



SUPER DUST DEPUTY® TIPS AND TRICKS

Super Dust Deputy® Cyclone Separators

4" Deluxe #AXD002040A

5" #AXD002030A

6" XL #AXD002030AXL

5" Steel #AXD002030

U.S. Pat. RE40048, 7282074, 6833016



The Super Dust Deputy® cyclone is a craftsman's dream; a durable, high performance product made in the USA that can be adapted for almost any shop! We frequently get questions from enterprising craftsmen about what works and what doesn't so we've compiled a list of our recommendations and customer example installations here.

Tips and Tricks

1

Choose the Super Dust Deputy that best suits your needs by matching the diameter of your ducting runs to the inlet of the Super Dust Deputy.

- a. AXD002040A: 4" duct runs
- b. AXD002030A: 5" duct runs
- c. AXD002030AXL: 6" duct runs
- d. AXD002030 (Steel): Industrial applications such as hot ash, soot or highly abrasive materials and 4-6" duct runs.

Note: For some set-ups, you may need reducers, adapters, flex hose, and hose clamps, to complete your setup. Visit oneida-air.com/sdd-accessories.

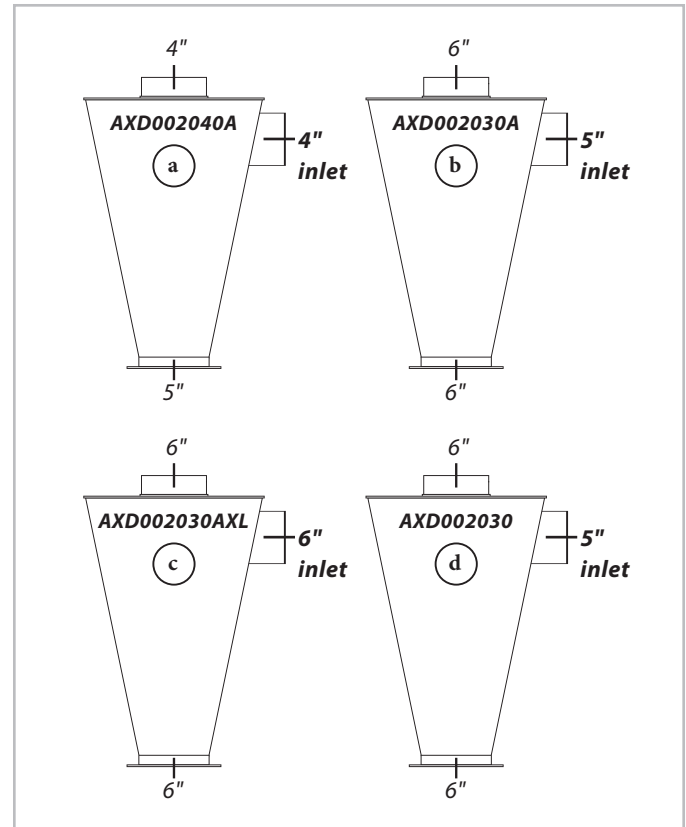


FIG. 1 Inlets

2

Choose a drum and lid [FIG. 2] that is:

- a. Sealed Air Tight - If there are any cracks or leaks present in the drum, lid, or anywhere in your custom assembly it will create a back draft that can significantly reduce the cyclone's ability to separate.
- b. Built With A Strong, Rigid Structure - Your drum and lid should be reinforced or rigidly built to avoid caving in due to the air pressure and to support the weight of the cyclone.

Note: The suction provided by your dust collector will hold down the lid when in use (if your seal is air-tight) but we recommend using a sealing agent (gasket, caulk or foam) [FIG. 3] and simple latches for added security [FIG. 4].



FIG. 2

5" Super Dust Deputy shown with 17 gal. Drum Kit (SXX170601) and Angle Brace Support Kit (AHX000004).

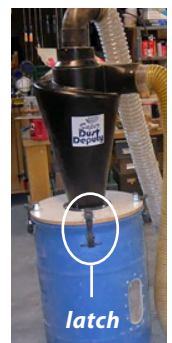


FIG. 4

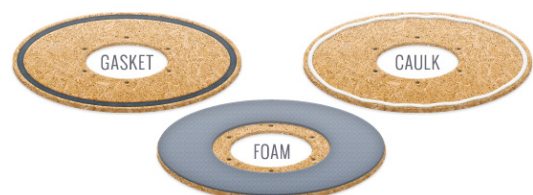


FIG. 3

Tips and Tricks (Continued)

3

Instead of mounting directly to the lid you can hook up flex hose to the bottom of your cyclone. The components you would need to complete this are shown in [FIG. 5]:

- a. (x2) 5" Collared Flange (DLX050000) or 6" Collared Flange (DLX060000)
- b. (x2) Quick-Release Hose Clamp (ACB060000)
- c. 5" (DHF050500) or 6" dia. (DHF060500) Flex Hose. 5' is the shortest length we offer. If needed, you can purchase longer lengths for your setup.
- d. Lid (we carry blank lids for our drums)
- e. Drum (we carry steel drums)
- f. Gasket/silicone for an air tight seal
- g. A wall mount or stand to support the cyclone and to easily remove the lid when emptying your drum. [FIG. 6].

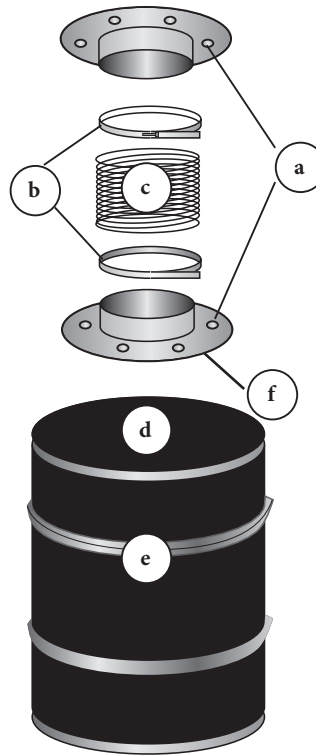


FIG. 5

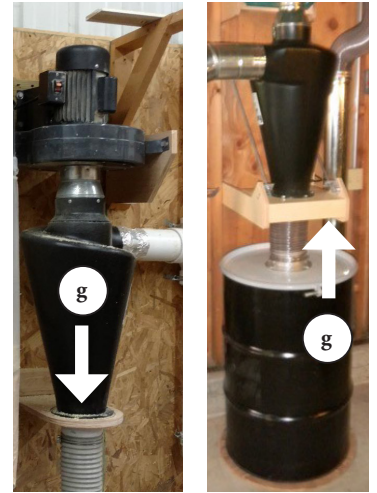


FIG. 6

Note: The collared flanges may not fully align with the cyclone's hole pattern. You may need to bore out holes (or punch out holes for the 4" Super Dust Deputy Deluxe Kit).

4

Upgrade your unit's filtration by either

- a. Replacing the cloth bag filter on your single stage collector with our HEPA Cartridge Filter Upgrade Kit (FXK011820) [FIG. 7]; or
- b. Connecting our Super Cartridge Filter (FXK010039) to your collector's fan housing and then mounting it to the Super Dust Deputy cyclone [FIG. 8]. Recommended components:
 - i. Square to Round Adapter. We recommend calling us at 866-387-8822 Mon-Friday, 8am-5:30pm EST for help choosing a compatible adapter.
 - ii. Adjustable Elbow (DEA900700)
 - iii. Super Cartridge Filter Retrofit Kit (FXK010039)



FIG. 7



FIG. 8

Tips and Tricks (Continued)

5

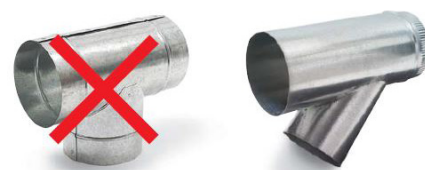
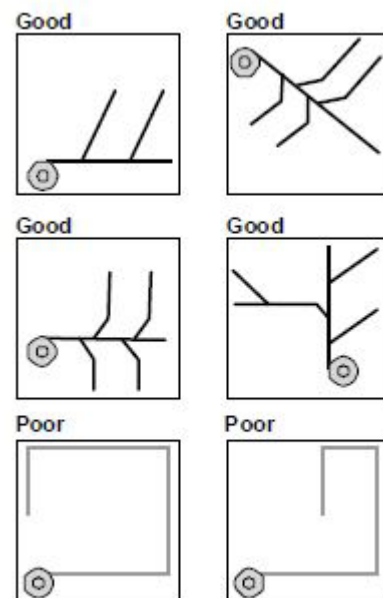
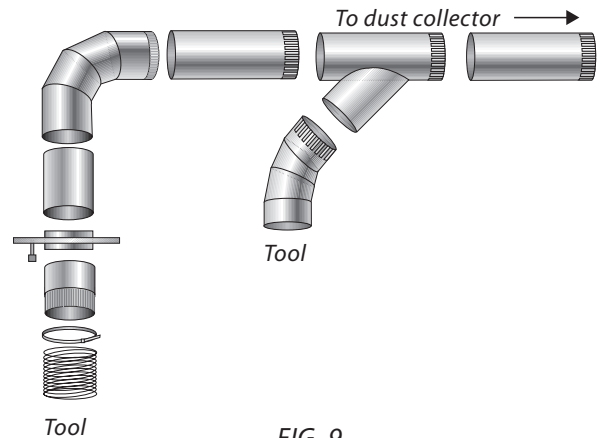
Due to technical limitations, we do not offer our consulting services for shops using third party dust collectors. Unlike Oneida Air Systems, competitive manufacturers do not provide real-world airflow performance data. Without that information, we cannot reliably size a ducting system for those dust collectors.

The Super Dust Deputy was designed initially to be hooked up to flex hose connections no longer than 20'. Metal duct may allow for longer runs, but it all varies based on the power of your blower/single stage collector.

Recommended best practices for ductwork:

- a. Centrally locate the collector and keep ductwork runs to a minimum. Locate your highest air requirement machines closest to the collector. [FIG. 10]
- b. Minimize the number of bends. See [FIG. 9] for a recommended drop setup.
- c. Use fittings designed for dust collection, not HVAC fittings. For example [FIG 11]:
 - i. 45 deg. wyes instead of 90 deg. tee.
 - ii. A 45 deg. wye with a long radius 90 deg. adjustable elbow adjusted to 45 deg. will create a gentle sweep.
- d. Seal all ductwork with silicone, duct tape, or metal tape. Well sealed ductwork will ensure you have maximum air available. All joints on adjustable elbows should be sealed after installation.

Further education is available at oneida-air.com/blog/category/dust-collection



90 deg. tee vs. 45 deg. wye



Short radius vs. long radius

FIG. 11

Tips and Tricks (Continued)

6

We strongly recommend metal over PVC or plastic ducting. Scientists, engineers, and industry experts who work in insurance, human safety, woodworking, and equipment manufacturing consistently agree that plastic pipe (PVC) should not be used in material (e.g. wood waste) conveying collection.

- Metal systems are much easier to disassemble and change as your shop evolves.
- Static sparks arcing from the PVC pipe can jolt, injure or startle personnel working on dangerous equipment. Remember the shock from a shop-vacuum hose and try to imagine what a dust collector can do.
- All commercial codes require metal pipe for wood dust.

Oneida Air Systems chooses to offer metal pipe, as do all dust collection experts in the industry. Metal pipe is used because it provides substantially better performance and proper fittings are readily available.





The **Industry Leader in Dust Collection**

Thank you for your business!

Regardless of where you purchased your system, if you have any questions or issues with missing / damaged parts, please call Oneida Air Systems first to let us help resolve your problem. We fully stand behind the quality of our product and place the utmost value on our customer's opinion.

We want to do everything possible to make your purchase and experience with Oneida Air Systems a good one!

Customer Service Dept.

1-866-387-8822 • support@oneida-air.com

1001 West Fayette Street, Syracuse, NY 13204 U.S.A.

Copyright © 2019 Oneida Air Systems, Inc.