

Super Air Wipe™

Blowoff, dry, clean and cool pipe, cable, extruded shapes, hose, and wire!

Split design requires no threading!



- ✓ **Uniform 360° Airflow!**
- ✓ **For Environments Up To 800°F**
- ✓ **Variable Force And Flow!**

What Is The Super Air Wipe?

EXAIR's Super Air Wipe provides a uniform 360° airstream that is ideal for blowoff, drying, cleaning and cooling of pipe, cable, extruded shapes, hose, wire and more. The split design offers easy clamping around the surface of the material moving through it, eliminating the need for threading. Available from 3/8" (10mm) through 11" (279mm) diameters.

All models include stainless steel screws and shims. Stainless steel wire braided hose is also included on sizes up to 4" (102mm) for added corrosion and heat resistance. Aluminum models are rated for temperatures up to 400°F (204°C) and stainless steel models for temperatures up to 800°F (427°C).

Applications

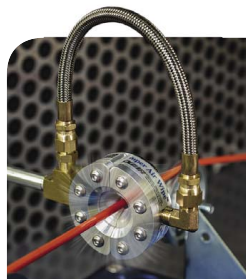
- Drying after washing, cleaning, plating or coating
- Blowoff dust and contaminants
- Cool hot extruded shapes
- Uniformly wipe surfaces
- Dry extruded profiles, rod and medical tubing
- Eliminate solution carryover - no cross contamination
- Blow excess water from automotive door gaskets
- Remove excess coatings, water and oil
- Dry tube, hose, wire, fiber optics
- Minimize solution loss due to drag-out
- Clean paint gun tips
- Dry screen printed or ink jetted surfaces
- Clean strips and ribbon

Advantages

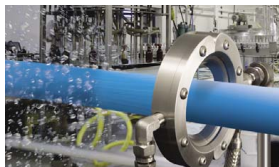
- Quiet
- Low air consumption
- Uniform 360° airflow
- Stainless steel hardware resists corrosion
- Aluminum models for temperatures up to 400°F (204°C)
- Stainless steel models for temperatures up to 800°F (427°C)
- Stainless steel hose supplied on sizes up to 4" (102mm)
- No electricity, no moving parts
- Non-contact - no wiper blade
- Split design - compact, rugged, easy to install
- Lightweight, low profile
- Tapped holes for mounting
- Variable force and flow
- Meets OSHA maximum dead end pressure and noise requirements



A 3/8 in Super Air Wipe uniformly dries a hose as it exits a cooling bath.



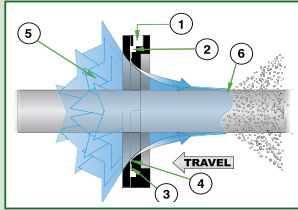
See page 4 for complete details.



The stainless steel Super Air Wipe is ideal for food and pharmaceutical applications.



The split design of the Super Air Wipe unlatches easily to eliminate threading.



How The Air Wipe Works

Compressed air flows through an inlet (1) of the Air Wipe into an annular chamber (2). It is then throttled through a small ring nozzle (3) at high velocity. This primary airstream adheres to the Coanda profile (4), which directs it down the angled surface of the Air Wipe. A low pressure area is created at the center (5) inducing a high volume flow of surrounding air into the primary airstream. As the airflow leaves the Air Wipe, it creates a conical 360° ring of air that attaches itself to the surface of the material running through it (6), uniformly wiping the entire surface with the high velocity airflow.



The aluminum Super Air Wipe is available in 11 sizes from stock. The stainless steel Super Air Wipe is available in 5 sizes from stock. Other sizes are available by special order.

Why The Super Air Wipe?

Prior to the introduction of the Super Air Wipe, the only way to blowoff, dry, clean and cool cylindrical, round, or extruded surfaces was to use a ring of air nozzles. The high air consumption and noise levels of the nozzles along with inconsistent air velocity often delivered poor results. The Super Air Wipe provides a high volume, high velocity airflow that is uniformly ejected from the 360° of its inner diameter. The airstream attaches itself to the material running through it to effectively wipe, clean or dry surfaces. Velocity can be varied from a “blast” to a “breeze”. Air consumption and noise are low.

Super Air Wipe Is Easy To Use

There is a 1/4 NPT female inlet on each half of the Super Air Wipe on sizes up to 7” (178mm). Sizes 9” (229mm) and larger include two 1/4 NPT female inlets on each half in order to maintain proper air volume and performance. Aluminum Super Air Wipes up to 4” (102mm) include a brass tee that supplies one half directly and a stainless steel wire braided coupling hose rated at 400°F (204°C) to supply the other half. Stainless steel Super Air Wipes up to 4” (102mm) include a stainless steel tee and a stainless steel wire braided coupling hose rated at 800°F (427°C). Larger sizes should be piped directly.

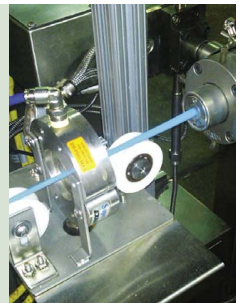
Tapped holes on the downstream side are provided for permanent mounting if the Super Air Wipe is not held in place with rigid pipe. Coupling brackets that hold each half of the Super Air Wipe together are provided which can be installed or removed quickly if required.

Cooling Extruded Tubing

The Problem: The extruded product, being hot and pliable, would slump and produce a crooked length of tubing. The customer tried using a series of rollers to support the extrusion until it cooled enough to become stiff. This helped somewhat, but they still experienced slump between rollers. The end product still would not meet customer specifications.

The Solution: Using a **Model 2401 1” (25mm) Super Air Wipe** positioned between two rollers, the product was cooled enough to maintain rigidity. Adding another set of Air Wipe/rollers, they were able to extrude even faster.

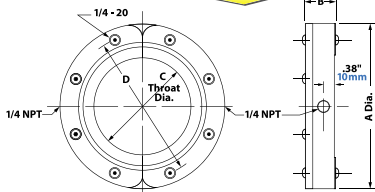
Comment: Not only were they able to salvage a \$30,000 order, the increased process speed enabled them to re-quote the job at a lower price and secure future business from their customer.



Super Air Wipe

Air Wipe Dimensions

DOWNLOAD
3 drawings at
EXAIR.com



Air Wipes

Air Wipe Performance

80 PSIG (5.5 BAR)	Air Consumption	Sound Level @3' (914mm)	
MODEL #	SCFM	SLPM	dBA
2399, 2429	11.1	314	82
2400, 2400SS, 2430	13.9	394	80
2401, 2401SS, 2431	19.1	541	80
2402, 2402SS, 2432	29.5	835	81
2403, 2403SS, 2433	39.8	1,127	82
2404, 2404SS, 2434	50.2	1,422	82
2405, 2435	60.6	1,716	82
2406, 2436	71.0	2,010	84
2407, 2437	81.3	2,302	85
2409, 2439	102.1	2,891	87
2411, 2441	122.8	3,477	89

Super Air Wipe Specifications

The Super Air Wipe is available with throat diameters (I.D.) of 3/8", 1/2", 1", 2", 3", 4", 5", 6", 7", 9", and 11" (10, 13, 25, 51, 76, 102, 127, 152, 178, 229, and 279mm). **Special diameters are available. Please contact our factory.**

Compressed Air Inlets: The Super Air Wipe has compressed air inlets on each half. Stainless steel wire braided hose is supplied with sizes up to 4" (102mm) that couples the air supply of one half to the other. Sizes 9" (229mm) and larger have two inlets on each half that must be supplied with compressed air to maintain uniform airflow.

Filtration: The use of clean air is essential. Kits include an automatic drain filter separator with a 5 micron filter element that is sized properly for flow.

Materials of Construction: The Super Air Wipe is constructed of aluminum or stainless steel. All models use stainless steel shims and screws. Stainless steel wire braided hose is included with sizes up to 4" (102mm).

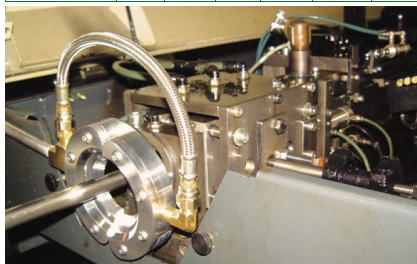
Temperature: Aluminum Super Air Wipes are rated for temperatures up to 400°F (204°C). Stainless steel models are rated for temperatures to 800°F (427°C).

Mounting: The Super Air Wipe can be supported by the compressed air supply pipe. Tapped holes (1/4-20) on the downstream side of the Super Air Wipe can also be used for mounting.

Regulation: A pressure regulator on the compressed air supply provides infinite control of flow, force and air consumption. Kits include a pressure regulator that is sized properly for flow.

Shim Sets: The Super Air Wipe has a .002" (0.05mm) gap setting. The compressed air exhausts through a gap which is set with a stainless steel shim positioned between the cap and body of the Super Air Wipe. Force and flow through the Super Air Wipe may be easily increased by adding shims to open the gap. Kits include a shim set. Shim sets include (2) .002" (0.05mm) thick stainless steel shims.

Super	Std	A	B	C	D	
2399	2429	in	3.13	1.13	0.38	2.38
		mm	79	29	10	60
2400, 2400SS	2430	in	3.25	1.13	0.50	2.50
		mm	83	29	13	64
2401, 2401SS	2431	in	3.75	1.13	1	2.95
		mm	95	29	25	75
2402, 2402SS	2432	in	4.75	1.13	2	3.95
		mm	121	29	51	100
2403, 2403SS	2433	in	5.75	1.13	3	4.95
		mm	146	29	76	126
2404, 2404SS	2434	in	6.75	1.13	4	5.95
		mm	172	29	102	151
2405	2435	in	7.75	1.13	5	6.95
		mm	197	29	127	176
2406	2436	in	8.75	1.13	6	7.95
		mm	222	29	152	202
2407	2437	in	9.75	1.13	7	8.95
		mm	248	29	178	227
2409	2439	in	11.75	1.13	9	10.95
		mm	299	29	229	278
2411	2441	in	13.75	1.13	11	12.95
		mm	349	29	279	329



The Super Air Wipe eliminates the possibility of smoke during machining by wiping hydraulic oil from the bar stock as it enters the chuck.

Changing Performance By Adding Shims

The compressed air exhausts through a gap which is set with a shim positioned between the cap and the body of the Super Air Wipe. The Super Air Wipe is shipped with a .002" (0.05mm) thick stainless steel shim installed which works best for most applications. Force and flow may be easily increased by adding shims to open the gap. Increasing the gap opening offers higher velocity and harder hitting force. Air consumption and noise will be slightly higher. Super Air Wipe shim sets include two .002" (0.05mm) stainless steel shims that can be stacked. Shim sets are included with all kits or can be purchased separately.



The Super Air Wipe Kit includes a stainless steel shim set, filter separator and pressure regulator (with coupler).

Special diameter Super Air Wipes are available.
Please contact our factory.

Super Air Wipe Models

Super Air Wipe Only

Super Air Wipe Kits - include the Super Air Wipe, shim set, filter separator and pressure regulator (with coupler).

Super Air Wipe Shim Sets - include (2) .002" (0.05mm) thick stainless steel shims.

I.D.	Aluminum Super Air Wipe Only Model	Aluminum Super Air Wipe Kit Model	Stainless Steel Super Air Wipe Only Model	Stainless Steel Super Air Wipe Kit Model	Super Air Wipe Shim Set Model
3/8" (10mm)	2399	2449	N/A	N/A	2349SS
1/2" (13mm)	2400	2450	2400SS	2450SS	2350SS
1" (25mm)	2401	2451	2401SS	2451SS	2351SS
2" (51mm)	2402	2452	2402SS	2452SS	2352SS
3" (76mm)	2403	2453	2403SS	2453SS	2353SS
4" (102mm)	2404	2454	2404SS	2454SS	2354SS
5" (127mm)	2405	2455	N/A	N/A	2355SS
6" (152mm)	2406	2456	N/A	N/A	2356SS
7" (178mm)	2407	2457	N/A	N/A	2357SS
9" (229mm)	2409	2459	N/A	N/A	2359SS
11" (279mm)	2411	2461	N/A	N/A	2361SS

Accessories

Model #	Description
9001	Auto Drain Filter Separator, 3/8 NPT, 65 SCFM (1,841 SLPM)
9032	Auto Drain Filter Separator, 1/2 NPT, 90 SCFM (2,549 SLPM)
9002	Auto Drain Filter Separator, 3/4 NPT, 220 SCFM (6,230 SLPM)
9005	Oil Removal Filter, 3/8 NPT, 15-37 SCFM (425-1,048 SLPM)
9006	Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,416-4,248 SLPM)
9008	Pressure Regulator, 1/4 NPT, 50 SCFM (1,416 SLPM)
9033	Pressure Regulator, 1/2 NPT, 100 SCFM (2,832 SLPM)
9009	Pressure Regulator, 3/4 NPT, 220 SCFM (6,230 SLPM)
9020	Solenoid Valve, 120V, 50/60Hz, 1/4 NPT, 40 SCFM (1,133 SLPM)
9034	NEMA 4/4X Solenoid Valve, 120V, 50/60Hz, 1/2 NPT, 100 SCFM (2,832 SLPM)
9036	NEMA 4/4X Solenoid Valve, 120V, 50/60Hz, 3/4 NPT, 200 SCFM (5,664 SLPM)



A Model 2404 4" (102mm) Super Air Wipe cleans a steel rod after processing.



The flanged end of an axle is lifted through a Super Air Wipe to blow off chips after machining.



EXAIR's 1/2" Super Air Wipe dries a wire as it exits a cooling bath.