

xFUME® TIG Catalog

Air and liquid cooled TIG fume extraction torches

Fume extraction technology for professional industrial use



www.binzel-abicor.com

TIG fume extraction torches xFUME® TIG

Air cooled and liquid cooled

Although TIG welding does not produce a similar amount of fumes compared to MIG/MAG welding, it does produce fumes that are particularly dangerous when inhaled. That is why it was very important to ABICOR BINZEL to develop a high-performance TIG torch for industrial use. The xFUME® TIG fume extraction torch also works according to the principle of extraction at the source and efficiently absorbs these highly hazardous fumes at their place of origin. This is provided by a combined ceramic protection and extraction nozzle, through which this TIG fume extraction torch with its slim front end guarantees an excellent view of the process. With its innovative concept and design, the xFUME® TIG is an excellent

TIG fume extraction torch in general fabrication especially for welding stainless steels, aluminum alloys and high-alloy materials, where welding fumes that pose different health hazards are increasingly released.

- Novel innovation in the field of TIG torches
- Integrated fume extraction to protect the welder
- Dimensions and weight as close as possible to standard TIG torches
- Patented extraction nozzle
- Improved ergonomics
- Reduced gas loss due to optimised frontend



xFUME® TIG 150

Technical data (EN 60 974-7):

Cooling:	air cooled
Rating:	150 A DC 105 A AC
Duty cycle:	35 %
Tungsten electrode:	Ø .040" - 3/32" (1.0-2.4 mm)

xFUME® TIG 300 W

Technical data (EN 60 974-7):

Cooling:	liquid cooled
Rating:	300 A DC 210 A AC
Duty cycle:	100 %
Tungsten electrode:	Ø .040" - 1/8" (1.0-3.2 mm)

Order No.	Description	Cooling	Power	Gas	Coolant
XT-113-M	xFUME® TIG 150 (13 FT)	Air	Lg Dinse Plug 35-50mm	Retaining Screw 5/8" - 18 UNF RH	N/A
XT-126-M	xFUME® TIG 150 (26 FT)	Air	Lg Dinse Plug 35-50mm	Retaining Screw 5/8" - 18 UNF RH	N/A
XT-313-M	xFUME® TIG 300 (13 FT)	Water	Lg Dinse Plug 35-50mm	Retaining Screw 5/8" - 18 UNF RH	Plug-in nipple DN5; Quick Connect 4mm Hose
XT-326-M	xFUME® TIG 300 (26 FT)	Water	Lg Dinse Plug 35-50mm	Retaining Screw 5/8" - 18 UNF RH	Plug-in nipple DN5; Quick Connect 4mm Hose

All consumables ordered seperately

xFUME® TIG 150 and xFUME® TIG 300 W

Wear parts



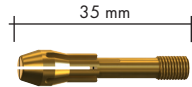
Back cap

Short

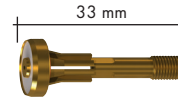
776.0053

Long

771.0051



Electrode holder



Gas diffuser

Electrode holder/ Gas diffuser

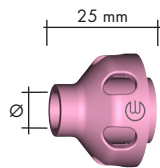
Ø .040" (1.0 mm)	776.0061	776.0171
Ø 1/16" (1.6 mm)	776.0062	776.0172
Ø 5/64" (2.0 mm)	776.0067	776.0177
Ø 3/32" (2.4 mm)	776.0063	776.0173
Ø 1/8" (3.2 mm)	776.0064	776.0174



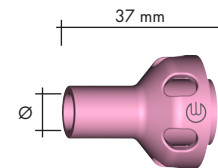
Insulator/Adaptor ring for torch body

Standard version

Insulator	776.1043
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Short



Long

Gas nozzle, ceramic

Ø 5/16" (8.0 mm)	776.5003.10	776.5001.10
Ø 3/8" (9.5 mm)	776.5004.10	776.5002.10
Ø 1/2" (12.0 mm)	776.5005.10	776.5006.10

Power cables, control cables and hoses

I. Power cables

Type	Power cable High Flex	
	13 ft (4 meters)	26 ft (8 meters)
xFUME® TIG 150	150.0040	150.0041
xFUME® TIG 300 W	150.0332.1	150.0333.1

II. Gas hoses, Hose clamps

Type	Description	Part-No.
xFUME® TIG 300 W	PVC hose black 3.5" x 1.25" (per meter)	102.0124
xFUME® TIG 300 W	Hose clamp Ø = 7.5 mm with ring (mark. 8.0)	171.9007

III. Coolant supply hose

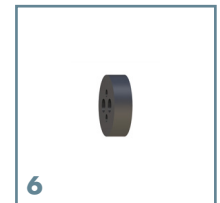
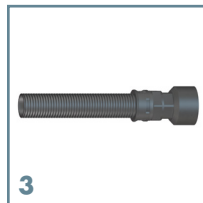
Typ	Description	Part-No.
xFUME® TIG 300 W	FRH hose black 3.9" x 1.5" (per meter)	109.0059
xFUME® TIG 300 W	Hose clamp Ø = 8.7 mm, continuously variable	171.9002

IV. Outer hoses

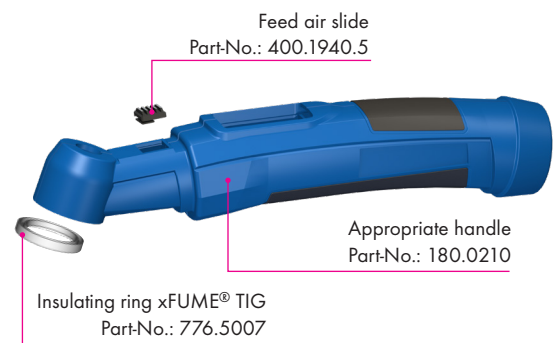
Type	Description	Part-No.
xFUME® TIG 150/ 300 W	Hose 32 black LW 28 R (per meter)	109.0042

V. Branch, connector set, cable guide, hose clutch, adaptor

Pos.	Type	Description	Part-No.
1	xFUME® TIG 150/ 300 W	Branch 45°	600.0126
2	xFUME® TIG 150/ 300 W	Hose clutch	400.1942
3	xFUME® TIG 150/ 300 W	Connector cpl.	400.1935
4	xFUME® TIG 150/ 300 W	Adaptor cpl.	776.5019
5	xFUME® TIG 150	Cable guide AC* cpl.	776.5009
6	xFUME® TIG 300 W	Cable guide LC** cpl.	776.5018



* air cooled
** liquid cooled



xFUME® Fume Extraction Welding Guns

Accessories

Weld Cable Cover



Features & Benefits

- 1000 Denier Cordura with flame retardant coating
- Extremely lightweight
- Continuous temp rating: +250°F
- Momentary temp rating: 800°F
- Excellent UV protection
- Unaffected by water, oils, and mild solvents
- Excellent resistance to abrasion, weld spatter, puncture and tear resistance

Ordering Instructions for Protective Cable Covering

WC	-	1.0	-	BULK
Model		Diameter Selection		Length
Model				Length
Weld Cover				Sold Per Meter*

Diameter Selection

1.0 = 1" ID ***1.5 = 1.5" ID

2.0 = 2" ID

2.25 = 2 -1/4" ID

2.38 = 2 -3/8" ID (2.38" cover fits the 38mm OD front fume hose well and is tight on the larger 45mm OD rear hose. See note below**)

2.5 = 2 -1/2" ID (2.50" cover fits the 38mm OD front fume hose loose and fits well on the larger 45mm OD rear hose. See note below**)

*45m = One full 150' roll

**In most applications, the 2.38" cover is preferred, but it is recommended to select 2.5" cover if flexibility is required on the rear fume hose section of the fume extraction torch. Tight hose coverings limit flexibility of the fume hose.

*** For xFUME TIG applications we recommend the 1.5" ID option

Surface cleaning & more »without grinding marks«

When the weld seam appearance is also important



Where conventional, abrasive grinding techniques or conventional pickling techniques very quickly reach their limits, the ABICLEANER is the gentle and fast solution.

In contrast to classic cleaning products such as pickling pastes, abrasives, brushes, fleece or emery, electrochemical surface cleaning with the ABICLEANER does not leave any unsightly grinding or pickling marks on the workpiece.

In addition, with the help of the millions of filaments of the carbon fibre brush, hard-to-reach places such as the inner seams of railings can

ABICLEANER 800

Control panel



Main equipment switch

Overload protection

Control lamp

High-current socket for cleaning tool

High-current socket for earth cable

ABICLEANER 1000

Control panel



Main switch for cleaning/polishing selection

Main equipment switch

Overload protection

Control lamp

High-current socket for cleaning tool

High-current socket for earth cable

ABIBRUSH carbon fibre brush

The carbon fibre brush, with its more than 1.5 million and only 7 µm finest filaments, gets into even the narrowest and most inaccessible crevices, and into even the most awkwardly accessible corners. Due to their nature, the brush bristles follow every contour of the workpiece.

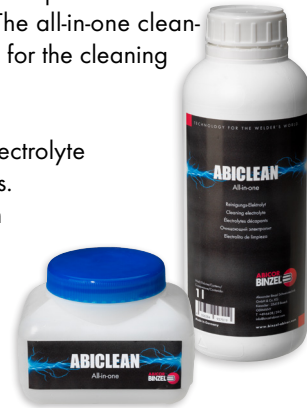
The threaded part on the handle and the brush adapter are made of high-quality stainless steel (1.4571) and are corrosion-resistant.



ABICLEAN all-in-one cleaning electrolyte

The guarantee for safe cleaning uses a safer compound free of hydrofluoric acid for shining metal surfaces. The all-in-one cleaning electrolyte ABICLEAN is the ideal solution for the cleaning process.

When ABICLEANER has a DC function, this electrolyte can additionally be used for polishing surfaces. Transport, storage and application are easy in handling and processing, as compared to conventional pickling agents.



Type:	ABICLEANER 800 AC	ABICLEANER 1000 AC/DC
Part Number:	192.0398	192.0397
Functions:	Cleaning	Cleaning, Polishing
Power:	800VA	1000VA
Mains Voltage:	120V/60Hz	120V/60Hz
Secondary Voltage:	8.7VAC	9.8VAC/12VDC
Operating Temperature:	41-131 (5-55C)	41-131 (5-55C)
IP Protection Type:	IP43*	IP21**
Cleaner Weight:	10.8lbs (4.9kg)	16.53lbs (7.5kg)
Cleaner Kit Weight:	23.35lbs (11.5kg)	30.86lbs (14kg)
Dimensions:	220 x 150 x 250 mm 8.66 x 5.9 x 9.84 in	320 x 150 x 250 mm 12.6 x 5.9 x 9.84 in

Description	Part Number
ABICLEAN all in one electrolyte, 1Liter	192.0369.1
ABICLEAN all in one electrolyte, 5Liter	192.0378.1
PTFE sleeve	192.0368.1
ABIBRUSH carbon fiber brush	192.0367.1

Fume extraction system xFUME® ADVANCED

The powerful one for extraction at the source

With this welding fume extraction system, you are on the safe side in terms of health and safety at work. The xFUME® ADVANCED is a powerful welding fume extraction system for use with a welding fume extraction torch. The filter used efficiently and reliably captures up to 99.5% of all particles without affecting the shielding gas coverage. In combination with an xFUME® PRO or xFUME® TIG welding fume extraction torch, this extraction system can show off its full capabilities

Up to two extraction torches can be connected to the xFUME® ADVANCED, each can be controlled independently of the other. The high extraction performance is guaranteed by two infinitely variable 0.8 kW motors with more than 16,000 Pa. Filter cleaning is 100% automated, which means: no downtime due to cleaning intervals.

- The filter captures up to 99.5% of all dusts > 0.1 µm
- Automatic, highly efficient filter cleaning saves time and provides safety
- Automatic start-stop feature reduces wear and keeps operating costs low
- Robust construction and highest mobility at the same time
- Slim design facilitates even hard-to-reach welding applications
- Infinitely variable 0.8 kW motors for welding workstations



xFUME® ADVANCED 115V

Max. airflow: 350 m³/h
 Max. vacuum: 18,000 Pa
 Noise level: ≤ 75 dB (A)
 Voltage: 115 V 50/60 Hz

Motor power: 2 x 0.8 kW
 Filter efficiency: > 99.5%

Type	Description	Part-No.
xFUME® ADVANCED 115V	115 V, 50/60Hz	601.0245.1

Tungsten Electrodes

Tungsten electrodes: 3 inch length (10 pcs)

Grade	Pure	E3®	Lanthanated 1.5%	Lanthanated 2%	Zirconiated	Ceriated 2%
Ø Color coding	Green	Purple	Gold	Blue	Brown	Orange
.040	040-3G	-	040-3GL	-	040-3GZ	040-3GC2
1/16	116-3G	-	116-3GL	-	116-3GZ	116-3GC2
3/32	332-3G	-	332-3GL	-	332-3GZ	332-3GC2
1/8	18-3G	-	-	-	-	-
5/32	532-3G	-	-	-	-	-

Tungsten electrodes: 7 inch length (10 pcs **)

Grade	Pure	E3®	Lanthanated 1.5%	Lanthanated 2%	Zirconiated	Ceriated 2%
Ø Color coding	Green	Purple	Gold	Blue	Brown	Orange
.020	020-7G	020-7E3	020-7GL	020-7GL2	020-7GZ	020-7GC2
.040	040-7G	040-7E3	040-7GL	040-7GL2	040-7GZ	040-7GC2
1/16	116-7G	116-7E3	116-7GL	116-7GL2	116-7GZ	116-7GC2
3/32	332-7G	332-7E3	332-7GL	332-7GL2	332-7GZ	332-7GC2
1/8	18-7G	18-7E3	18-7GL	18-7GL2	18-7GZ	18-7GC2
5/32	532-7G	532-7E3	532-7GL	-	532-7GZ	532-7GC2
3/16	316-7G	316-7E3	316-7GL	-	316-7GZ	316-7GC2
1/4	-	-	-	-	-	-

** Electrodes with diameter of 3/16" or 1/4" are sold 5 per package.

Tungsten Grinders



Tungsten Grinder
Part # 88897030

The Wet Tungsten Grinder from ABICOR BINZEL provides wet diamond grinding for a smooth finish, minimally wastes your tungsten electrodes, and quickly adjust the grinding angle anywhere from 7.5° to 90°

Comes with Electrode Holder, 1/16, 3/32, & 1/8 clamps, grinding liquid and stand. 120V, 6Hz.



Tungsten Grinder Cutter
Part # 88897530

The Wet Tungsten Grinder Cutter from ABICOR BINZEL gives all the qualities of the grinder with two cut-off receptacles to quickly remove contaminated tungsten.

Comes with Electrode Holder, 1/16, 3/32, & 1/8 clamps, cut-off collet tool, 2 receptacles for contaminated tungsten, grinding liquid and stand. 120V, 6Hz.



AutoGrind
Part # 88897830

The AutoGrind is game changing technology in the world of TIG. Extend the life of your diamond wheel and achieve the smoothest grinds quickly and precisely. The AutoGrind is easily programmable to save you time and money.

Product connects to either ABICOR BINZEL Grinder for simple operation. 120V, 6Hz.



HandiGrinder
Part # HG-110

ABICOR BINZEL's HandiGrinder™ is the simple solution for on-site grinding of tungsten electrodes from 15° to 180°. Lightweight and easily manageable, the HandiGrinder grinds electrodes for a precise and stable concentrated welding arc. The Handi-Grinder has variable speeds and multiple grinding positions, extending the wheel life. 120V, 6Hz.

Our product range

MANUAL

- MIG/MAG welding torches
- TIG welding torches
- Plasma cutting torches
- Plasma welding torches

EXTRACTION TECHNOLOGY

- Fume extraction systems
- Fume extraction torches
- Fume extraction & power source combination system

ROBOTIC SYSTEMS

- Robot torches MIG/TIG/Plasma
- Robot switch-off protections
- Torch cleaning stations
- Wire cutting devices
- Robot power source
- System solutions for cobots
- Pipe welding robot
- Wire feeder systems
- Seam tracking sensors
- Gas management systems

LASER SYSTEMS

- Remote laser scanner
- Tactile laser optics
- Wire feeder systems
- Process monitoring tools

ORBITAL WELDING

- Orbital welding systems
- Positioning bands
- Coated contact tips

HARD AUTOMATION

- Welding tractors
- Welding tractor & power source combination system
- MIG/MAG automatic torches
- Plasma automatic welding and cutting torches

WELDING ACCESSORIES

- Wear parts MIG/TIG/Plasma
- Intermediate cable
- Sockets and plugs
- Electrode holders
- Gouging torches
- Gouging electrodes
- Utilities and tools
- Cooling units
- Wire feeding units
- Equipment for weld seam treatment
- Anti-spatter agents, sprays and pastes



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