



AUTOGEN-RITTER GmbH
Arc-welding torches MIG-MAG WIG/TIG Plasma Spare parts

Quality Welding Solutions since 1920.

EN

NeoARc PAW **Plasma welding torch**





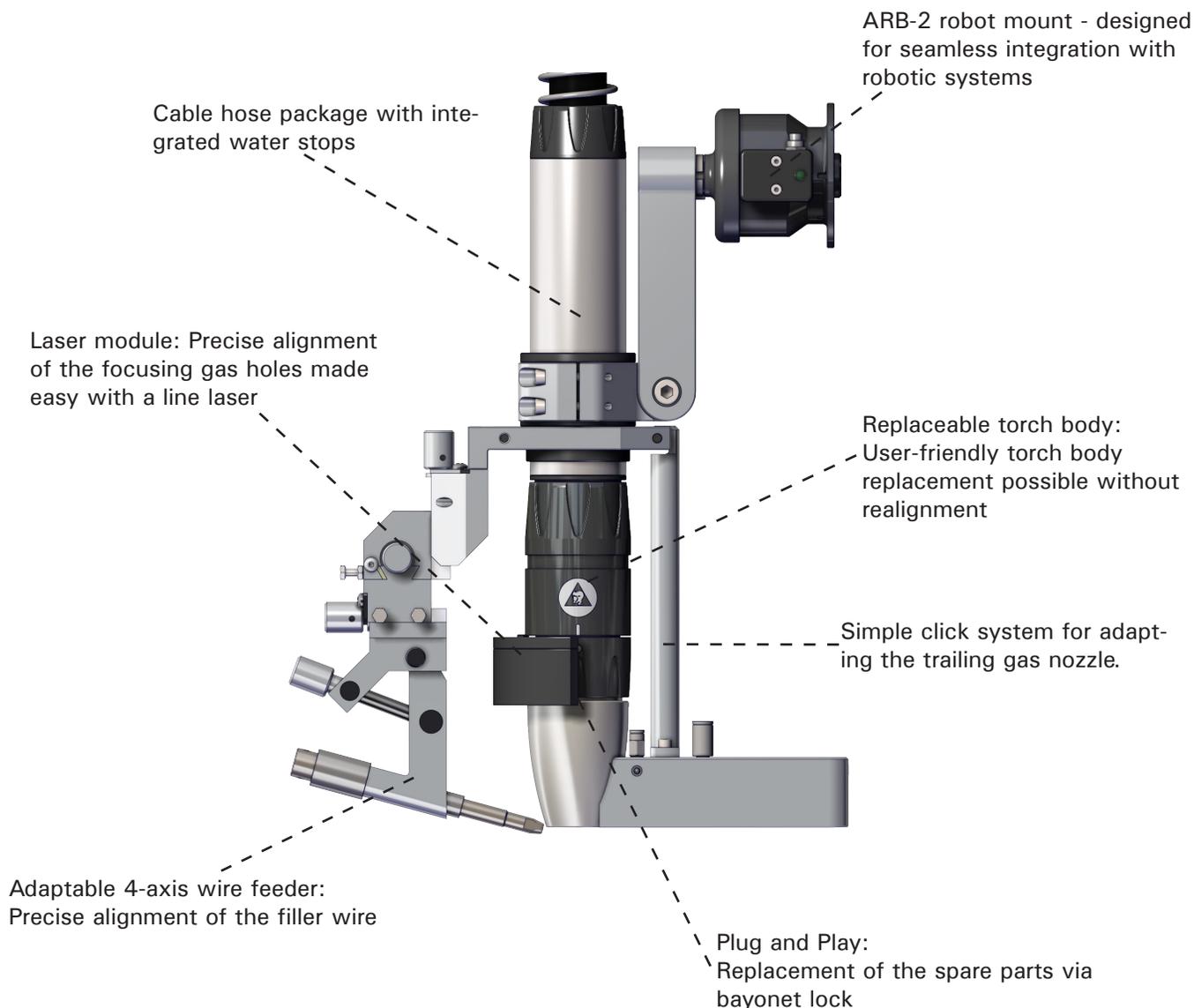
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NeoARc PAW – developed to make plasma welding simpler and more efficient

The NeoArc PAW is an innovative and user-friendly plasma welding torch for automated applications. Its wide range of accessories – such as trailing gas nozzles, alignment tools, and wire feeders – reduces the complexity of plasma welding and gives users the confidence to quickly achieve optimal results.

- **Easy integration:** Fast migration of the plasma process through a system solution concept
- **Fast consumable change:** The bayonet lock allows precise and uncomplicated replacement of consumables
- **Time savings:** Torch change within seconds, without additional electrode adjustment
- **Increased productivity:** Reproducibility and less rework thanks to precise alignment of the focusing gas holes to the weld pool (once aligned, the focusing gas holes always remain in the same position)
- **Longer service life:** Highly efficient cooling for electrodes and nozzle reduces replacement intervals

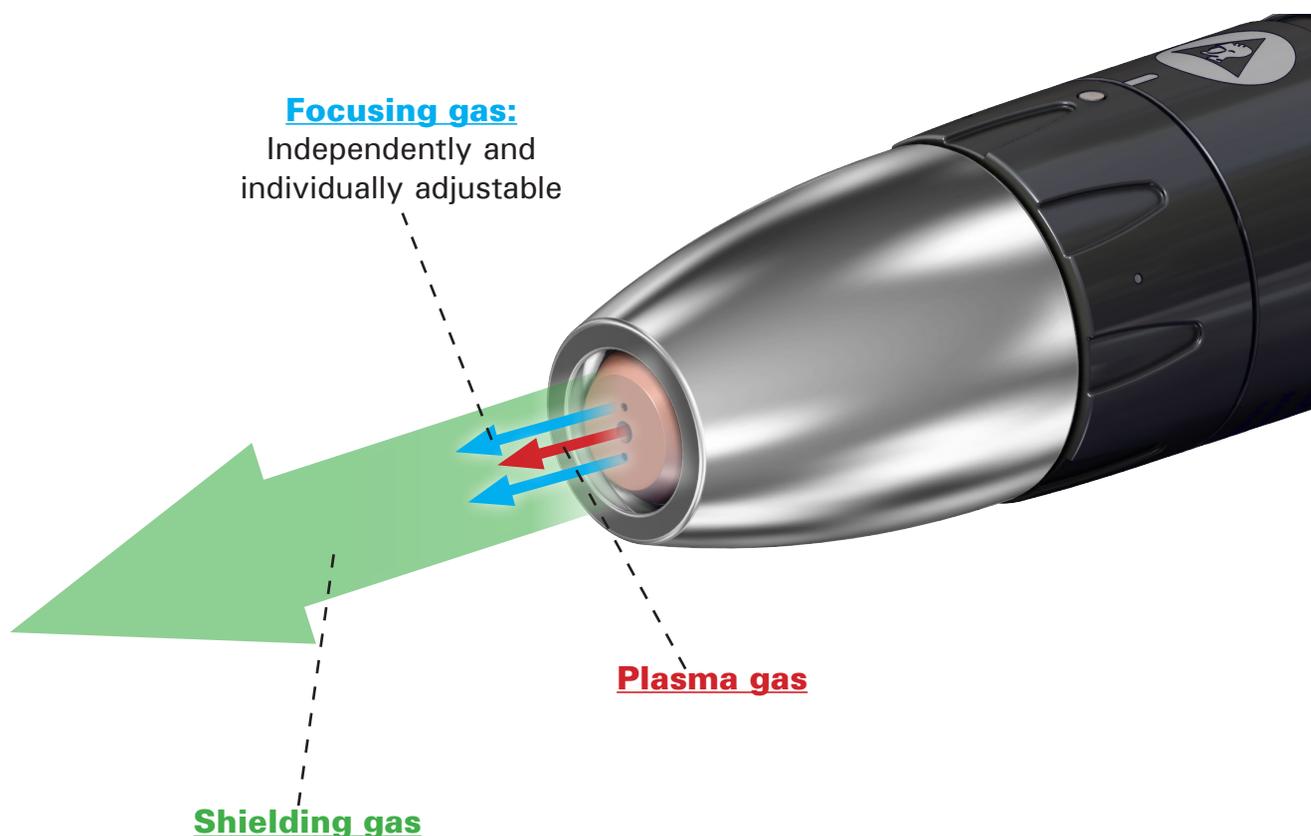


NeoARc PAW operating principle – One step ahead!

The operating principle of the NeoARc PAW welding torch allows the user to independently and separately adjust not only the shielding and plasma gas, but also the focusing gas. The focusing gas flows out of the familiar three-hole nozzles.

The detached setting of the focusing gas simplifies:

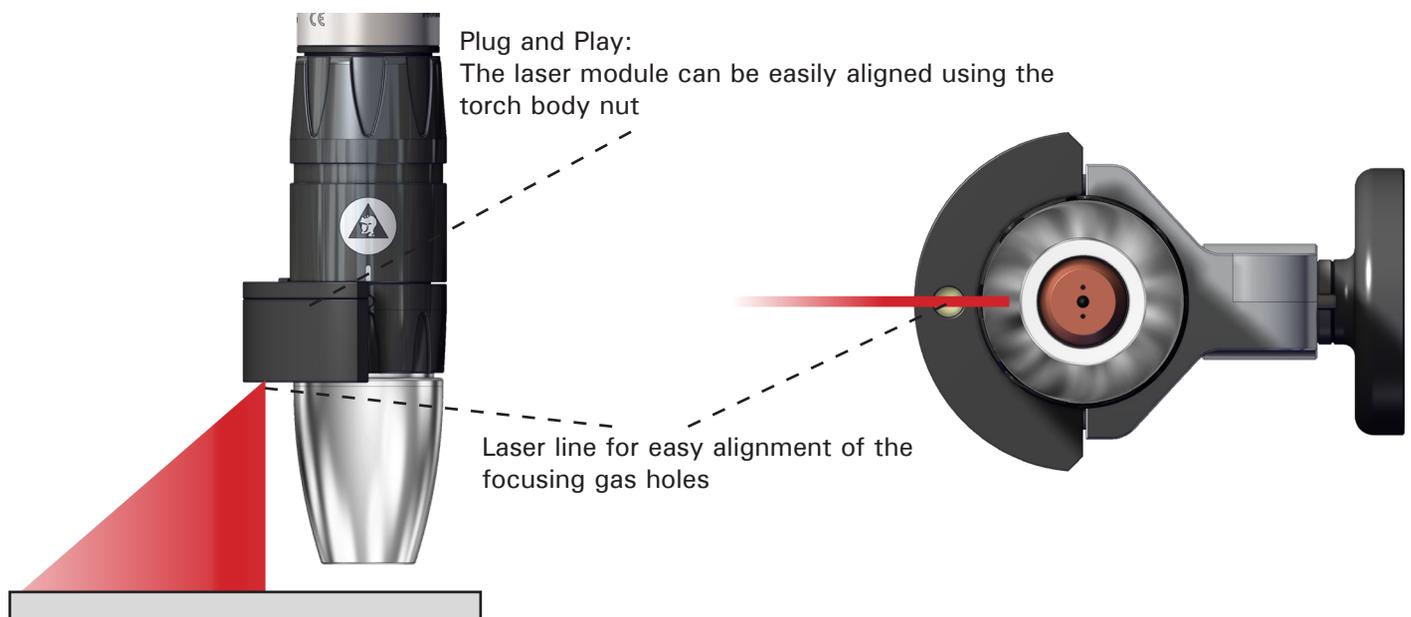
- **Reproducibility:** Once the focusing gas has been set, it remains unchanged regardless of external influences
- **Simpler process parameter determination:** Separate control allows parameters to be adjusted precisely and more easily





Easy alignment of the focusing gas holes using the laser module

The laser module for the NeoARc PAW welding torch allows the plasma nozzle holes to be aligned effortlessly, user-friendly and reproducibly. After replacing a spare parts, no realignment is necessary!





Technical data NeoARc PAW welding torch

NeoARc PAW



Technical data according to EN 60 974-7

Rating* ¹ :	500 A DC at 100 % Duty cycle
Tungsten electrodes-Ø:	4.0 mm
Pilot current:	max. 40 A
Shielding gas flow rate:	min. 15 l/min
Plasma gas flow rate:	1 - 10 l/min
Focusing gas flow rate:	0 - 10 l/min

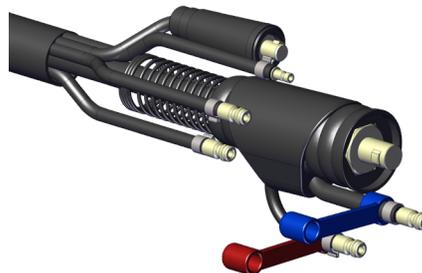
*¹Cooling capacity $\leq 350\text{A}$ with 5m cable hose package length $\geq 3\text{kW}$ and welding torch inlet pressure of the cooling liquid of 6.7-10.0bar.

Add 0.25kW for every 1m of cable hose package length.

Overview torch connections for NeoARc PAW

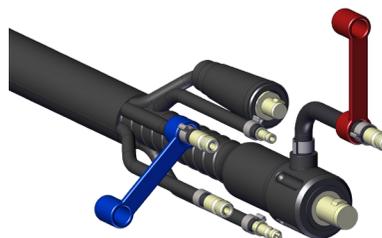
Suitable for EWM®

Main current: SK35/50 (Ø13mm)
 Pilot current: SK 10/25 (Ø9mm)
 Water: plug-in nipple NW5
 Plasma gas: plug-in nipple NW2,7
 Shielding gas: plug-in nipple NW5
 Focusing gas: plug-in nipple NW5



Suitable for Migatronic®

Main current: SK35/50 (Ø13mm)
 Pilot current: SK 10/25 (Ø9mm)
 Water: plug-in nipple NW5
 Plasma gas: plug-in nipple NW2,7
 Shielding gas: plug-in nipple Miga.
 Focusing gas: plug-in nipple NW5



Suitable for SP-7 connector box

Main current: SP-7-connector
 Pilot current: SK 10/25 (Ø9mm)
 Water: plug-in nipple type 23
 Plasma gas: plug-in nipple type 21
 Shielding gas: coupling socket type 21
 Focusing gas: plug-in nipple NW5



Adapter package for second cooling circuit: plug-in nipple type 25 and coupling socket type 25

Suitable for SBI®

Main current: SK35/50 (Ø13mm)
 Pilot current: Inline-plug
 Water: plug-in nipple NW5
 Plasma gas: plug-in nipple NW2,7
 Shielding gas: plug-in nipple NW2,7
 Focusing gas: plug-in nipple NW2,7



Different connections on request!

Configurator cable hose package NeoARc PAW without torch body

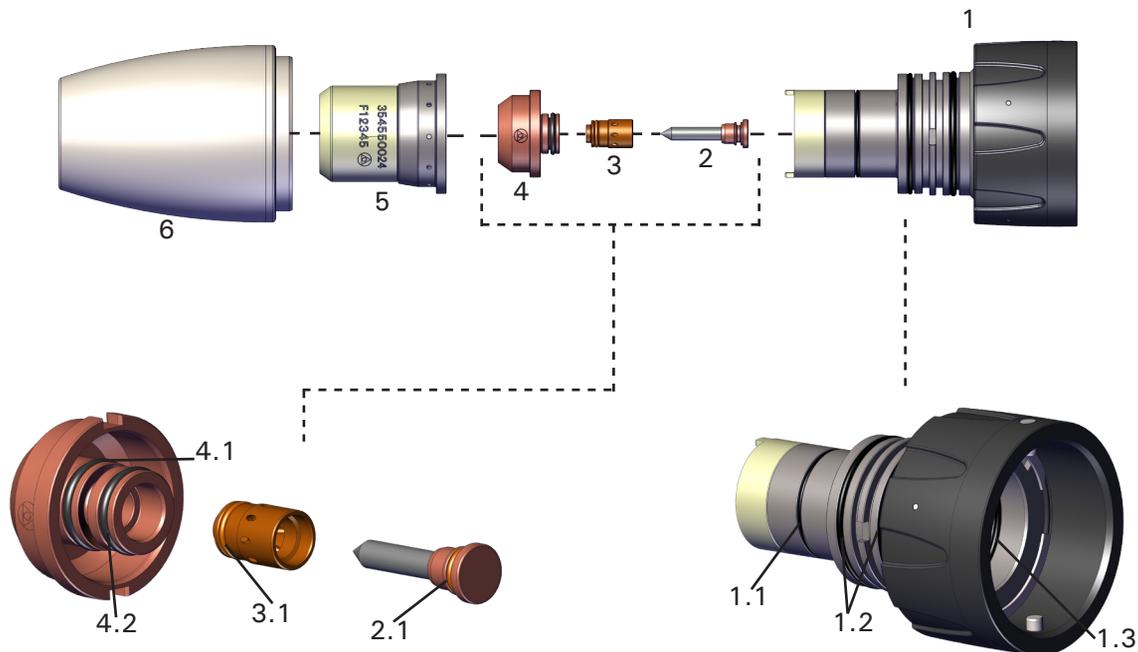
Torch type	Cable hose package length	Hose package type	Torch connection for power source
35455	40	T	E0
35455 NeoARc PAW	20	T textile cover hose	<u>EWM®</u> E0 Main current: SK35/50 (Ø13mm); Pilot current: SK10/25 (Ø9mm) Water: plug-in nipple NW5; Plasma gas: plug-in nipple NW2,7 Shielding gas: plug-in nipple NW5; Focusing gas: plug-in nipple NW5
	40		<u>Migatronik®</u> M0 Main current: SK35/50 (Ø13mm); Pilot current: SK10/25 (Ø9mm) Water: plug-in nipple NW5, Plasma gas: plug-in nipple NW2,7 Shielding gas: plug-in nipple Miga.; Focusing gas: plug-in nipple NW5
	80		<u>SP-7 connector box</u> A0 Main current: SP-7-connector; Pilot current: SK10/25 (Ø9mm) Water: plug-in nipple type 23; Plasma gas: plug-in nipple type 21 Shielding gas: coupling socket type 21; Focusing gas: plug-in nipple NW5 Adapter package for second cooling circuit: plug-in nipple type 25 and coupling socket type 25
			<u>SBI®</u> S0 Main current: SK35/50 (Ø13mm); Pilot current: Inline-plug Water: plug-in nipple NW5; Plasma gas: plug-in nipple NW2,7 Shielding gas: plug-in nipple NW2,7; Focusing gas: plug-in nipple NW2,7

Different connections on request!

Delivery condition:

*The cable hose package is always supplied without the torch body!
The torch body must be ordered separately!*

Spare parts NeoARc PAW

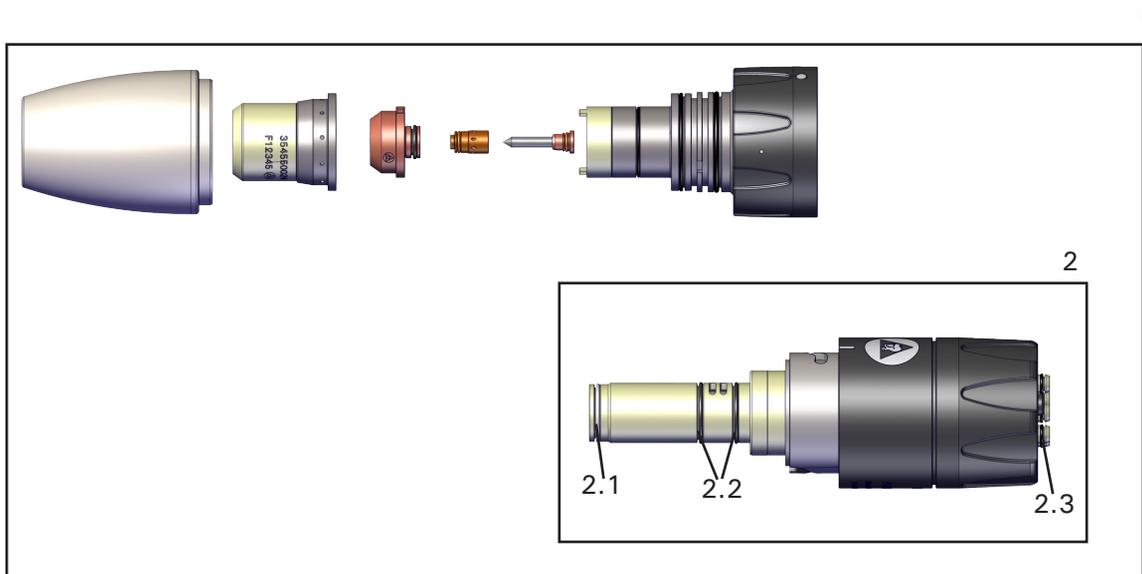


Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	354550026	Bayonet nut with insulation and O-rings	4	3545500220	Plasma nozzle Ø3.0mm with O-rings (PU = 10)
1.1	354550033	O-ring 24.0x1.0mm (PU = 2)	4.1	67329001	O-ring 10.0x1.5mm (PU = 5)
1.2	354550034	O-ring 33.0x1.5mm (PU = 5)	4.2	0091500	O-ring 9.5x1.5mm (PU = 5)
1.3	354550035	O-ring 33.0x2.0mm (PU = 5)	5	354550024	Shielding gas distributor (PU = 2)
1.4	354550037	O-ring 31.0x1.5mm (PU = 5)	6	354550025	Shielding gas nozzle
2	3545500210	Electrode Ø4,0mm standard (PU = 10)			
	3545500211	Electrode Ø4,0mm soft plasma (PU = 10)			
2.1	354550032	O-ring 5.0x1.0mm (PU = 5)			
3	354550023	Plasma gas distributor (PU = 3)			
3.1	354550031	O-ring 6.0x1.0mm (PU = 5)			



Torch body NeoARc PAW

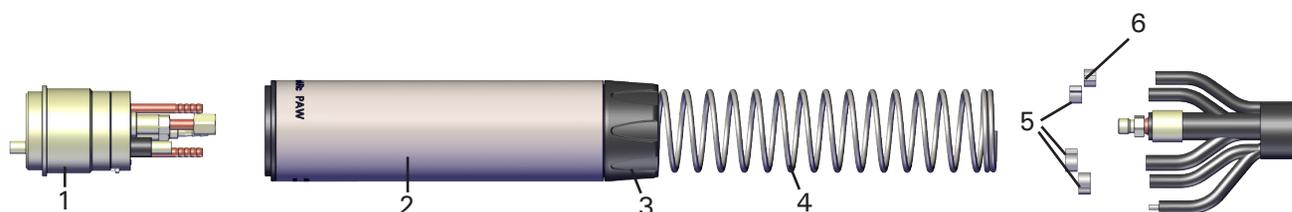


Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	3545500101	Torch body NeoARc PAW including replaceable bayonet assembly	2	3545500110	Torch body NeoARc PAW
			2.1	354550030	NeoARc O-Ring (PU = 5)
			2.2	354550036	O-ring 19.5x1.5mm (PU = 10)
			2.3	0051200	O-ring 5.0x1.2mm (PU = 20)



Torch mount NeoARc PAW

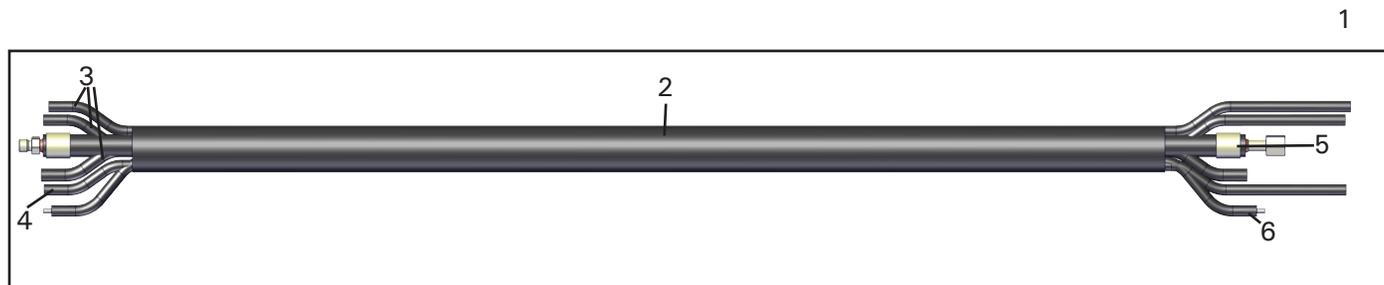


Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	354550050	Torch mount NeoARc PAW	4	2411622	Kink protection spring
2	3545500521	Handle tube with insulating sleeve	5	03210951	Single ear clamp D = 9.5 (PU = 100)
3	354550054	Insulating nut	6	03211051	Single ear clamp D = 10.5 (PU = 100)

Cable hose package NeoARc PAW

Standard cable hose package



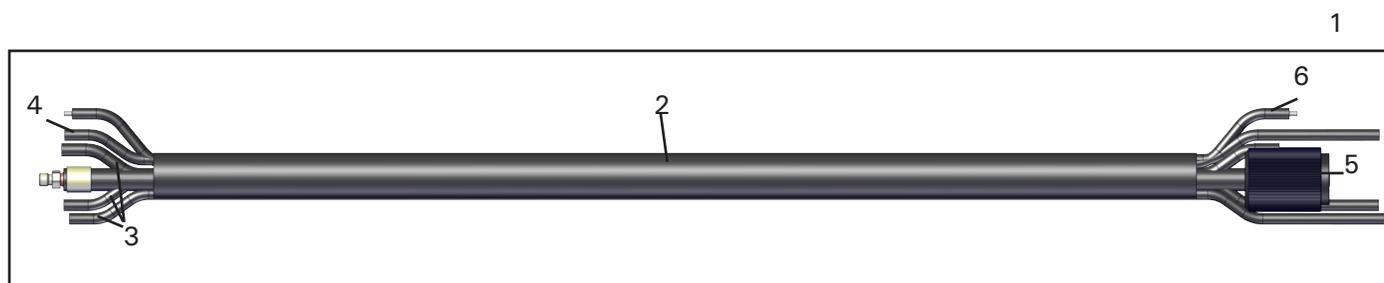
Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	35455N XX 00	Cable hose package standard NeoARc PAW X m cpl.	4	0550104	PVC hose with textile reinforcement (PU = 200m)
2	0550203	Textile cover hose (PU = 40m)	5	35455N XX 30	Power cable standard X m cpl.
3	0550111	PVC hose (PU = 100m)	6	0500101G	Pilot power cable (PU = 100m)

Pos. 1/5 are available in 2m (20) / 4m (40) / 8m (80).
Please insert at **XX** the length.

Example: Pos.1 Cable hose package standard 8m cpl. is: 08; Part-No.: = 35455N**08**00

Cable hose package for SP-7 connector box



Spare parts

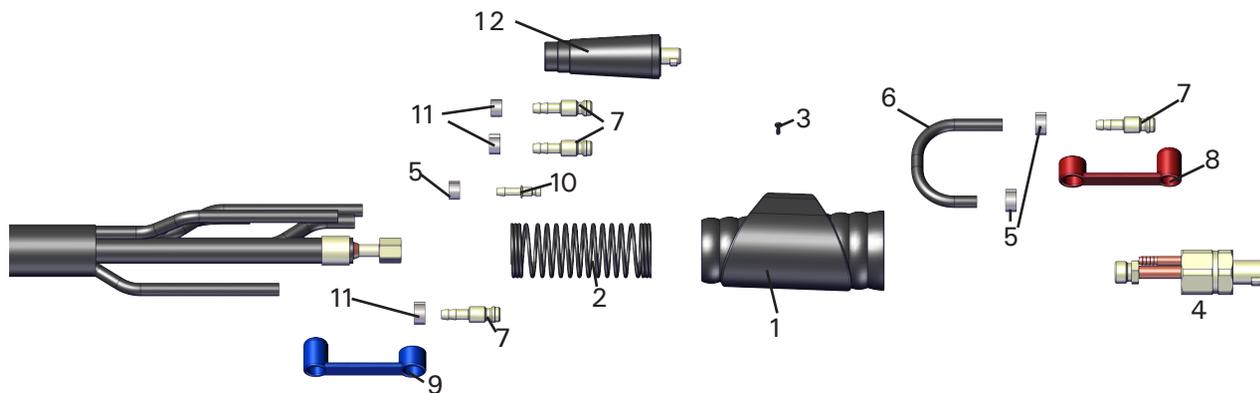
Pos.	Part No.	Description	Pos.	Part No.	Description
1	35455N XX 01	Cable hose package for SP-7 connector box NeoARc PAW X m cpl.	4	0550104	PVC hose with textile reinforcement (PU = 200m)
2	0550203	Textile cover hose (PU = 40m)	5	35455N XX 31	Power cable for SP-7 connector box X m cpl.
3	0550111	PVC hose (PU = 100m)	6	0500101G	Pilot power cable (PU = 100m)

Pos. 1/5 are available in 2m (20) / 4m (40) / 8m (80).
Please insert at **XX** the length.

Example: Pos.1 Cable hose package standard 8m cpl. is: 08; Part-No.: = 35455N**08**01

Machine-side NeoARc PAW connection

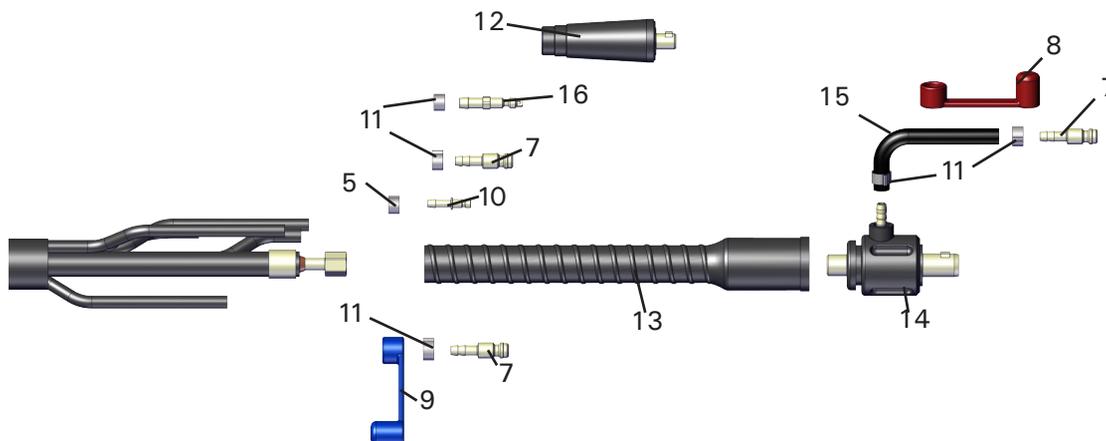
**Suitable for EWM®: Main current: compact connection SK35/50 (Ø13mm);
 water: plug-in nipple NW5; pilot current: SK10/25 (Ø9mm);
 plasma gas: plug-in nipple NW2,7; shielding gas: plug-in nipple NW5;
 focusing gs: plug-in nipple NW5**



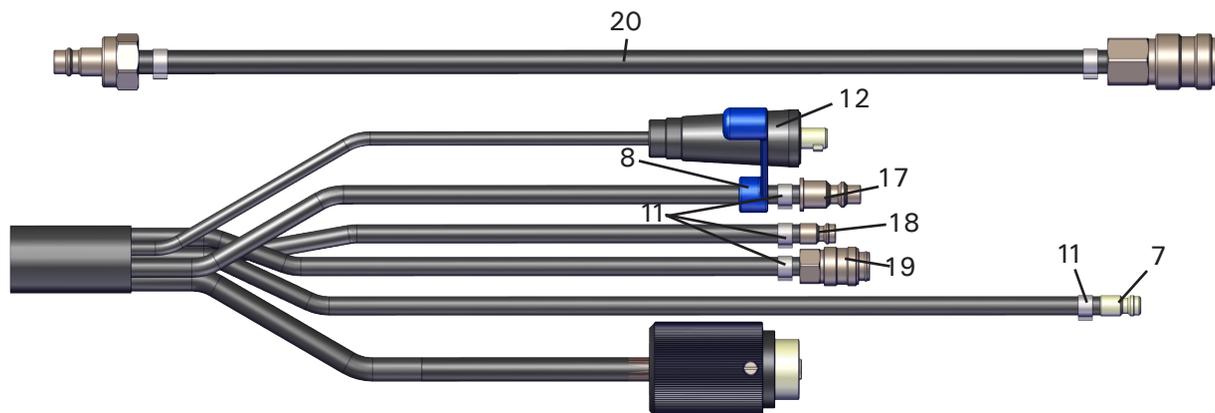
Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	30002273	Housing for compact connection TIG	7	2990800	Water plug-in nipple NW5 (PU = 10)
2	300022731	Spring for housing	8	45050340	Water stop red (PU = 10)
3	300022735	Screw Torx (PU = 20)	9	45050339	Water stop blue (PU = 10)
4	300022725	Compact connector TIG SK35/50	10	ARTR-0401	Plug-in nipple NW2.7 (PU = 10)
5	03210951	Single ear clamp D = 9.5 (PU = 100)	11	03211051	Single ear clamp D = 10.5 (PU = 100)
6	0550121	Hose 4x1.3mm black (PU = 100m)	12	3001201	Plug SK10/25 (Ø9mm)

**Suitable for Migatronic®: Main current: BSB connector SK35/50 (Ø13mm);
 water: plug-in nipple NW5; pilot current: SK10/25 (Ø9mm);
 plasma gas: plug-in nipple NW2,7; shielding gas: plug-in nipple
 Miga.; focusing gas: plug-in nipple NW5**

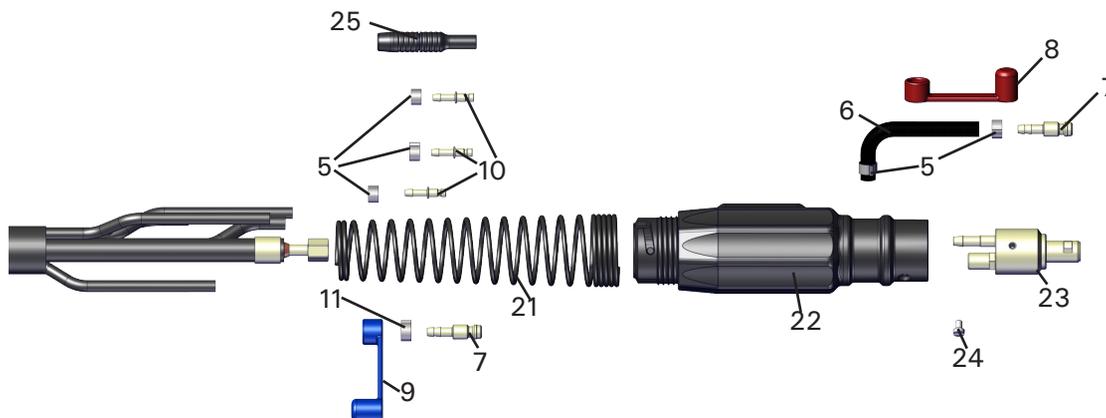

Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
5	03210951	Single ear clamp D = 9.5 (PU = 100)	13	0331025	Kink protection
6	0550121	Hose 4x1.3mm black (PU = 100m)	14	3595110S1	BSB connector SK35/50 (Ø13mm)
7	2990800	Plug-in nipple NW5 (PU = 10)	15	45573158	Hose 5x2 black (PU = 100m)
8	45050340	Water stop red (PU = 10)	16	0311014	Plug-in nipple for gas Mig. (PU = 10)
9	45050339	Water stop blue (PU = 10)			
10	ARTR-0401	Plug-in nipple NW2.7 (PU = 10)			
11	03211051	Single ear clamp D = 10.5 (PU = 100)			
12	3001201	PLug SK10/25 (Ø9mm)			

Suitable for SP-7 connector box:
Main current: SP-7 connector; pilot current: SK10/25 (Ø9mm)
water: plug-in nipple type 23; plasma gas: plug-in nipple type 21;
shielding gas: coupling socket type 21;
focusing gas: plug-in nipple NW5

Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
7	2990800	Plug-in nipple NW5 (PU = 10)	17	000L689	Plug-in nipple type 23
9	45050339	Water stop blue (PU = 10)	18	000L685	Plug-in nipple type 21
11	03211051	Single ear clamp D = 10.5 (PU = 100)	19	000L686	Self-sealing coupling socket type 21
12	3001201	Plug SK10/25 (Ø9mm)	20	994100169	Adapter package for second cooling circuit: plug-in nipple type 25 and coupling socket type 25 l=0,5m

**Suitable for SBI®: Main current: SK35/50 (Ø13mm); water: plug-in nipple NW5;
pilot current: Inline-plug; plasma gas: plug-in nipple NW2,7;
shielding gas: plug-in nipple NW2,7; focusing gas: plug-in nipple NW2,7**


Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
5	03210951	Single ear clamp D = 9.5 (PU = 100)	21	2411611	Spring for housing
6	0550121	Hose 4x1,3mm black (PU = 100m)	22	2411600S1	Gun plug housing
7	2990800	Plug-in nipple NW5 (PU = 10)	23	80300004S1	Plug SK35/50 (Ø13mm) for gun plug housing
8	45050340	Water stop red (PU = 10)	24	0040601	Screw M4x6 (PU = 20)
9	45050339	Water stop blue (PU = 10)	25	10112021	Inline-plug cpl.
10	ARTR-0401	Plug-in nipple NW2.7 (PU = 10)			
11	03211051	Single ear clamp D = 10.5 (PU = 100)			

Spare part kits

Starter kit for NeoARc PAW



Starter kit NeoARc PAW (3545500413), consist of:

Part No.	Description	Part No.	Description
3545500210	8x Electrode Ø4.0mm standard	354550025	1x Shielding gas nozzle
3545500211	2x Electrode Ø4.0mm softplasma	354550040	1x O-ring kit
3545500220	5x Plasma nozzle Ø3.0mm with O-rings	354550030	2x NeoARc O-ring
354550023	2x Plasma gas distributor	75105105	1x O-ring lube
354550024	1x Shielding gas distributor		

O-ring kit for NeoARc PAW

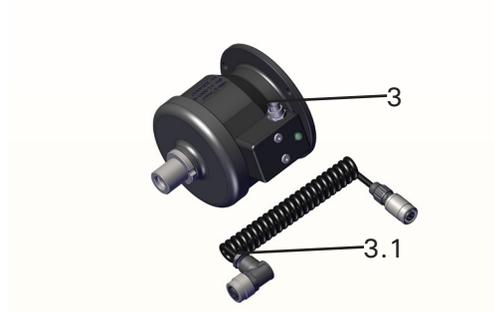
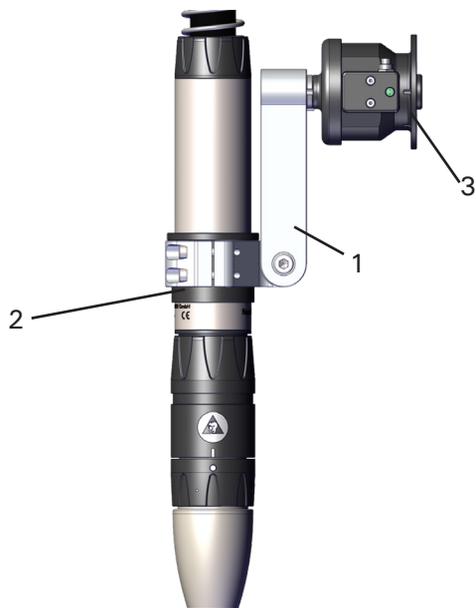


O-ring kit NeoARc PAW (354550040). consists of:

Part No.	Description	Part No.	Description
354550031	5x O-ring 6.0x1.0 Silicon. red	354550035	5x O-ring 33.0x2mm
354550032	5x O-ring 5.0x1.0 Silicon. red	354550034	5x O-ring 33.0x1.5mm
0091500	5x O-ring 9.5x1.5mm	0051200	20x O-ring 5.0x1.2mm
67329001	5x O-ring 10x1.5mm	354550036	10x O-ring 19.5x1.5mm
354550033	2x O-ring 24.0x1.0mm	354550037	5x O-ring 31.0x1.5mm

Torch holder and robot mount

Torch holder and robot mount for NeoARc PAW



Technical data ARB-2

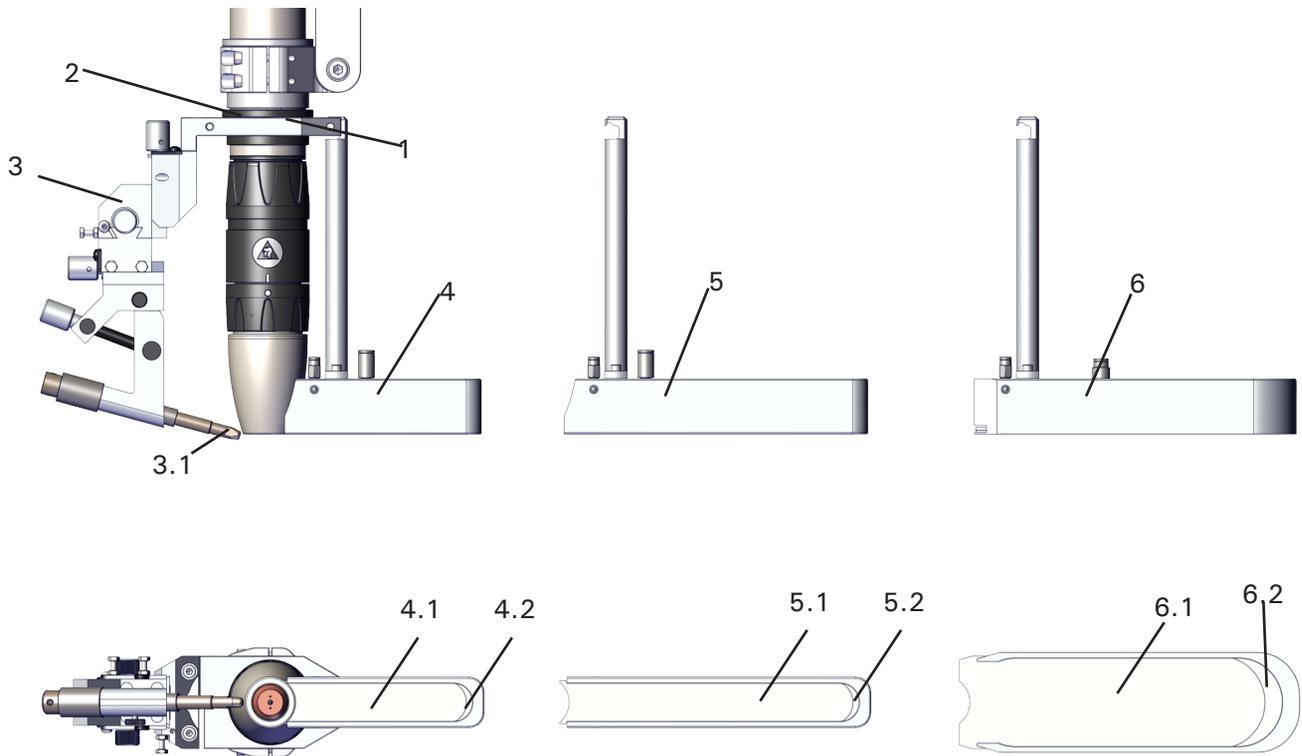
Models:	medium	medium plus	max
Release torque on axis (Mx,My)	approx. 14Nm	approx. 25Nm	approx. 33Nm
Weight:	approx. 0,56kg		
Max. deflection	+/- 14°		

Spare parts

Pos.	Part No.	Description	Pos.	Part. No	Description
1	200425031	Torch holder 90°	3	20040034	Robot mount ARB-2, „medium“ cpl.
2	200425030	Plastic ring for torch holder		20040035	Robot mount ARB-2, „medium plus“ cpl.
				20040036	Robot mount ARB-2, „max“ cpl.
			3.1	20040027	Helix cable 3-pol. cpl.

Wire feeder and trail

Wire feeder and trail for NeoARc PAW



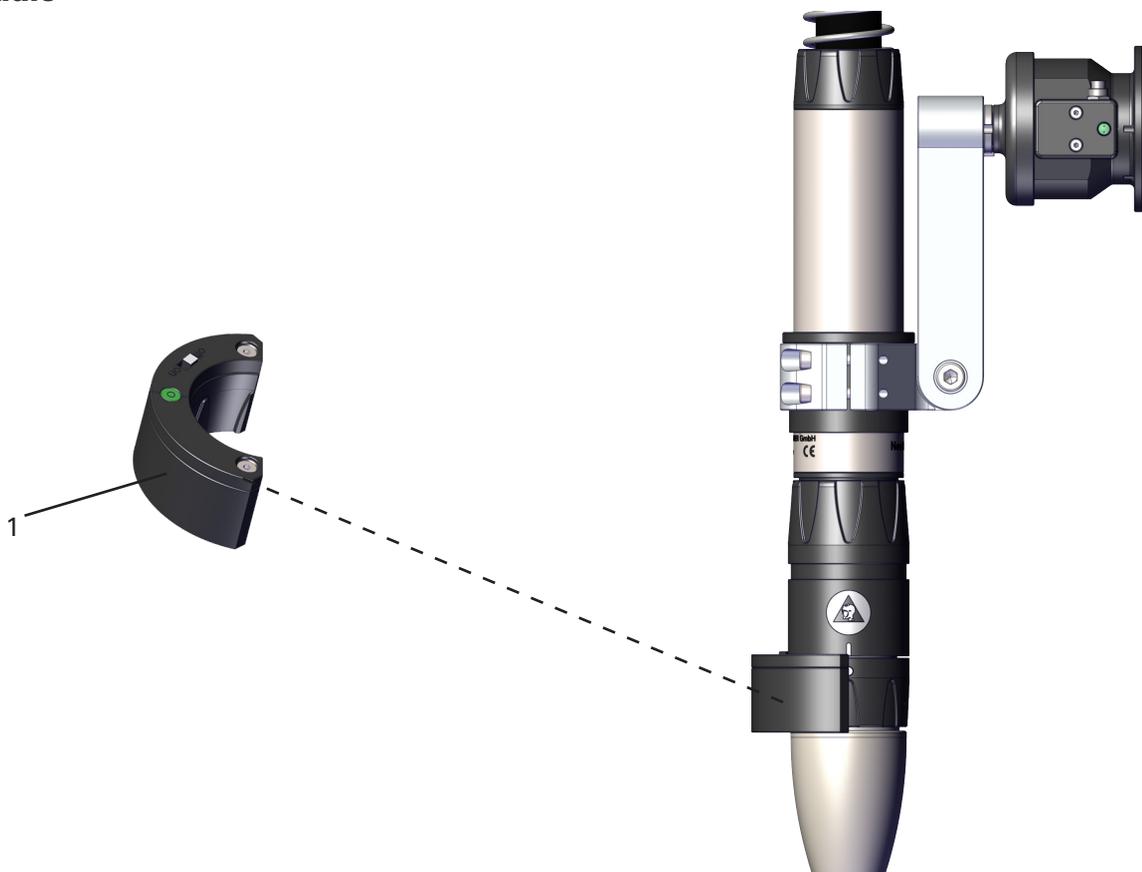
Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	354550070	Holder for 4 axis wire feeder and trail	4	3545500600	Trail short cpl.
2	3545500701	Plastic ring for holder	4.1	3545500601	Metal mesh for trail short
3	100018930	4-Achs-Verstelleinheit	4.2	3545500602	Perforated metal plate for trail short
3.1	22576 XXV	Contact tip M6x28, Ø in mm / CuCrZr nickel plated	5	3545500610	Trail long cpl.
Contact tips available in Ø0.8/1.0/1.2mm. Please insert wire diameter at XX . Example: Ø1.0mm is: 10; Part No.: = 22576 10V Other diameters on request!			5.1	3545500611	Metal mesh for trail long
			5.2	3545500612	Perforated metal plate for trail long
			6	3545500620	Trail titan cpl.
			6.1	3545500621	Metal mesh for trail titan
			6.2	3545500622	Perforated metal plate for trail titan



Alignment aid

Laser module



Spare parts

Pos.	Part No.	Description	Pos.	Part No.	Description
1	354550071	Laser module	no fig..	3545500714	Battery 3V



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Autogen-Ritter GmbH® – Welding technology with tradition, innovation and customisation.

For over 100 years, Autogen-Ritter GmbH® has stood for quality, innovation and technical precision in the field of welding technology. With our own development and design capabilities, we create customised solutions that are precisely tailored to our customers' requirements, from one-off production to series production.

Our portfolio includes high-performance TIG, plasma welding and GMAW welding torches for manual and automated applications. Our products are used worldwide in a wide range of industries, including crane and pipeline construction, the automotive industry, pipeline construction and additive manufacturing.

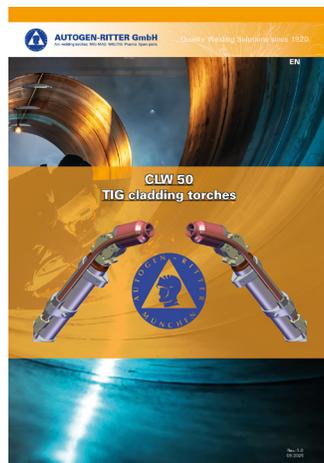
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In addition to information about the products on our website, we also offer catalogues for the respective areas:

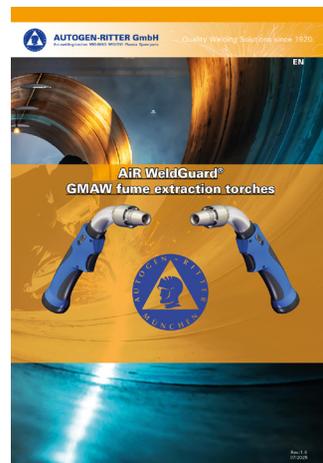
TIG manual torches



TIG cladding torches



GMAW fume extraction torches





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