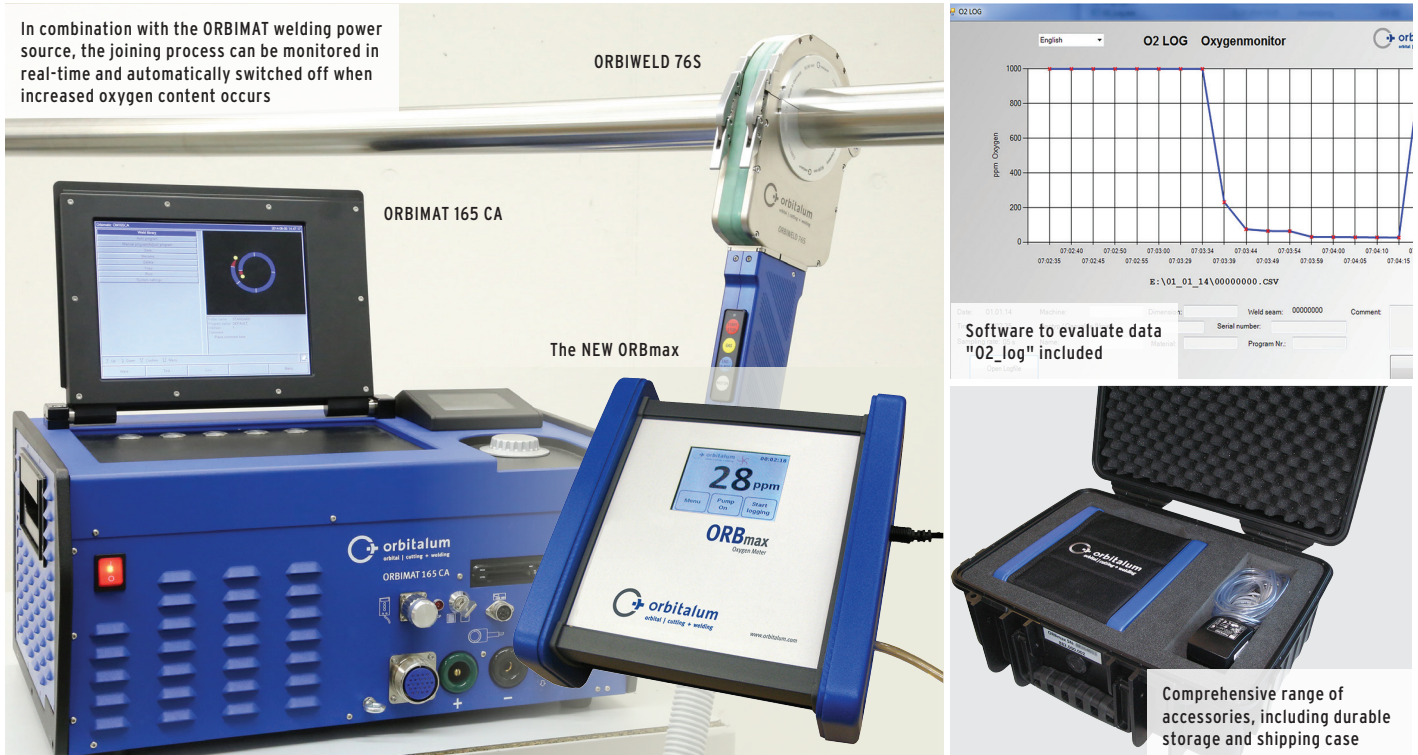


# ORBmax

## Residual oxygen meter

With Tungsten Inert Gas (TIG)-welding, oxygen as a protective and forming gas atmosphere is generally undesirable, as it is detrimental to the welded joint. This new ORBmax residual oxygen meter sets a milestone for fast, exact detection of residual oxygen, and with it complete documentation of these parameters. At the same time, the new measuring method results in greater efficiency and higher quality.



**The "Optical oxygen measurement via fluorescence extinction" method for welding technology (patent pending) is far superior to the conventional methods, using zirconium sensors: It requires no warm-up time whatsoever; reliably, quickly and precisely detects the oxygen share in the gas; unchecked alleged increasing of the measured value due to the formation of ozone is eliminated; the measurement is possible in all gas mixtures without manual switch-over (even with forming gas with a variable percentage of hydrogen).**

The exact, fast detection of the oxygen content reduces the otherwise long flooding time of the forming gas. The operator can start the safe welding process considerably earlier. As a result, precious working time is saved and the gas consumption reduced. In addition, ORBmax requires no maintenance of any kind. Calibration once a year in accordance with the standard ISO 9001 is sufficient.

For welding pipes in plant and equipment construction for the food processing, beverage, cosmetics and pharmaceuticals industries, medical and bio-technology as well as fine chemicals, comprehensive quality assurance is required and a procedure qualification is specified for the welded seams. For quality certification, not only the values from the power source, but also the residual oxygen values can be documented with the ORBmax. The need for a more in-depth inspection, for example with x-rays, is therefore eliminated. When used as a stand-alone solution, ORBmax records a digital log with a time stamp. In conjunction with the ORBITAT welding power source, the joining process can be monitored in real-time and automatically switched off when increased oxygen content occurs.

- No warm-up time required
- Quick response
- High measurement accuracy
- Measurement of residual oxygen level during the welding process

- No uncontrolled increase of the measurement during the welding process
- Measurement of forming gas with variable hydrogen content without mode change
- Measurement of the residual oxygen value in all gas mixtures
- Measured value recording on SD card
- User-friendly touchscreen
- Water-resistant sensor
- Alarm mode with beeper and changing colour of the display (green/red)
- Protection class IP32
- Setable alarm value and saving interval
- Multirange power supply
- Software to evaluate data
- Can be connected with an ORBITAT Orbital Welding Power Source
- Maintenance-free sensor (yearly calibration recommended)
- Pleasant and handy design
- Transportation case with IP67 protection

## Residual oxygen meter

### ORBmax

Features, see page 68.

TECHNICAL DATA	ORBMAX
Dimensions (lxwxh)	215 x 200 x 74 mm 8.46" x 7.87" x 2.91"
Weight, approx.	2 kg 4.4 lbs
Protection class device	IP32
Protection class transport case	IP67
Power connection	AC 100 - 240 V, 50 - 60 Hz
Measuring range	1 - 999 ppm
<b>SCOPE OF DELIVERY</b>	<ul style="list-style-type: none"> <li>• 1 ORBmax residual oxygen meter</li> <li>• 1 Durable storage and shipping case</li> <li>• 1 power unit supply set 100 - 240 VAC / 12 VDC</li> <li>• 1 measuring hose (with test tip and filter)</li> <li>• 1 SD card including evaluation software "O2_log"</li> <li>• 1 interface cable</li> <li>• 2 reserve filter inserts</li> <li>• 1 operating instructions</li> </ul>

ARTICLE	VERSION	CODE	WEIGHT OF MACHINE KG	DISPATCH WEIGHT KG
ORBmax	100 - 240 V, 50/60 Hz	882 000 002	2.000	4.775

### Consumables for ORBmax

All individual parts are already included in the scope of delivery of the ORBmax.

ARTICLE	CODE	KG
Measuring hose set, including: • 1 hose* • 1 filter for protecting the oxygen sensor against soiling • 2 filter inserts • 1 test tip • 1 hose connector	882 050 006	0.081
Hose*	882 012 010	0.050
Filter	882 020 003	0.021
Filter inserts (5 pieces per packing unit)	882 030 002	0.003
Test tip	882 012 011	0.004
Hose connector	882 012 012	0.001

\* Please specify the hose length in meters when ordering.



ORBmax



Practical protective cover included



Measuring hose set (Individual parts)

#### OTHER ACCESSORIES FOR ORBITAL WELDING