

K-KORE™ COMPOSITE AIR PLENUMS
K-KORE™ COMPOSITE ENERGY RECOVERY PLENUMS
(PATENTED)



DEDICATED TO DETAIL, PRECISION AND QUALITY CONTROL

WELCOME TO MK PLASTICS

Founded in 1963, MK Plastics is a global leader in the production of corrosion resistant industrial and commercial blowers, fans, and ventilation systems. Patented in several countries, our products are AMCA Certified for Air and Sound Performance.

OUR MISSION

We offer the broadest and most complete line of quality industrial and commercial corrosion-resistant fans and blowers. Our innovative ventilation technologies are recognized world wide.

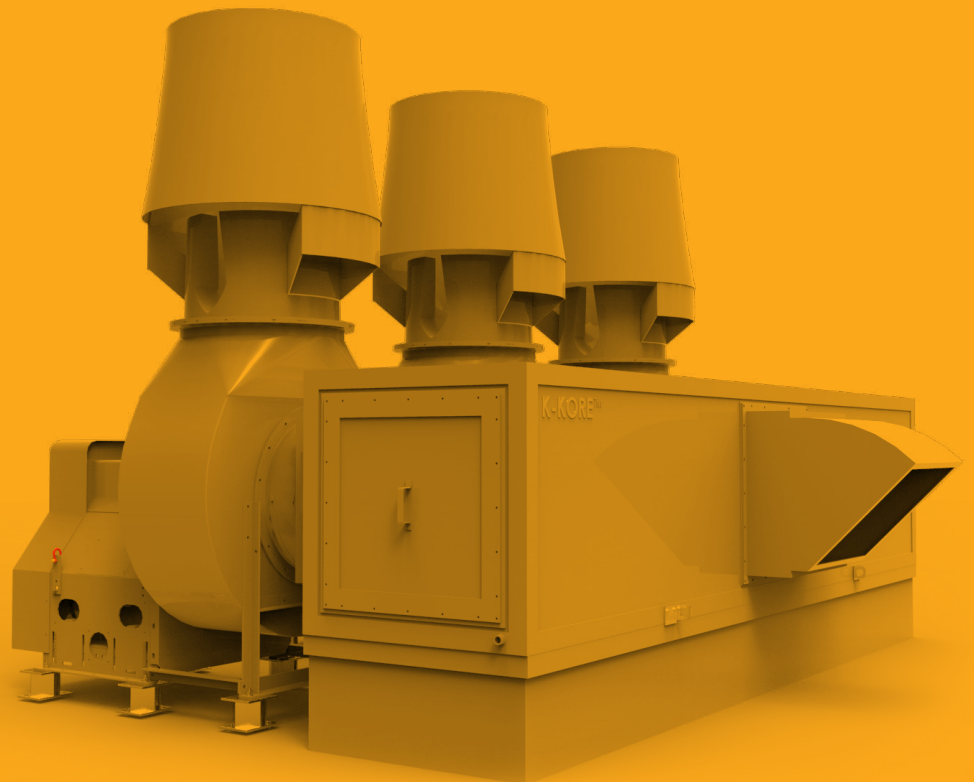
OUR COMMITMENT

Certified for excellence in performance and noise reduction, we are devoted to providing:

- The highest quality corrosion resistant fans and systems available
- Superior engineering support for our equipment
- Industry leading technology and experience.
- Highly skilled application engineering associated with the equipment and systems we manufacture.

OUR FACILITIES

We design and manufacture complete ventilation systems in our own facilities as we have done for two generations, assuring quality, and reliability and constant innovation. Our dedicated engineering and R&D team designs, refines, and tests all of our fans and blowers in our 70,000 sq. ft. manufacturing facility and performance test laboratory in Montréal, Québec, Canada.





OUR PRODUCTS

For 50 years, MK Plastics has been engineering, designing, and fabricating thermoplastic and FRP ventilation components and systems for institutional and industrial applications. Founded in 1963, today MK Plastics has facilities and offices in Montréal, Québec, Canada; Spiez, Switzerland; Troy, OH and Mooers, NY, USA. MK Plastics has technical sales representatives that are located in major cities throughout the globe.



INNOVATIVE DESIGNS

The Canadian Plastics Industry Association - Québec Section has recognized the innovative design and construction of MK Plastics products at the 2004 Gala Awards.



PRODUCTS SUPPLIED BY MK PLASTICS

- K-Kore™ Composite Air Plenums*
- K-Kore™ Composite Energy Recovery Plenums*
- Axijet® High Plume Dilution Fan*
- Axijet® LEADLAG™ Exhaust Fan Control System*
- KVC High Plume Fan
- Venturi Perchloric Acid Exhaust System*
- DHK Medium Pressure Centrifugal Fan
- DHK-NW High Pressure Centrifugal Fan
- CNW Centrifugal Fiberglass Fan
- PRVS High Pressure/Low Volume Centrifugal Blower
- RBK Roof Upblast & Sidewall Centrifugal Fiberglass Exhaust Fan
- AXT Axial Tubular Fan
- AXTC Centrifugal In-Line Fan*
- AXB Axial Bifurcated Fan
- AXPR Axial Panel Fan
- FRP & PVC Control Dampers & Gravity Backdraft Dampers*
- FRP & PVC Ducting and Fittings
- Mist Eliminators

*PATENTED



K-KORE™ COMPOSITE AIR PLENUMS AND ENERGY RECOVERY PLENUMS

The perfect product to provide years of trouble-free operation, K-Kore Composite Air Plenums and Energy Recovery Plenums use the latest technology in composite construction materials that renders steel construction obsolete. Our patent-pending Fiberglass Reinforced Plastic (FRP) assembly will provide the ultimate in durability and equipment life.

K-Kore plenums are high quality custom designed exhaust systems for commercial, industrial and institutional applications where corrosive environments can rapidly destroy steel equipment. The product is manufactured from high quality reinforced composites that can be engineered to withstand any corrosive environment, from the acidic rain or wastewater treatment plants of industrialized cities to the chemical exhausts of university or hospital laboratories.

WHY COMPOSITES?

Composite materials, once considered futuristic and expensive, are now commonly used for all high-tech manufacturing sectors, from aerospace manufacturing to the automotive industry. Metal construction is considered obsolete in most high-tech industries where any degree of corrosion resistance or longevity is required, and so the engineers at MK Plastics came together with a common purpose of keeping the HVAC industry up to speed with the pace of technological advancements in material design.

Pound per pound, composite construction is stronger, more durable, and significantly more corrosion resistant than coated metal construction. The thermal conductivity is extremely low, allowing a true no-through metal design over the entire depth of the panel, something unachievable with current metal design.



COMPOSITE HISTORY

The use of resin-infused fiberglass for marine construction began over 50 years ago in the 1960's. The actual service life of this material is unknown since there has never been a failure in the industry due to corrosion through exposure to saltwater environments. K-Kore plenum construction uses the same resin-infused fiberglass design that will almost certainly show no signs of corrosion after 50+ years in the harshest environmental conditions. In the conceivable event that the K-Kore unit outlasts the building in which it is installed, the material can be recycled in an environmentally friendly manner.

COMPOSITE USAGE

Composites are everywhere in the world today. Look up and you might see an airliner from Boeing, Airbus or Bombardier pass overhead, with their high-tech composite bodies allowing greater range, fuel economy and longevity compared to their metal rivals. Sports cars, military vehicles, spacecraft and almost all other high tech construction industries make extensive use of composite construction. The HVAC industry, until now, has been lagging far behind the state of the art. MK Plastics is bringing the construction industry into the 21st century.



K-KORE ENERGY RECOVERY PLENUM DESIGN FEATURES:

K-Kore products provide benefits to every facet of the construction process.

Owners:

The long term longevity of composite construction ensures the greatest payback on investment. Owners who are looking for a durable solution with an extended service life now have an option with all the benefits of F.R.P. corrosion resistance.

- Replaceability of components is critical for product longevity and air quality. K-Kore Air Plenums are the only product available to offer our patent-pending replaceable drain pan design which allows the entire drain pan to be easily replaced when the time comes to replace the coils.
- K-Kore plenums are constructed with true no-thru-metal construction throughout the entire depth of the cabinet walls, creating an energy efficient cabinet with the highest possible resistance to surface condensation.
- All metal components of K-Kore plenums are either manufactured from 316 stainless steel or are designed to be easily replaceable; even the 316 stainless steel triple sloped drain pans and coils can be easily removed and replaced when required using a patent-pending slip-out design.
- High resistance to impact: Composite structures resist impact damage much better than steel, and are easily repairable when damage has occurred.
- No cabinet coatings: paint, anodization, and galvanization are all surface treatments that will eventually allow corrosion to penetrate and lead to failure. K-Kore plenums use pigmented composite material that will never delaminate and fail as paints or other coatings will, even if deeply scratched.

Contractors:

The lightweight but ultra-strong construction often will allow smaller secondary cranes to rig the equipment. Metal units weighing up to 50% more will often require the use of a higher capacity crane, making scheduling and rigging more costly and delaying installation.

- 3-D modelling software that generates both submittal drawings and assembly drawings from the same model ensures consistent accurate dimensions. CAD/CAM manufacturing ensures the highest level of drawing accuracy.
- Resistance to denting means less field repair work and warranty claims.
- Surface color is provided by integral pigmentation of the composite, with zero risk of corrosion if scratched. No surface prep is required for field touch ups, and will not reduce the corrosion resistance of the cabinet.

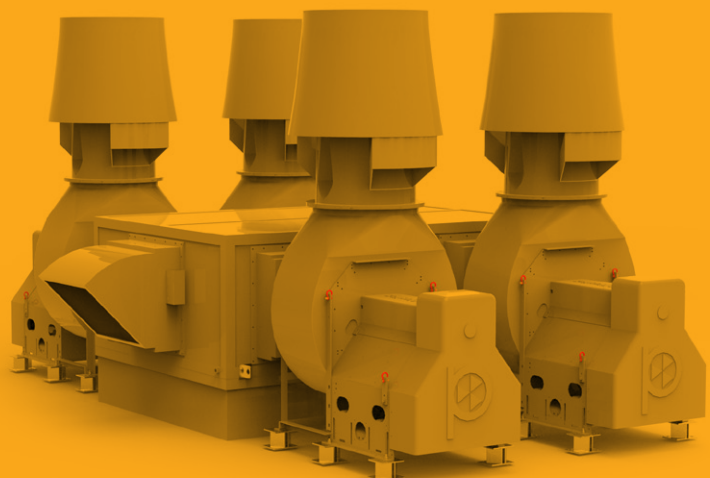
Engineers:

Now consulting engineers may specify a product that provides superior durability at a competitive cost to their clients. The Engineers' customers, the Owners and Contractors, will benefit from the decision to specify K-Kore Air Plenums.

- Lightweight composite construction allows for lighter structural construction and cost, allowing significant cost savings for the building structure.
- Composite construction allows engineers to specify products that will withstand almost any chemical or harsh saline environment. Fiberglass Reinforced Plastics have long been used in the mining and wastewater treatment industries where even 316 stainless steel construction is not acceptable, and now K-Kore Plenums offers the same technology for the entire exhaust air system.

Advantages:

- Lightweight construction. Up to 50% weight savings vs. steel construction.
- True no-thru-metal construction throughout the entire cabinet depth.
- Unlimited salt-spray resistance: FRP has over 40 years (and counting) of salt spray exposure with no detrimental effects.
- Corrosion resistance: K-Kore™ Air Plenums are the only products with a 50 year expected service life without corrosion in most environments.
- Flame Spread index of less than 25 when tested according to UL 723.
- Acoustic Performance: The composite skins and core allow for higher levels of acoustic performance. Acoustic software accurately predicts the unit performance based on independently certified results from ASTM E 90 and ASTM C 423.
- UV Resistant.





LIMITATION OF WARRANTY AND LIABILITY

M.K. Plastics Corporation (MK Plastics) warrants its equipment, products and parts, to be free from defects in workmanship and material under normal use and service for five (5) years after delivery to the first user. The obligation of MK Plastics under this warranty are limited to repairing or replacing, at the option of MK Plastics and without cost to MK plastics, any part or parts which are, within such warranty period, returned to MK Plastics with transportation and customs charges prepaid, and which our examination shall disclose to our satisfaction to have been defective.

M.K. Plastics Corporation will not be responsible for damage to equipment or materials through improper installation, storage, improper servicing, or through attempts to operate it in excess of its rated capacity or recommended use, intentional or otherwise. MK Plastics will not be responsible for consequential damage.

M.K. Plastics Corporation has no direct control over the actual handling and use of its products in the field, and therefore M.K. Plastics Corporation does not assume any liability for any loss to the customer or any personnel or any physical damages that are claimed by anyone due to a failure or cause attributed to the use of its products. In no event shall M.K. Plastics Corporation be responsible for consequential damages of any such defective material or workmanship, including but not limited to the buyer's loss of material or profit, increase expense of operation, downtime or reconstruction of the work and in no event shall M.K. Plastics Corporation's obligation under this warranty exceed the original contract price of the defective item.

M.K. Plastics Corporation will not be responsible for the cost of removal of a defective product or parts or the installation of a replaced product or parts, or for costs due for its removal, crating or shipping.

On account of variables including but not limited to, vibration, system noise characteristics, motor overloading or change in voltage condition, the specifics of customer application of equipment or other system conditions, MK Plastics does not expressly warrant its equipment for any specific purpose.

The customer and its agents are responsible for the selection and application of MK Plastics products, including their fitness for the purpose and performance intended. Consequently, the customer on behalf of its agents assumes all liability related to the use/misuse, application and selection of the MK Plastics Products.

MK Plastics does not expressly warranty any individual parts or components which are not manufactured by MK Plastics Corp, but does pass on the manufacturer's warranty for these parts. Parts bearing serial numbers from manufacturers other than MK Plastics are warranted only by their own original manufacturers.

Exposure to some chemicals, including but not limited hydrofluoric acid, acetones, and other solvents render this entire warranty null and void. K-Kore™ plenums are constructed with Vinylester Resins, and it is the responsibility of the designers and operators of the equipment to ensure compatibility of Vinylester Resin to any chemicals (including their concentrations and temperatures), to which the plenums may be exposed. Exposure to any chemical considered by MK Plastics to be harmful to Vinylester Resin renders this entire warranty null and void.

IN-WARRANTY RETURN POLICY

For any warranty claims, contact your local MK Plastics representative immediately. The claim will be evaluated and if necessary a Return Materials Authorization (RMA) number will be provided.

All defective parts replaced under warranty must be returned to M.K. Plastics Corporation at the owner's expense, including all shipping charges, brokerage, customs and duties, unless MK Plastics expressly requests otherwise. Parts replaced under warranty which are not returned to MK Plastics within 30 days of reception of the replacement part will be billed at market value. Parts returned to MK Plastics must be labeled with the RMA number issued for its warranty claim.

MK PLASTICS

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