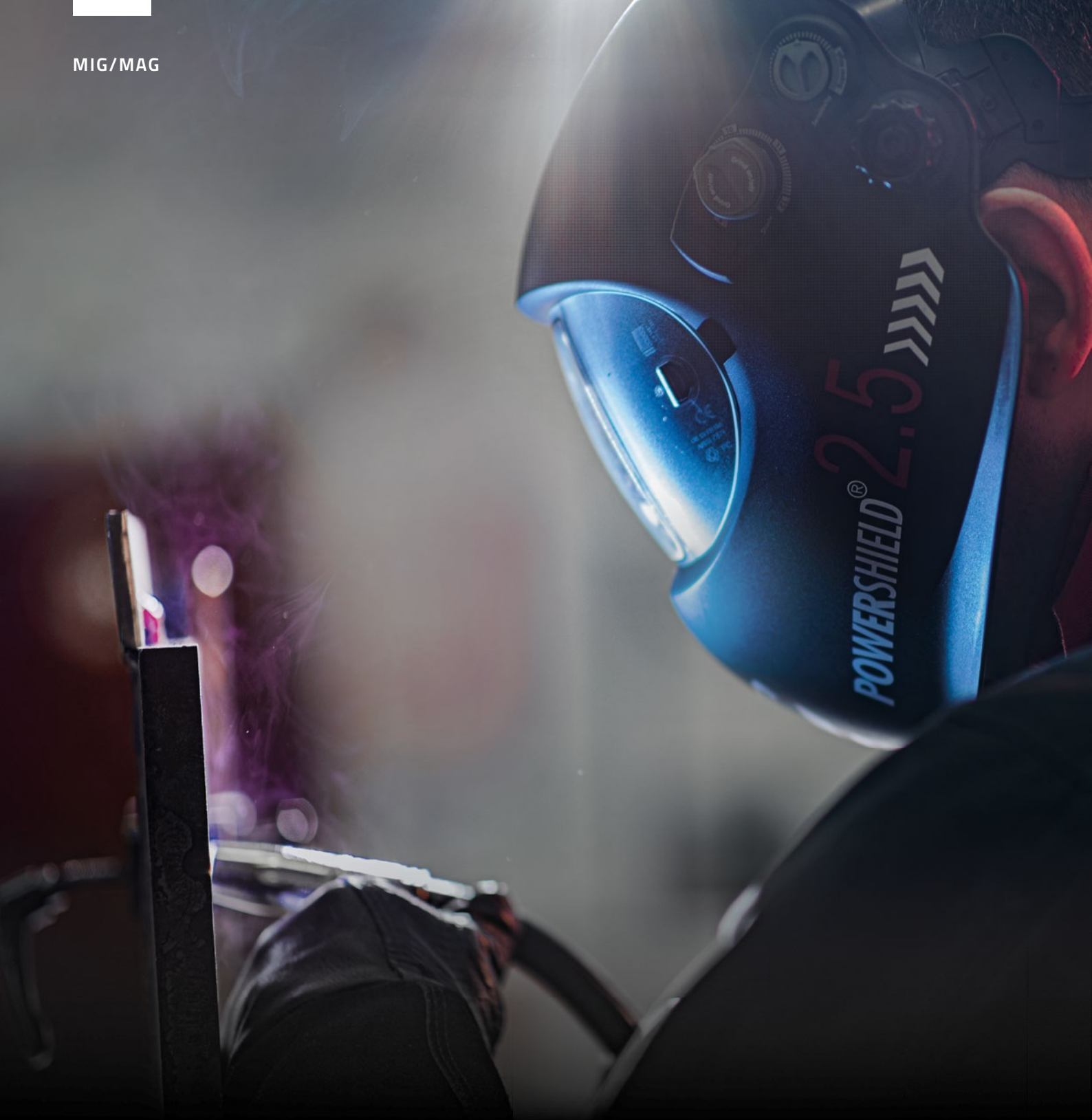


MIG/MAG

## WELDING TORCHES

CUSTOMISABLE, PROFESSIONAL AND UNIVERSAL:  
THE PM, MT AND UM SERIES





# MIG/MAG WELDING TORCHES:

## TOP QUALITY FOR STRONG BONDS.

### YOU'VE GOT IT IN THE PALM OF YOUR HAND

The advantages offered by the MIG/MAG welding procedure are no secret to you: flexibility with regard to material processing, a large range of applications, consistently good seam quality and high cost efficiency. In order to see these advantages in practice at every level of your company, perfectly coordinated welding technology must be used.

This is precisely why we at the EWM Welding Torch Development department always go one step further. We want to offer you exactly the right technology for whatever need you have – and we can. We integrate it all into our welding torches for you, which boast outstanding quality and are focused on the needs of the customer.

Want to work in a cost-efficient way and minimise operating expenses? Welding torch consumables last an especially long time and have a long service life thanks to optimal cooling. Want to increase the quality and efficiency of your work while lowering costs at the same time? Thanks to their innovative design and optimal ergonomics, our welding torches ensure easier handling and less finishing work. Want state-of-the-art technology which you can use to contribute to greater sustainability? By using our welding torches, you can conserve valuable resources by reducing your consumption of gas and consumables.

EWM welding torches are part of our holistic system, being optimally coordinated with all the other components. That's how we guarantee you the optimal performance of each individual component, in both manual and automated welding. This is our quality assurance promise to you. With MIG/MAG welding torches from EWM, you hold the biggest advantage for you and your company in the palm of your hand.

Yours sincerely,

**Adrian Vetten**

Head of Welding Torch Development



**Looking for a welding torch that adapts to your needs?**

**Simply send an email to our sales and service team at [info@ewm-group.com](mailto:info@ewm-group.com).**

# OUR FAMILY OF WELDING TORCHES.

## WHY YOU SHOULD CHOOSE PREMIUM WELDING TORCHES FROM EWM.

- **Minimal process interruptions**

No overheating, unlike conventional welding torches.

- **Transition-free wire guide**

Less abrasive wear thanks to significantly minimised friction points – e.g. the Euro torch connector and the contact tip.

- **Easy handling**

Work more comfortably thanks to the use of high-quality materials.

- **Long service life**

Reduced temperature transition resistance ensures longer life cycles of consumables.

- **Quick amortisation**

Low life-cycle costs thanks to fault-free weld seams and minimal resource consumption.



## OUR PREMIUM WELDING TORCHES.

- **Cost-efficient to run thanks to a long service life**

Minimal overhead thanks to low consumable consumption and less changeover and finishing work required. Thanks to the optimal cooling of high-quality materials, all consumables last a very long time.

- **Greater efficiency thanks to an innovative design**

Its ideal ergonomic design improves the quality of welding work, as easier handling reduces errors and the amount of finishing work.

- **Reduce costs and conserve resources**

Resources are conserved thanks to lower consumption of consumables. Separate gas supply and laminar gas coverage ensure reduce shielding gas consumption.



## OUR STANDARD WELDING TORCHES.

- For heavy-duty use in day-to-day work, gas- and water-cooled welding torches offer a high degree of comfort while working.
- The well-thought-out handle design guarantees easy handling in any position.
- A long service life and easily available consumables guarantee interference-free use.





UP TO

**2.1**

L/MIN

MAXIMUM COOLING CAPACITY FOR  
THE TORCH NECK THANKS TO A HIGH  
FLOW RATE



UP TO

**25**

L/MIN

**3 x** LONGER

SIGNIFICANTLY SAVES TIME  
THANKS TO LONG SERVICE LIFE  
OF CONSUMABLES

**FASTER**

EFFICIENT IN USE THANKS TO  
MULTI-FUNCTION CONTROL

**100**

PERCENT

RELIABLE  
WELDING  
CURRENT  
TRANS-  
MISSION

UP TO  
**100%**

DUTY CYCLE  
WHEN WELDING  
WITH MIXED GAS

UP TO **20%** LESS SHIELDING GAS

WITH COMPLETE SHIELDING GAS COVERAGE



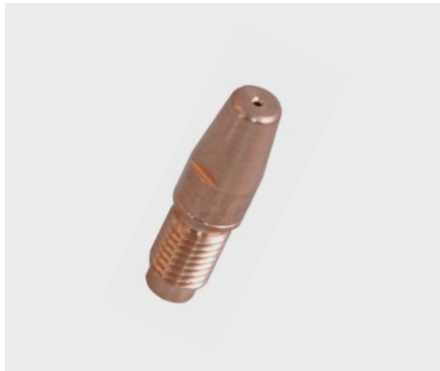
# OUR PREMIUM WELDING TORCHES.

## THE PM AND MT SERIES.



### HOSE PACKAGE/ CABLES +

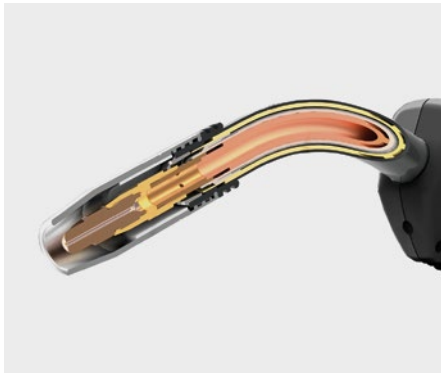
High-quality materials in the hose package, e.g. tinned cables for water-cooled welding torches, provide optimal welding properties. Solid and secure contacting surfaces in the power/water cable guarantee low-resistance flow.



### CONTACT TIP +

Optimum heat transmission is guaranteed, and overheating is prevented. This is thanks to the 30%-larger material cross section and the conical fit of the M7/M9 contact tip as compared to conventional thread sizes.





## TORCH NECK



The technology inside is especially impressive here. High-quality components ensure high temperature resistance, high consumable strength and high conductivity all round.



## COOLING HOSES



Complete protection over the entire length. The hoses remain flexible at low temperatures and exhibit optimal shape retention at high temperatures. Their large diameter ensures above-average flow.



## EURO TORCH CONNECTOR



Stability in every position is guaranteed by the rugged housing design of the Euro torch connector. Other advantages include the insulated fastening screw, silver-plated spring pins and optimised exiting of the water hoses and control cable from the connection housing.

# PM WELDING TORCH.

## THE PROFESSIONAL.

- Ergonomic thanks to a well-balanced grip design
- Useful and more efficient: Function torch with remote-control function and graphic display
- Flexible ball joint facilitates operation in frequently changing welding positions and positional welding
- With LED lighting for dark working areas
- Fully supported by the ewm Xnet welding management system for Welding 4.0 for measurable added value Xnet ready
- Individually adaptable thanks to a whole host of options
- Thanks to the digitally connected X technology, a bothersome additional control cable isn't required
- Hose packages up to 6.5 m long available

**We build the right welding torch for your application. This enables us to guarantee optimally adapted components for your manual welding task.**



### Integrated LED lighting

- Facilitates welding in dark working environments



**A selection of customisable options is shown here. We'd be happy to provide you with additional options at a personal consultation.**



Pistol grip



Welding fume extraction kit



Heat protection shield



Various bend angles



#### Compact ball joint

- Optimal range of movement
- Comfortable working conditions thanks to strain relief, especially for positional welding
- The hose package cannot be over-twisted or impacted



#### Anti-slip rubber inserts

- Secure hold for better welding torch guidance
- Ergonomic, comfortably shaped handle

#### Practical torch trigger protection

- Minimises unintended activation
- Very safe
- Protects against damage

Available in three control variants or without a control as standard



RD3 X control



RD2 X control



2U/D X control



Standard torch and  
standard torch with  
LED lighting

# MT WELDING TORCH.

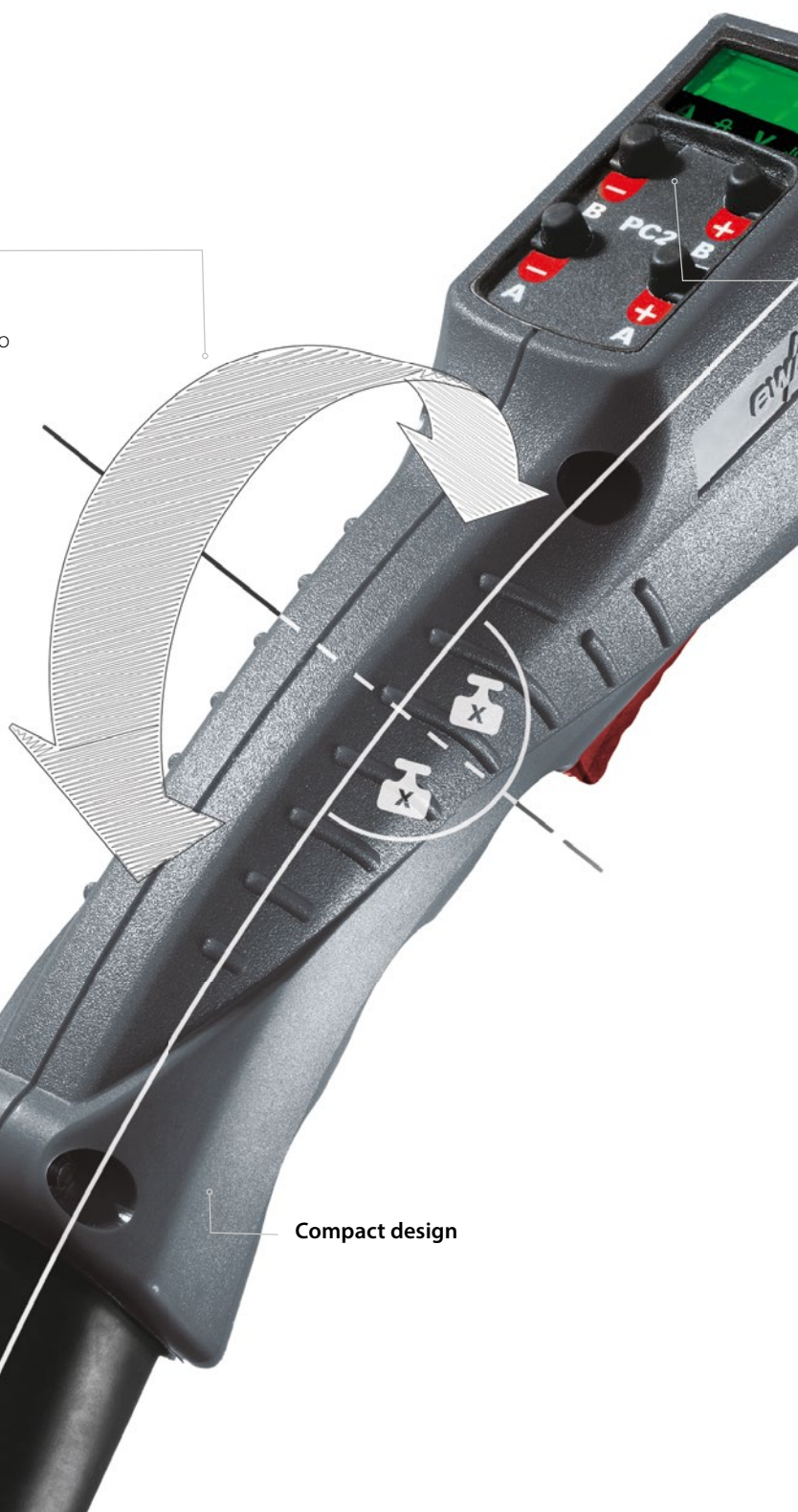
## THE ALL-ROUNDER.

- Extremely rugged and long-lasting, perfect for use in rough environments
- Ergonomic, elliptically shaped grip reduces the amount of force required to operate the welding torch
- Also available as a function torch with a remote-control function and segment display
- Thanks to the digitally connected X technology, a bothersome additional control cable isn't required
- Individually adaptable thanks to a whole host of options
- Feels good in the hand thanks to its balanced design

**We build the right welding torch for your application. This enables us to guarantee optimally adapted components for your manual welding task.**

### Lightweight and well-balanced

- For fatigue-free working
- Minimal force required to guide the welding torch



Compact design

### 360° rotatable torch neck

- Ultimate flexibility with replaceable torch neck version



### Thick, heavy-duty casing

- Very rugged thanks to 2.8 mm thick grip
- High break-resistance
- Optimum insulation

Available in four control variants or without a control as standard



PC 2 X



PC 1 X



2U/D X



U/D X



Standard

A selection of customisable options is shown here.

We'd be happy to provide you with additional options at a personal consultation.



Heat protection shield



Various bend angles



Torch holder



Welding fume extraction torch kit

# UM WELDING TORCH.

## THE NO-FUSS TORCH.

- Impressive overall package: The solid technology and well-thought-out grip design guarantee good handling
- High working comfort for everyday use
- Tried-and-tested consumables concept with standard M6 and M8 threads
- Rugged, ergonomic grip
- Suitable for any machine with a Euro torch connector

### Sophisticated grip design

- Rugged welding torch design guarantees optimal handling

### Compact ball joint

- Optimal range of movement
- Comfortable working thanks to strain relief

### Anti-slip rubber inserts

- Optimal hold
- Easy welding torch guidance



# MIG/MAG PUSH/PULL WELDING TORCH.

- Welding torch with drive unit for wire feeding support
- Plug and weld at EWM machines
- Features a grip and retrofittable pistol grip as standard
- Available with various different controls of the MT welding torch series
- Consumables compatible with those of the PM and MT series
- High-quality drive motor



## AVAILABLE VARIANTS OF OUR PUSH/PULL WELDING TORCHES.

- Gas- or water-cooled
- Available in lengths of 6, 8 and 10 m
- Also available in custom lengths on request
- With or without control

**Also available in other lengths on request.**



# HOW DO I FIND THE RIGHT WELDING TORCH?

## HOW TO MAKE THE RIGHT CHOICE.

The professional | The all-rounder | The heavy-duty torch. These three welding torch series were developed by our engineers to meet your individual needs as a user, right down to the smallest detail. They differ with regard to functions and application options, but have the most important advantages in common: innovative design and a long service life for cost-efficient working. Costs are reduced and resources conserved at the same time. Regardless of whether you choose a welding torch from the PM, MT or UM series, you can be sure you've got top quality in the palm of your hands.



	PM WELDING TORCH	MT WELDING TORCH	UM WELDING TORCH
Duty cycle	■■■	■■■	■■■
Positional welding	■■■	■■	■■
Compact dimensions	■■■	■■■	■■
Shielding gas coverage	■■■	■■■	■■
Welding fume extraction*	■■■	■■■	□
Long service life of consumables	■■■	■■■	■■
Replaceable neck	■■■	■■■	□
Operation of the welding machine at the welding torch	■■■	■■■	□
LED lighting	■■■	□	□
■■■ Very good			
■■ Good			
■ Average			
□ Not available			

\* Available as a fume extraction torch or retrofittable with the welding fume extraction kit.



# CUSTOMER TESTIMONIALS.

SAW IT, TRIED IT OUT AND WAS CONVINCED STRAIGHT AWAY.



**Stefan Limberger**

Managing Director of ISW

Eight hours, 350 amperes, one EWM contact tip



The nozzle can probably last longer, but we prefer to err on the side of caution.



**Christian Gruber**

Welding Supervisor at Ebner

Every function accessible in one welding torch!



Making parameter changes directly at the welding torch prevents the need to walk back and forth and saves valuable time.

Christian Gruber, Welding Supervisor at Ebner, sees this as one of the main advantages of the PM welding torch.



**Andreas Euen**

Managing Director  
of EWM-Euen GmbH

Special welding torches for extreme spatial conditions



I was only able to accept this order because of our in-house welding torch production.

The welding torch for Schroeder Valves is a special design with a particularly long torch neck.

# PREMIUM CONSUMABLES.

All consumables suitable for the welding torch you receive from us are especially long lasting thanks to optimal torch neck cooling. Precisely coordinated to your requirements, they're the perfect supplement to MMA welding torches, automated welding torches, push/pull welding torches and fume extraction torches.



## EWM gas nozzles

- Screw-on gas nozzles ensure a secure fit, even under extreme thermal conditions
- Reduced spatter adherence thanks to nickel-plated surface and improved heat dissipation
- A diverse range of options
- Long service life



## EWM contact tips

- Made of CuCrZr, EWM contact tips boast much greater wear resistance than standard E-Cu nozzles
- Conical limit stop of the contact tip for a secure fit, precise centring and optimal current and heat transfer



## EWM contact tip holders

- All EWM contact tip holders are made from low-wear CuCrZr
- Maximum functionality – even under rough conditions
- Different versions mean you can alter the fit of the contact tip
- The welding torch can be optimally converted based on the application



## EWM gas diffusers

- High stability thanks to high-tensile, temperature-resistant special plastic
- Even distribution of the welding gas ensures even shielding gas coverage

# NARROW-GAP GAS NOZZLES.

We offer an array of special consumables for future applications for our premium welding torches in the PM and MT series. Gas nozzles in conical, cylindrical and bottleneck shapes are available for narrow gap welding.



Conical nozzle shape



Cylindrical nozzle shape



Bottleneck shape

# WELDING TORCHES FOR AUTOMATION.

In addition to simple solutions with automation welding torches, our robot welding torches can also be used with an additional drive. You can secure additional advantages with our RMT hose packages specially developed for robots and cobots. They are outfitted with function buttons which you can freely assign yourself. Regardless of which variant you choose, your EWM welding torch will ensure cost-efficient working thanks to a long service life and maximum precision.



Push buttons for inching and reversing inching wire, as well as a gas test



Various bend angles



Welding fume extraction kit





# ACCESSORIES.

Better handling, increased safety and greater working comfort. The goal of our accessories for welding torches is very clear: to make work as comfortable as possible for you. That's why we offer a wide variety of different accessory parts with which you can outfit your welding torch from the start or later on down the line. Whether it's a torch holder, pistol grip or button extension, you can design your welding torch to suit you and your requirements.



## HEAT PROTECTION SHIELD

Perfect for retrofitting your PM/MT welding torch. The heat protection shield guards you during long duty cycles. Also compatible with PM welding torches with LED lighting.\*\*



## TORCH TRIGGER AT THE TOP

Is it more comfortable for you to weld when the torch trigger is at the top? Not a problem! With this conversion kit, you can adapt your welding torch to your needs in a flash. The installation tool is included.\*



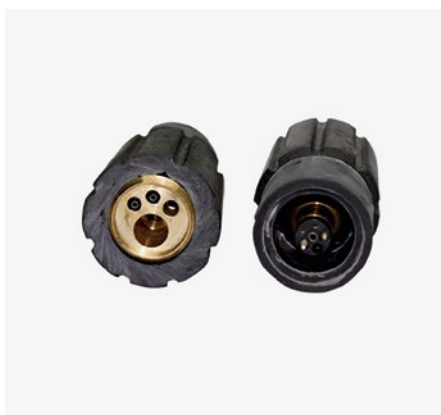
## TORCH HOLDER

Practical tool for supplementing your EWM welding machine. The torch holder is easy to install and makes your workstation even safer.\*



## BUTTON EXTENSION

Quick and easy to attach, optimally adapts to the preferences of the welder. For even greater comfort while welding.\*\*



## ADAPTER

Ensure the perfect connection. More machine-specific Euro torch connectors are available.\*



## SHRINK HOSE

Practical insulating hose made of plastic which also protects the welding torch.\*

\* PM and MT welding torches

\*\* PM welding torches



## TORCH BRACKET

Perfectly complements personal equipment. The Handy Support Original Fix<sup>®</sup> bracket provides the welding torch with a secure hold with non-marring support points. Comes complete with magnetic foot and powder coating made of aluminium.\*



## + PISTOL GRIP

Optional handle which can be installed on the welding torch with no conversion. Enables fatigue-free welding, even with long weld seams.\*\*



## + WELDING FUME EX-TRACTION TORCH KIT

This kit enables you to retrofit your EWM welding torch very easily and cost effectively. Direct extraction of harmful substances guarantees increased health protection while welding.\*



## GAS QUANTITY MEASURING TUBE

Always have everything important in sight. This tool can be attached directly to the welding torch in just a few steps, enabling you to see the current flow volume at all times.\*



## + AIRFLOW METER

The welding fume extraction torch is plugged into the AirFlow Meter, and the extraction capacity is regulated by the extraction system until the slider in the AirFlow Meter reaches the height of the specified torch-specific flow rate.



# TECHNICAL DATA OVERVIEW.



## PM and MT, gas-cooled

	221 G	301 G	401 G
Duty cycle CO <sub>2</sub>	250 A/60%	330 A/60%	450 A/35%
M21 duty cycle	220 A/60%	300 A/60%	400 A/35%
M21 pulse duty cycle	150 A/60%	210 A/60%	260 A/35%
Wire ø	0.8–1.2 mm	0.8–1.6 mm	0.8–2.0 mm
Connection	Euro torch connector		
Hose package length	3, 4 and 5 m – other lengths available on request		
Torch neck bend angle	Various bend angles available		
Operating weight	1.09 kg	1.16 kg	1.3 kg
Product certification	CE EAC UK		






## PM and MT, water-cooled

	301 W	451 W	551 W
Duty cycle CO <sub>2</sub>	330 A/100%	500 A/100%	650 A/100%
M21 duty cycle	290 A/100%	450 A/100%	550 A/100%
M21 pulse duty cycle	250 A/100%	350 A/100%	500 A/100%
Wire ø	0.8–1.2 mm	0.8–1.6 mm	0.8–2.0 mm
Connection	Euro torch connector		
Hose package length	3, 4, 5 and 6.5 m – other lengths available on request		
Torch neck bend angle	Various bend angles available		
Operating weight	1.03 kg	1.09 kg	1.1 kg
Product certification	CE EAC UK		






### UM, gas-cooled

	15 G	24 G	25 G	36 G
Duty cycle CO <sub>2</sub>	180 A/60%	220 A/60%	200 A/60%	270 A/60%
M21 duty cycle	150 A/60%	250 A/60%	230 A/60%	300 A/60%
Wire ø	0.6–1 mm	0.6–1.2 mm		0.8–1.4 mm
Connection	Euro torch connector			
Hose package length	3, 4 and 5 m			
Torch neck bend angle	45°			
Operating weight	0.64 kg	0.95 kg	0.90 kg	1.34 kg
Product certification	  			



### UM, water-cooled

	240 W	401 W	501 W
Duty cycle CO <sub>2</sub>	300 A	400 A	500 A
M21 duty cycle	270 A	350 A	450 A
Wire ø	0.6–1.2 mm	0.8–1.6 mm	
Connection	Euro torch connector		
Hose package length	3, 4 and 5 m		
Torch neck bend angle	45°		
Operating weight	1.03 kg	1.14 kg	1.18 kg
Product certification	  		



**More MIG/MAG, TIG and plasma torches can be found in our online shop.**

Whether it's gas- or water-cooled, for thin plates or thicker plates, you'll find just the right welding torch for your application in our online shop. Naturally, we'll provide you with all the important information on consumables and the available accessories for each product.







WE ARE WELDING

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## #WEAREWELDING

Follow us



EWM is your partner for the best welding technology. With EWM, you'll weld more efficiently, more reliably and produce higher-quality results. Innovative systems, efficient welding procedures, digital technologies and services and EWM's expert consultation help you carry out your welding tasks with perfection.

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The contents of this document were researched, checked and edited with care. However, it is still subject to alterations, writing errors and mistakes.