

Kitchen Countertop Series

**Corfab™**  
**Tenoners & Shapers**

**MA** MIDWEST  
AUTOMATION

*Innovative Products for Innovative People*

midwest   
GROUP ONE

# Corfab™ Machines

## Model CF 1540

The Midwest Automation family of Corfab™ machines are uniquely designed for the production kitchen countertops, bartops, and vanities from particle board, plywood or MDF substrates, in high volume production environments.

The Corfab™ CF 1540 is a double-sided, entry level kitchen countertop machining center designed to automatically feed and glue pre-cut solid wood, particleboard, MDF or composite build-down, scribe and/or no-drip sticks to the panel in a continuous operation.

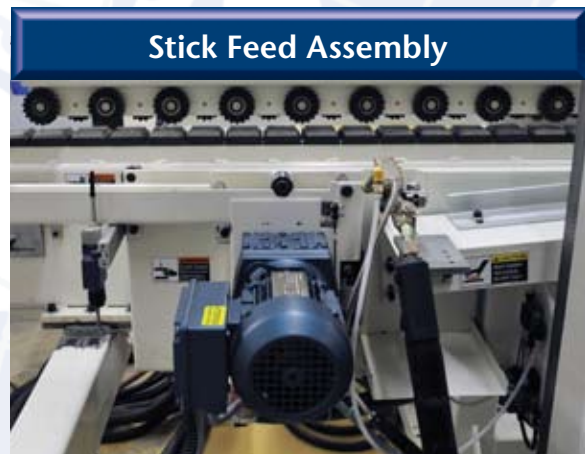
Once the sticks are glued and bonded to the core, the panel continues through vertical and/or horizontal shapers where the edges are machined to the desired profile. Vertical spindle shapers, with 220 mm long shafts and stacked tooling allow multiple profiles to be produced with minimum set up. The unique 2 to 1 ratio center drive design provides a right hand or left hand fixed side for inline operation.

### Features Include

- Compact, double-sided design with center drive
- Heavy duty welded frame with unique 2 to 1 ratio fixed side design
- Transport chain assembly with 3-3/16 inches wide carrier blocks
- Rubber drive pads vulcanized to steel plate & mechanically fastened to carrier blocks
- AC drive motor coupled directly to drive sprocket
- Electronic variable speed control with digital display
- Upper beam with double rows of 2-3/4 inch diameter hold-down wheels
- Power width adjustment with high-speed ball screws & linear bearings
- Hand-wheel operated upper beam adjustment with dial indicator
- Two (2) double cast-iron columns per side with machined dovetail slides
- Sizing, milling & shaping units include horizontal & vertical adjustment on dovetail slides
- Sizing/milling/shaping units are tiltable from 0 to 180 degrees
- Spindle motor sizes up to 10 hp (7.7kw) & shaft lengths up to 8-5/8 inches
- Operator Interface (HMI) PLC controls



Infeed wheel conveyor with overhead rack for staging build-down, scribe and no-drip sticks.



Stick feed drive motor(s) automatically aligns and feeds build-down and scribe sticks onto the bottom of the core.



*Shown with gravity infeed and outfeed conveyors with standard Nordson Durablue™ Hot Melt System*

**Plus**

- Automatic build-down & scribe stick system
- Optional no-drip stick system
- Nordson Durablue™ hot melt system
- Special infeed & outfeed conveyors
- Overhead stick rack mounted over infeed conveyor
- Optional carbide & diamond tooling packages



**Typical Profiles**



**No-Drip Feed Assembly**

Optional No-Drip Stick System with pneumatic clamping.



**Hot Melt Dispenser**

Aligns sticks precisely to the edges of the core.

# Corfab™ Machines

## Model CF 1545

*The Corfab™ CF 1545 is the next step in simplifying the kitchen countertop manufacturing process. The CF 1545 is a double-sided, kitchen countertop machining center, designed to automatically cut particleboard sticks from the edges of the core, while simultaneously feeding, gluing and clamping them to the top and/or bottom of the core, in a continuous operation.*



### CF 1540 Features Plus

- Infeed sizing saw units with custom engineered cutter head assemblies
- Optional infeed end milling units to machine relief cuts and/or dados
- Automatic build-down & scribe stick system
- Optional no-drip stick & cove stick systems
- Nordson Durablue™ hot melt system
- Special infeed & outfeed conveyor systems
- Optional automatic panel feeders
- Optional pick & place loading systems
- Optional electronic motor brake kits
- Optional carbide & diamond tooling packages

*Shown with optional PF 1512 Panel Feeder, powered outfeed roller conveyor and Nordson Durablue™ Hot Melt System*

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Vertical spindle shapers, with 220 mm long shafts and stacked tooling, allow multiple profiles to be produced with minimum setup. The unique 2 to 1 ratio center drive design provides a right hand or left hand fixed side for inline operation.



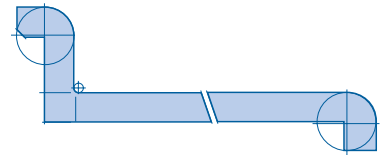
Optional infeed end milling units can mill relief cuts or dado recesses into the core to enhance the profile look and durability. Once the sticks are glued and bonded to the core, the panel continues through vertical and/or horizontal shapers where the edges are machined to the desired profile.

### Vertical Spindle Shaper

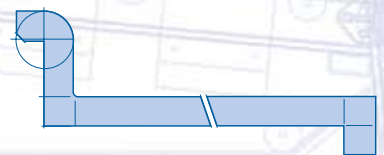


Vertical spindle shaper with stacked tooling to reduce setup.

### Typical Countertop Profiles



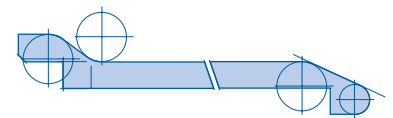
Where simplicity in design is required without a square edge look.



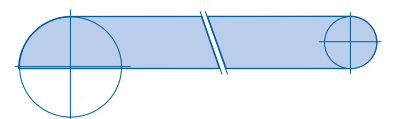
Self edge profile with 'coved' backplash.



A profile that blends functional features with European elegance.



"Comfort Edge" profile with European backplash.



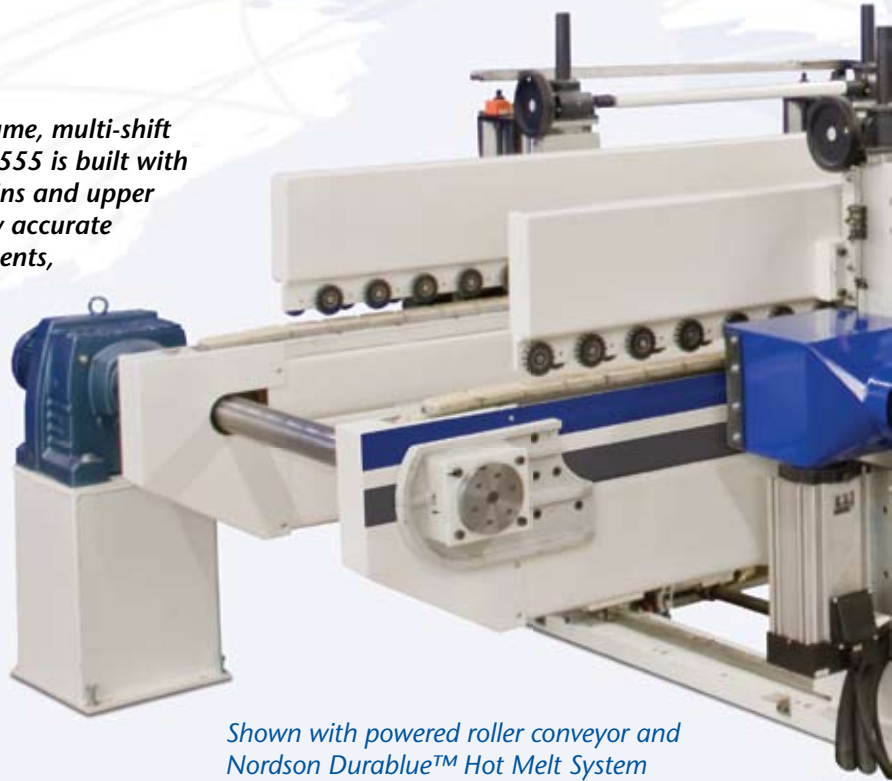
Flat panel with profiled edges.

# Corfab™ Machines

## Model CF 1555

*The Corfab™ CF 1555 is designed with the high volume, multi-shift kitchen countertop manufacturer in mind. The CF 1555 is built with two, heavy duty, double end tenoner type drive chains and upper hold-down beams, required to produce an extremely accurate countertop core in demanding production environments, while providing years of dependable service.*

*Automatic panel feeders, two and three column configurations, and electronic positioning systems, with optional bar code capability, enable you to produce a wide variety profiles in-line, without production delays caused by costly setup changes.*



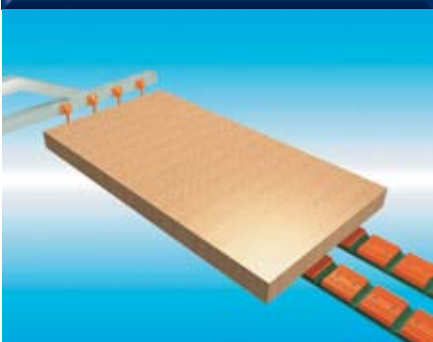
*Shown with powered roller conveyor and Nordson Durablue™ Hot Melt System*

### Features Include

- Welded steel frame made from heavy walled structural tubes for maximum rigidity
- Two (2) heavy-duty, double end tenoner type chain assemblies with cast iron chain links
- AC drive motor coupled directly to drive shaft
- Electronic variable speed forward/reverse drive
- Two (2) upper beams with double rows of hold-down wheels
- Power width adjustment with high speed ball screw & linear bearings.
- Hand-wheel operated upper beam adjustments
- Two (2) & three (3) double cast iron column configurations per side with machined dovetail slides
- Sizing/milling & shaping units have horizontal & vertical adjustments on dovetail slides
- Sizing/milling & shaping units are tiltable from 0 to 180 degrees
- Spindle motors up to 10 hp (7.5 kw) & shaft lengths up to 8-3/4 inches
- Operator interface (HMI) PLC controls
- Optional carbide & diamond tooling packages
- Optional electronic & pneumatic positioning systems

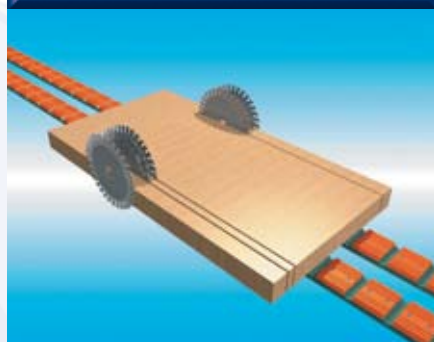
### HOW IT WORKS

#### Panel Feeder



Panels can be automatically fed into the machine.

#### Sizing Saw Units



Panels are sized and sticks cut from the panel's edge(s).

#### Milling Units



Relief cuts can be milled into the top and/or bottom of panel for recessing sticks.

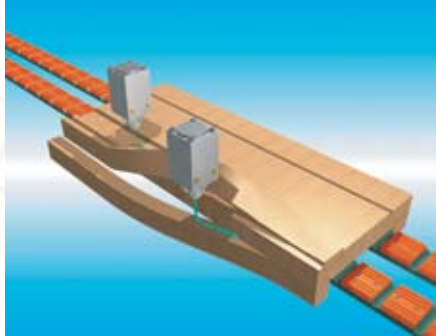


**Main Drive Assembly**



Dual chain assemblies and (2) upper hold down beams.

**Hotmelt Adhesive System**



Hotmelt adhesive or PUR glue is applied to the panel and sticks.

**Stick Clamping System**



Sticks are directed to top and/or bottom of panel and clamped until bond is completed.

**Shaping Units**



Profiled edges are shaped and can be sanded for completed panels.

## Close up shots & accessories

### Control Panel



Operator interface (HMI) with color monitor for ease of operation.

### AC Drives



Optional AC drives and electronic motor brakes.

### Chain Assembly



CF 1555 chain assemblies utilize cast iron chain links, needle bearings and full friction rubber pads.

### Power Width Adjustment



Power width adjustment with linear bearings and precision acme screws.

### Upper Beam Adjustment



Optional handwheel operated upper beam adjustment with digital readout.

Note: Standard on CF 1555

### Transport Chain



Transport chain assembly with upper hold-down wheels.

### Stick Gluing Assembly



Electro/pneumatic controlled glue dispensing heads with adjustable flow controls.

### Stick Clamping System



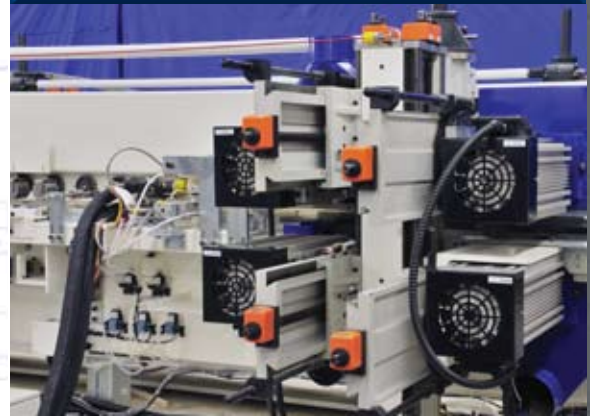
Spring-loaded stick clamping system aligns and holds sticks to the edges of the core.

### Cast Iron Column



Double cast iron columns with machined dovetail slides and individual dial indicators.

### Sizing/Cutting Units



Infeed sizing/cutting saw units with precision 2-axis adjustment.

### Outfeed Shapers



Horizontal and vertical spindle shapers on dovetail slides.

### Cutter Head Assembly



Cutter head assembly with sizing saws engineered to specific customer requirements.

# Corfab™ Machines

## Model CF 1515

*The Corfab™ CF 1515 is a compact, double-sided, sizing/shaping machine that is designed for in-line dimensioning and profile shaping wood parts such as work surfaces, kitchen countertops, door and drawer fronts, and other furniture components. Made for heavy work loads where through-put and accuracy are a priority, the CF 1515 is a great alternative to a double-end tenoner which is often cost prohibitive.*



### Features Include

- Compact, double-sided design with center drive
- Heavy duty welded frame with unique 2 to 1 ratio fixed side design
- Transport chain assembly with 3-3/16 inch wide carrier blocks
- Rubber drive pads vulcanized to steel plate & mechanically fastened to carrier blocks
- AC drive motor coupled directly to drive sprocket
- Electronic variable speed control
- Upper beam with double rows of 2-3/4 inches diameter hold-down wheels
- Power width adjustment with high-speed ball screws & linear bearings
- Hand-wheel operated upper beam adjustment
- Two (2) double cast-iron columns per side with machined dovetail slides
- Sizing, milling & shaping units include horizontal & vertical adjustment on dovetail slides
- Sizing/milling/shaping units are tiltable from 0 to 180 degrees
- Spindle motor sizes up to 10 hp & shaft lengths up to 8-5/8 inches
- Operator Interface (HMI) PLC controls

### Main Drive Motor



AC drive motor coupled directly to drive sprocket.

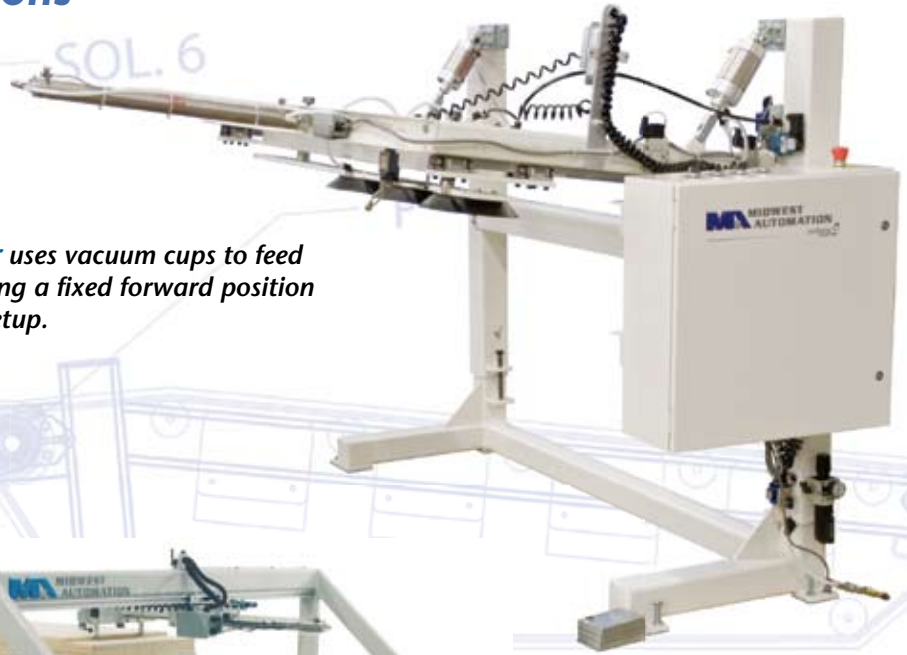
### Double Column



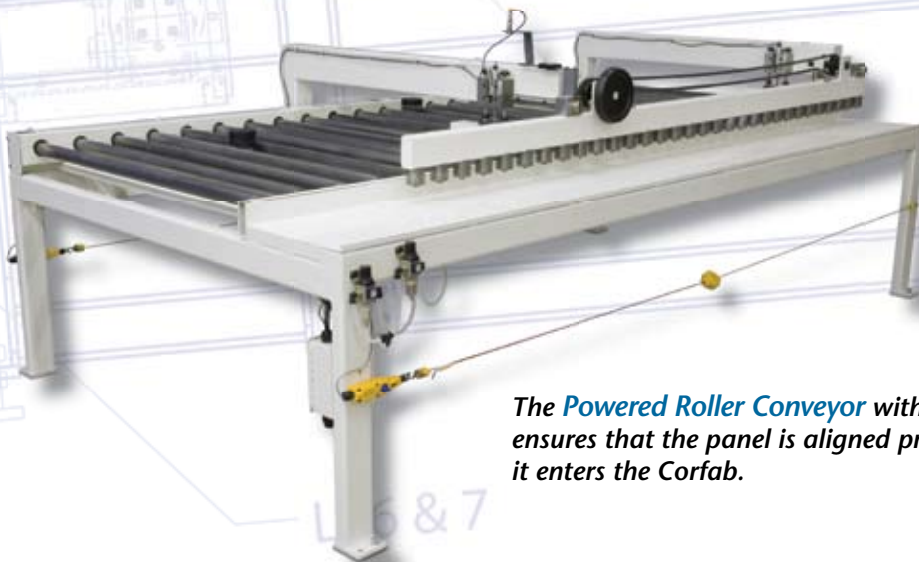
Double cast iron column with sizing and shaping units.

## Panel Feeding Options

*The PF 1500 V Panel Feeder uses vacuum cups to feed random panel lengths utilizing a fixed forward position from a scissors lift without setup.*



*The PF 1512 P Panel Feeder uses a pneumatic pusher to feed panels of a given length from a scissors lift. Panel lengths can be manually adjusted.*



*The Powered Roller Conveyor with pneumatic hold-over device ensures that the panel is aligned properly to the fixed side as it enters the Corfab.*

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