laboratory or jewelry personnel. Arc radiation, hot metal, electric shock and compressed shielding gas present hazards. Follow the supplied operating manual and local welding safety requirements. Do not use this independent specification summary as a substitute for a manufacturer-approved procedure.