



PERFECT PELLETS.  
EVERY TIME.

# XC Series

## DRYER/COOLER

A new era in cooling innovation has arrived. Introducing the most advanced pellet cooling technology available on the market today: The VertiCool XC Series Dryer/Coolers from Midwest Custom Solutions are ready to stand up to your toughest pellet processing challenges with the safest, most efficient design offered in our industry. Not only do our XC Series Dryer/Coolers have the cutting-edge, reliable, rugged design you've come to expect, but also provides 50% more throughput of finished product per square foot of floor space than other coolers on the market today. Are you ready to spend less on every ton of perfect pellets?

Your Pellets. Our Priority.

- ❖ Accelerated Drying/Cooling Times
- ❖ Production Data Available
- ❖ PLC Controlled Throughout
- ❖ Improved Safety
- ❖ Proactive Audit Awareness
- ❖ Curtailed Emissions
- ❖ Continuous Moisture Monitoring Available



XC3 shown for Size Reference - contact your MCS Sales Representative to discover which XC unit is right for your application.



**"MADE IN AMERICA" REAWAKENED**  
FORGED IN THE CRUCIBLE OF LIBERTY  
POWERED BY THE FUEL OF FREEDOM

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DRYER/COOLER



Heavy-duty canvas seals ride on all air intake slats providing increased efficiency and air control through the pellet cooling columns. As pellets are dried, cooled and move through the columns, weight of the processed product opens the slats as cooling air is required. We've even engineered accommodations for optional exhaust air connections on either side of our XC Series Dryer/Coolers.



Heavy-gauge outflow vanes deliver a precise, metered, gentle and predictable flow of processed pellets through the XC's individual cooling columns. Engineered for dependability, durability and corrosion-resistance, the vanes rotate on precision milled shafts, long-wearing bushings and industry-leading, serviceable bearings coupled to a powerful actuation drive. Our outflow vanes are what set the XC Series Dryer/Coolers apart from antiquated systems.



Only high-quality finishes, paints, seals and fasteners are used in our XC Series, ensuring you receive countless hours of worry-free service and operation while combating equipment corrosion and deterioration in your most harsh of operating environments and processing conditions.



Viewing Ports have been engineered into the XC Series product drying column providing your technicians with real-time visual reference of processing volumes. Avoiding time-consuming downtime due to equipment overfill is a costly inefficiency we're here to help you avoid and prevent.



Heavy-gauge steel framing members and cooling column panel sections have been selected for our XC Series design to further ensure your new Dryer/Cooler provides the highest returns while operating in environments where moisture and corrosion will attack your equipment investment most aggressively.



All of our XC Series Dryer/Coolers feature a muscle-bound actuation system providing for a powerful, yet, precise movement of the outflow vanes below the cooling columns. We know that equipment placement within your processing operations isn't always conducive to regular maintenance, so we build strength into your investment for added "piece of mind" and operational assurance.



Our XC Series design allows for quick opening of the dryer/cooler for inspection of all perforated panel sections, ensuring your maintenance and cleaning duties are simple, easy and time-effective. We know that keeping your equipment in top-working order and meticulously clean is an important focus to your processing operations with improved operational efficiencies, increased airflow across the product column and improved safety with reduced processing residue build-up.



Only industry-leading serviceable and sealed bearings, precision-milled shafts and locking collars are utilized in the construction of our XC Series Dryer/Coolers. At MCS, we know you expect to receive the highest returns for your investment dollar, therefore we use the only the highest-quality components in the construction of ALL of our products, providing you with countless hours of predictable, reliable and durable service in your processing operations.

# PERFECT PELLETS. EVERY TIME.

We proudly present to you a better way to achieve precision in the art of pelleting. Your endeavor of achieving perfect pellets every time is closer than you may have imagined.

## Are you guessing or do you know the exact moment your product is cool?

The name of your game is "efficiency," and we know exactly how to play. The XC Series Dryer/Coolers from Midwest Custom Solutions offer a fully automated control system with complete monitoring of product moisture and temperature levels throughout the pellet cooling process. This means you maximize your product throughput and minimize your process energy consumption to achieve the greatest operational efficiencies possible.

## Are you running the perfect CFM/ton?

Incomplete drying and cooling is an integral function of the pellet system ahead of the cooler, but how do you currently know you have a problem? Processing your pellets inefficiently means you're wasting money consuming time, electrical power and cooling air needlessly. The XC Series design is specifically engineered to utilize the precise amount of CFM to automatically match the product throughput of your equipment. Our sensor system will immediately alert you to conditions which may be addressed before they grow into rejected loads. With our XC Series you'll have precise measurement and control over moisture levels at the cooler.

## Are you over-drying your pellets in the cooler, and thereby giving away product weight and income?

The moisture content of your processed pellets is a delicate balance. The XC Series Dryer/Coolers are explicitly designed to provide precise control over your pellet moisture content and temperature levels, thus eliminating under-processing AND over-processing. Our equipment doesn't use any more air than is necessary to cool your product. Once cooled, processed pellets are discharged automatically.

## Do you have data points for verification of a safe, cool and dry product? Are you guessing or tracking?

We offer an optional PLC Panel control for our XC Series Dryer/Coolers to ensure your operations are even easier and more precise. Industry-leading temperature and moisture sensors in our design are installed as standard features to eliminate the "guesswork" which is costing you money in inefficient operations.

## What wasted CFM are you paying to filter?

The air we breathe is plentiful, but the filtration of your processing air is not.

Pinpointing the amount of energy to accomplish your moisture and temperature goals is the only way to win in the battle of efficiencies.

## What extra processing emissions are you sending into the atmosphere?

Emissions play a major role in pellet processing and are a growing concern in all process plants today. Our XC Series Dryer/Coolers stand at the forefront of caring about the air we breathe and the safety of the communities we serve. Applying the equipment's design efficiencies will allow you to use just the right amount of air to achieve your desired moisture content and temperature levels. Other designs use excess air inefficiently to guess at your desired targets.

## What does a cooler fire cost you?

We mitigate and diligently strive to eliminate those concerns. The XC Series technology continuously monitors the temperature level and moisture content to mitigate any fire risks. Hot spots are a thing of the past with the equipment's advanced detection and fire suppression control. Ease of cleaning has also been engineered into our XC Series product line with hinged louver panels which swing-out providing simple access to critical components for maintenance and debris removal.

## Do you have a camera system for monitored safety inside your existing cooler?

Midwest Custom Solutions offers an optional camera installation to ensure automated cleaning is being performed appropriately and thoroughly. Rapid identification of processing residues is quickly provided, and preventative maintenance is easily verified by all in your operations.

## Can you get more throughput out of your cooler?

If you're using antiquated processing techniques, the answer is: "probably not." We offer five versions of our XC Series Dryer/Coolers to accommodate your unique equipment setup or individual processing requirements. When operational size restrictions present installation concerns, one of the XC options will provide 50% more throughput of finished product while occupying the same footprint.

Only high-quality materials are used throughout our products to ensure years of carefree, efficient operation, and we are here to partner with you to help your business grow to the next level.

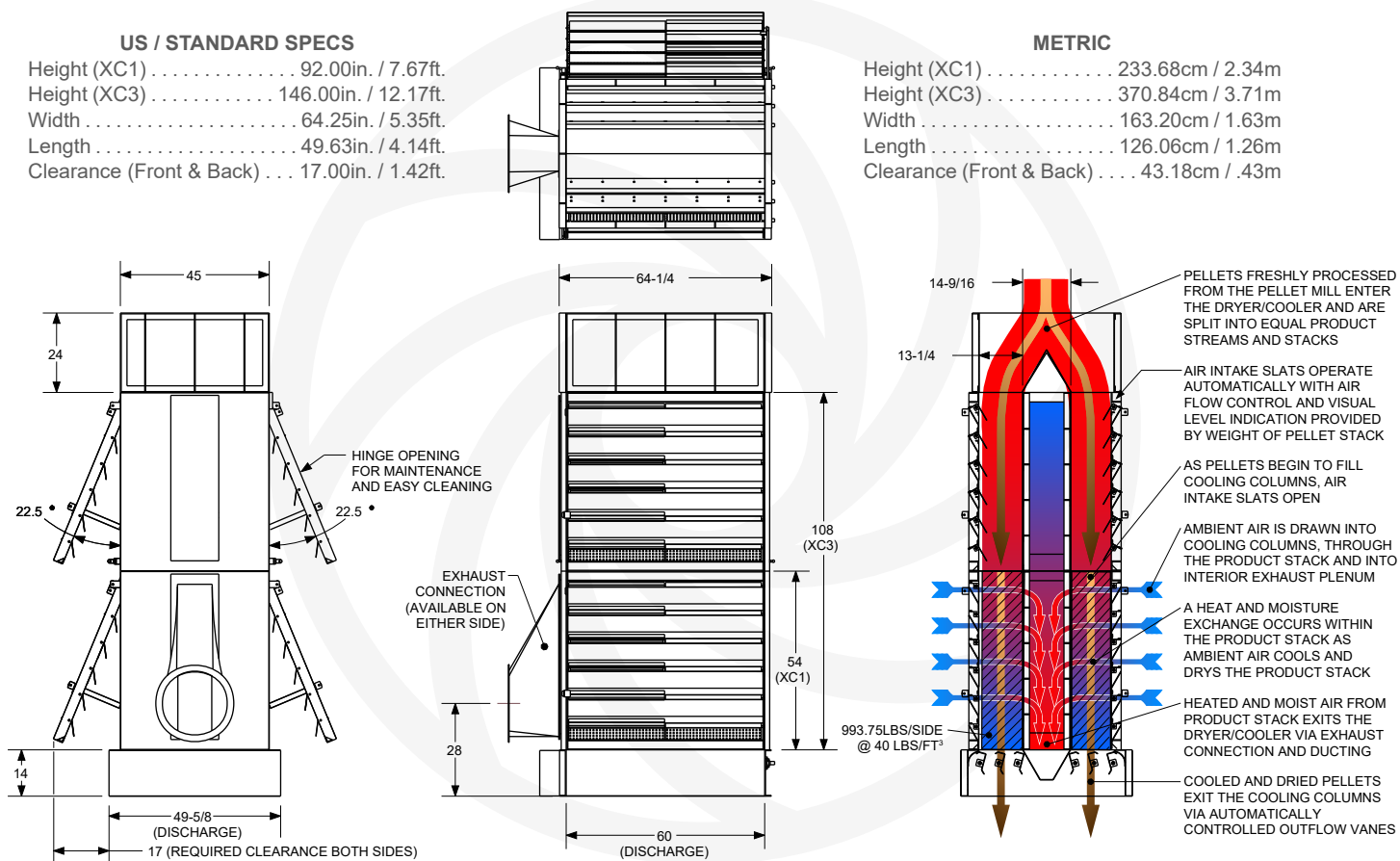
Contact us today to experience how our equipment will help your business thrive.


### US / STANDARD SPECS

Height (XC1) ..... 92.00in. / 7.67ft.  
 Height (XC3) ..... 146.00in. / 12.17ft.  
 Width ..... 64.25in. / 5.35ft.  
 Length ..... 49.63in. / 4.14ft.  
 Clearance (Front & Back) ... 17.00in. / 1.42ft.

### METRIC

Height (XC1) ..... 233.68cm / 2.34m  
 Height (XC3) ..... 370.84cm / 3.71m  
 Width ..... 163.20cm / 1.63m  
 Length ..... 126.06cm / 1.26m  
 Clearance (Front & Back) ... 43.18cm / .43m





Working with one  
of these is good  
for your body.

Warming by some  
of these is good  
for your soul.

Heating with a bunch of these is good  
for your peace of mind and bottom line.

## Are your wood pellets up to the challenge?

The economic benefits of heating with wood pellets are difficult to deny with operating efficiencies of over 85%. However, those cost savings rapidly decrease depending on the overall finished quality of this unique fuel product.

Controlling the temperature and moisture content of wood pellets during processing and packaging will always be a primary concern while managing your production.

Failure to remedy pellet moisture content and temperature may lead to condensation during packaging or bulk storage promoting absorption or freezing with subsequent breakdown of product and reduction of operating efficiencies being the end result... something you've worked diligently to minimize.

The **XC Series Dryer/Coolers** from Midwest Custom Solutions are the perfect solution to eliminate those concerns, simultaneously reducing and conditioning pellet temperature while precisely metering the moisture content within processed wood pellets.

The gentle, efficient functionality engineered into our **XC Series Dryer/Coolers** protects and ensures the precise amount of moisture remains in your product investment while adjusting pellet temperatures to your exacting standards.

Over-drying and inefficient processing typical with antiquated, harsh processing techniques and methods are eliminated with our novel, intuitive monitoring systems supplemented by an innovative, cutting-edge, ruggedized design.

Processed wood pellets are gravity fed and gently moved through the unit with automatic control of flow and discharge. Additionally, an optional touchscreen control panel is offered to ensure your operations are even easier and more precise. State-of-the-art temperature and moisture sensors in the **XC Series** design are installed as standard features.

Screen cleaning and "hot spot" suppression control have also been incorporated into the design, and optional cameras may be installed to ensure automated cleaning is being performed appropriately and completely.

Five versions of our **XC Series Dryer/Coolers** have been designed and engineered to accommodate a variety of processing and operational height limitations while featuring an industry-leading innovative, rugged design which offers 50% more throughput while occupying the same footprint.

You work hard to provide a valued product to your customers efficiently. We're here to help make your job easier.



 **MIDWEST  
CUSTOM  
SOLUTIONS**

**PRECISION  
QUALITY  
INTEGRITY**

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