



# YOUR HELMET: THE APR 900.

Flexible. Secure. Individual.  
[www.apr900.com](http://www.apr900.com)

**LORCH**  
smart welding

# It's **YOUR** helmet!

You are placing high demands on your helmet. It must be easy to use, it needs to adapt to you, it needs to be safe, and it has to protect your health. On top of that, it should also look good on you.

The APR 900 as a standard and fresh-air system is going to meet all your requirements:

## Security

No matter in which direction you are facing, whether overhead, lying down or sideways, or for any position in between. With reliable darkening precisely to your needs.

## Clear vision

A perfect view of the welding result requires a large field of vision, ideal colour reproduction and fast shutter speed of the auto darkening filter.

## Flexibility

Easy replacement of wear parts, adjustment options for the visual appearance to personal preferences, and expansion with numerous accessories – from chest to neck protectors.

## Longevity

and robustness are required in everyday welding work. It's even better if the helmet design is also cool and makes you look good.

## Ergonomics

Balanced, perfectly fitting, with adjustment options for fatigue-free welding even when worn for prolonged periods.

## Price-performance ratio

Because safety must not be a privilege!



“I am convinced of the **APR 900.**”

**Martin John**  
Application engineer

I am using it every day, and it is proving its incredible performance. The easy and flexible handling of the helmet are of great benefit – I can switch from welding mode to grinding mode very quickly even with gloves on.

The APR 900 is practical; it fits perfectly and makes me feel secure. You only have two eyes in your life. You need to protect them without accepting any compromises!

# IT FITS YOU PERFECTLY.

Work safety as you need it.

## The APR 900 welding helmet

The helmet is at the core of workplace safety by Lorch. The APR 900 combines all technical features that a state-of-the-art welding helmet needs. On top of this: It also looks good. **The APR 900 is all you need.**



APR 900  
standard helmet

APR 900 XF  
with flip mechanism

## The APR 900 fresh-air system

Are you a professional welder looking for the perfect helmet and breathing protection system? Supplemented by smart accessories that make working with fresh air easier and allow you to produce perfect welding results over the long term? **The APR air fresh-air system is your first choice then.**



APR 900 air  
with breathing protection system

APR 900 XF air  
with breathing protection system  
and flip mechanism

APR FLOW

APR FLOW ACCESSORIES

# The professional helmet for professional welders. THE APR 900.

A helmet that is completely designed around you, supports you in your work and offers you maximum safety. 100% your helmet. Your helmet not only comprises a auto darkening filter at an absolute reference level, but also includes many other practical detail solutions that are absolutely harmoniously combined in an overall concept.

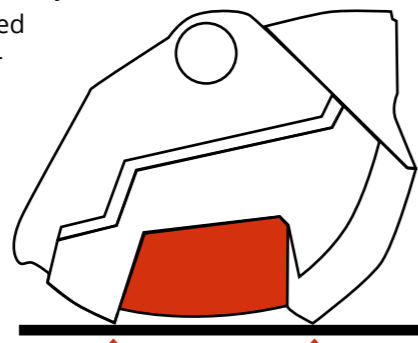
## The protection levels

**Highest safety rating for welding helmets:** The helmet shell meets the requirements of the European standards EN 175 B.



## The “four-point support”

**Safe storage, perfect handling, optimal scratch protection:** Even the best auto darkening filter will become useless if a scratched front cover only reflects the arc. Your helmet can be placed easily with the visor side down. The visor will still be protected from contact and scratches.



Nice side effect: The sweatbands in the headband are protected from dust and dirt on surfaces and dry quickly.



## The grinding button

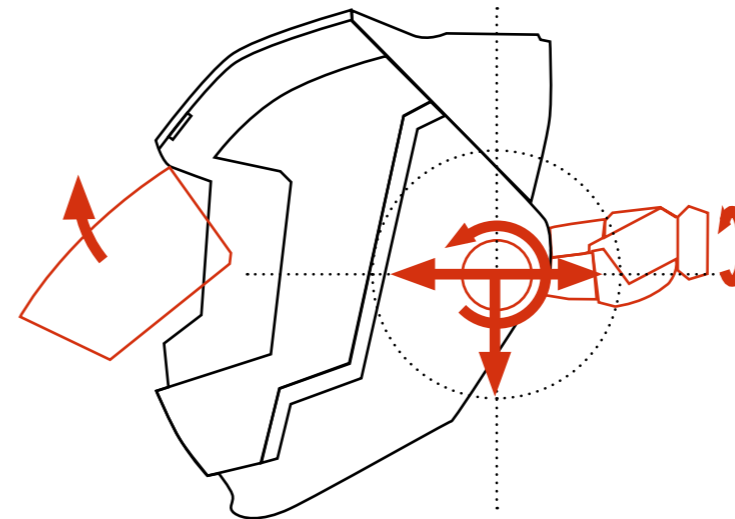
**Dedicated grinding button at the helmet centre:** Centrally mounted rubberised grinding button in easy-to-find position, even left-handed. This way, you can switch to grinding mode without having to take off your helmet. The recessed position protects it well from damage.

## The auto darkening filter

**Colour rendering/visibility in general:** auto darkening filter in the absolute reference range (1,1,1,1), true colour, extra-large field of vision, and very large protection level range (3, 5-9, 10-14).

**Battery life:** 4,000 h battery life with standard CR2032 batteries (2 pcs.). The batteries are housed inside the housing keeping them away from dust.

**Accessories:** Special front cover with yellow tint to imitate the “soft” colour impression of classic darkening filters.



**Outer front cover made of robust injection moulding with innovative quick-release fastener:** Highest possible optical category. Certified in accordance with EN175 B.



**Operation and operating modes:** Option of setting operating modes, protection level, delay, and sensitivity with clearly marked buttons and a display that can be read at any time. Welding mode (protection levels 10-14), grinding mode (protection level 3), and cutting mode (protection levels 5-9) are available for selection during operation.

## Complete flexibility for the perfect fit

**Extensive adjustment options for any head:** Head circumference adjustment via a ratchet-fastening knob at the back of the head, double strap construction for an integrated, stable fit, and longitudinal helmet adjustment to adjust to the shape of your face and your preference.

**Sweatbands for the forehead and back of the head:** Individual absorbent and padded sweatbands around the headband.

**Locking in the upper and lower position:** The helmet latches in the upper and lower settings to keep it in the respective position. The “speed” at which the helmet closes again can be adjusted independently of this.

# THE APR 900 XF.

## Clearest view on full width.

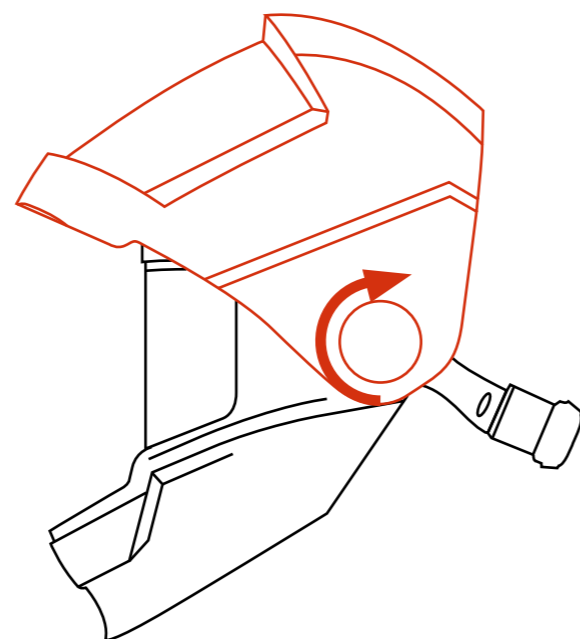
A flip helmet is ideal, in particular if other work is required in addition to welding where the eyes and face must be protected from dust and sparks. It combines the large and clear view of a grinding visor with the automatic protection from the UV radiation of the arc. The helmet can stay on your head and be folded up or down depending on the work task.

“XF” – for the  
eXtra Flip mechanism

**Safety and comfort:** The two-part helmet contains a large curved protective lens with a large field of vision. This protects from flying particles and sparks, such as those produced during grinding. An outer helmet shell containing the glare protection cassette can be folded down.

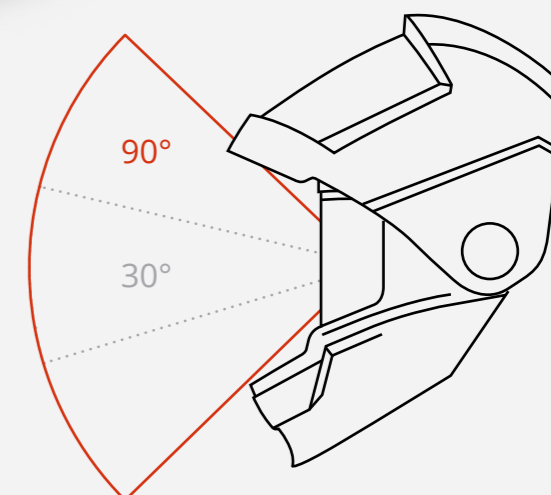
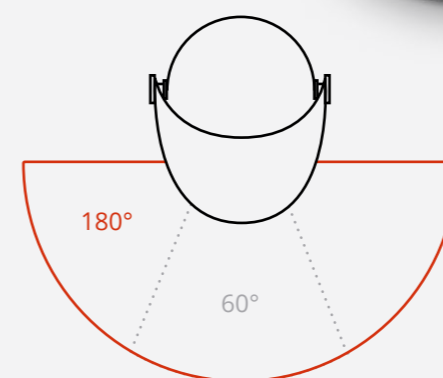
Easy handling

**The outer and inner helmet shells are disconnected from each other.** The disconnected folding mechanism ensures that the inner helmet shell remains closed even when the outer shell is unfolded. This allows one-handed activation of a large, clear field of vision with maximum protection.



Perfect vision – thanks to large grinding visor

**A large viewing window offers greater peripheral vision.** There is no need to move the head as frequently. Movements or even potential danger in the peripheral area can be perceived early.



..... without flip mechanism  
— APR 900 XF (with open visor)

# Fresh air and comfort in every welding position. **THE APR 900 AIR SYSTEM.**



## Pleasant fresh air

**Draught-free ventilation, comfortable, and quiet.** The air flow supplied does not create an issue on the eyes or ears and is also supplied to the interior of the helmet without whistling or noise. Full enjoyment of the fresh-air supply without restrictions.



## Adjustable air supply

**The air supply adjuster allows adjustment of the air flow** - only to the mouth/nose area in the closed position and additionally to the forehead in the open position. The welder can adjust the direction of ventilation depending on individual preferences. Reliable fume shielding is warranted in all positions via the overpressure in the helmet.

## Effective sealing

**Sealing towards the face for a comfortable feel.** The better the seal between the welder's helmet and face, the less fume can penetrate. The fire-resistant cotton mix feels comfortable on the skin. Even the lowest ventilation stage is sufficient to reliably keep the fume out due to the overpressure with good sealing.

The illustration shows the **APR 900 air** with the **fresh-air unit APR FLOW** (see the following pages)

Ventilation hose with quick-release bayonet fastener and hose holder

**Easy and quick assembly and disassembly of the helmet and hose.** The helmet separates quickly from the ventilation system. Particularly useful when the helmet needs to be put aside without taking off the strap. The helmet can also be used without the ventilation system. The hose holder on the headband ensures that the hose is fixed, can be individually guided, and does not interfere with work.



## THE APR 900 XF AIR

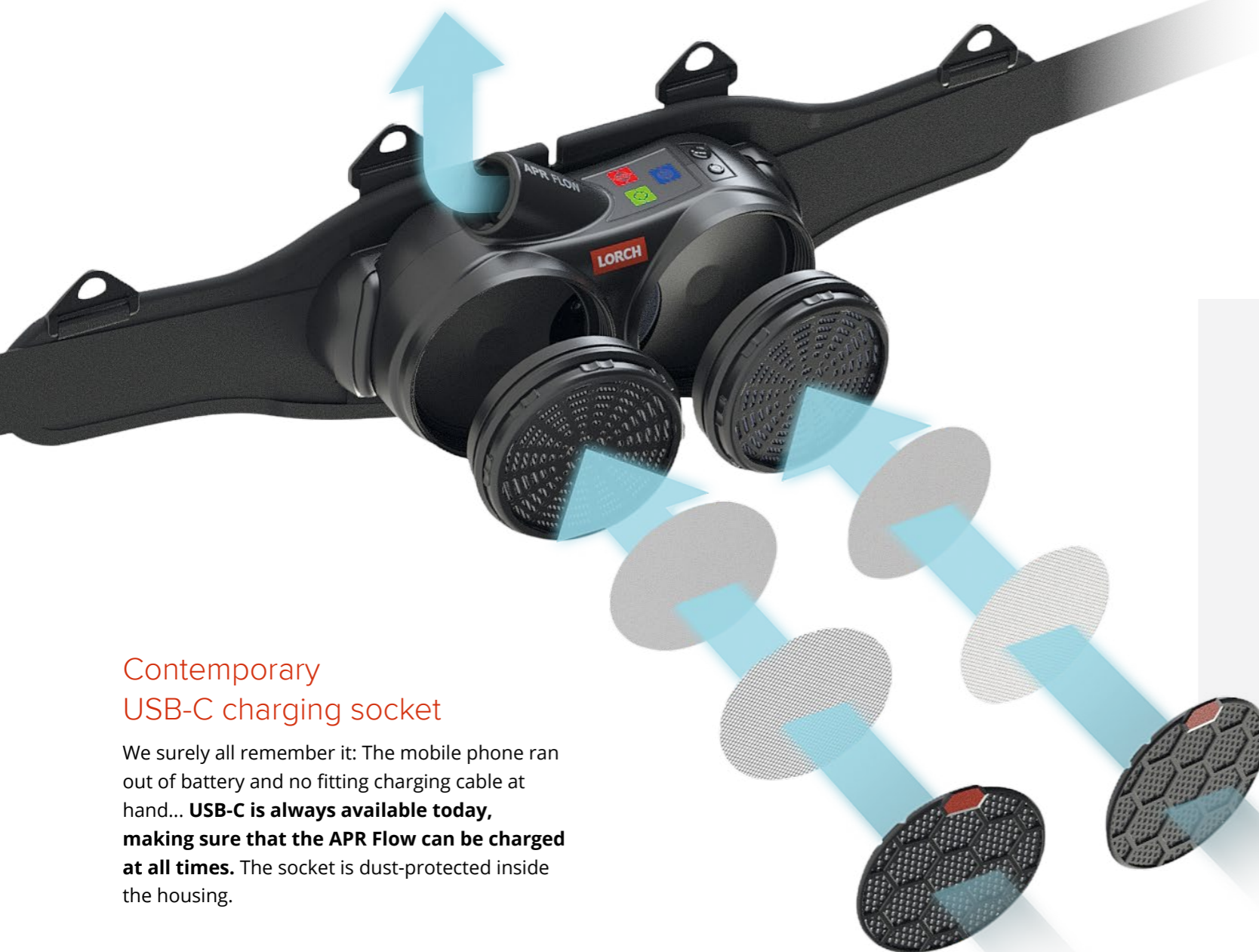
Perfectly prepared for the APR FLOW.



# The perfect combination. THE APR FLOW BREATHING PROTECTION.

## Wearing comfort

The lightweight fan and filter unit will adjust to the shape of your back to be barely perceptible. The support system is soft yet sturdy enough to keep the unit tightly on your back without dangling between your legs as well. That would get in the way of work.



## Contemporary USB-C charging socket

We surely all remember it: The mobile phone ran out of battery and no fitting charging cable at hand... **USB-C is always available today, making sure that the APR Flow can be charged at all times.** The socket is dust-protected inside the housing.

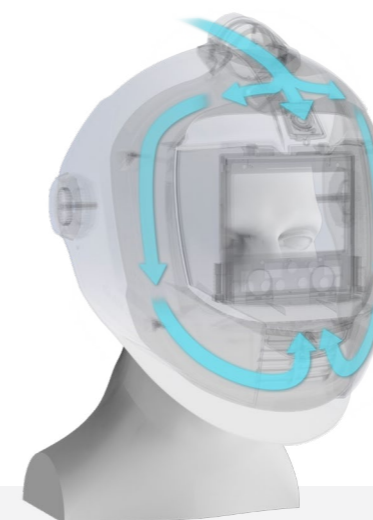
## Particle or gas filter?

**A PRSL particle filter is usually sufficient in good working conditions with good to limited ventilation.** However, if aluminium or stainless steel are to be welded with limited ventilation, an additional ABE1 gas filter with activated carbon filter quickly becomes necessary in order to comply with the limit values according to the risk assessment. The APR Flow offers both options to secure its contribution to safeguarding health and working capacity for a long time to come.



## Certified health protection.

Our APR 900 air systems are TH3 certified – for particle filters and even for gas filters! Only the highest protection class TH3 will filter out 99.8% of all harmful particles and gases. This makes the air 10 times cleaner than the TH2 respiratory protection systems that are common on the market can manage!



## Draft-free air distribution

The supply air exits in a diffuse stream in the area of the mouth and nose without tiring the eyes. The dial switch for additional air supply to the forehead adds some extra comfort.

## No compromise in the area of safety

**Battery capacity and filter clogging are displayed by LEDs during operation, enabling timely preparation of the unit.** If this is missed, the APR Flow first sounds an acoustic alarm and later a vibration alarm as well, prompting to leave the danger zone in time and without any risk of misunderstandings.

## Tough conditions?

**Welding times until recharging can be doubled with an optional heavy-duty battery.** This is perfect for longer tasks or on external assembly jobs. There is the protective cover for the ventilation hose, which protects it from damage for a longer service life and frequent welding in constrained positions.

Are you not quite convinced yet?

**The APR Flow can also be retrofitted to the APR 900 air and APR 900 XF air.** Allowing you to test helmets individually and simply connect them later on.

# APR 900 welding helmets

Welding helmet APR 900 and XF  
with ADF APR C850 auto darkening filter



## APR 900

Field of vision	98 x 62 mm / 3.86" x 2.5"
Classification	1   1   1   1 (optical category, scattered light, homogeneity, angular dependence)
True colour vision	Yes
Grinding mode	Yes (can be switched from the outside via central grinding button)
UV/IR protection	Durable protection level DIN 14
Protection level (light   dark)	Protection level DIN 3   DIN 5-8 (cutting) / DIN 9-14 (welding)
Switching time (light to dark)	0.2 ms at room temperature   0.1 ms at +55 °C
Sensor technology	4 sensors
Sensitivity control	Digital (1-9)
Delay control	Digital (0,1 s - 0,95 s)
TIG rating	>2A
Power supply	2 x CR 2032 (exchangeable)
Battery life	>2,000 hours (operation)
On/Off	Fully automatic
Operating   Storage temperature	-5 °C to +55 °C / 23 °F to 131 °F   -20 °C to +70 °C / -4 °F to 158 °F
Standards and norms	CE EN379:2009 ANSI Z87.1-2020   CSA Z94.3-2020 AS/NZS1338.1-2012
Total weight of the helmet	650 g
Application areas*	Electrode welding (stick welding, SMAW) / MIG-MAG shielded metal arc welding, GMAW / GMAW high performance welding / flux cored welding / TIG welding (TIG, GTAW) / plasma welding / micro-plasma welding / plasma cutting / grinding.
Scope of supply	1x APR 900 welding helmet, 1x front cover, 1x inner protective screen, 1x cleaning cloth, 2x batteries, 1x operating manual

\* For all electric welding processes. Suitable for overhead welding. Not suitable for laser welding!



## APR 900 XF (in addition to the APR 900)

Grinding mode	Flip-up mechanism instead of grinding button
---------------	--

# APR 900 air fresh-air systems

Supplementary data of the APR 900 air, XF air  
with automatic glare protection cassette ADF APR C850  
and fresh-air unit APR FLOW



## APR 900 air (in addition to the APR 900)

Air distribution	adjustable
------------------	------------



## APR 900 XF air (in addition to the APR 900)

Grinding mode	Flip-up mechanism instead of grinding button
Air distribution	adjustable



## APR FLOW

Air flow	adjustable from 170 to 220 l/min
Lithium-ion battery	Up to 8 hours of operation at 220 l/min (PRSL only). Optional heavy-duty version up to 10+ hours of operation at 220 l/min (PRSL only)
Pre-filter	interchangeable with spark arrestor
Particle filter	PRSL, TH3 (EN12941)
Gas filter (optional)	ABE1 + PRSL, TH3 (EN12941)
Charger	International with interchangeable pins
Charging time	4-6 hours standard battery, 4-6 hours heavy-duty battery
Recognition	Filter status, battery level
Status warning	optical, acoustic, via vibration
Shoulder strap	optional
Scope of supply	1x APR Flow, 2x particle filter (installed), 1x pre-filter (installed), 1x standard Li-Ion battery, 1x ventilation hose, 1x carrying strap, 1x charger, 1x operation manual



# YOUR HELMET: THE APR 900.

Experience the advantages of the APR 900 as a standard helmet, with flip mechanism as well as our fresh-air system, up close: Flexible. Secure. Individual.

**Your contact:**



**More info also available on**  
[www.apr900.com](http://www.apr900.com)

913.1288.1 | EN | 09.2023 | Subject to technical changes, price changes, and printing errors.