



Pulp & Paper Industry

MH&W Nanotech is an industry-leading supplier of nanocrystalline cores in North America. Our vast knowledge, experience, and abilities have allowed us to develop incredibly effective noise-filtering solutions, such as filters and chokes for electric vehicles (EV), variable frequency drive (VFD), solar, and wind applications. Our clients include critical energy producers, manufacturers, water treatment facilities, agricultural producers, and more, all of whom trust our extensive product line.

MH&W Nanotech also works with the pulp and paper industry, where our innovative solutions eliminate “ghost” malfunctions that result in lengthy, unplanned system shutdowns and loss of revenue. Our high-tech nanocrystalline common mode choke (CMC) cores help protect signal lines by eliminating stray ground noise. Our solutions also eradicate bearing fluting and the associated replacement costs, effectively absorbing electromagnetic interference (EMI) noise at the variable frequency drive source.

What Is the Pulp & Paper Industry?

Wood pulp is the necessary ingredient for paper processing. The eco-friendly material is both biodegradable and renewable. Products manufactured using wood pulp are very sustainable, as it is one of the most versatile raw materials available, with an extensive range of practical uses.

In pulp and paper processing facilities, machinery with a VFD system controls operations using the torque and speed of the motor. To ensure long-lasting operation, every motor system must have sufficient EMI protection to reduce the risk of bearing damage and “ghost” malfunctions, where the system shuts down without any apparent reason or warning.

Disruptive EMI noise can lead to electronic and electrical interference, drowning out signals of neighboring components and negatively impacting the performance of the motor systems.

MH&W's Services for the Pulp & Paper Industry

To resolve industrial motor system issues, MH&W offers a full range of products and services, including magnetic products and protective components. Based on our pulp and paper industry customers' specific problems, needs, and goals, we provide a wide selection of solutions for their VFD-driven systems. Here's an overview of our products.



Nanotech® Cores

Nanotech® toroids suppress the asymmetrical EMI currents generated by the VFD while significantly reducing the high frequency common mode EMI current at the motor. Made from nanocrystalline material, the toroids diminish the damage to motor bearings in modern inverter systems that operate at high switching frequencies.

Placing a Nanotech® core at the inverter output cables significantly prolongs the service life of the motor bearings and minimizes downtime and maintenance costs.



Nanotech Kits

The MH&W [Nanotech® Kit](#) has allowed industrial plants, office buildings, and hospitals to avoid equipment failure and save millions of dollars in downtime. We offer standard kits for all cable lengths and HP ranges. Every kit includes the appropriate size and number of Nanotech® cores based on the length of the cable between the motor and the drive as well as the VFD's HP rating.

Each CMC core includes a thermal temperature dot for effective temperature monitoring, and each kit contains a Nanotech® sticker and complete installation instructions.

Applications for the Nanotech® Kit include:



- ✓ Agricultural Equipment
- ✓ Automotive Manufacturing
- ✓ Electric Vehicles (EV)
- ✓ Fans and Pumps
- ✓ Hospitals
- ✓ OEM Manufacturers of HVAC Systems
- ✓ Paper and Pulp Processing Equipment

Benefits of Working with MH&W

Identifying the source of noise in a pulp and paper processing facility is essential to prevent errors, shutdowns, and major malfunctions. Since 2010, MH&W's engineers have provided long-lasting solutions as a leading provider of nanocrystalline products for filtering and power conversion.

When you work with MH&W, you can expect to experience the following benefits.



High Quality

At MH&W, we only collaborate with manufacturers that meet our high-quality standards for producing nanocrystalline and magnetic products. Getting to the source of noise in pulp and paper processing machinery is essential to avoiding equipment shutdown, manufacturing errors, and machinery malfunctions. To ensure our clients can trust the integrity of our solutions, we use our established quality control processes to verify product quality in every application.



Technical Expertise

As a leading supplier of nanocrystalline products in North America, MH&W staffs in-house experts who stay up-to-date with the latest technological innovations, offering the proper solutions for every filtering and EMI challenge. Using our ever-growing expertise in nanotechnology and magnetics, our technical support capabilities include helping customers choose new solutions for their applications.



Customization

Our team can develop a customized solution when standard components are not sufficient for a facility's existing equipment. We can modify cores and protective products to meet specific demands, challenges, or specifications of the VFD motor system.



Global Reach

MH&W operates worldwide, delivering localized services, technical support, and high-quality products to the pulp and paper industry. We have sales, engineering, and distribution centers throughout North America, allowing us to quickly source and distribute products promptly in every time zone.



Competitive Pricing

MH&W provides cost-effective, high-quality solutions to the pulp and paper industry to help reduce system downtime, improve energy efficiency, enhance machine performance, and minimize maintenance needs.

Pulp & Paper Industry Solutions From MH&W

Disruptive EMI noise can drown out signals, resulting in electrical interference and adversely impacting the performance of the motor system. Our solutions can eliminate these problems by absorbing the EMI noise at the VFD source.

Since 1964, MH&W has developed cutting-edge magnetic cores and components for challenging filter and power conversion applications. Our team of experienced engineers supplies both standard and custom solutions, providing our customers with a competitive advantage in the evolving marketplace. MH&W can help you find the proper filtering components to reduce interruptions and control signal noise.

Contact us today to learn more about the common problems in pulp and paper processing and how nanocrystalline components can help protect your VFD drives. You can also request a quote to start your order.

About MH&W

Since 1964, MH&W has been at the forefront of developing and promoting innovative magnetic cores and components for power conversion and filter applications. A highly qualified team of engineers supplies standard and custom-specific solutions, giving our customers a competitive edge in the marketplace. Since 2010, MH&W has evolved as the industry leader in supplying nanocrystalline components in North America. Experience, ability, knowledge, and foresight led to the development of extremely effective noise-filtering solutions manifested in chokes and filters for VFD, EV, Wind, and Solar applications. The MH&W Team is standing by to solve your most demanding power conversion and filter challenges.

[CONTACT US](#)

[RESOURCE LIBRARY](#)



575 Corporate Drive Suite 4200
Mahwah, NJ 07430

201-252-8125

www.mhw-filters.com

