

TECHNOLOGY FOR THE WELDER'S WORLD.



Welding Fume Source Capture
Abicor Binzel xFUME™ Products



www.binzel-abicor.com

Welding Fume Source Capture

Panelists



Cody Miller,
Product Manager



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Director of Environmental
Health Systems



Welding Fume Source Capture

Overview of Discussion

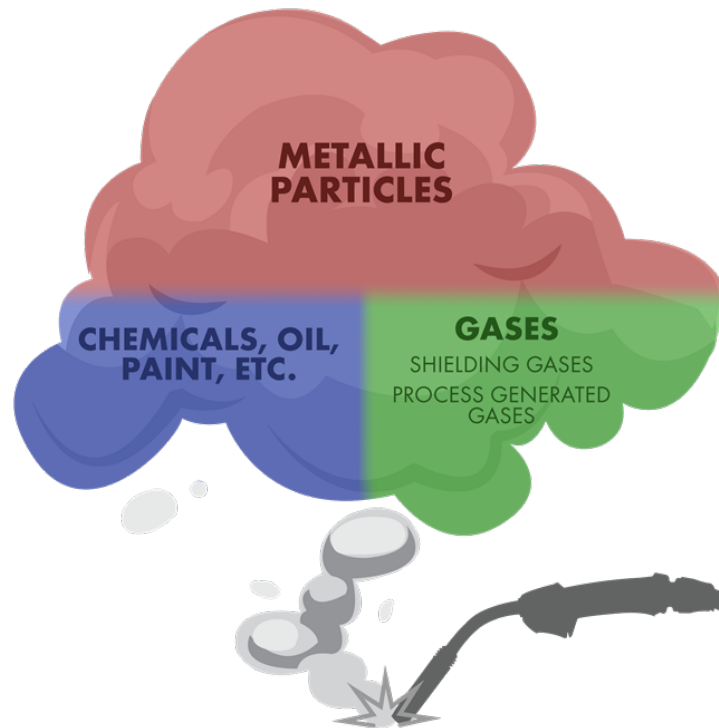
Abicor Binzel xFUME™ Manual Welding Product Line

- xFUME™ MIG Torches
- xFUME™ ADVANCED
- xFUME™ FLEX
- IndustriFume™



Welding Fume Source Capture

What is Welding Fume?



Welding Fume Source Capture

Why Do We Care?

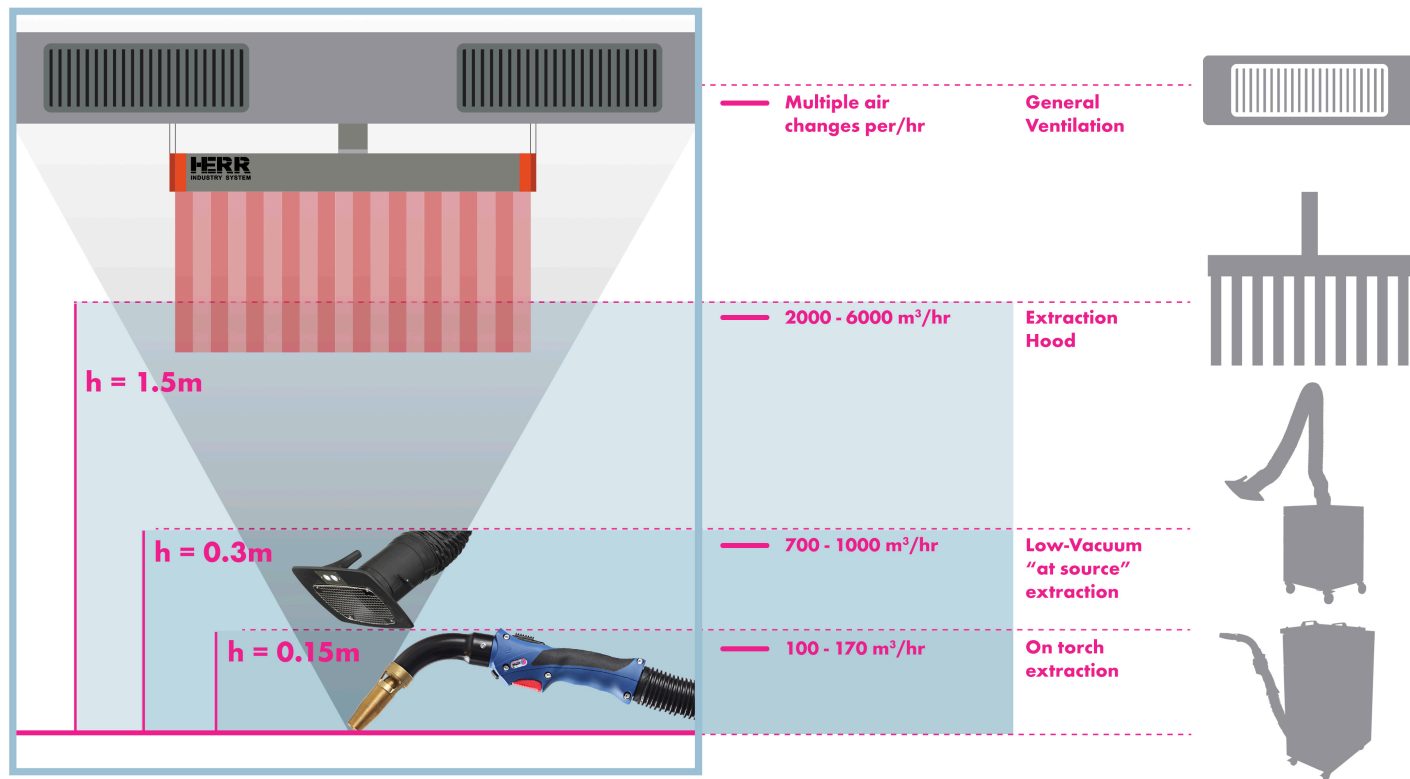
Short Term Effects	Long Term Effects
Skins & Eye Irritation	Pulmonary Chronic Disease
Asthma	Nervous System Damage
Fume Fever	Kidney Damage
Poisoning	Cancer



- **Welding Fumes Cause Cancer. It's that simple!**
 - Classified as a Group 1 Carcinogen

Welding Fume Source Capture

Why Source Capture?



Welding Fume Source Capture

xFUME™ MIG Torches

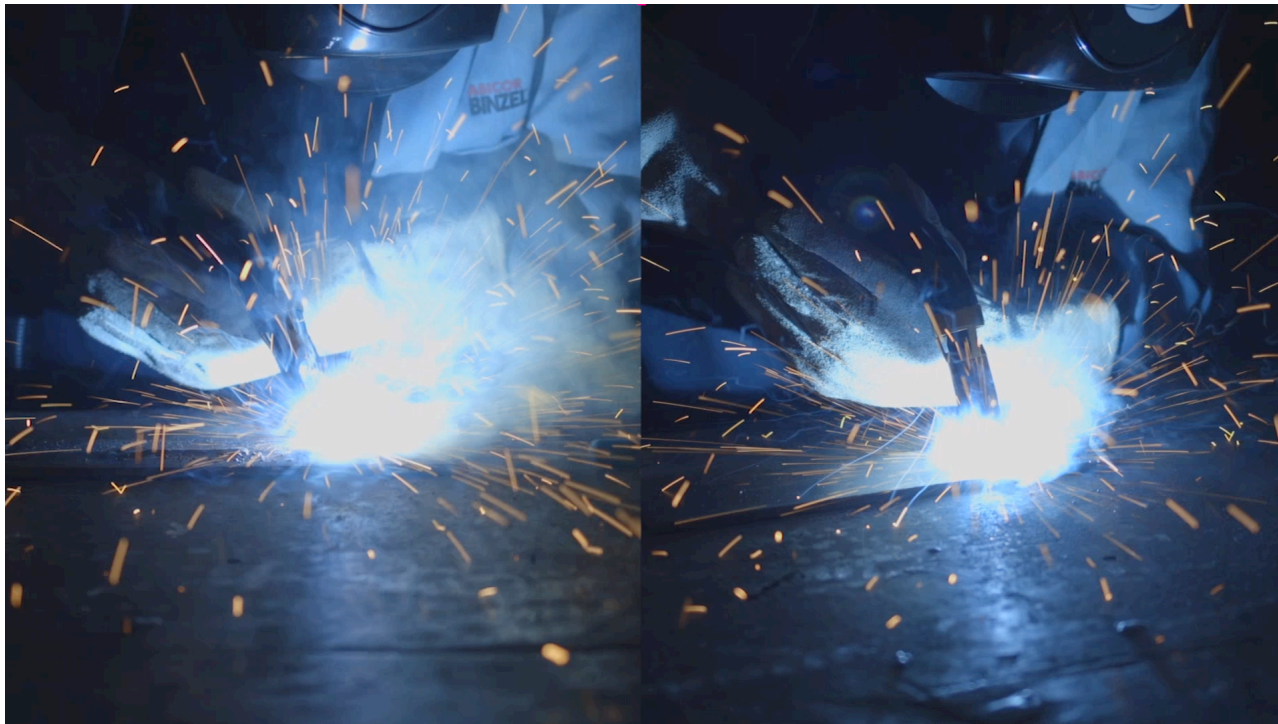
Outline

- Features and Benefits
- Detailed review
- Torch ratings and duty cycles
- Setup and performance
- Maintenance
- Training



Welding Fume Source Capture

Welding Fume Example



Welding Fume Source Capture

xFUME™ MIG Torches

xFUME™ Features and Benefits

- Premium MIG Welding Torch
- Top welding AND extraction performance
- Best in class for ergonomics
- Simple and Robust Design
- High Quality Binzel consumables



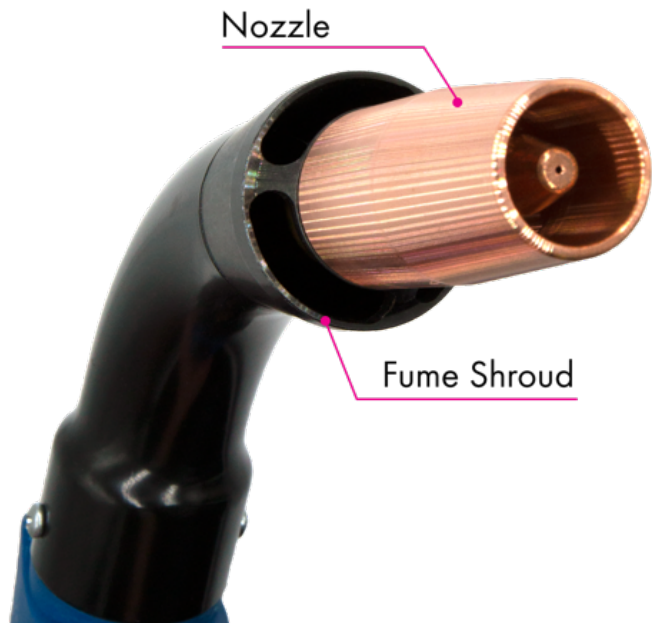
Welding Fume Source Capture

xFUME™ MIG Torches



Welding Fume Source Capture

Front End



Welding Source Fume Capture

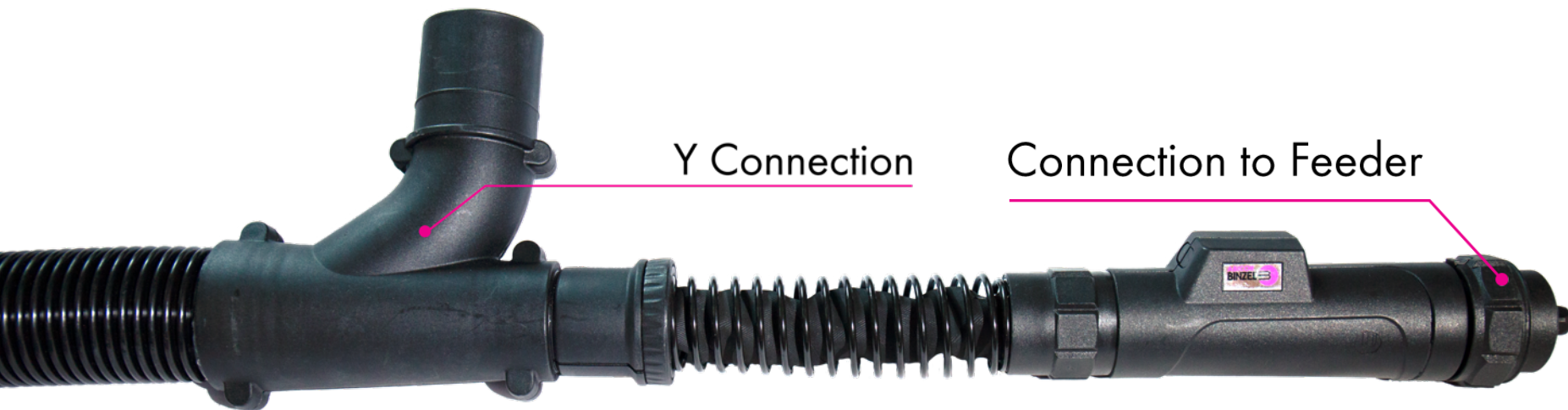
Middle Section



Welding Fume Source Capture

Back End

- Y-Connection for better flow through the torch



Welding Fume Source Capture

Torch Rating & Duty Cycle

Rating	Air-Cooled		Water-Cooled	
	CO ₂	Mixed Gases	CO ₂	Mixed Gases
	250A - 60% DC 300A - 60% DC	220A - 60% DC 270A - 60% DC	500A - 100% DC	450A - 100% DC

- Further de-rated by 35% for pulsed arc

Welding Fume Source Capture

Easy Setup

- Connect to feeder
- Connect to vacuum
- Connect the shunt

Weld!

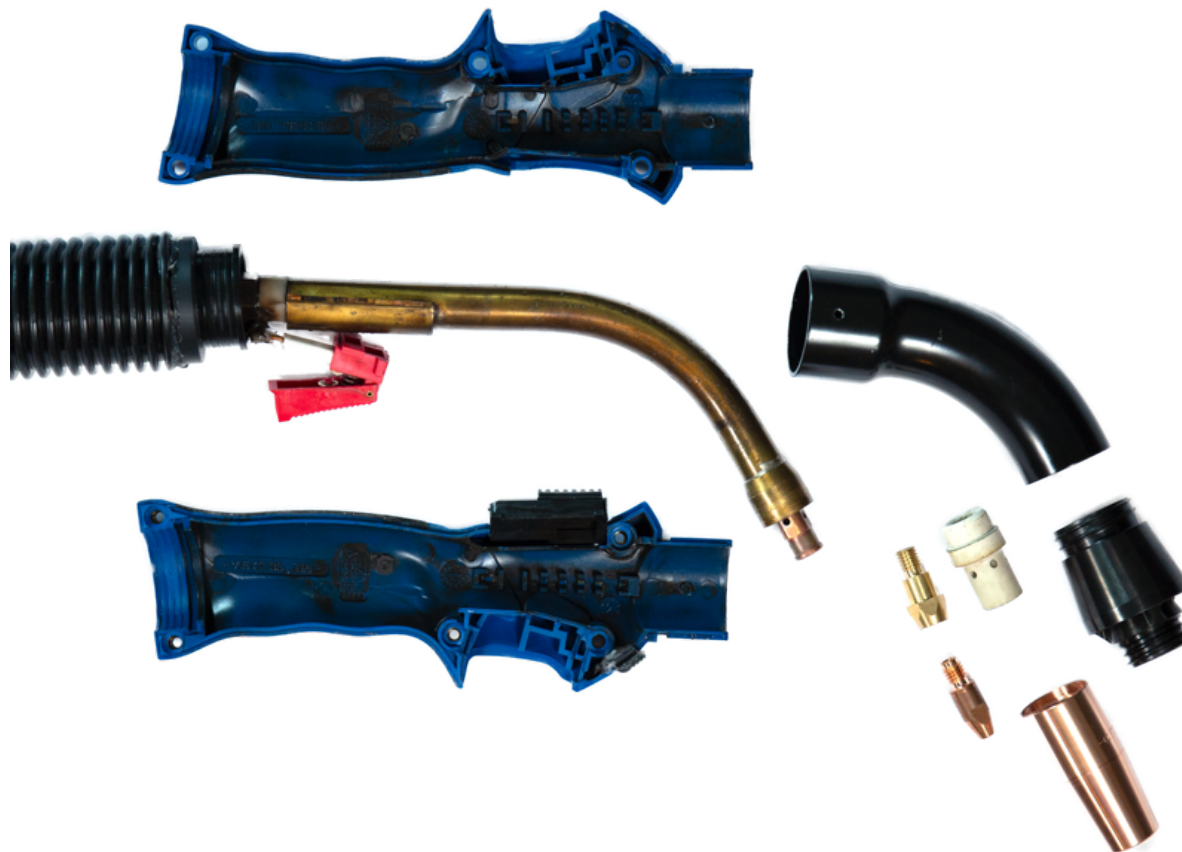


Welding Fume Source Capture Performance



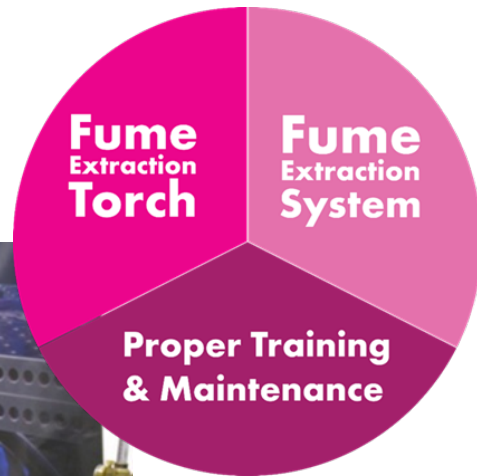
Welding Fume Source Capture

Maintenance



Welding Fume Source Capture

Training and Implementation



Welding Fume Source Capture

xFUME™ ADVANCED

Outline

- Accessories
- Set-up
- Filters
- Air Flow
- Maintenance

Ideally suited for xFUME™
Fume Extraction MIG Torches



ADVANCED 115V



ADVANCED HP 230V



Welding Fume Source Capture

xFUME™ ADVANCED

Standard Accessories

- 16' 45-mm Extraction Hose
- 1 Shunt
- Filter Wrench
- Manual
- 3/8" Industrial Quick Disconnect
- ADVANCED gets NEMA 5-20 Plug
- ADVANCED HP has flying leads



Welding Fume Source Capture

xFUME™ ADVANCED

Set-Up

- Locking Castors
- Air Supply
 - Ensure air supply is between 70-90psi and the air is clean/dry.
 - Use supplied 3/8" Industrial Quick Disconnect or larger
- User Controls



Welding Fume Source Capture

xFUME™ ADVANCED

Filter Performance

- Dual HiSTEC Filters
- PTFE Coated for improved surface loading
- EN1822:2009 HEPA H12 Rated: 99.5% @ 0.1-0.3µm
- Automatic Filter Cleaning

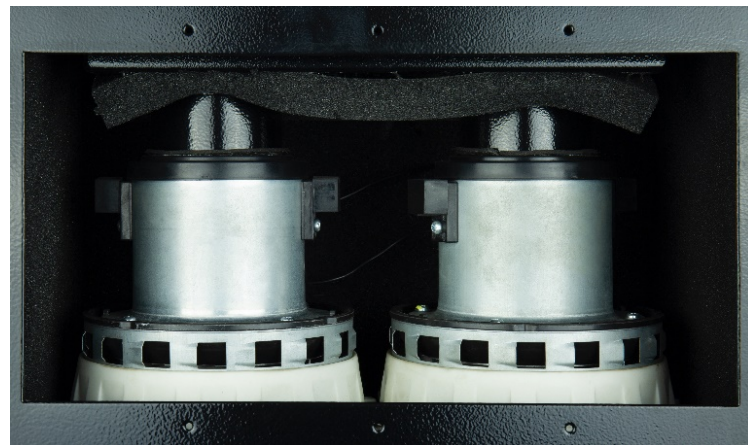


Welding Fume Source Capture

xFUME™ ADVANCED

Airflow Performance

- Adjustable Airflow knob
- Two Motors:
 - 115 V 2x0.8kw (1.07 - HP)
 - 230 V HP 2x1.6kw (2.14 - HP)
- 1 Gun vs. 2 Guns



	xFUME™ ADVANCED (115V)	xFUME™ ADVANCED (230V)
Max. airflow:	200 CFM (340 m ³ /h)	360 CFM (610 m ³ /h)
Connections:	2	2
Airflow Performance:	118 CFM @ 40in-H ² O 84 CFM @ 55in-H ² O	150 CFM @ 60in-H ² O 100 CFM @ 80in-H ² O

Welding Fume Source Capture

xFUME™ ADVANCED

Maintenance

- Dust Collection Tray
- Filter Changeout with provided wrench
- Motor Brush Changes



Welding Fume Source Capture

xFUME™ FLEX

Outline

- Standard Options
- Filters and Air Flow
- When to use a FLEX



Welding Fume Source Capture

xFUME™ FLEX

- Extraction Arm Lengths
 - 6ft, 9ft, 12ftt
- Airflow
 - 700 CFM using 1.1kw brushless vacuum motor
- 115 V/60 Hz Power only
- Locking Castors
- Suction hood with integrated LED light
- Filter Specs
 - HEPA class H13 Cassette Style Filter
 - 99.95% @ 0.1 – 0.3µm
 - Simple rapid filter changes



Welding Fume Source Capture

xFUME™ FLEX

When to use a FLEX unit...

- TIG, Stick, and Aluminum.
- Tube welding on all positions
- Pair with existing, non-source capture, MIG torches



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xFUME™ FLEX



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Welding Fume Source Capture

IndustriFume™

Outline

- Features and Benefits
- Ordering and Accessories
- Set-up
- Maintenance



Welding Fume Source Capture

IndustriFume™

Features and Benefits

- Ideally suited for xFUME™ Extraction MIG Torches
- Fits 4 to 6 welders*
- Powerful 28HP motor and sturdy design
- Up to 99.9%* filtration of welding fumes
- Automatic filter cleaning
- Variable Frequency Drives provides unique control
- Efficient operation with automatic Start/Stop/ Sleep using the Economizer™ shunt
- Replaceable spark arrestor
- ...Stay tuned for "Clean Cell Technology™"

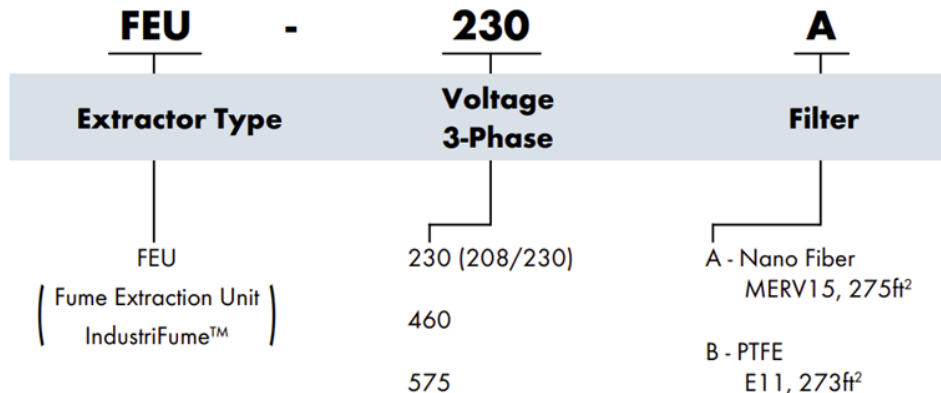


Welding Fume Source Capture

IndustriFume™

Ordering and Standard Accessories

Ordering Chart



Accessories

- 1 Economizer™ Shunt
- 5" plate for Hard Ducting
- Replaceable Spark Arrestor
- Filter Cartridge

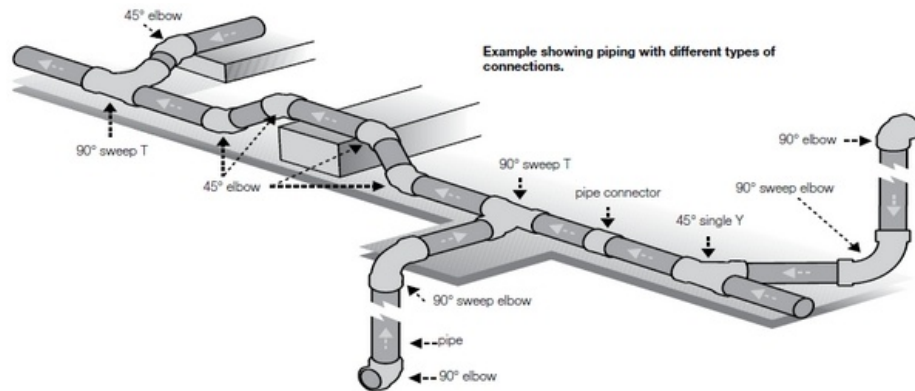


Welding Fume Source Capture

IndustriFume™

Setup

- Electrical
 - Compressed Air
 - Ducting or flex hoses (opt)
 - 1 Shunt
-
- Ready to start, pre-programmed

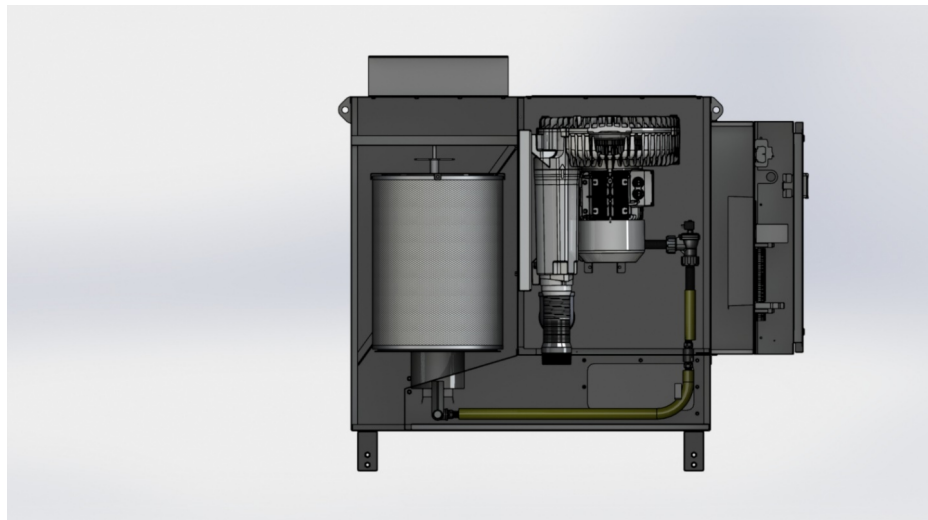


Welding Fume Source Capture

IndustriFume™

Maintenance

- Catch Basin
- Filter Life
- Optional HEPA



Welding Fume Source Capture

Overview



Welding Fume Source Capture

Next up... The Clean Cell Technology™

Robotic Source Capture – Fume Extraction with
Pat.Pend. xFUME™ ROBO

Webinar Date and Time:
Wednesday, October 21st - 1:00 PM EST



TECHNOLOGY FOR THE WELDER'S WORLD.



Welding Fume Source Capture Questions?



www.binzel-abicor.com

Contact us

We'd Love to Hear From You



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