




*Do you have  
air quality questions?  
RoboVent has answers.*

*Oil & Gas Pipeline and  
Equipment Manufacturing*





## ***Cleaner facility air starts here.***

Manufacturing pipeline components, drilling rigs, offshore platforms and other types of equipment for the oil & gas industry comes with significant air quality challenges. Challenges such as:

- High fume volumes from high-production manual and robotic welding
- Highly toxic emissions from working with stainless steel or other specialized metals, or from using flux-core or metal-core welding wires
- Large weldments that cannot be easily hooded or contained
- Overhead cranes that make placement of air quality equipment or ductwork difficult
- Cutting and grinding applications that produce large quantities of toxic, abrasive or combustible dusts

At RoboVent, we know how to solve your toughest air quality challenges. From whole-facility ambient systems to targeted source capture solutions, we have a full suite of air quality options for manufacturers in the oil & gas industry. We will work with you to understand your processes, define your goals and design an air quality system tailored to your unique needs.



## Built for quality

No matter what system you choose, you can rest assured that it will come with RoboVent's quality guarantee. We build safety, energy savings and efficiency into every piece of equipment we make.



**Lower operating costs:** We're always looking for ways to reduce energy use, such as automated systems to ensure collectors run only when they need to. Our filters and equipment have been engineered to maximize filter life and reduce operating costs.



**Superior safety and risk reduction:** Safety features like our Delta3 spark arrestor and the Supprex-200 fire suppression system reduce the risk of fires in your ductwork and filtration equipment to protect your plant and your employees.



**Easy maintenance:** Longer lasting filters are just the start. Our equipment is built to reduce the maintenance burden on your staff. With eTell advanced controls, you can move beyond preventative maintenance to truly *predictive* maintenance.

## Expert Support

**Not sure what you need? Don't worry. We can help.**

Our experienced solution engineers are the best in the industry. We have more than 25 years of experience designing and installing air filtration and ventilation systems for a wide variety of industrial applications. We'll work with you to find the right configuration for your facility.



# Ambient Weld Fume Solutions

## Ambient Solutions

Need a facility-wide clean air solution? Ambient filtration provides effective air quality control for environments where source capture is not practical or not sufficient.

Ambient filtration systems continually turn over air for the entire facility, pulling contaminated air in and pushing clean air out. Compared to exhaust-and-make-up air ventilation systems, ambient filtration is more energy efficient, because it keeps indoor-temperature air inside the building. It also reduces toxic emissions that could put your company out of environmental compliance.

RoboVent offers both traditional ducted push-pull systems and innovative ductless systems that create facility-wide airflow patterns for maximum capture efficiency.



**RoboVent Vista360's horizontal, ceiling-hung design requires no ductwork and takes up no floorspace.**

### Vista360™

Vista360 uses ceiling-mounted dust collectors to save floor space while providing highly efficient fume capture. This system creates airflow patterns similar to a traditional ducted push-pull system—but without costly and inconvenient ductwork. The units are designed for high efficiency and very low maintenance. Mounting them on the ceiling frees up valuable floor space for facilities where space is at a premium.



### Spire360™

The Spire360™ is an ambient version of our space-saving Spire™ dust collector. Dirty air is pulled into an intake plenum at the top of each unit, and clean, filtered air is pushed out at the bottom. This creates a positive pressure zone that naturally forces dirty air up and into the filters before it propagates through the facility. These space-saving, floor-mounted units are easy to install and easy to move, making them ideal for environments needing flexibility.

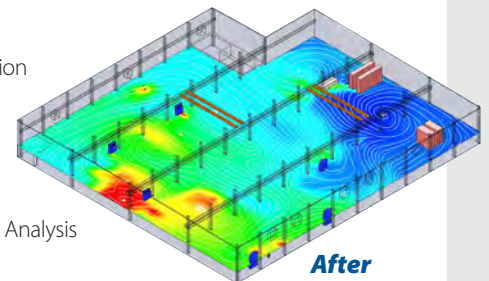
Spire360 can be equipped with the optional Delta3™ Spark Arrester, our groundbreaking technology that stops sparks before they have a chance to ignite.

### VentMapping™

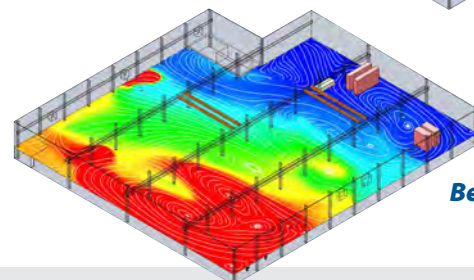
The RoboVent VentMapping™ Engineering Process is a five-step, science-based process tailored to your unique goals, challenges and needs. With VentMapping, we use your data and a proprietary computer modeling approach to find the ideal placement of equipment and ductwork to address your air quality concerns. We start by listening closely to your needs, your budget concerns, your deadlines and your future plans. From there we delve into your processes and consider further steps. VentMapping includes some of the most advanced analytical methods available, including cutting-edge CFD modeling, 3D scanning and more.

Our process includes:

- Onsite Consultation
- Data Collection
- Modeling
- System Design
- Final Review and Analysis



**After**



**Before**

# Manual Source Capture Solutions

## RoboVent Extractor™ and ProCube™

For manual welding of large equipment, nothing beats the **RoboVent Extractor™**. This lightweight, powerful fume gun builds high-efficiency fume extraction right into the weld torch to collect fumes as soon as they are generated.

The Extractor reduces exposure to welding fumes by 90-95%. It features an ergonomic design and is about the same size as a standard weld gun, so it will not cause excess fatigue or interfere with visibility of the weld seam.

The **RoboVent ProCube™** puts high-vacuum extraction power in a small package that fits wherever you need it to go. The ProCube can be connected to one or two Extractor fume guns.

Patent-Pending



Extraction OFF

Extraction ON

*The RoboVent Extractor reduces the welder's exposure to welding fumes by 90-95%.*

## CrossFlow Table

For bench-scale welding of small parts, an all-in-one bench-and-filtration unit provides effective source capture and a convenient workstation. The RoboVent CrossFlow Table is a compact, self-contained welding bench and source capture system that recycles contaminated air using a high-efficiency, self-cleaning filter system. Available in compact 4' or more spacious 5' models.



\*welder not included.

## Additional Source Capture Options for Manual Welding

RoboVent can help you find the right source capture solution for your manual welding application, whether you are welding large equipment or small parts. From portable fume arms to centralized ducted collection systems, we've got you covered.



# Laser & Plasma Cutting Dust Collection

## Plaser® by RoboVent

At RoboVent we use plasma cutting for our own manufacturing, so we understand advanced cutting processes and laser welding. Because of this experience, we have developed advanced collectors to remedy the serious dust and fumes produced by these processes.

Laser and plasma cutting produces large volumes of dust that cause significant problems if not controlled:

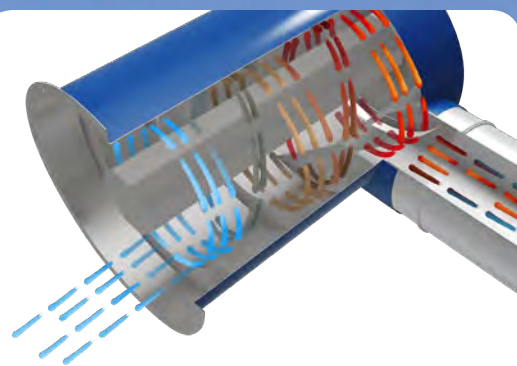
- Interference with lasers
- Damage to sensors, optical lenses or mechanical parts
- Combustion risks
- Health problems caused by exposure to toxic particulates

RoboVent's Plaser Series of collectors is designed specifically for these processes. These collectors are based on our decades of experience in the industry. Over 1,000 Plaser units deployed in manufacturing operations have demonstrated the many benefits of our filtration technology. In fact, RoboVent has partnered with several major manufacturers of thermal cutting systems, including the Mazak Optonics, ALLtra Corp. and Hornet Cutting Systems. RoboVent's Plaser Series is the perfect air quality solution for these cutting-edge processes.

Benefits of the Plaser Series include:

- **Lower operating costs:** We're always looking for ways to reduce energy use, such as our eDrive Automatic VFD and automated systems to ensure collectors run only when they need to.
- **Superior safety and risk reduction:** Every piece of equipment we make is engineered to reduce the danger of fires or other problems that could put your workers and assets at risk. The Delta3 Spark Arrestor (optional) is our cutting-edge technology to kill sparks before they cause problems.
- **Easy maintenance:** The Plaser Series is designed to work with the best filters in the industry. For example, the Endurex B16 PTFE filter (optional) is not only superior-performing but is one of the longest-lasting filters available. Our filters and equipment are built with the goal of reducing the maintenance burden on your staff.

The Plaser's features and options—such as rugged construction, vertical filters, Dynamic Pulse, eTell Intelligent Controls, eDrive and RMO Technology—not only ensure the longevity of the collector itself, but provide energy savings and longer filter life.



## Fire Safety

The **Delta3 Spark Arrestance System** is built on groundbreaking technology that uses centrifugal force to kill sparks before they have a chance to ignite. By stopping sparks right at the source, Delta3 creates a safer work environment and vastly reduces the risk of avoidable work accidents.

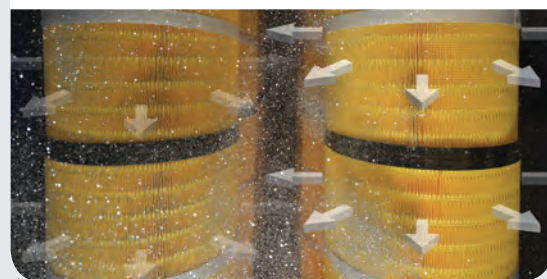
The **Supprex-200™ Fire Suppression System** is a dual-stage system activated by smoke or heat. If smoke is detected, a fire damper closes, stopping all airflow and oxygen supply. If heat is detected, FM-200 gas is instantly deployed to smother the fire.

## Energy Savings

RoboVent **eDrive™ Automatic VFD** automatically monitors the dust collector's airflow and adjusts the motor's RPM to compensate for filter loading. This compresses and straightens energy peaks and valleys, cutting energy usage by approximately 40% and increasing filter life by as much as 30%.

## Filter Longevity

The RoboVent **Dynamic Pulse™ System** maximizes filter life with an innovative technology that is 1.5 times more effective than typical filter cleaning systems. Dynamic Pulse uses a synchronized pulsing mechanism to prevent re-entrainment of dust onto neighboring filters and removes 30% more dust with each cleaning cycle.



# Robotic Source Capture Solutions

## RoboVent Spire and Streamline Hood

When it comes to robotic welding, RoboVent has you covered. For an easy and space-saving solution, pair the RoboVent Spire™ dust collector with our Streamline™ Hood.

**Spire** is a space-saving floor unit with enough power to keep up the heavy demands of robotic welding in a high-production facility. Each unit provides filtration for one or several weld cells. It's a flexible, cost-saving alternative to centralized ducted systems. Spire features:

- **Small footprint:** Our floor-saving design takes up about the same amount of space as a wire barrel.
- **Built-in spark arrestance:** Our propriety Delta3 spark arrestance system comes standard with every unit for superior fire safety.
- **Very low maintenance:** Everything is easily accessible for easy filter changes and maintenance—no special tools required. And our proprietary eTell system makes maintenance headache-free.
- **Flexibility:** Spire is fast to install and easy to move as your production needs change.

Pair Spire with our **Streamline Hood** for maximum performance and value. This modular hood system can be configured for a range of weld cell sizes. It can accommodate single or multiple robot systems with a variety of configurations, including turntable, Ferris wheel or headstock/tailstock. The unit's low profile is perfect for facilities with overhead cranes.



## RoboVent FlexTrac

Have robotic applications that can't be hooded? The **RoboVent FlexTrac™** may be right for you. We custom fit an extraction hose right on the robot arm to collect the majority of weld fumes right as they are created. FlexTrac can reduce the need for large ventilation or ambient filtration systems in environments where robotic welding cannot be enclosed.

For maximum extraction power, pair with the **RoboVent FlexPro™** or **ProCube™** Hi-Vac Extractor.





## ***Need a different approach?***

*RoboVent has a full range of clean air solutions  
for all types of fabrication and manufacturing.*

*Ask us about:*



*Machining and  
Oil Mists*



*Laser and Plasma  
Cutting*



*Grinding*



*Abrasive  
Blasting*



*Silica Dust  
Remediation*



*Rubber and Plastic  
Processing*



*Combustible  
Dusts*



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