GOMACO Corporation pioneered the development of the first cylinder finisher over 50 years ago. The late Harold W. Godberson, founder of GOMACO Corporation, developed and manufactured a bridge deck finisher to meet the growing needs for bridge markets. Considered to be a milestone, the cylinder finisher made GOMACO a recognized name in the construction industry.

Today, GOMACO cylinder finishers are designed for versatility with the C-450 and C-750. They are easy to operate and save time and labor costs on all of your concrete finishing projects.

Pin-connected sections provide fast setup time and the versatility to fit exact job requirements. The C-450 frame widths range from 12 feet (3.66 m) to 104 feet (31.7 m), with transitional framework attached. The C-750 frame widths range from 16 feet (4.88 m) to 160 feet (48.77 m).

**Bridge Deck Finishing**

GOMACO has the proven bridge deck finishers. All-welded steel construction provides the sturdiest, yet most lightweight finishers on the market.

**Strictest Tolerances**

GOMACO finishers assure you less than one-eighth inch (3 mm) tolerance in 12 feet (3.66 m) while finishing high-slump or low-slump concrete.

**Crown Adjustment**

GOMACO offers optional hydraulic power transition adjusters (PTAs) for on-the-go crown elevation changes made from the operator’s console. PTAs may be installed at pin-connected points.

The C-450 finishes a 48 foot (14.63 m) wide bridge deck with a thickness of 20 inches (508 mm).

The C-450 is equipped with a power transition adjuster (PTA), allowing changes in crown elevation on-the-go, and an adjustable auger to level the concrete ahead of the finishing cylinders.
The C-450 with a PTA is finishing a 225 foot (68.58 m) long by 44.5 foot (13.56 m) wide bridge deck.
This C-450 is finishing a 38 foot (11.58 m) wide, 5.5 inch (140 mm) thick overlay in New York, U.S.A. The concrete they are using contains microsilica, which makes the concrete very sticky, but the external vibrating double-cylinder undercarriage handles the concrete extremely well.

The GOMACO finisher features the optional fogger system, which is a mister stationed ahead of the cylinders. This allows a smooth finish from the machine, with minimal hand finishing for the crew. A turf drag is also used on this project to texture the concrete after each pass.

This project has very tight working conditions with only six inches (152 mm) of granite curb to run the rails on for the bogies. The machine’s legs were raised so the machine was five feet (1.5 m) in the air, which helps keep the machine cleaner and makes it easier for the crew to work around the machine. Since the machine is raised higher than normal, a 36 inch (914 mm) lowering kit is needed for the carriage to reach the concrete.

The C-450 works on one side of the bridge while the other side has live traffic running at speeds up to 70 mph (112.7 kph). Pump truck access is a challenge, as well, because of the fast-paced traffic. This pour is done with a pump truck stationed underneath the bridge.
The C-450 is equipped with transitional framework and two undercarriages to finish a bridge deck. The GOMACO machine also features adjustable augers and pan-type vibrators on each undercarriage. The GOMACO cylinder finisher is followed by a powered Spanit® Work Bridge.
Pan-Type Vibrator
The hydraulic pan-type vibrator is used for latex overlay applications.

Vibrating Finishing Cylinder(s) for Low-Slump and High-Density Overlays
The GOMACO single and double vibrating cylinders are designed for low-slump and high-density overlays. The system is the only cylinder finisher available that compacts and consolidates material with cylinder vibration. This means total versatility for your finisher, allowing you to finish low-slump and high-density overlays, including microsilica overlays.

Variable settings allow adjustments for frequency of vibration for various mix designs. The vibrating cylinders are capable of 6700 vibrations per minute to meet the strictest specifications. This allows you to obtain required density and finishing specifications on overlays. The single and double vibrating cylinders are available for the complete line of GOMACO finishers.

Fogger System
The optional fogger system for the GOMACO cylinder finishers is a set of mister bars mounted to both sides of the undercarriage, ahead of the finishing cylinder(s). This helps keep the concrete from sticking to the cylinders during finishing in order to create a smooth finish.

A GOMACO C-450 is using a pan-type vibrator and double cylinders to provide a smooth finish on a latex overlay.

The above C-450 is using the pan-type vibrator extended in front of the adjustable augers.

The 24 inch (610 mm) long adjustable augers are an optional attachment for maximum leveling capabilities.

The 24 inch (610 mm) long adjustable augers are an optional attachment for maximum leveling capabilities.

The C-450 is followed by a Spanit® Work Bridge on a polymer overlay project.
Skewed Carriage
A 360 degree turntable on the upper carriage allows maximum skewing of the undercarriage to keep the finishing cylinder parallel to the center of the slab. Automatic advance on the C-450 allows the machine to automatically advance to any pre-set distance at the end of each carriage pass. As the machine advances, the undercarriage can change its attack angle and concrete finishing resumes.

An overhead drawing of a GOMACO C-450, shows how the undercarriage is parallel to the rails with the machine set up for a skewed project.

GOMACO’s Patented Three-Point Finishing System
With the GOMACO patented three-point finishing system, the auger serves to level the concrete, the cylinder consolidates and finishes the concrete, and the float pan seals and textures the surface.

Using the 10 inch (254 mm) diameter auger, the same diameter as the cylinder, assures proper leveling and grade preparation for the finishing cylinder. The auger is hard faced for a greater life span. The auger and cylinder are adjustable in height on-the-go by raising or lowering the front elevation jacks.

The final step in the three-point finishing method is the 25 inch (635 mm) by 22 inch (559 mm) GOMACO float pan, which follows the cylinder and seals and textures the surface. Adjustable, double, 10 inch (254 mm) diameter cylinders and 7.75 inch (197 mm) augers and a double float pan are available.

High Production Finishing
The GOMACO finisher is equipped with adjustable augers, double-cylinders, and dual finishing pans to create a smooth finish. This machine was also equipped with the fogger system and an Astroturf drag for texturing on a 56 foot (17.07 m) bridge deck.
More Reasons to Choose GOMACO Finishers

PTA - The power transition adjuster (PTA) allows for smoother operating for on-the-go crown adjustments. The PTA is designed to transfer the load throughout the frame.

Eight-Roller Carriage System - The eight-roller carriage system is designed to move smoothly through crown adjustments and rail joints on flat or crown finishing. Rollers are CNC-machined steel wheels with maintenance-free sealed roller bearings. Adjustment of all rail pinch rollers is quick and easy.

Features for the Operator’s Platform -
- The operator’s platform is designed for strategic positioning, providing excellent visibility for the entire finishing operation.
- Operator access from either the front or end of the machine.
- Easy access to the engine compartment.
- Better clearance for the carriage and attachments.
- It can be positioned at either end of the machine.

The operator on a GOMACO finisher can view where the carriage(s) and crew members are during paving to ensure efficiency and safety.
Double Float Pan - The double float pan with jack designed with complete interchangeable capabilities or additions to the finishing system setup. The common beam design allows for adjustment in applications with any number of finishing systems.

Double Vibrating Cylinders - The vibrating double-cylinders compact the concrete while leveling it out during the finishing process. The vibrating cylinders are isolated from the machine, so only the cylinders receive the vibration and not the machine.

Vibrating Cylinders - The vibrating double-cylinders compact the concrete while leveling it out during the finishing process. The vibrating cylinders are isolated from the machine, so only the cylinders receive the vibration and not the machine.

Adjustable Augers - GOMACO’s adjustable auger attachment is designed to be attached ahead of the finishing cylinders for full strike-off control. Quick, easy, and accurate grade adjustments can be made with the adjustable augers. The double-wrap augers are 7.75 inch (197 mm) diameter by 24 inches (610 mm) long with a three inch (76 mm) pitch. The augers can be quickly adjusted to one inch (25 mm) above or below the finishing cylinders.

Rotating Stinger Vibrator Rotates 180 Degrees - The GOMACO stinger vibrator attachment automatically rotates 180 degrees at the end of each pass. This keeps the vibrator pulling through the material with the eccentric always trailing and provides vibration to the end of the pass. The angled vibrator allows for maximum depth consolidation. This single vibrator system eliminates the expense of a double vibrator system and the need for double hydraulics.

Widening Jackmount Assemblies - Offset rollers balance the load on all four rollers to eliminate binding and to roll more efficiently. The widening jackmounts have better engagement since the rollers sit over the top edge of the angle iron. This helps hold the jackmounts in place and keeps them from moving back and forth on the frame. All jackmounts have built-in self-locking capabilities to lock the jack into place anywhere along the rail, and are designed for better weight distribution. Self-widening jackmounts can be turned into the optional power widening jackmounts for enhanced widening capabilities.

Vibrator Assembly - The vibrator mounting assembly for the adjustable pan or rotary stinger vibrator is designed to be attached in any position. The pan vibrator can be quickly adjusted to one inch (25 mm) above or below the finishing cylinders.
GOMACO originated and patented the cylinder finisher concept in the early 1960s and pioneered the bridge deck finisher. Building on five decades of engineering and manufacturing experience, our engineers have designed the C-450 with the belief that the finisher is an example of the best getting even better. The C-450 features easy operation, ultimate reliability and value, and enhanced serviceability with added safety.

**Easy Operation**
- Operator enhanced monitoring of machine functions with panel mounted bogie and carriage circuit pressure gauges, oil filter restriction gauge, hydraulic oil temperature gauge, hour meter, and circuit gauges.
- Reorganized plumbing and hose routing for ease in setup and operation.
- Automatic advance is standard on the C-450 and automatically advances any pre-set distance at the end of each carriage pass.
- Self-widening will control the carriage travel distance through the use of proximity switches for widening or tapering of decks.
- Urethane coated wheels with removable flanges for multiple applications.
- Powered widening for maintaining crown position on tapered decks.
- Power transition adjusters (PTA) can be installed at pin-connected points and are hydraulically operated for on-the-go grade elevation changes.

**Ultimate Reliability and Value**
- Features the hydraulic plumbing with crimp-style hydraulic hoses with O-ring face seal fittings and adapters.
- The locking shroud also provides quiet operation and theft protection for security from vandalism.
- All previous style undercarriages and attachments will fit on the upper carriage of the C-450.
- The GOMACO frame design has been maintained for interchangeability with your existing C-450 framework.
- The C-450 features a 36 inch (914 mm) wheelbase for improved distribution of the wheel load.

**Enhanced Serviceability**
- The fuel tank has a large capacity for extended operation.
- Easy access to daily service points.
- Self-monitoring restriction gauge on oil filter to ensure proper maintenance and serviceability of the system.
- Features an environmentally friendly, industrial seven micron filter system with restriction gauge.
- All engine service points can be accessed from the right side of the console. The molded fiberglass engine shroud is lightweight and allows quick and easy access.

**Added Safety**
- Easy to remove roto-molded fenders to access bogie wheels and drive components.
- Emergency stop buttons are strategically located on both the console and carriage. Additional emergency stop buttons are available for providing optimal use for specific applications.
- Rear console exhaust is directed away from the operator.
- The operator’s station is positioned to provide high visibility of the entire operation.
Two C-450s work side-by-side with two concrete pumper trucks to finish this bridge deck.
C-450 Cylinder Finisher Specifications

ENGINE (2)
Type: Kohler, air-cooled gasoline.
Horsepower: 18 hp (13.4 kW) @ 3000 rpm.
Electric Start: 12 volt start motor with a 25 amp regulator-rectifier.

SERVICE CAPACITIES
Hydraulic Oil: Carriage 9 gal. (34 L). Console 15.3 gal (57.9 L).

CONSOLE
Self-Contained: Hydraulic console with easy-to-operate controls, including variable travel. Can be positioned in other locations on the main frame for operator safety and convenience.
Carriage Drive: Designed for operator ease in controlling travel speed and direction of the carriage.

TRACTION SYSTEM
Traction Drive: Two drive and two idler bogies standard. Drive bogies include two hydraulically-driven flanged wheels, 3.25 in. (83 mm) wide for 2 in. (51 mm) square tube. Optional cupped or urethane wheels are available.
Traction Speed: Up to 31 fpm (9.4 mpm).

CONSTRUCTION
Frame: All-welded steel, pin-connected main frame.

TRANSPORT ASSEMBLY (optional)
Tires: Two 10 in. (254 mm) x 15 in. (381 mm) wheels with 12-ply tires and removable towing tongue for job site use only.
Hydraulic Vertical Lift: 48 in. (1219 mm).

FRAME WIDTH
Standard 24 in. (610 mm) Deep Frame Assembly: 12 ft. (3.66 m) to 72 ft. (21.95 m).
Frame Transition Extensions: Positioned in the center of the C-450 frame, provides increased frame strength for widths over 72 ft. (21.95 m) up to 104 ft. (31.7 m). Frame transition extensions available in 8 ft. (2.44 m) and 12 ft. (3.66 m) lengths and a depth of 3.5 ft. (1.07 m). Consult factory for machines over 72 ft. (21.95 m) wide.
Note: Finishing width is normally 36 in. (914 mm) less than frame width indicated.

VARIABLE FINISHING WIDTHS
Frame Sizes: The frame is adjustable in 2 ft. (.61 m), 4 ft. (1.22 m), 8 ft. (2.44 m), 12 ft. (3.66 m), or 16 ft. (4.88 m) increments. The C-450 assures a specified tolerance of one-eighth inch (3 mm) in 12 ft. (3.66 m). A self-widening capability provides use on tapered decks and slabs. A 360 degree turntable on the upper carriage allows maximum skewing of the undercarriage to keep the finishing cylinder parallel to the center of the slab.

POWER TRANSITION ADJUSTER (optional)
Hydraulic Operation: Console controlled infinite adjustment for on-the-go crown elevation changes. Power transition adjusters can be installed at most frame pin-connected points.

CARRIAGE/FINISHER ASSEMBLY
Finishing Cylinder: One 10 in. (254 mm) diameter, 48 in. (1219 mm) long.
Optional: Single-cylinder or double-cylinder with either 48 in. (1219 mm) or 60 in. (1524 mm) long cylinders.
Augers: One 10 in. (254 mm) diameter (right-hand) and one 10 in. (254 mm) diameter (left-hand), 14 in. (356 mm) long with auger guard.
Finishing Pan: 25 in. (635 mm) x 22 in. (559 mm) trailing float pan.

TRIMMER UNDERCARRIAGE ASSEMBLY (optional)
Trimmer Wheel: 10 in. (254 mm) x 48 in. (1219 mm) trimmer wheel for fine grading the subgrade.
Tooth Holders: Standard holders with 32 replaceable cutter teeth.

OTHER STANDARD FEATURES
Three console auxiliary hydraulic circuits for attachments.
Automatic advance:
Eight-roller carriage system with rail pinch rollers.
Operator’s platform.

OPTIONS
Engine (2):
Type: Honda, air-cooled gasoline.
Horsepower: 19 hp (14.1 kW) @ 3000 rpm.
Electric Start: 12 volt start motor.
Engine (2):
Type: Yanmar diesel.
Power: 19.9 hp (14.8 kW) @ 3000 rpm.
Power transition adjuster (PTA).
Transport assembly.
Adjustable hydraulic, pan-type vibrator for latex overlay applications or with protruding fin for street work.
Hydraulic, stinger-type vibrator and mount assembly, equipped with bent vibrator which rotates 180 degrees at the end of each pass, to allow vibration close to paving form.
Single-cylinder or double-cylinder undercarriage with 60 in. (1524 mm) long cylinder and external vibration.
Incorporated cylinder lowering attachment.
Hydraulic cylinder lowering attachment.
Main frame extensions.
Adjustable single-auger or double-auger assembly, double-wrap 7.75 in. (197 mm) diameter by 24 in. (610 mm) long augers with a 3 in. (76 mm) pitch. Augers can be vertically adjusted to 1 in. (25 mm) above or below the finishing cylinders.
Four hydraulically powered bogies for all wheel drive.
Third wheel assist bogies, consisting of four single-wheel idler bogies and spreader beam to distribute machine weight.
Bogies with 41 in. (1041 mm) wheelbase.
Spare console, upper and undercarriage assembly.
Additional emergency stop buttons available.
Other options are available to customize machine to accommodate applications and customer needs.
Versatile Frame and Finishing Width...
The frame width for the standard C-450 cylinder finisher is 12 feet (3.66 m) to 72 feet (21.95 m). The frame width on the C-450 with transitional framework is a minimum of 12 feet (3.66 m) to a maximum of 104 feet (31.7 m).
The C-450 with transitional framework - Yellow: standard 24 inch (610 mm) tall C-450 framework and components. Red: transitional framework. Blue: 42 inch (1067 mm) tall framework.

**GOMACO Bridge Deck Finishers - Available with Transitional Framework and Third Wheel Assist**

The transitional framework is a design option for the GOMACO C-450 cylinder finisher that provides faster assembly and weight savings compared to wider-width finishers requiring an overhead truss system. The new frame features transition sections connecting the C-450’s standard 24 inch (610 mm) tall framework to the 42 inch (1067 mm) tall framework used on a C-750 finisher. The frame sections only need to be pin-connected and the cross arms bolted in place.

The transitional framework sections can also be removed and the C-450 can finish at smaller widths with its standard 24 inch (610 mm) framework. The framework allows the versatility of two finishers in one for the narrower or wider widths. The transitional framework can be added to new or existing C-450s.

GOMACO’s line of bridge deck finishers is also available with the optional third wheel assist on the standard bogies to further distribute the machine’s weight while traveling on the rails. The optional third wheel assist bogies, on each side of the finisher, consist of two single-wheel idler bogies attached to the spreader beam. It’s a simple modification that can be made to any C-450 or C-750 to help spread the weight out and reduce the wheel load on the overhang brackets.

The C-450’s transitional framework allows for wider finishing. It has a quick assembly time since the frame sections only need to be pin-connected and the cross arms bolted into place.
A C-450 with transitional framework finishes a bridge deck on a skew with its double-cylinder carriage and a four inch (102 mm) crown built-in with a power transition adjuster (PTA).
Wider Width Finishing

- The C-750 provides high-production results with one-pass finishing for wider widths. Pin-connected sections provide fast setup time and the versatility to fit exact job requirements with frame widths ranging from 16 feet (4.88 m) to 160 feet (48.77 m).

- The C-750 features a 41 inch (1041 mm) wheelbase. The larger bogie drive motors are geared down to allow for continuous creeping advance.

- The console and operator’s platform are designed to be positioned anywhere within the 3.5 foot (1.07 m) deep framework sections, providing excellent operator visibility.

The GOMACO C-750 with a power transition adjuster (PTA) is finishing a bridge deck. It is followed by a powered Spanit® Work Bridge.
This GOMACO C-750 uses two, three-point finishing carriages for maximum efficiency to pave both sides of a bridge deck. The left carriage has the adjustable double augers and the right carriage has the standard augers, which operate ahead of the finishing cylinders.
C-750 Cylinder Finisher Specifications

ENGINES (2)
Type: Kohler, air-cooled gasoline.
Horsepower: 18 hp (13.4 kW) @ 3000 rpm.
Electric Start: 12 volt start motor with a 25 amp regulator-rectifier.

SERVICE CAPACITIES
Fuel Reservoir: Console 9 gal. (34 L), Carriage 9 gal. (34 L).
Hydraulic Oil: Console 15.3 gal. (57.9 L), Carriage 9 gal. (34 L).

CONSOLE
Self-Contained: Hydraulic console with easy-to-operate controls, including variable travel. Can be positioned in other locations on the main frame for operator safety and convenience.
Carriage Drive: Designed for operator ease in controlling travel speed and direction of the carriage.

TRACTION SYSTEM
Traction Drive: Two drive and two idler bogies standard. Drive bogies include two hydraulically driven flanged wheels, 3.25 in. (83 mm) wide for 2 in. (51 mm) square tubing or cupped wheels to run on 2 in. (51 mm) pipe. Optional urethane wheels or urethane wheels with removable flanges.
Traction Speed: Up to 31 fpm (9.4 mpm).
Automatic Advance on C-750: Electronically controlled at the end of the finishing pass. As machine advances, the undercarriage can change attack angle and concrete finishing resumes.

FRAME
Frame Construction: All-welded steel, pin-connected, main frame, 16 ft. (4.88 m) to 120 ft. (36.58 m).
Finishing width is normally 4 ft. (1.22 m) less than frame width indicated.

VARIABLE FINISHING WIDTHS
Extendible Frame for Finishing Widths: 4 ft. (1.22 m), 8 ft. (2.44 m), 12 ft. (3.66 m), or 16 ft. (4.88 m) increments. The C-750 assures a specified tolerance of one-eighth inch (3.2 mm) in 12 ft. (3.66 m).
Includes a self-widening capability for use on tapered decks and slabs. Self-widens up to 12 ft. (3.66 m) as machine advances. A 360 degree turntable on the upper carriage allows maximum skewing of the undercarriage to keep the finishing cylinders parallel to the center of the slab.

POWER TRANSITION ADJUSTER (PTA) (optional)
Hydraulically operated for on-the-go crown elevation changes. Power transition adjusters can be installed at most pin-connected points.

CARRIAGE/FINISHERS ASSEMBLY
Finishing Cylinders: Double-cylinder undercarriage with two reversible 10 in. (254 mm) diameter, 48 in. (1219 mm) long cylinders.
Augers: Two augers, one 10 in. (254 mm) diameter (right-hand) and one 10 in. (254 mm) diameter (left-hand) with auger guard.
Finishing Pan: 25 in. (635 mm) x 22 in. (559 mm) trailing float pan.

OPTIONS
Engine (2):
Type: Honda, air-cooled gasoline.
Horsepower: 19 hp (14.1 kW) @ 3000 rpm.
Electric Start: 12 volt start motor.
Engine (2):
Type: Yanmar diesel.
Power: 19.9 hp (14.8 kW) @ 3000 rpm.
Power transition adjuster (PTA).
Transport assembly includes four 12-ply tires and towing tongue for job site use only.
Adjustable hydraulic, pan-type vibrator for latex overlay applications or with protruding fin for street work.
Hydraulic, stinger-type vibrator and mount assembly, equipped with bent vibrator which rotates 180 degrees at the end of each pass, to allow vibration close to paving form.
Incorporated cylinder lowering attachment for single-cylinder and double-cylinder.
Hydraulic lowering attachment for single-cylinder and double-cylinder.
Main frame extensions.
Single-cylinder undercarriage, 10 in. (254 mm) diameter, 48 in. (1219 mm) long.
Single-cylinder undercarriage, 10 in. (254 mm) diameter, 60 in. (1524 mm) long.
Adjustable augers for double-cylinder, two 7.75 in. (197 mm) diameter double pitch augers with manual vertical adjustment.
60 in. (1524 mm) long by 10 in. (254 mm) diameter cylinder with external vibration for double-cylinder undercarriage and single-cylinder undercarriage.
Double finishing pan assembly.
Trimmer undercarriage assembly with trimmer wheel assembly for fine grading the subgrade.
All bogie drive. Four hydraulically powered bogies.
Third wheel assist bogies, consisting of four single wheel idler bogies and spreader beam to distribute machine weight.
Spare console, upper and undercarriage assembly.
Additional emergency stop buttons available.
Other options are available to customize machine to accommodate applications and customer needs.
Versatile Frame and Finishing Width...
The C-750 cylinder finisher is designed for wider width finishing. The frame transition extensions in the center of the frame provide increased strength for widths over 120 feet (36.58 m) up to 160 feet (48.77 m).
Worldwide Customer Support & Education

Our worldwide distributor network and corporate support team of concrete paving professionals always stand ready to serve and assist you. There is nothing we enjoy more than visiting with you about concrete paving and helping you increase your quality, production, and profits. We understand how important it is for you to make the right purchasing choice in a concrete finisher, the first time and every time.

Our commitment to education, research, and customer satisfaction assures that you have the newest methods and technology for all your applications. Our GOMACO University instructors have provided classroom and hands-on training to thousands of contractors throughout the world. Whether it’s concrete placing, trimming, slipforming, concrete finishing, canal projects and unique waterway projects around the world, we have the machine for you. A fully staffed service department is always on call to help set up, operate, and check the performance of your machine. GOMACO Corporation markets equipment through a global network of distributors with office locations throughout the world.

GOMACO’s state-of-the-art facilities are located in Ida Grove, Iowa, U.S.A. GOMACO also has sales offices located in England, and a worldwide distributor network for sales and services. Only GOMACO offers a complete line of concrete paving and related support equipment. Over 50 different models are manufactured by a dedicated workforce of over 300 full-time employees.

You can always find us at http://www.gomaco.com/resources/finishers.html

The GOMACO C-450 is finishing a unique project, a boat ramp. A coffer dam was built to keep the river back since the ramp starts at seven feet (2.13 m) below water level.