



# THE ULTIMATE FIELD GUIDE

QUALITY GRAIN MANAGEMENT



# COMMERCIAL BINS



## J-RIB ROOF DESIGN

Chief interlocking J-Rib roof is a structured design to meet your peak load requirements.

Roof panels that utilize a 2.5" (6.35 cm) interlocking J-Rib design provide reduced construction time while maintaining outstanding strength.

The structured J-rib roof is available with upgrades up to 50,000 lbs.

Roof sheets are standard with a G140 (450 gm<sup>2</sup>) galvanized coating. (56% thicker coating compared to G90).

Sidewall sheets & stiffeners with a G115 (350 g/m<sup>2</sup>) galvanized coating. 28% thicker coating compared to G90 (275 g/m<sup>2</sup>).

Chief produces high quality corrugated sidewalls from steel with a tensile strength of 70 ksi (483 MPa).

Standard 105 mph/ASCE 7-10 (170 km/h) wind load.

Bolts and serrated nuts with a 1000 hour salt spray test coating include conical washer for complete sealing.



1-ring and 2-ring sidewall doors available.

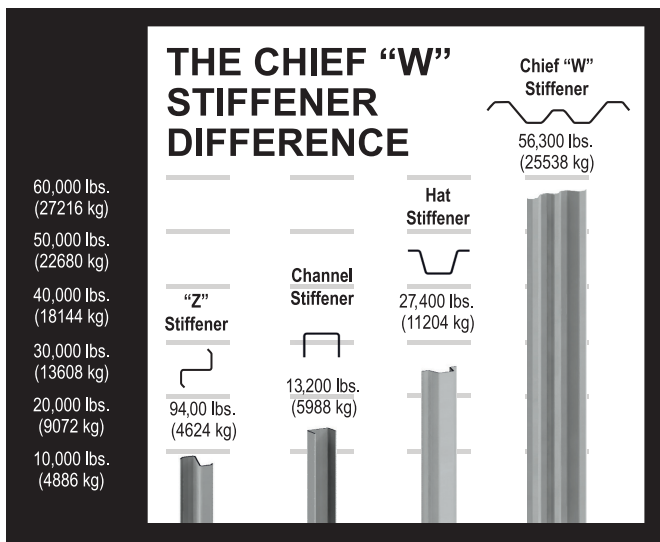
Commercial bin sizes up to 1.3 million bushel capacity (33030 MT).

Mid roof walk-around and eave walk-around available.



## CHIEF'S "W" STIFFENERS LEAD THE COMPETITION IN STRENGTH

Designed to support the vertical load, the "W" stiffener system provides additional strength, allowing sidewall height to exceed 100 feet (30.48 m). It also enables our bins to easily support overhead catwalks and conveyors.





# STIFFENED AND UNSTIFFENED FARM BINS

CHIEF

## CHIEF ROOF SYSTEMS

The roofs on Chief Agri grain bins are engineered to provide additional storage capacity, optimum protection against the elements, and easier access for loading the grain.



Made with same quality material as commercial bins.

Sidewall sheets & stiffeners with a G115 (350 g/m<sup>2</sup>) galvanized coating. 28% thicker coating compared to G90 (275 g/m<sup>2</sup>).

Chief produces high quality corrugated sidewalls from steel with a tensile strength of 70 ksi (483 MPa).

Structured J-rib roof available with loads of up to 25,000 lbs. (11340 kg) on farm bins.

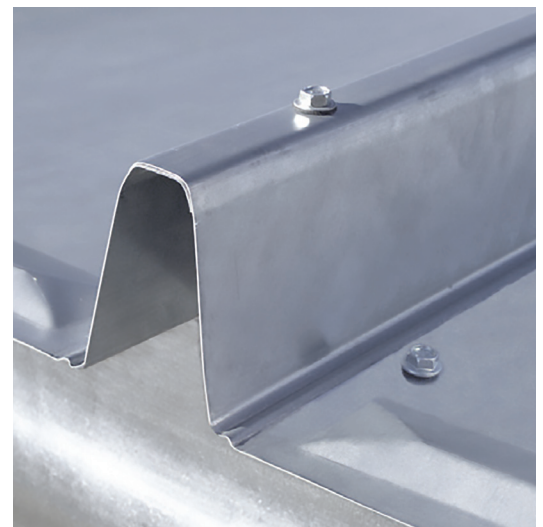
## V-RIB ROOF DESIGN

Chief's enhanced roof structure features one of the strongest designs in the industry. All grain bins through 27'-10" (8.5 m) diameter eave incorporate a 2-1/2" (6.35 cm) rib depth. Grain bins from 30'-11" (9.4 m) diameter through 49'-6" (15.09 m) diameter have a full 4" (10.16 cm) rib depth.

Chief farm bins utilize a roof system that incorporates over 30% more roof ribs than leading competitors for a stronger roof.

15'-6" (CB05) through 37'-1" (CB12) V-Rib Roofs have a 30" peak with a 30" hinged lid. 43'-4" (CB14) and 49'-6" (CB16) V-Rib have a 40" peak with a 30" hinged lid.

**\*J-Rib optional**





# HOPPER TANKS

## FOR AN EXCEPTIONAL VALUE, CHIEF COMMERCIAL HOPPER TANKS ARE THE SMART CHOICE!

Commercial hopper tanks from Chief Agri offer the same ease of installation and unparalleled strength found in the Chief commercial grain bin line. Engineered from the highest quality materials, they provide the long term reliability and satisfaction you've come to expect from Chief. For wet holding, storage, or load-out, contact Chief to maximize your storage dollars.

### *Up to 60050 bushel capacity (1551 M Ton)*

The exclusive Chief exterior "W" stiffener is almost twice as strong as the closest competing stiffener.

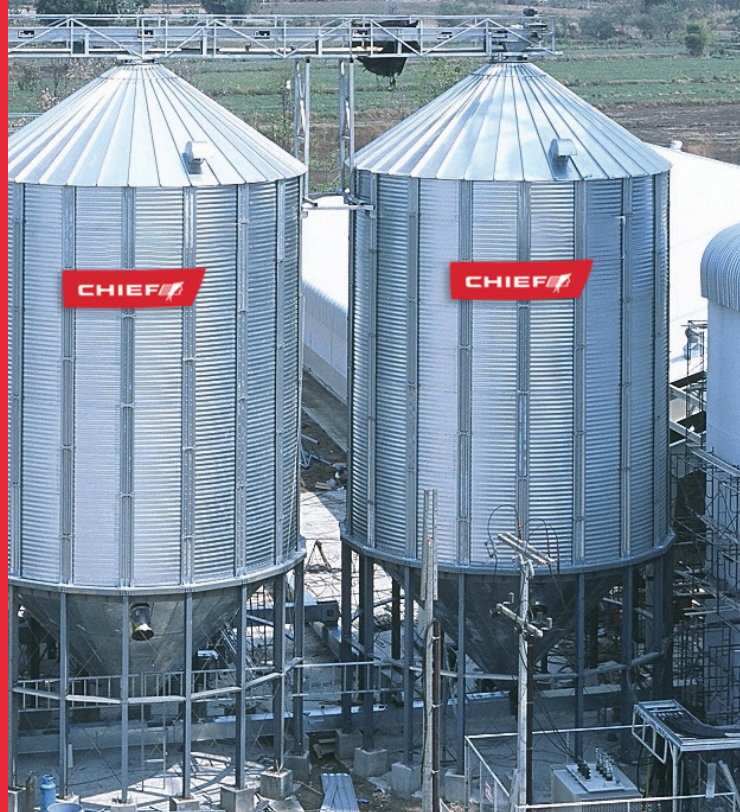
Sidewall sheets are G115 with 70 ksi tensile strength, same as bins.

Chief commercial hopper tanks utilize a standard powder coated or optional hot-dipped galvanized substructure with welded legs and ring beams. A "Super Structure" is available for use in drive-under applications.

G140 (450 g/m<sup>2</sup>) galvanized coating is standard on all roof panels. G115 on sidewalls and stiffeners for superior corrosion resistance.

A 45° bottom hopper cone and a 16" (406 mm) discharge opening are standard with Chief commercial hopper tanks. 60° hopper cone available on certain models.

### *Up to 25,000 lbs. (11340 kg) Peak Load One of the Highest in the Industry!*



## MEDIUM-DUTY HOPPER TANKS

Chief's V-rib roof design uses over 30% more ribs than leading competitors, providing a cover of exceptional strength for smaller bins without a structured roof.

- Easy to install.
- A cost-effective solution built with superior strength.
- Wide range of capacities adaptable for different applications, commodities, and more!





# LEMANCO MODULAR BIN SYSTEMS



***Flexibility,  
Future  
Expandability!***

## **BIN SYSTEMS**

Modular bin options include 6', 7', 8', 10', and 12' (1.83 m, 2.13 m, 2.44 m, 3.05 m and 3.66 m) with half and quarter bin compartments available.

Factory welded one-piece hoppers for 6' - 10' (1.83 m - 3.05 m) require no field assembly. Optional two-piece or bolt-together hoppers are available.

Standard hoppers have 60° slope and internal corner chamfers. Chief welded hoppers do not require field assembly.

Standard man-ways are vented (including filter media and bird screen) and made of galvanized steel.  
*Conforms to NFPA 61 (Section 4.5.4)*

Structural steel supports are designed to meet seismic categories and wind loadings per IBC 2012. All structural members are fully coated. A325 fasteners are included.

## **BIN SYSTEM OPTIONS**

Standard safety equipment includes ladders, cages, platform safety gates, handrails, and optional fall arrest systems that meet OSHA requirements.

Standard suspended weigh hoppers come in 6', 7', or 8' (1.83 m, 2.13 m, 2.44 m) sizes with flare tops or header boxes/covers, including canvas connectors and vents with filters. Support frame, shafts, wheels, and drive package are provided for weigh lorries. Exterior is coated with gray enamel and interior with linseed oil.

Optional stainless steel or epoxy coated bins are available for storing corrosive bulk materials.

Standard adaptors are 2-to-1 and/or 4-to-1, welded and coated with gray enamel on exterior and linseed oil on interior.



# TEMPORARY GROUND STORAGE

## AVAILABLE IN THREE HEIGHTS:

- 1 wall sheet 4' (1.2 m)
- 1 wall sheet 4'4" (1.3 m)\*
- 2 wall sheets 6'8" (2 m)
- 2 wall sheets 7'2" (2.3 m)\*
- 3 wall sheets 10'6" (3.2 m)\*

*\*With perforation and tarp tube*

## TWO STYLES AVAILABLE:

- Vented with perforated screen below the tarp support tube and nail board
- Non-vented with nail board only on 1 and 2 wall sheets.
- Full perforation option on 4' panels

## PAIRED WITH ONE OF THE BEST:

- Caldwell 24" axial fans  
*(Available in 5 hp, 7.5 hp and 10 hp)*

Wall panels are corrugated using G115 70 ksi steel.

Tarp access walkway available for the 2 and 3 sheet versions for OSHA compliance.

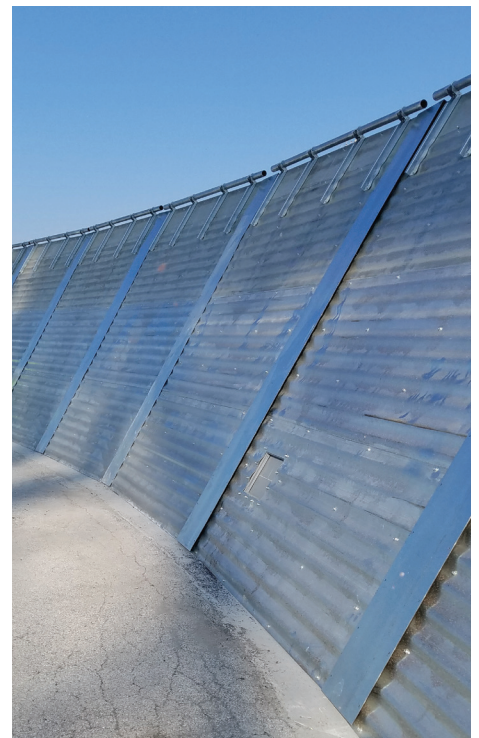
Tarp support tube is standard on 3 sheet models and optional on the 1 and 2 sheet models.

Wall sections are available with bolted aeration transition, eliminating the need to cut or weld in during installation.

**Walls are factory preassembled for rapid field installation.**

Support structure is hot-dipped galvanized.

***Economical Rapid Installation!***





# FANS

## CALDWELL FANS

Safe, reliable, and attractive. With over 55 years of manufacturing experience, Caldwell fans and heaters assure system performance, dependable service, and acceptance throughout the world.

- Galvanized housings
- Motors from industry-leading manufacturers
- Available for 230, 460, or 575 volt 60 hz, and 380 volt 50 hz applications
- CSA approved, PAMI tested
- Meets OSHA standards



### ***Right Fan for the Right Job!***

*Caldwell aeration has been one of the most recognized aeration brands since its founding in 1961.*



## AXIAL FANS

Caldwell axial fans range in diameters from 12" to 28" (305 mm to 711 mm) to fit any application.

- 3500 rpm at 60 hz operation
- Single and three-phase TEAO motors ranging in horsepower from .75 to 12.5
- Heavy gauge galvanized housing built to last

## CENTRIFUGAL FANS

Designed for farm and commercial use. Centrifugal fans operate quieter and allow for easy field upgrades with heaters.

- For deep grain depths, fan operation to static pressures up to 33" water column
- 1750 rpm / 3500 rpm at 60 hz and 1450 rpm / 2900 rpm at 50 hz
- Wheels from 15" to 40" (381 mm to 1016 mm) diameter
- 3 to 100 horsepower models
- Single and three-phase TEFC motors, PTO units available
- 230 volt models are pre-wired for heaters



## IN-LINE CENTRIFUGAL FANS

Compact and quiet, Caldwell in-line centrifugal fans are ideal for medium to high static pressures and allow for easy field upgrades with low temperature heaters.

- Heavy gauge galvanized housings from 14" to 28" (356 mm to 711 mm)
- Wheels from 10" to 20" (254 mm to 508 mm)
- 1 to 15 horsepower models
- Single and three-phase ODP motors





# HEATERS

***Efficiency - Dependability***

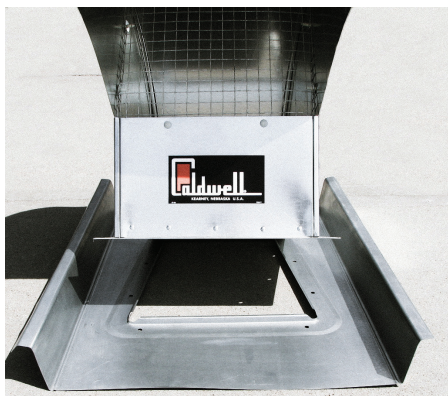
Caldwell heaters are designed to work in combination with axial, centrifugal, or in-line fans. Fueled by natural gas and liquid or vapor propane, Caldwell heaters are available in upstream and downstream models.

- Easy access service door and control box
- Heavy gauge galvanized housings are built to last
- High and low temperature configurations
- Nine models of electric humidity controllers



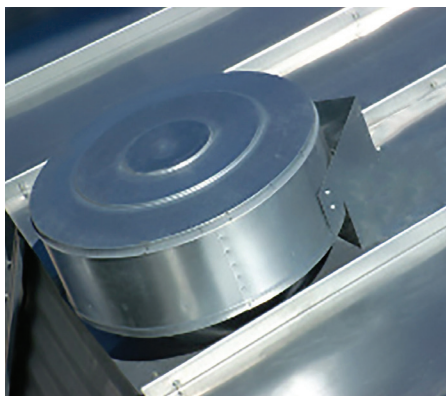
# VENTS

***Caldwell offers one of the industry's most complete exhaust line. All vents install easily and are designed to minimize build-up of ice and foreign materials.***



## **GOOSE NECK VENT**

2670 cfm (4536 m<sup>3</sup>/h) hooded bin vent is 20% larger than standard hooded vents. Pre-punched roof panels make installation quick and easy!



## **MUSHROOM VENT**

3750 cfm (6371 m<sup>3</sup>/h) Caldwell mushroom bin vent is 42.8% larger than standard hooded vents. A rain and snow diverter provides optimum moisture control.



## **ROOF EXHAUSTERS**

18" 4000 cfm (6796 m<sup>3</sup>/h) and 24" 10650 cfm (18094 m<sup>3</sup>/h) (458 mm to 610 mm) roof exhaust fans available.

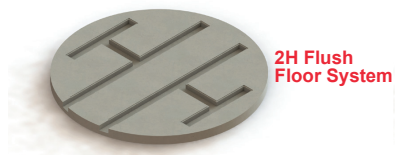


# FLOORS



## CALDWELL FLUSH FLOOR SYSTEMS

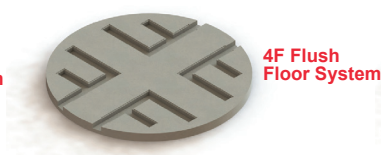
Caldwell Flush Floor Systems are custom designed for each specific application. Choose from a panel grate system, corrugated sheeting system, or channel-lock plank system in the configuration that fits your needs. Available in a variety of sizes up to 10' (3 m) wide, systems are perforated for unrestricted air flow. Caldwell will also design a custom fit to ensure proper air flow. Panel grates are available with I-beam supports (which incorporate a perforated web) for heavier loads. Flush Floor Systems are manufactured with modular components for ease of installation.



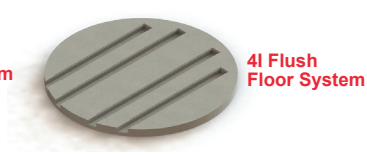
2H Flush  
Floor System



2T Flush  
Floor System



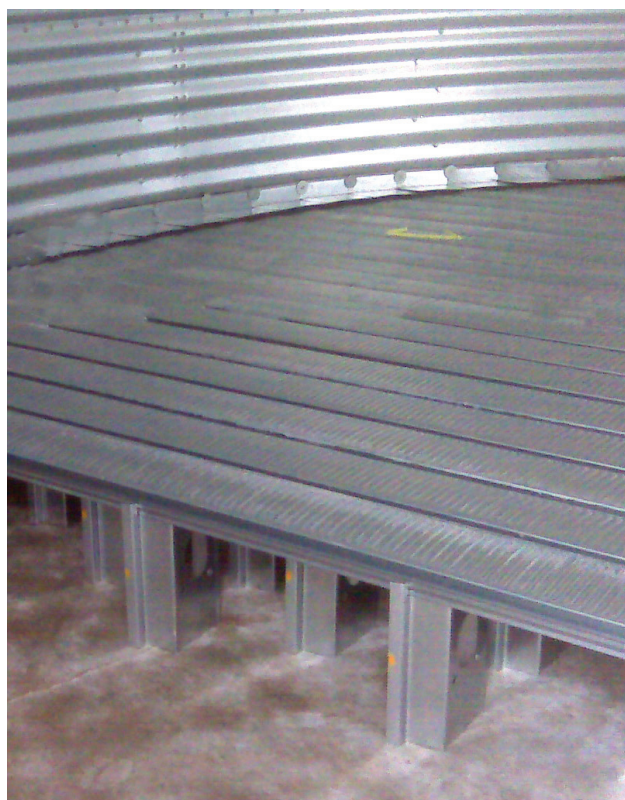
4F Flush  
Floor System



4I Flush  
Floor System

## FULL FLOOR SYSTEMS

Caldwell channel-lock floor systems are manufactured to help maintain the optimum quality of your grain. All channel-lock floor planks are of galvanized steel and manufactured to exacting specifications to insure proper fit, structural integrity, and proper airflow.



## RIGIDITY FOR THE LONG HAUL

***Caldwell Floors are  
engineered to handle grain  
depths of up to 110' (33.52 M)!***

## AVAILABLE FLOOR PERFORATION SIZES PER GAUGE:

### 20 gauge

0.094" (.24 cm)  
0.050" (.13 cm)

### 18 gauge

0.094" (.24 cm)  
0.054" (.14 cm)

### 16 gauge

0.094" (.24 cm)

Floor supports are available in:

### Airframe design

### Channel-lock design

13" (33.02 cm) floor depth  
17" (43.18 cm) floor depth  
16 gauge galvanized material  
18 gauge galvanized material



# CONVEYORS

## **GALVANIZED FOR SUPERIOR CORROSION RESISTANCE**

Chief horizontal chain conveyors come standard with fully galvanized intermediate sections. It can be customized to your application.



***Gentle Handling, Low Horsepower***

## **PRODUCT FEATURES:**

- Horizontal and Incline Conveyors available.
- AR Liners in 10 ga, 7 ga, 1/4" and 3/8".
- High-strength Chains with welded attachments.
- HD UHMW CNC cut replaceable paddles.
- Class II Drives Standard; Class I & III available.
- Large variety of box sizes and chain speeds available.
- Intermediate seams have bolt connections with staggered bottoms to provide a secure joint without the need for welding. The result is a strong connection with superior corrosion resistance.
- Telescoping-type take-up system uses an easy to adjust threaded rod for reliable and accurate belt tracking.
- Reversing conveyors are available.
- Idler return systems are used for smaller conveyors; rail returns are standard on 21" (53.34 cm) and wider conveyors.
- Options available for multiple discharge. Full line of inlets, and sensors.
- Legs and conveyors are also available in stainless steel.
- Capacities up to 40,000 bph (1016 MT/h).

## **SELF-CLEANING CONVEYOR**

Conveyors designed with formed pans that remove areas for material to be left behind by paddles. Paddles sweep along inclined area and move material to the discharge. Great for conveyors handling multiple commodities or feed products.



## **UNDER FLOOR CONVEYOR**

Built with exceptional strength to stand up to high usage. Available in Horizontal or Horizontal Incline Models in 17x09 and 21x09. Designed to fit underneath 17" floor support.





# ELEVATORS

***Full Capacity - Delivered!***

## **HEAVY-DUTY COMMERCIAL ELEVATOR BOOT IS BUILT TO LAST!**

*Standard for 36" (91.44 cm) pulleys and larger*

- Chief's heavy-duty elevator is ideal for extra heavy operations! For use in the largest of commercial grain handling facilities, with features to meet your demands.
- Welded and hot-dipped galvanized frame is constructed with structural angle support and ¼" plates.
- Rack and pinion clean-out doors provide easier access for cleaning the boot.
- Side shovel pocket makes it easy to feed loose grain that may have spilled around the boot area.



## **STANDARD BOOT SECTIONS OFFER ROCK SOLID SUPPORT!**

*Standard for 30" (76.20 cm) pulleys and smaller*

- Inspection doors on each side of the boot section provide access to the heavy-duty drum or self-cleaning winged pulley.
- 45° clean-out sections on the end panels of each boot section are standard.
- Take-up screws are standard.
- Boot shafts for models CBE30 and larger are drilled and tapped for an optional speed monitor.
- Clean-out sections are standard on each end of the boot.
- Factory precut openings for rub bar monitors.

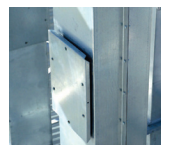


## **ELEVATOR TRUNK SECTIONS INSTALL EASILY!**

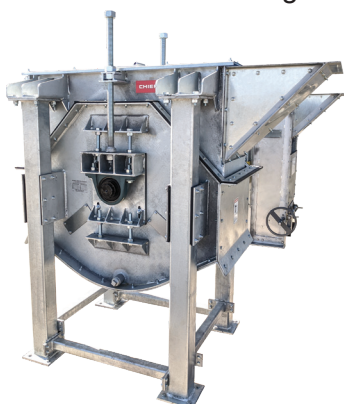
- Ceramic and urethane lining optional, explosion vents are optional on 20'-0" (6.10 m) centers in the up and down leg trunking.
- Inspection sections have heavy-duty welded frames with removable panels for easy belt and bucket maintenance.
- Polyethylene buckets are standard. Steel, stainless steel, urethane, or nylon buckets are optional.
- Urethane-lined discharge hoppers are available for smaller models and standard on larger models.



Polyethylene Buckets



Explosion Venting



## **SELF CLEANING BOOT**

- Available in Hot Dip Galvanized Finish Or Stainless Steel
- Available in Standard Drum Or Wing Pulley Configurations



# CATWALKS & TOWERS

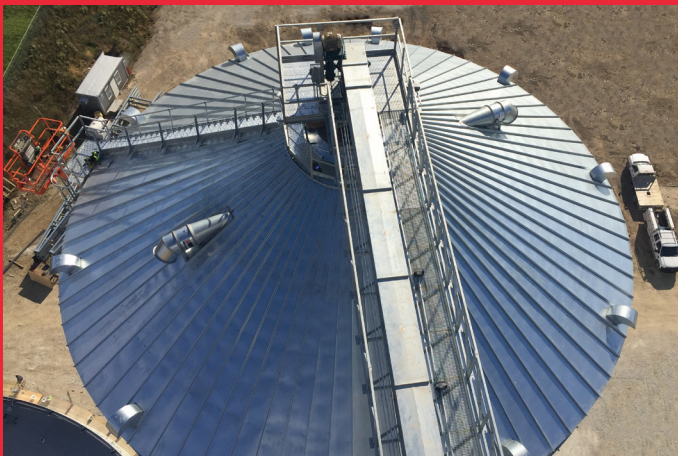
***Long Life, Professionally Engineered***

## **PROJECT SPECIFIC DESIGN**

Your Catwalks and Tower Systems are manufactured by Chief Agri, whose dedication to customer service and reputation for manufacturing quality grain storage and handling systems is recognized worldwide.

**Here are a few of the reasons why Chief Catwalks and Tower Systems are right for your grain handling system:**

- All components are hot-dipped galvanized
- Fully bolted assembly
- Square tubing design assures optimal strength
- Multiple catwalk models and tower widths to accommodate your grain system needs





# CHIEF CD CONTINUOUS MIXED FLOW DRYER



*Higher Quality End Product!*

## **THE CHIEF CD CONTINUOUS MIXED FLOW DRYER IS USED AROUND THE WORLD!**

With standard dryer capacities ranging from 355 to 11340 bushels/hour (9 MT to 288 MT), Chief CD Dryers are used for a wide variety of commodities including wheat, corn, rice, coffee, cocoa, canola, sunflowers, and more. The requirements of your dryer will be carefully assessed, assuring you of operation regardless of most environmental conditions, including extreme climates.

## **TOUCHSCREEN OPERATION**

PLC is individually programmed for each specific installation to control both the dryer and auxiliary equipment on the grain facility, such as gates, conveyors, and elevators.

## **EASY INSTALLATION**

Chief CD Dryers are shipped in preassembled modular units and feature completely bolted construction.

## **REDUCED MAINTENANCE**

The Chief CD Dryer requires minimal cleaning and maintenance resulting from its 'clean' design inside and out.

## **CONSISTENT UNIFORM AIRFLOW**

Chief CD Dryers assure even temperature and airflow for optimum drying results.

## **BUILT FOR YEARS OF CONTINUOUS USE**

Chief CD Dryers are constructed of high quality galvanized steel, with its exterior covered in painted galvanized sheeting to add many years of dependable service. All components are engineered for maximum longevity.

## **ECOGUARD DUST FILTRATION**

Chief offers dust suppression with optional dust fans for filter pod systems. Filter pods are located in the exhaust air column. As air passes through a filter medium it captures material from the air before it is exhausted out of the dryer.

## **ENVIRONMENTALLY CONSIDERATE**

Our team of dryer experts will carefully consider the environmental concerns of your specific locality, including the height, noise, dust, color, or air quality.



# CALDWELL DRYER

## CALDWELL CONTINUOUS MIXED-FLOW DRYERS YIELD BIG BENEFITS

Continuous Mixed-Flow Dryers are used for drying commodities such as corn, wheat, soybeans, and rice. They hold a reputation for durability, energy-efficiency, dependable performance, and advanced technology.

### MODULAR DESIGN

Modular construction allows for the sections to be delivered in stages and offers attractive time and cost-saving assembly.

### GREATER ENERGY EFFICIENCY

Caldwell Mixed-Flow Dryers provide 40-45 cfm of air per bushel.

### CONVEYANCE UNLOAD SYSTEM

Caldwell Mixed-Flow Dryers are unloaded by twin drag conveyors (one per column) and powered by a single drive.

### FAN-UNDER MIXED-FLOW DRYERS

The fan-under Continuous Mixed-Flow Dryer offer capacities of 1150 bph (29 MT/h) to 7000 bph (178 MT/h) (5 point dry and cool).

### MAXON BURNERS

Fuel-efficient Maxon Burners accept propane or natural gas. Single burner, gas train, and ignition are standard on all models.

### DRYER MASTER® MOISTURE SENSORS

With the Caldwell Continuous Mixed-Flow Dryer and Dryer Master's® grain moisture technologies, the guesswork of drying is eliminated.



### *Capacities up to*

7000  
bph

at 5%  
Removal

15-20%  
Based on corn

### REMOTE TOUCH SCREEN CONTROL PANELS

The interactive control panel allows for ease of operation. Only a few settings need to be made prior to operation.



### HONEYCOMBED DUCTS

Rather than the conventional screen drying method, grain is gravitationally separated and continually mixed as it cascades and gently tumbles around honeycombed ducts. The larger holding capacity allows grains to be tempered and heated slowly. Longer retention time and gentle heating reduces the likelihood of grain cracking due to stress.

### PRESERVES GRAIN QUALITY

The Continuous Mixed-Flow technology dries grain uniformly with less dispersion of outlet grain moisture. This results in grain of higher quality, improved test weight, and better storability.





**CHIEF**   
**AGRI**

A division of CHIEF INDUSTRIES, INC.  
4400 East 39th Street  
P.O. Box 848  
Kearney, NE 68848-0848 USA  
Phone +1 (800) 359-7600

[agri.chiefind.com](http://agri.chiefind.com)





*Trusted. Tested. True.®*

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