



DURODUST™

Recirculating System for Dust Collection,
Stone Cutting, Surface Preparation, Weld Smoke
13,500 CFM to 200,000 CFM



Duroair Technologies USA Inc.
129 Elm Steet, Unit B
East Aurora, NY 14502 USA

Duroair Technologies Inc.
5850 Don Murie Street, Unit D
Niagara Falls, ON Canada L2G 0B3

Contact Information
info@duroair.com
1-888-387-0911
1-905-356-8585

duroair.com

Product Data Sheet – DuroDust™

Applications

Stone Cutting, Composite Repair, Sanding, Weld Smoke

Ducting

Ducting is not required with the DuroDust™ System.

Tapered Airflow Design

The Duroair product line is a cross draft design. Shop air enters the enclosure through the front filter doors or sliding curtain. Clean air travels in a horizontal direction towards the back of the enclosure using Duroair’s patented tapered airflow design. Airflow is drawn through multiple stages of filtration and is discharged upward.

- Creates negative pressure, pulling all particulate to the filtration system
- Airflows up to 150 fpm to ensure dust/smoke will not escape the enclosure
- Advanced filtration system designed with 4 stages of highly-efficient filtration
- Captures 100% particulate to 1.0 micron and 99.7% of particulate to 0.3 micron depending upon filter package
- Exhaust system creates a negative pressure vacuum seal

DuroDust™ Overview

Duroair has developed a four-stage filtration system to filter fine particulate generated during welding, sanding, grinding and other preparation work. Suitable for lighter dust loads, each layer of filtration can be customized to meet customer requirements.

The DuroDust system captures all particulate to 1 micron and 99.7% of particulate to 0.3 micron depending on the filter package. It captures 100% of hexavalent chromium particles generated during surface preparation processes, exceeding NESHAP 319 requirements. The four stage filtration uses both panel and V-Cell filters, increasing the filter face by 4 times. This allows for better capture rates and filter loading, reducing on the number of filter changes required. Airflow will remain strong and capture rate will be maximized with this design.

Each system has a built-in variable frequency drive for complete control of the airflow. Duroair’s patented “Taper-Draft” technology ensures optimal capture of 99.7% of all airborne contaminants reducing dust, dirt and creating a clean room environment for diverse uses and industries, depending upon filter package.

- Ideal for sanding, grinding, welding repair applications and other finishing processes



CFM	FAN SIZE	MOTOR SIZE	FLA @ 480/3/60	VFD	FILTER MONITORIN G GAUGE	NUMBER OF FILTERS EACH STAGE	CUSTOM FOUR STAGE FILTRATION to HEPA and NESHAP 319	FRONT LOADING FILTERS	HOT WORK PACKAGE
13,500 CFM	30" Reverse Incline Fan	10 HP	19	✓	✓	6	✓	✓	✓
18,000 CFM	30" Reverse Incline Fan	15 HP	19	✓	✓	9	✓	✓	✓
25,000 CFM	34" Reverse Incline Fan	20 HP	25	✓	✓	12	✓	✓	✓
30,000 CFM	34" Reverse Incline Fan	25 HP	28	✓	✓	15	✓	✓	✓
40,000 CFM	2 x 30" Reverse Incline Fan	2 x 15 HP	48	✓	✓	20	✓	✓	✓
50,000 CFM	2 x 34" Reverse Incline Fan	2 x 20 HP	50	✓	✓	24	✓	✓	✓
60,000 CFM	2 x 34" Reverse Incline Fan	2 x 25 HP	57	✓	✓	30	✓	✓	✓
75,000 CFM	3 x 34" Reverse Incline Fan	3 x 20 HP	75	✓	✓	36	✓	✓	✓
90,000 CFM	3 x 34" Reverse Incline Fan	3 x 25 HP	14	✓	✓	45	✓	✓	✓

Safety Features

- Hot Work package available
- The DuroDust™ system captures all particulate to 1 micron and 99.7% of particulate to 0.3 micron. It captures 100% of Hexavalent Chromium particles generated during surface preparation processes, far exceeding NESHAP 319 requirements.
 - First stage captures particulate to 10 microns in size (This is a rough prefilter for protection of stage 2 through 4 filters.)
 - Second stage is a MERV 8 filter
 - Third stage is a MERV 11 filter
 - Fourth stage is a NESHAP 319, MERV 15, MERV 16 or HEPA filter, depending upon requirements
- Enclosure is made of a durable fire rated PVC vinyl meeting the requirements of NFPA 701
- Exhaust system creates a negative pressure vacuum seal creating a clean purified environment. Ideal for a retractable clean room and/or containing airborne particulate and smoke.

Product Data Sheet – DuroDust™

Fans

Fans are designed using a reverse incline fan wheels with inlet cones. Non sparking construction. Fan sizes from 18” to 35” with 5hp to 25hp motors dependent on airflow requirements. Airflow designed at 3.5” static pressure. (This is not a paint booth.)

Variable Frequency Drive

A VFD is used to give the customer complete control of airflow and doubles as a soft starter to eliminate the need for a motor starter.

Control Panel

A standard system has a VFD with on/off, speed dial control. If required the control panel can be upgraded to a lockable fused disconnect panel that is C/ UL /US listed, with an on/off, speed dial control. Customer is required to supply building power.

Filters