

Columbia

FEED DRAWER

Columbia Machine's Informational Publication

Volume 58 Issue 1

www.colmac.com

2015

UNACEM &
UNICON

pg.7

CONEXPO
CON/AGG

pg.9

Cowra
Concrete
Products

pg.19

TECH
TIPS 
pg.26

Continuing Excellence
Through Innovation



EVERYTHING WE DO ALWAYS FROM THE EYES OF OUR CUSTOMERS

VISION

We will be the preferred supplier of engineered product solutions in the targeted markets we serve. We will provide exceptional customer value through strategic marketing, innovative product development and unparalleled customer service.

MISSION

We are committed to recognized leadership in serving targeted segments of the Concrete Products, Material Handling and Manufacturing Services Industries.

We will “always” see our business through “the eyes of our customers,” and provide them with superior solutions through innovation, quality, reliability and continuous improvement.

We will leverage the expertise, product knowledge and technology of our business units to better serve our current and future customers.

Our core competencies will be Marketing, Product Development, Manufacturing Technology and Customer Service.

We value safety, integrity, trust, fairness, professionalism and teamwork in relationships with our customers, employees, business partners, suppliers and shareholders.

We respect our legacy and reputation within our communities and global markets.

We strongly encourage personal growth and the involvement of all employees in achieving Company goals.

We will secure our future through strategic investments and profitable growth.

Columbia[®]
www.colmac.com



FEED DRAWER

Published by

Columbia Machine, Inc.
107 Grand Blvd.
Vancouver, WA USA 98661

Telephone: (360) 694-1501

Fax: (360) 695-7517

www.colmac.com

Some of the equipment pictured in this publication may have guarding removed for demonstration purposes.

Columbia Machine, Inc. recommends that equipment never be operated without all guarding in place and in good working order.

ON THE COVER:
Newly designed clamp cuber.

A Message from our CEO

Last year, we talked with many of you about the improvements you were seeing in your markets. We have seen this momentum carry into 2014 with business levels continuing to grow. In addition to the increase in parts, molds and machine upgrades that we saw in 2012 and 2013, we are now seeing many of you invest in replacement machines and line upgrades, as well as an increasing number of new plants going in. We are excited to see you carry this momentum into the New Year and look forward to helping you grow your businesses in any way we can.

Going into the downturn, we asked many of you what we should be focused on while we had some breathing room coming off of the market peak in 2006 and 2007. We appreciate the input you gave us and have been working hard to continue to improve the ways we can help you grow your businesses profitably going forward. The three primary things we heard from you were:

1. Safety. Help us ensure that we have the safest plants in our industry. The safety of our employees and customers is our number one priority.
2. Innovative production solutions. Keep investing in product development so that we have the plant equipment solutions we need in the future, to make the products our customers need.
3. Support our Industry. We have serious building materials competition and we need your help positioning our products as the best solutions available.

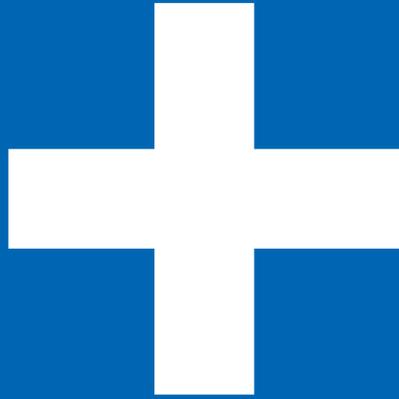
We were happy to get the input listed above, as the first two were already high priorities for Columbia and have been part of our mission for many years. The third point comes naturally, as we continue to do what we have done for decades.

We are pursuing your focus on Safety in two ways: First, we are working with you to identify upgrades which can be made to your existing equipment that take advantage of the latest available technology and operating procedures. We are working to be proactive by letting you know what new options are available in publications like this *Feed Drawer*, our website, social media, at tradeshow, at industry association meetings and when we visit your plants. As new technology becomes available, or new Safety procedures are developed, we will make sure that we make you aware of them. Second, Safety is our foremost priority with every new machine we develop. Safety is #1 on our list of the 18 Columbia Design Rules we use to develop each and every new piece of equipment. As we finalize project design scope, a risk assessment is completed for each design and our Safety committee performs a complete review of each new machine. If you ever have a Safety concern, please contact us ASAP...Safety is our highest priority.

As we discussed in our last issue, Columbia will spend more time and money on product development and enhancements than we ever have in a single five-year period, during the last three years and throughout the next couple of years. We are committed to developing the batching, mixing, production machines, molds, curing, handling and cubing solutions needed to produce the high quality, cost competitive products your customers need today and in the future. Just to name a few of the things that we have been working on: our new electric UL has been running nicely for most of the year, our new servo clamp cuber has shipped to its first home, the second one is on our assembly floor, as I write this, and our new PTS ships in the next couple of months. You can get further information on these new handling solutions on our website or at upcoming tradeshow. We will also be excited to introduce a new industry-leading production machine in February. Keep your eyes open for a number of other things that we will be introducing in 2015 and 2016.

Third on our list, is to support our industry with our time and money. We are fully committed to our industry associations and haven't missed a beat during the recession, or now as markets are picking up. We will continue to be active with our industry associations and help in any way we can at meetings, participating on committees and sponsoring the activities that help drive the success of your products in the markets that you serve. This is easy for us, because we truly believe your products are the best available. In addition to supporting our industry associations, we will continue to play an active role with the Research and Education Foundations, as we have been honored to do for the last couple of decades. We will continue to invest both our time and money to support these critical efforts.

We are excited about the opportunities we see in the coming year. Business conditions look good for the foreseeable future in many of the markets you serve. We appreciate your business over the last year and look forward to working with you in the New Year. Thank You.



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LAUNCHING FEBRUARY 2015

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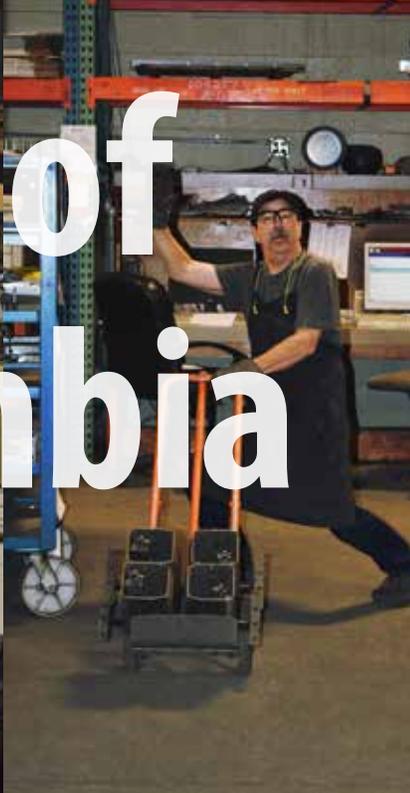
FEED DRAWER

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Faces of Columbia



New Roles For Some Familiar Faces

Columbia Machine, Inc. announced that Bill Oberfield joined the Columbia Machine sales team on September 29, 2014 as our Key Account Executive.

Bill served as President / CEO of Oberfield's Inc. Concrete Products from 1985-2011, and in the same position for Oberfields LLC from 2011-2013. He has been a major contributor to the masonry industry throughout his career and is considered an authority in the business.

Extremely active in the National Concrete Masonry Association (NCMA), Bill chaired numerous committees, served on the Board of Directors and Executive Committee, served as Chairman of the NCMA Board in 1994, and was awarded the NCMA LIFETIME ACHIEVEMENT AWARD this year.

With his knowledge of concrete production methods and technology, and his vast product knowledge and passion for innovation, Bill will be a tremendous asset to the Columbia organization. Columbia looks forward to tapping into his expertise to enhance its ability to provide solid solutions for all customers. His unique perspective of a concrete products producer will be invaluable to all of Columbia's activities.

We would like to announce that Kevin Brown will be taking over the role of Vice President of Sales for the Concrete Products Division.

Kevin has experience in numerous roles over 25 years with Columbia Machine, most recently as Director of Customer Care. The knowledge gained from his experience will be a tremendous resource as Columbia Machine continues to provide exceptional customer value through product innovation and customer support.



Bill Oberfield
Key Account Executive - Concrete Products Division



Kevin Brown
VP of Sales - Concrete Products Division

THE MOST MODERN CONCRETE

PRODUCTS PLANT IN LATIN AMERICA

UNACEM & UNICON

In 2000, Union Andina de Cementos S.A.A (UNACEM) and Union de Concreteras S.A. (UNICON) analyzed the possibility of becoming involved in the concrete products market. They began with a market study for the production, commercialization, and distribution of concrete block and brick products for walls, partitions, roofs, retaining walls and all types of pavers.

UNACEM would acquire the machinery, look over the equipment installation and start-up, and would contract with UNICON for the production and marketing of the products.

Their goal was to meet the needs of the market with consistent high quality products, good presentation and efficient cost of manufacturing. The idea was to set up plants to make concrete products with the latest technology that will allow manufacturing different types of products with the possibility of adding colors and different textures.

Based on the findings of the study, UNACEM contracted ARPL Technology Industrial SA in order to carry out the installation of a concrete products plant. (ARPL is an engineering consulting company, with more than 50 years of experience in concrete production projects, grinding plants, hydroelectric plants, solar power plants, docks, and other works of infrastructure, mainly with concrete).

For the equipment supply, various leading companies with experience in concrete products plants of the latest technology were researched. The Columbia Machine Model 1600 plant with a capacity of 3,000 pallets a day in an 8 hour shift was finally chosen as the best option to meet the production requirements.

The annual production capacity of the two plants is 16 million units of various concrete products. The first Model 1600 plant was installed in 2002, the second Model 1600 in 2008. Both plants are located on the same site in the Agustino district of Lima.

As a result of the growth and acceptance of the products, the decision was made to invest in a third plant. This time, a fully-automated Columbia Machine CPM 60 plant with high safety standards was chosen, making it the most modern concrete products plant in Latin America.

The annual production capacity in two shifts of the CPM 60 is 54,432,000 units of different concrete products.

The equipment supplied by Columbia Machine, Inc. included components for batching, Model 135 Mixer, MBS Modular Batching System, Command View System, CPM 60 Concrete Products Machine, Pallet Transporter System, Product Reject Station, Pallet Turnover, Mist Curing Controls, Roll Conveyors and QBR 200 Cubers with Wood Pallet Injector, Molds, and a Mold Alignment Fixture. Belt conveyors, storage hoppers, transfer chutes and silos were manufactured locally by Peruvian companies. The civil work was done using domestic contractors.



Finally, after an in-depth analysis, it was decided to locate the CPM 60 plant in Cajamarquilla, an area of 23,828 m² with sufficient area to install a second similar plant adjacent to the existing one when the market requires it. This plant started operations in December 2013.

With the new plant, in addition to the existing Columbia Machine solutions, UNICON and UNACEM positively contribute to the development of the construction sector and creation of direct jobs and indirectly related jobs such as product transportation, distribution and salesforce in their region.





Columbia Machine proudly exhibited at ConExpo/CON -AGG 2014 in Las Vegas in March. This year we featured a complete Model 21 Concrete Products Plant in our booth. The show was a huge success for us and we're already looking forward to 2017!







Manufacturing Services Division

*Update

Columbia Manufacturing Services Division is beginning its seventh year, continuing to succeed in our quest to be the supplier of choice for local and regional OEM's that are seeking additional manufacturing capability and/or capacity. We have developed strong partnerships over the years with key accounts that provide us with high volumes of repetitive parts, frequently shipped to them from our inventory. We are also continuing to seek new partnerships and are frequently introduced to new and exciting business opportunities from a variety of industrial business segments. We are assembling an overhead crane for a national crane manufacturer, manufacturing completed frames for the automation industry, parts and components for customers in the metal working industry, and manufacturing machined weldments for a major supplier in the Oil and Gas Industry. While we are developing relationships with new and potential customers, we continue to explore and develop new opportunities created with our existing partners.

SAFETY

WE TAKE SAFETY SERIOUSLY



**Eye Protection
Must be Worn**
Parking Lots & Office Areas Excluded



**Hearing Protection
Must be Worn Where Posted**
Required in Machine Shop, Fab, Carpenter shop, and Blast



**Face and Eye Protection Required
When Sanding / Grinding**



**Lockout / Tagout
Tryout**
Required on All Stored Energy



Arc Flash & Shock Hazard
Appropriate PPE Required



**Fall
Protection**
Required 4 Feet and Above
*Only Exception is loading/unloading trucks



**Obey Forklift
Speed Limit**
Walking Pace or Less



**Danger
Overhead Crane**



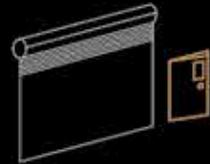
**Wear your
Seatbelt**



**Safety Footwear Required
When Working in Manufacturing**
General Footwear Required within Designated
walkways or Roped off Safety Zones



**Gloves
Required in Manufacturing
When Appropriate**



**Use Pedestrian Door
When Available**
No Walking Through
Overhead Door Areas

Look for our
safety poster
around the
Columbia plant
on your next
visit!

Columbia
www.colmac.com

COLUMBIA CUSTOMER CARE

Your Aftermarket Support.



PARTS | MOLDS | SERVICE

At Columbia Machine, we're not only committed to providing you with the very best concrete products machines, but also the upgrading of technology to keep your machines running for years and years.

Conversions and Parts:

From new controls to upgrades in technology, Columbia has conversions and upgrades for all of your Columbia equipment.

- It's been your workhorse for years.
- Contact your regional representative or call us today.
- We'll show you how to keep your workhorse up to date with our latest technology.

In addition to our equipment upgrades, there is no exception to the fit and quality of genuine Columbia parts. With our large inventories and strategically located depots, Columbia parts are just a phone call away.

- Get the most uptime and highest quality parts from Columbia

Molds:

Columbia Machine is a world leader in the design and manufacturing of concrete products molds for Columbia and Besser production machines. With state of the art CNC machines, in-house hardening processes, 3D CAD systems, and prototyping /scanning, we got you covered. Columbia's experienced staff of sales and engineers are here to assist you with the continuing changes in products and demands as well as your replacement molds needs. With new mold technology from dual actuating heads to advancements in concrete paving slabs Columbia can support all of your mold needs.

Call us today for all of your aftermarket needs.

Columbia®

Columbia Machine, Inc.
107 Grand Blvd.
Vancouver, WA 98661
+1 360 694 1501
www.columbiemachine.com

Scan to visit us online and learn
more about our industry
leading aftermarket
support





Locker rooms have been added in the main building. This will encourage walking/bicycle commuting, helping to reduce cars on the road, and fits well with our health and wellness program.



sustainability update

The Energy Team combined with the Green Team will look for opportunities to reduce/reuse natural resources along with investigating environmentally conscious ways to manufacture equipment.





CONCRETE SHOW
SOUTH AMERICA • BRAZIL • SÃO PAULO

Columbia Machine, Inc. exhibited for the 6th consecutive year at the Concrete Show America, Sao Paulo, Brazil, August 27-29, 2014.

By far, this is the most important Show in Latin America for the construction industry, with more than 600 Brazilian and International companies exhibiting their products and services. Brazil is by far the largest market for construction equipment in Latin America.

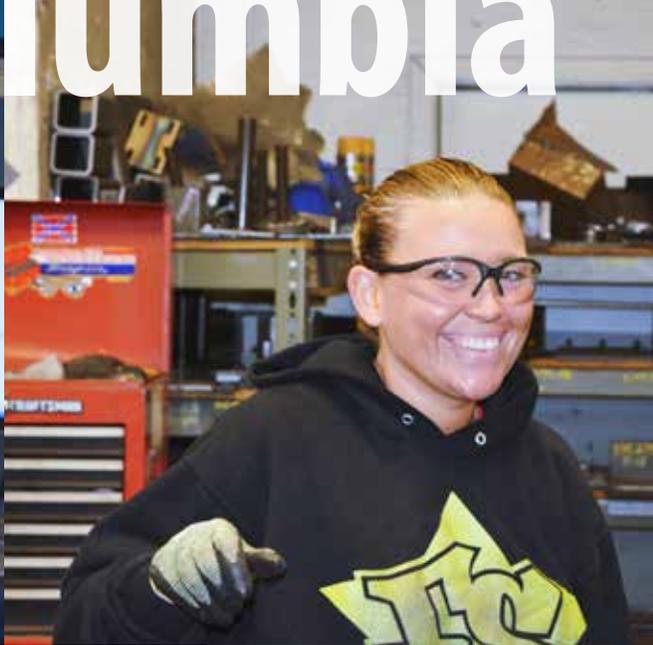
On display in the Columbia booth was a diverse offering of quality concrete products supplied by Columbia customers, along with a video display of a live feed from Arevale, a local producer with a complete CPM plant. With the live feed, we were able to show in real-time how efficiently our plants run.

Manufacturers of concrete products equipment from all over the world were present at this show, including a large number of Brazilian manufacturers, and many overseas manufacturers from the U.S., Germany, Spain, Italy, France, Portugal, China and Japan. This is a clear indication that, in spite of the current slowdown of the local economy, Brazil remains as one of the largest markets in the world for concrete products equipment. In the future, Columbia will continue to pursue opportunities in Brazil and has already committed to exhibiting at the 2015 Concrete Show.





Faces of Columbia



COMPANY EVENTS

2014



EMPLOYEE PICNIC





MEG DAY™

10.03.14



ANNUAL BIKE BUILD

CUSTOMER PROFILE

COWRA CONCRETE PRODUCTS

Cowra Concrete Products was established in the 1950's. Quality and good customer service are what Cowra Concrete Products has always strived for. Its focus on providing affordable, high quality bricks, pavers and other concrete products has driven the company's growth since John Healey bought it over thirty years ago.

Cowra Concrete Products has been manufacturing bricks and blocks for home builders for 35 years, expanding its product range over the decades to offer a variety of masonry ideas to anyone designing their home.

It is a family-run business. The owner, John Healey, works with Jay and Mistie Healey in providing the concrete products their clients are looking for. They have recently welcomed Carlie Healey to their team.

In the 1970's, the plant was a hand-operated Koyo machine and a hand-operated Zenith "egg layer", and both machines were fed by hand-batched mixes.

When the Healey family purchased the company, forklifts were yet to replace wheelbarrows in moving the products and the products were still dried naturally.

Shortly after purchasing the business, John Healey set about mechanizing the production work and using newer machines to manufacture bricks and pavers.

"As demand grew we looked for a machine that would make better quality products and to make production easier we chose a Columbia Model 5 semi-automatic. Then we moved on to purchase a Columbia Model 8 and off bearer and a local mixer which both operated for many years. As the demand for new products arose, we found again that Columbia was our choice so we installed a Model 22, which again proved to be a great machine".

"Looking at the future, we are currently installing a NEW Model 16 machine, rack loader unloader and cuber. The decision to do this has been made a lot easier by knowing Columbia's history of support from choosing the right machine to installing, training, parts and all available locally".

“The decision to do this has been made a lot easier by knowing Columbia's history of support.”

Cowra Concrete Products manufactures its own bricks, blocks and pavers in a small plant behind its display centre on the Young Road. The plant's small size gives the business an advantage over other brick and paving manufacturers, allowing it to pay attention to detail and take a hands-on approach to controlling its products' quality.

"We're big on quality. We've grown because of that," said John Healey.

Cowra Concrete Products' clients are spread throughout central west NSW including Orange, Parkes, Dubbo and Forbes, but for Cowra's residents it offers locally manufactured products at a low price.

"Especially for locals the price is right. [Products are] manufactured here so there are no transport costs," said Mistie Healey.

Customer service is important to Cowra Concrete Products. It helps customers with their queries in its new display and selection centre (see right), and offers a



delivery service and all-terrain forklift hire. "Everything [we do] is based on customer service," said Ms Healey.

Cowra Concrete Products has opened a display and selection centre to help its customers select the right bricks and paving for their homes.

The centre that was completed in May and took a year to build, offers customers a wide range of brick and paving products to see. The products are spread neatly throughout its front courtyard, letting customers see how each could look in an outdoor setting.

"We have the products that [customers] can physically look at... Before [they selected] all products ... out of a brochure," said Mistie Healey.

John Healey decided to have the centre built after Cowra Concrete Products started servicing the town as a retailer of bricks, blocks, pavers and retaining walls.

"We needed somewhere people, especially women and children, could come," said Mistie Healey.

The environment at Cowra Concrete Products has been modified to ensure it is wheelchair accessible. This includes the entrance to the building's display area and bathroom facilities.

Ms Healey designed the interior of the building, a neat, well-presented affair with brochures for customers and staff on hand to help them. She collaborated with Leigh Browne and Billy Jack Brick Laying in devising the centre's exterior, while the landscaping has been designed by Richard Ryan of Lachlan Valley Landscaping. The centre was constructed by Leigh Browne.

"We wanted it to be a selection centre so you can come here and select products from the bricks to the tiles, to the roof, without going out of town," Ms Healey said.

The result is a modern display centre that integrates Cowra Concrete Products' range with those of other reputable companies.

These leading companies within the nationwide brick and masonry industry include PGH Bricks and Pavers, Boral Bricks and Masonry, Austral Bricks and Masonry, Adbri Masonry, Claypave and Stone Masonry.

The resale of these companies' products will provide Cowra Concrete Products' customers with a greater range of options to fit any size projects and budgets.

Available to Cowra Concrete Products' customers now are clay bricks, clay paving, masonry paving, all masonry, retaining walls, garden edging, cleaners and sealers, sandstone, decorative stone and drystack stone.

Popular among the business' products are the Tasman and Norfolk Retaining Wall Systems. It offers Traditional Split Face Blocks for creating decorative pillars, stairs and house entrances.

Eight years ago these products' popularity encouraged Cowra Concrete Products to begin retailing its range direct from its manufacturing site. It was a large step for the company, which until then had been solely a manufacturer and supplier.

But the business is determined not to stand still. "We're always looking for new products to sell," said Mistie Healey.

Cowra Concrete Products is now working on getting another new product off the ground – the permeable paver.

These pavers are fully porous, taking pressure off storm water drainage systems, and collecting and detaining runoffs without open drains or pits.

They reduce flooding and surface ponding, while also increasing water supply to trees and landscaped areas. The business is also aiming to add the sandstone face block to its product range.

Columbia wishes Cowra Concrete Products every success with their new plant choice.





Columbia's Palletizer Division and subsidiary company, Columbia/Okura, were excited to demonstrate a complete palletizing system at this year's Pack Expo International Show. The closed loop palletizing system featured the HL7200 high level, inline palletizer and Columbia/Okura's model A1800 robotic palletizer / depalletizer. The system allowed both divisions to demonstrate their capabilities to key industries and received a great response from the attendees.

The HL7200 showcased the ultimate in flexibility by incorporating Columbia's programmable laner technology with Columbia's proven soft turn and configurable layer table to provide accurate and stable layer forming. The HMI revealed how easy it is for the operator to create new patterns or modify existing patterns using Columbia's Product Manager Software. This combination makes the HL7200 ideal for reliable handling of current and future package types and sizes.

Columbia/Okura's model A1800 high-speed robotic palletizer was integrated next to the HL7200 discharge conveyor. Using a venturi style vacuum end effector, the robot was tasked with depalletizing the complete pallet stack and returning the cases to the system infeed. The robotic palletizing display also featured a pick-and-place orientation to showcase product handling capabilities. Both Columbia Machine & Columbia/Okura include an industry-leading safety package on all their palletizing systems that feature Category 3 electrical safety components. This includes A-B SensaGuard dual circuit safety interlocks and full height light curtains along with enhanced physical guarding to provide additional operator protection.

Pack Expo International is the largest packaging show in North America. This year's show drew 2,352 exhibitors that utilized more than 1.2 million net square feet of exhibit space and attracted over 48,600 attendees.

CUSTOMER PROFILE

BARCEL USA // PALLETIZING SYSTEM

Barcel USA, a subsidiary of global baking leader Grupo Bimbo, is a growing manufacturer in the bakery and snack food markets. Grupo Bimbo has over 150 plants worldwide and as part of their growth strategy in 2013 opened the new Barcel plant located in Coppell, TX. This plant has been fully operational since December 2013, manufacturing snacks with Mexican inspired flavor that include the Takis snack chips, Hot-Nuts and Churritos.

As part of the growth strategy, Barcel USA needed a fully integrated palletizing system to help them continue to expand. This involved using minimal warehouse space for the new end-of-line packaging equipment. The automated solution needed to have an extremely compact footprint, but also provide flexibility in handling the variety of products manufactured at the facility. Francisco Zamora, Barcel's Project Engineer, was tasked with overseeing the packaging automation project. When asked why they selected Columbia Machine as the system supplier, Zamora stated, "We selected Columbia Machine as our palletizer manufacturer and system integrator because of the attention to detail shown during the project discussion and design phase. Their ability to provide full project management and the solution they offered to us was not only the best fit for our needs, but it was also at a competitive price."

By the end of the project installation, Zamora commented "our operators were completely trained on how to operate the palletizers and system components. They (the operators) often comment on how easy it is to operate the system."



"We selected Columbia Machine as our palletizer manufacturer and system integrator because of the attention to detail shown during the project discussion and design phase."

Francisco Zamora,
Project Engineer

WHERE WE'VE BEEN

TRADE SHOW UPDATE



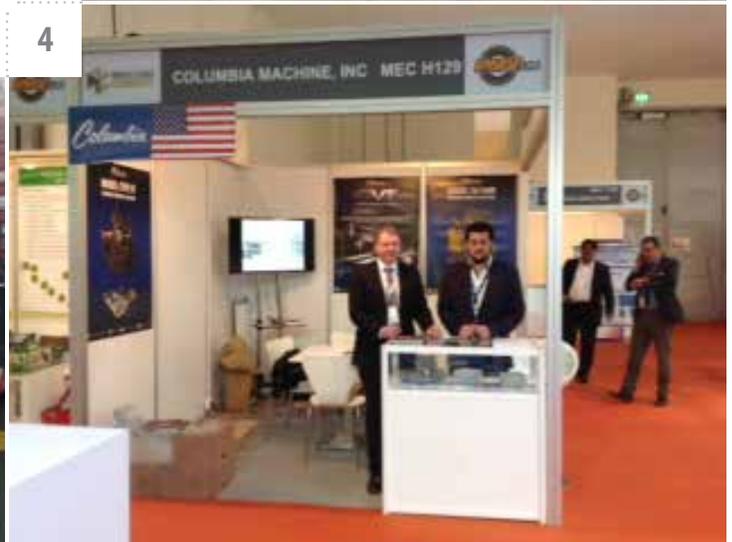
1



2



3



4

1. ASOCRETO COLOMBIA

On September 24-26, 2014, Columbia Machine exhibited at the Reunion del Concreto in Cartagena, Colombia. This was the fifteenth time the "Concrete Meeting" exhibited in Colombia and was a great opportunity to bring building and infrastructure representatives into one event.

2. CONCRETE SHOW MEXICO

This Show was held in Mexico for the first time, May 21-23, 2014 in Mexico City. Many competitors exhibited at this Show, including Besser, Hess, Ital Mexicana, Ilmar, Poyatos, Prensoland, Quadra, Quangong Machinery, Rampf and Tiger. Enrique Jaime, our Sales Representative for Mexico, and Ricardo Birkner manned our booth.

3. CONSTRUFER GUATEMALA

This Show was held in Guatemala City, Guatemala, May 5-18, 2014. Companies from all sectors of the construction industry exhibited at this Show. Antonio Munoz, our Sales Representative for Guatemala, and Ricardo Birkner manned our booth where they had the opportunity to meet with several prospects.

4. BIG 5 DUBAI

On November 17-20, 2014 Columbia Machine exhibited at the Big 5 Show (co-located shows Middle East Concrete and PMV Live) at the Dubai World Trade Centre. The show is the largest construction event in the Middle East, attracting 2,600 exhibitors and attended by nearly 75,000 people from over 100 countries.



CELEBRATING SAFETY

Columbia Machine and Columbia/Okura LLC celebrated a record setting injury free length of time! For over 6 months, not a single time loss injury has been recorded. Also, we celebrate 176 days without any recordable injuries. This perfect record extends back to 2013 and we are positive that we can keep our impressive safety trend going. We honored our employees for their efforts with a catered BBQ by Famous Dave's Restaurant. It was a great opportunity to gather as a company and recognize our achievement. Safety is priority number one for Columbia. Whether it be in one of our facilities or in a customer's plant, we strive to create the safest environment we can. Keep up the good work!

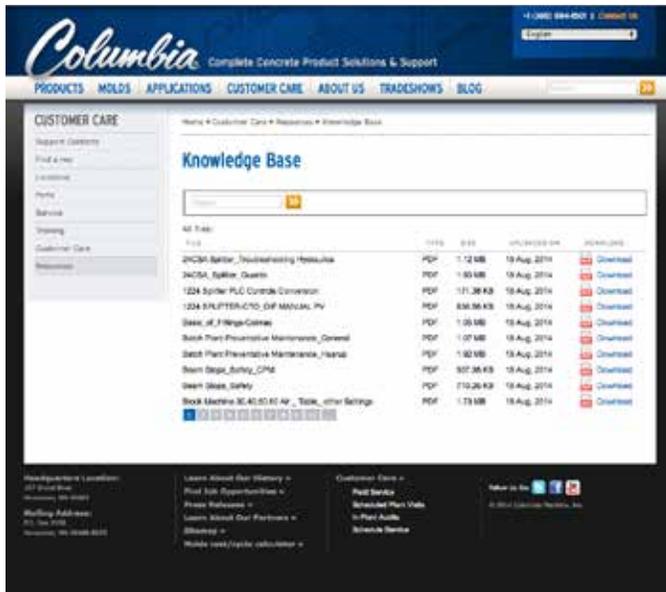
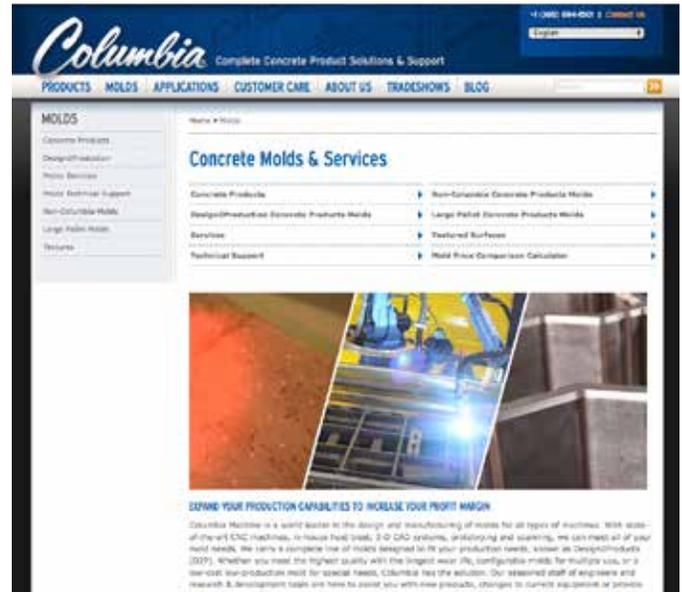
SAFETY DOESN'T HAPPEN BY ACCIDENT



WEBSITE UPDATES

COLUMBIA MOLDS UPDATE

The Columbia Molds section of columbiemachine.com has been dramatically expanded and we're proud to bring a wealth of new information to our customers. We encourage you all to look through our hard work and take advantage of the information and functionality. We now have product-on-pallet drawings for a growing number of concrete products and detail out a wide range of blocks, pavers and retaining wall products with photos, renderings, measurements and other important specifications. You'll also find information on our custom product textures and the process involved in making them, as well as information on our industry-leading engineering and manufacturing capabilities.



THE KNOWLEDGE BASE GOES ONLINE

Columbia Customer Care has always strived to be the best in the industry and our new web presence reflects that dedication. Among many other updates, we are proud to announce that our Knowledge Base is now an online resource available to all of our future and existing customers. Here you will find hundreds of technical articles, how-to guides and other bulletins in a new, searchable format.

These are just a few of the things we've been working on. Keep an eye out for more updates in the coming months as we bring even more new features to our websites.

Back-up power for the PLC memory “RAM” is provided by a replaceable battery. It is recommended that the battery be replaced each year. If not, you have a potential of losing the machine program stored in the PLC in the event of power loss. The loss of the machine program will halt the operation of the machine, resulting in extended down-time, loss of production, and the expense of a service call if you do not have a laptop computer to reload the machine program.

The list below is the part numbers for the various PLC’s;

| MANUFACTURE | PLC TYPE | BATTERY PART # |
|---------------|-------------------|---------------------|
| Siemens/TI | 525/535 | 237348 |
| Siemens/TI | 545-1101 | 237348 |
| Siemens/TI | 545-1102 | Non-Replaceable |
| Siemens/TI | 545-1103 & 1104 | 237355 (coin style) |
| Siemens/TI | 545-1105 & 1106 | 237348 |
| Siemens/TI | TI330, TI337 | 238728 |
| Direct Logic | DL340, DL440 | 238728 |
| Direct Logic | DL230, DL240 | 234538 |
| Allen Bradley | SLC 5/01,02,03,04 | 234517 |

Note: Before replacing battery, refer to your PLC Users Manual for proper removal and installation.



If your TCAM (CTI-5250-TI5) has faded to the point where it's difficult to read, keypad is worn out or failed, then it's time to switch to the new **state-of-the-art color Panelmate 1785K**. Not only does this latest screen emit an image that's brighter than your previous screen, but the full color display **makes reading the entire screen easier**. What's more, converting to a color Panelmate is **quick and seamless**, so you don't have to deal with costly down time while you upgrade to the Panelmate.

Features & Benefits:

- Color LCD display
- Easy to read
- Programmed ready to install



PART NUMBER

REPLACES

CTI 5240 & CTI 5250-TI5

Consult Factory

Electrical number of machine and manufacturer's part number of the PLC will be needed.

For more information on the benefits of Panelmate conversion kit or safety features, please contact your local representative or call Columbia direct at (800) 628-4065.

New (two springs) systems for use on the Stripper Beam Rotary Valve. This helps overcome hydraulic rotor lock on Floor Level (HF) and CPM machines.

Below are photos of the new (two spring) systems we are using on new machines. This is to help overcome hydraulic rotor lock. The first photo is the Floor Level (HF) machine and the second is the CPM machine.

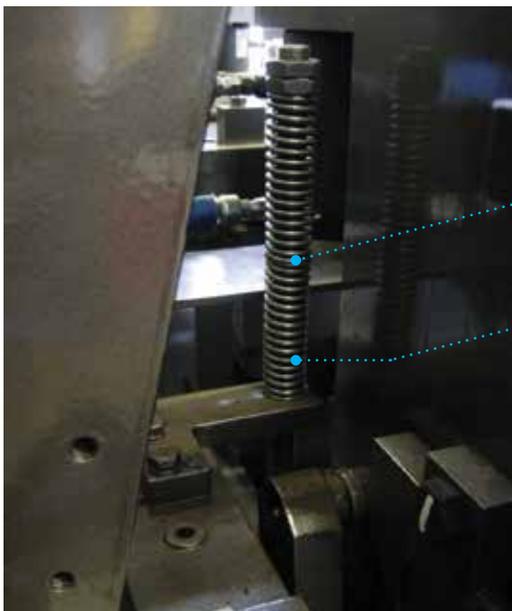
Floor Level (HF)



NEW TWIN, COIL WITH A COIL

- 1 - C2151.51 Outer Spring
- 1 - 367.1.16 Inner Spring

CPM



SPRING SPLIT

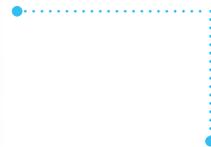
NEW TWIN STACKED COIL SPRINGS FOR CPM

- 2 - C2051.51 Spring

If your DTAM (1747-DTAM) has faded to the point where it's difficult to read, keypad is worn out or failed, then it's time to switch to the new state-of-the-art Panelview 400+. Not only does this latest screen emit an image that's brighter than your previous screen, it makes reading the entire screen easier. What's more, converting to a Panelview 400+ is quick and seamless so you don't have to deal with costly down time while you upgrade to the Panelview 400+.

Features & Benefits:

- LCD display
- Easy to read
- Programmed ready to install



PART NUMBER

REPLACES

1747-DTAM

Consult Factory

Electrical number of machine and manufacture's part number of the PLC will be needed.

For more information on the benefits of Panelview 400+ conversion kit or safety features, please contact your local representative or call Columbia direct at (800) 628-4065.

CVT

Columbia Vibration Technology

When you need to make the industries most demanding products **only one machine will do.**

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Columbia's patented vibration technology, CVT, combines over 75 years of innovative engineering and field proven designs with industry leading manufacturing capabilities. CVT enables producers to create the highest quality and widest range of concrete products in the world.

Versatility in Products



Extended Mold Life



Energy Efficiency



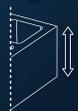
Even Product Density



Reduced Cement Usage



Precision Height Control



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• AMERICAN MADE •



MATERIALS SYSTEMS DIVISION

Columbia Machine has taken a renewed interest and added resources to the Material Systems Department. The team will focus on a number of current market niches including batching & mixing opportunities within the precast and prestressed concrete industry. Cement blending for the oil and gas industry is a developing market for Columbia and has huge growth potential. MSD will be responsible expanding on the cement blending plants that are installed and finding new customers to pursue.

Another element of batching and mixing this team will focus on is plant modifications. Many producers need to expand what they can make with their current plants, but are not willing to invest in a new plant. Columbia's MSD will provide engineered solutions to increase plant flexibility.

Along with batching and mixing, the team will focus on reviving Columbia's bagging product line. Stay tuned in 2015 for more on all of these exciting opportunities.



Complete Bag Line Solutions



Plant Modifications & Upgrades

CUSTOMER PROFILE



Paramount Farms is the world's largest grower and processor of almonds and pistachios. With 125,000 contributing acres, Paramount produces more than 450 million pounds of nuts annually. Levels of production this high require advanced automation of both processing and packaging equipment to maintain the desired quality and operational efficiency. When Paramount set out to automate the packaging portion of their Lost Hills (CA) plant, they required a solution that would provide high-speed stacking capabilities, product flexibility and maximum uptime reliability.

The Lost Hills facility is Paramount Farm's main processing campus and home of the world's largest pistachio processing and manufacturing plant. When it came to purchasing the end-of-line equipment, it was vital that the palletizing solution be designed, integrated and installed to not only meet the highest of production rates, but to also insure uptime reliability. They turned to Columbia/Okura to provide that solution. In May of 2011, the installation of the model A1800 robotic bag palletizing system was completed. Since the time of installation, the solution has met all of Paramount Farm's operational requirements.

Speaking to the success of the initial project, Toni Irving (Process Engineer) stated "the whole process of working

with Columbia/Okura, from design specifications, testing and installation has been excellent. The robotic palletizers themselves are very robust and maintainable (achieving the desired uptime requirements) and are user-friendly which enables quick and simple changeovers which is important in maintaining our flexibility." He continued his praise by saying that

"working with Columbia/Okura feels more like a partnership than supplier/customer relations and I would not hesitate to recommend Columbia/Okura and their equipment to anyone in need of a robotic palletizing solution."

The success of the first project provided Paramount with confidence to further develop the relationship with Columbia/Okura. Since the first installation in 2011, two additional robotic palletizing systems have been installed into the Lost Hills plant to handle the palletizing of both bag and case products. Other Paramount Farm's plants are taking advantage of the successful solution as well, with the acquisition of another robotic palletizing system set to be installed in their Firebaugh, CA plant in August of 2014.

TECH SCHOOL GRADS

OLD CASTLE MADERA, CA



Front Row: left to right

1. Mike Richards
2. Federico Garcia
3. Jose Garibo
4. Jose "Eddie" Guerrero
5. Victor Rafanan
6. Larry Bray (Instructor)

Back Row: left to right

- | | |
|--------------------------------|---------------------|
| 1. Justin Lapat | 7. Javier Hernandez |
| 2. Sebastian Cruz | |
| 3. Jennifer Perez | |
| 4. Steven Resendez | |
| 5. Rinaldo "Boomer" Valdez Sr. | |
| 6. Humberto Flore | |

QUIKRETE CORONA, CA



Front Row: left to right

1. Dagoberto Hernandez
2. Gregorio Rendon
3. Joe Elizalde
4. Barney McClure
5. Christopher Goforth
6. Larry Bray (Instructor)

Middle Row: left to right

- | | |
|------------------------|----------------------|
| 1. Fidenro Rendon | 7. Jerry L. Stillion |
| 2. Jorge Luis Camarena | 8. Jorge Enciso |
| 3. Maximino Gomez | |
| 4. Francisco Sanchez | |
| 5. Brain Kautz | |
| 6. Alberto Cardenas | |

Back Row: left to right

- | | |
|----------------------|-------------------|
| 1. Jesse Vallecillo | 7. John Altmaier |
| 2. Uriel Lopez | 8. Jose L. Gomez |
| 3. John Stanley | 9. Juan Rodriguez |
| 4. Leobardo Renteria | 10. Art Torres |
| 5. Arnulfo Soto | 11. Mychel Masson |
| 6. Santiago Sarabia | |

**BASIC MECHANICAL CLASS
COLUMBIA TECH SCHOOL**



Front Row: left to right
 1. Thomas Newkirk
 2. Alwin Cubangbang

Back Row: left to right
 1. Mike Bogue
 2. James Wright (Instructor)
 3. Andy Lloyd Sampionius

**BASIC ELECTRICAL CLASS
COLUMBIA TECH SCHOOL**



Front Row: left to right
 1. Alwin Cubangbang
 2. Ryan Urabe

Middle Row: left to right
 1. Sutton Christianson
 2. Mike Bogue
 3. Ralph Stonesteet
 4. Jerry Stillion

Back Row: left to right
 1. Eric Whitaker
 2. Mychal Masson
 3. Dave McKee (Instructor)
 4. Thomas Newkirk
 5. Andy Lloyd Sampionius

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Be sure to keep an eye on all of our social media outlets for regular updates on company culture, division specific articles and other entries.



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meet our staff, see our operations.



2015

Classes Offered



Basic Electrical/Allen Bradley Controls

Basic Electrical/Allen Bradley Controls Class: During the five (5) day course, the first two day hands-on course will help you understand electrical symbols, read electrical schematics, be able to use a test meter properly, quickly recognize areas at fault, and help you reduce your down time. The next three day course covers I/O components, input, output, analog, remote I/O, and flex I/O modules. Work hands-on using a computer, Allen Bradley software and a PLC workstation. Learn how to connect to the PLC, load/save program and troubleshoot.

Basic Mechanical 22/16/1600

Basic Mechanical 22/16/1600 Class: This five (5) day course covers instruction on general hydraulics, pneumatics, and preventative maintenance. Students will get training on making machine adjustments, hydraulic and pneumatic settings, and more in-depth instruction on hydraulic circuitry and valve technologies. This one week class is a must for all machine operators, plant maintenance personnel, and plant production managers.

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We manufacture machines for every aspect of concrete products production. Ruggedly built, precisely engineered, adaptable to any environment, our machines work as hard as you do to create valuable, profit-driven products year after year. It's how we've set the standard for over 75 years.

Contact

Columbia Machine, Inc.
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Vancouver, WA 98661
+1 360 694 1501

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By Mail Columbia Machine, Inc.
P.O. Box 8950
Vancouver, WA 98668-8950 Attn: Scott Hutton

By Fax +1 360 906 5728 Attn: Scott Hutton

*General Registration Information

Airline tickets should specify Portland International Airport (PDX) as your destination. Airfare, hotel, and transportation (between the airport and hotel) is at the registrants expense and is not included in the class cost. The hotel will provide a shuttle service between the hotel and the classes at Columbia Machine headquarters each day. Shuttle departs at 7:30am from the hotel lobby each morning of the scheduled class.

*Hotel Accomodations Contact Information

Homewood Suites by Hilton
701 SE Columbia Shores Blvd.
Vancouver, WA 98661
Phone: (360) 750-1100
Fax: (360) 750-4899

.....▶ Airfare, hotel, and transportation (between the airport and hotel) is at the registrants expense and is not included in the class cost. ◀.....

Applicant Information

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Telephone: _____ Fax: _____

Email Address: _____

Company Information

Company Name: _____

Contact Name: _____

Address: _____

City: _____ State/Province: _____ Postal Code: _____ Country: _____

Telephone: _____ Fax: _____

Company Email Address: _____

Payment Information

Method of Payment Check Visa Mastercard Discover

Company Name: _____ Contact Name: _____

Card Number: _____ Expiration Date: _____

Name on Card: _____ Signature: _____

Terms, cancellations, deadlines, travel plans: If you must cancel, please contact Scott Hutton at (360) 694 1501 ext. 573. Refunds will only be issued through the Thursday prior to the beginning of the class. All cancellations will be subject to an administrative fee. Any class may be cancelled if student enrollment is below minimum attendance. If class is cancelled, a notification will be sent two weeks prior to class start along with a full refund. It is advised to not purchase a non-refundable or non-transferable ticket, as classes may be cancelled or rescheduled. Columbia Machine is not responsible for any airfare charges incurred as a result of a class cancellation.

See us at the trade show in 2015

WORLD OF CONCRETE 2015

Las Vegas | **Dates:** 3 - 6 February, 2015 | **Stand:** #N819

ICON-XCHANGE 2015

San Antonio | **Dates:** 18 - 19 February, 2015

THE UK CONCRETE SHOW

Birmingham, UK | **Dates:** 25 - 26 February, 2015 | **Stand:** #G14

CONEXPO LATIN AMERICA 2015

Santiago, Chile | **Dates:** 21 - 24 October, 2015



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