

# AERDEX

TECHNOLOGIES

# MAV-1100

BROCHURE



MADE IN NORTH AMERICA.  
TRUSTED BY ALL.



# PRODUCT DESCRIPTION

## MAV-1100

Demanding applications require proven performance in the toughest environments—whether it's coolant mist, oil mist, or smoke. The Maverick MAV-1100 meets these requirements out of the box with a standard HEPA filter, up to 99.97% efficiency on submicron particles and guaranteeing clean air even under heavy-duty conditions.

Minimizing downtime and service costs is critical. The MAV-1100's multi-stage filtration system, featuring industry-leading fibrebed media, extends filter life to 3–5 years (application-dependent) and dramatically reduces replacement frequency. Because filter stages are modular, you can tailor the configuration—add carbon cells for fume control or swap in specialized media—to match each process, ensuring you're never over or under-filtered. Each MAV-1100 is also equipped with drains for continuous drainage, returning separated coolant or oil directly to your machine.

Integration needs vary across shops, so the MAV-1100 offers true flexibility. Mechanically, choose between horizontal suction (for duct or hose connections) or bottom-suction direct mounting via Aeroex's proprietary baseplate system. Electrically, Aeroex provides a suite of integration kits that let you run the MAV-1100 from your machine tool's control logic—adding automation even where the CNC doesn't natively support it. If you prefer standalone control, panels and VFDs are also available.

Real-time feedback keeps maintenance truly proactive. Two digital service gauges—with 4–20 mA outputs and alarm signals—connect to your remote monitoring systems, reporting filter status continuously. Dual-color (green/red) status lights give operators an instant visual check. In summary, the MAV-1100 combines HEPA-level efficiency, long-life fibrebed filtration, application-specific adaptability, seamless mechanical and electrical integration, and intelligent digital monitoring—delivering low-maintenance, high-performance mist collection wherever you need it.



### KEY MAVERICK FEATURES

- Digital Gauges
- Status Lights
- Vertical and Horizontal Suction
- Mounting Baseplate

## PRODUCT SPECS

<b>Air Flow</b>	1000-1300 cfm
<b>Machine Tool Enclo. Recom Volume</b>	Up to 450 ft <sup>3</sup>
<b>Motor</b>	2 hp
<b>Voltage (Amps)</b>	230/3/60 (5.5) 460/3/60 (2.7) 575/3/60 (2.09)
<b>Inlet Connection</b>	8"Ø
<b>Sound</b>	70 dB(A)
<b>pH limit</b>	5.8 - 12

<b>Temp limit</b>	70 °C / 160 °F
<b>Weight</b>	340 lbs
<b>Length</b>	43.5"
<b>Width</b>	28.6"
<b>Height</b>	46.3" (with base feet)
<b>HEPA Filter</b>	Standard
<b>Carbon Filter</b>	Optional

# FILTER TECHNOLOGY

The MAV-1100's filter system is engineered to deliver unrivaled air purity, long service life, and simple service—ensuring your shop stays clean and productive without constant downtime. At its core is our industry-leading fibrebed media, designed with progressive-efficiency stages that trap coolant mist, oil aerosols, and smoke particles down to microns with minimal pressure drop. Because the fibrebed is resistant to clogging, you'll typically see 3–5 years of filter life (application-dependent), dramatically reducing replacement costs and labor.

Understanding that every shop has unique needs, the MAV-1100 features a fully modular filter setup. The standard assembly includes a mechanical stage and fibrebed media with HEPA for submicron capture, while activated carbon cells can be added for vapor and fumes, or stages swapped with specialty media to suit specific applications. Quick-mount rails and ergonomic handles enable fast, easy field changes, allowing you to adapt your filtration as processes evolve.

Built-in drains at the primary separation stage return collected coolant or oil directly to your machine tool, minimizing fluid waste. Digital gauges let operators monitor remaining media life instantly—no guesswork, no disassembly. When it's time for a swap, individual panels slide out without disturbing adjacent stages, cutting maintenance to mere seconds.

Whether handling high-volume machining, heavy-duty grinding, or specialized chemical processes, the MAV-1100 filter suite offers flexible configuration, long-lasting fibrebed filtration, standard HEPA, optional carbon polishing, and built-in hands-free drainage—all in an easy-to-service design. This ensures reliable air-quality compliance, reduced ownership costs, and confidence that your filtration performs at its best.

## FILTER BREAKDOWN

- 1. 1<sup>st</sup> Stage: Mechanical Element:** This stage uses smooth metal surfaces and strategically placed baffle plates to separate up to 90% of heavier oil mist and swarf from the airflow. The separated fluids quickly drain back to the machine sump, reducing waste and preventing premature filter saturation downstream.
- 2. 2<sup>nd</sup> Stage: Demister Element:** The Demister Element supports the first stage of filtration, capturing and removing up to 95% of mist and swarf particles. It uses durable, washable filters designed for long-term use, making it a non-consumable solution.
- 3. 3<sup>rd</sup> Stage: Pleated Depth-Loading Fibrebed Filter:** Building on the previous stage, this filter offers higher efficiency by capturing finer mist and smoke particles. Its advanced depth-loading construction provides a significantly increased surface area compared to standard filters, which improves filtration capacity and helps extend service intervals.
- 4. 4<sup>th</sup> Stage: Pleated Depth Loading Fiber Bed Filter:** Rated MERV 14, this high-performance filter features a depth-loading design that provides up to 25 times more surface area than standard filters. This increased capacity significantly extends its service life, typically lasting between 2 to 4 years depending on usage and environment.
- 5. 5<sup>th</sup> Stage – Certified HEPA Filter:** This final polishing stage is available in two efficiency options—95% or up to 99.97%—and captures the smallest submicron particles, including mist, smoke, and aerosols. Designed for critical air quality, it ensures the exhaust air meets stringent environmental and safety standards.



# FILTERS OVERVIEW

The Maverick mist collectors offer versatile, easy to install filters for diverse applications including Fibrebed depth loading and HEPA. Quick self-replacement reduces downtime and external maintenance needs. \* Activated carbon and custom media options are also available.

## REPLACEMENT FILTERS



**1<sup>ST</sup> STAGE MECHANICAL ELEMENT**  
A11FMS-0001



**2<sup>ND</sup> STAGE DEMISTER ELEMENT**  
A11FDE-0002



**3<sup>RD</sup> STAGE "OM#5" OIL MIST FIBRE BED FILTER**  
A11FOM-0005



**4<sup>TH</sup> STAGE "OM#7" OIL MIST FIBRE BED FILTER**  
A11FOM-0007



**5<sup>TH</sup> STAGE "HF" HEPA FILTER**  
95%           2000HF-2095  
99.97%       2000HF-2099  
Odor-Rid      2000HF-3095



MAV-1100

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# KEY FEATURES

## SETTING A NEW STANDARD

The Maverick mist collector is engineered with advanced features to deliver reliable performance and low service needs in the most demanding machining applications.

Designed for ease of use and seamless integration, it combines intelligent digital monitoring, electrical integration, and flexible installation options to optimize filtration efficiency while minimizing downtime and maintenance effort. Below is a detailed breakdown of the key features that set the Maverick apart.

### 1. DIGITAL GAUGES

Equipped with digital gauges featuring 4–20 mA outputs and alarm signals, the system provides real-time monitoring of internal pressure levels for precise feedback on filter condition and airflow efficiency. This enables proactive maintenance and helps prevent unexpected downtime.

### 2. STATUS LIGHTS

Dual-color status lights offer immediate, at-a-glance insight into system performance and maintenance needs, helping operators quickly identify when service is required.

### 3. VERTICAL OR HORIZONTAL SUCTION

Designed for flexibility, the Maverick supports both horizontal inlet connections for duct or hose setups and vertical suction for direct machine mounting, adapting effortlessly to your shop's configuration.

### 4. MOUNTING BASEPLATE

A proprietary mounting baseplate system simplifies machine integration by providing a secure, mechanically compatible platform that ensures stable, vibration-resistant installation.

### 5. ELECTRICAL INTEGRATION KITS

Aeroex offers a range of electrical integration kits that enable automated control of the Maverick mist collector via your machine tool, adding start/stop functionality and safety interlocks even when native machine control is not available.



# MOUNTING OPTIONS

## FLEXIBLE MOUNTING SOLUTIONS TAILORED TO YOUR WORKSPACE

The Maverick mist collector is designed with versatility in mind, offering multiple mounting options to fit a wide range of shop layouts and operational needs. Whether space is limited, equipment moves frequently, or centralized mist collection is preferred, our adaptable mounting solutions ensure efficient mist capture without disrupting your workflow. Explore the choices that make integrating the Maverick effortless and effective.

### DIRECT MOUNT

Install the mist collector directly on your machine tool. Ideal for compact spaces, it captures mist right at the source, significantly reducing airborne contaminants while providing a clean, integrated appearance that blends seamlessly with your equipment.

### SUSPENDED MOUNT

Suspend the Maverick mist collector from the ceiling or overhead supports. Perfect for saving floor space and suited for both centralized mist collection systems or servicing individual machines.

### WALL MOUNT

Use vertical wall space to free up floor area. This option is great for smaller workshops or where direct or suspended mounting isn't practical.

### STAND AND HOSE

Mount the mist collector on our sturdy pillar stand and connect it to your machine using a suction hose. This setup provides versatile connection options while keeping the collector separate from the machine for easier access and flexible placement.

Choose the mounting style that best fits your space and operational goals. By aligning your selection with your facility's layout and workflow, you'll optimize mist collection efficiency while keeping production running smoothly.



Example of a Direct Mount.

MAV-1100

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# ACCESSORIES

## INSTALLATION



### SUSPENSION BRACKET

MAV 400 & MAV 600 099AMW-0001  
 MAV 1100 & MAV 1400 099AMW-0002  
 MAV 2000 099AMW-0003



### INSTALLATION KIT

MAV 400 099AKI-0001  
 MAV 600 & MAV 1100 099AKI-0002  
 MAV 1400 099AKI-0003  
 MAV 2000 & MAV 2500 099AKI-0004



### STAND

32" Tall Powder coated black  
 Only for MAV 400  
 099AMP-0004



### WALL MOUNT

MAV 400 & MAV 600 099AMW-0001  
 MAV 1100 & MAV 1400 099AMW-0002  
 MAV 2000 099AMW-0003



### PILLAR STAND

MAV 400 & MAV 600 099AMP-0061  
 MAV 1100, MAV 1400 & MAV 2000 099AMP-0062  
 MAV 2500 099AMP-0063

## MISCELLANEOUS



### CHIP STRAINER

MAV 400 & MAV 600 099ACS-0002  
 MAV 1100 099ACS-0005  
 MAV 1400 099ACS-0006  
 MAV 2000 & MAV 2500 099ACS-0007



### SUCTION HOSE

MAV 400 099MPH-0006  
 MAV 600 & MAV 1100 099MPH-0008  
 MAV 1400 099MPH-0010  
 MAV 2000 & MAV 2500 099MPH-0012



### HOSE CLAMP

MAV 400 099AHC-0006  
 MAV 600 & MAV 1100 099AHC-0008  
 MAV 1400 099AHC-0010  
 MAV 2000 & MAV 2500 099AHC-0012



### MACHINE ADAPTER

MAV 400 099AMS-0006  
 MAV 600 & MAV 1100 099AMS-0008  
 MAV 1400 099AMS-0010  
 MAV 2000 & MAV 2500 099AMS-0012



### WIRE KIT

MAV 400 & MAV 600 099EMS-E001  
 MAV 1100 & MAV 1400 099EMS-E002  
 MAV 2000 099EMS-E003  
 MAV 2500 099EMS-E004  
 MAV 4000 099EMS-E005

## REPLACEMENT PARTS

### MOTOR

MODEL	VOLTAGE	
	230/460/3/60	575/3/360
MAV 400 / 600	099EMT-0002	099EMT-0003
MAV 1100/1400	099EMT-0010	099EMT-0011
MAV 2000	099EMT-0006	099EMT-0007
MAV 2500/4000	099EMT-0008	099EMT-0009



### IMPELLER

MAV 400 A04IMP-001  
 MAV 600 & MAV 1100 A06IMP-001  
 MAV 1400 & MAV 2000 A14IM0-001  
 MAV 2500 & MAV 4000 A25IMP-001



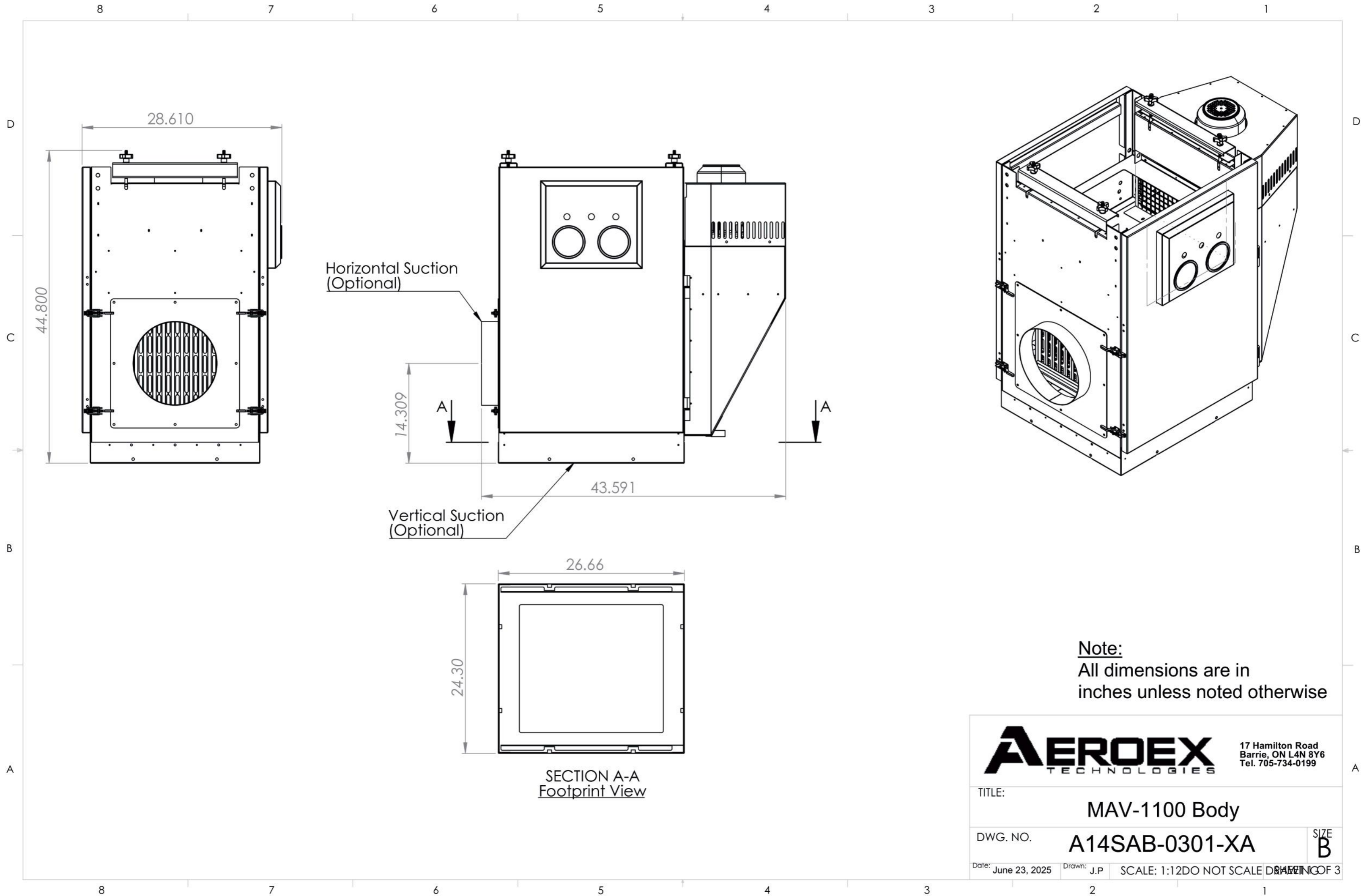
### INLET CONE

MAV 400 A04CON-0001  
 MAV 600 & MAV 1100 A06CON-0001  
 MAV 1400 & MAV 2000 A14CON-0001  
 MAV 2500 & MAV 4000 A25CON-0001



### DIGITAL GAUGE

MAV-A031  
 MAV 2500 & MAV 4000 receive primary and HEPA status gauge



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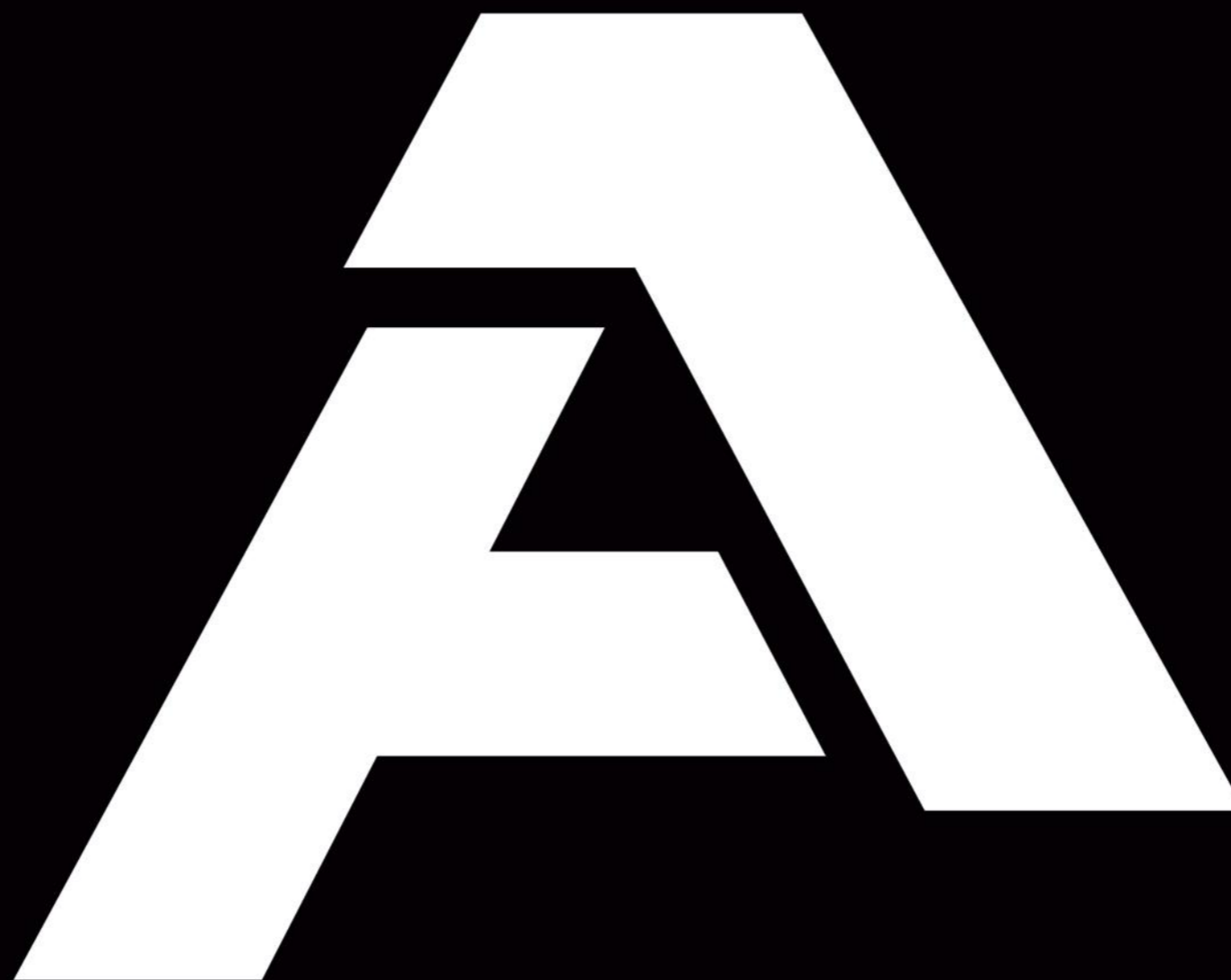
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DRAWING OF 3



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