

The logo features the acronym 'MAPA' in a bold, white, sans-serif font with a black outline. A stylized yellow and black road graphic with white dashed lines curves beneath the letters. Below this, the words 'ASPHALT NEWS' are written in a large, white, bold, sans-serif font. The entire logo is set against a dark, blurred background of autumn leaves.

MAPA ASPHALT NEWS

Missouri Asphalt Pavement Association

Fall 2015

THE NEW VÖGELE VF 600 SCREED WITH FRONT-MOUNTED EXTENSIONS VERSATILE AND RIGID!



Close to
our customers

Thanks to its sturdy design, the vibratory VF 600 Extending Screed is your perfect all-application screed. Whether paving highways, parking lots or residential areas, the VF 600 gives you the versatility of changing widths on the fly while holding adjustment and maintaining precise pavement profiles.



ROAD AND MINERAL TECHNOLOGIES

Technical Highlights

- ▶ Basic width 10 ft.
- ▶ Hydraulically extending up to 19 ft. 6 in.
- ▶ Maximum paving width 25 ft. 6 in.
- ▶ Sloping extension up to 10%
- ▶ Innovative electric screed heating
- ▶ Hydraulic crown adjustment -2.5% to +5%
- ▶ Optional berm available in three widths (12, 18 or 24 in.)

MURPHY

TRACTOR & EQUIPMENT CO.

IOWA

Des Moines • 515-263-0055
Fort Dodge • 515-576-3184
Sioux City • 712-252-2753
Waterloo • 319-235-7085

KANSAS

Dodge City • 620-227-3139
Great Bend • 620-792-2748
Park City • 316-942-1457
Topeka • 785-233-0556
Ulysses • 620-356-1071

MISSOURI

Kansas City • 816-483-5000
Springfield • 417-863-1000

NEBRASKA

Gering • 308-436-2177
Grand Island • 308-381-0741
Lincoln • 402-467-1300
North Platte • 308-534-7020
Omaha • 402-894-1899

murphytractor.com

MAPA ASPHALT NEWS

The Asphalt News is produced quarterly and distributed to association members and others interested in Missouri's asphalt industry.

Konn Wilson
President

Brandon Finn
Vice President

Don Rosenbarger
Secretary-Treasurer

Jeff Bross

Randy Canfield

Keith Davenport

Brian Goggins

Phil Hocher

Kyle Phillips

Shawn Riley

John View, III

David Yates

Larry West

Dale Williams
Executive Director
Mobile: (573) 690-9676
Email: dalewilliams@moasphalt.org

Laura Markway
Assistant Director
Mobile: (573) 301-3530
Email: lauramarkway@moasphalt.org

Susan Brand
Executive Assistant
Email: susan@moasphalt.org

Mailing Address:
P.O. Box 104855
Jefferson City, MO 65110

Street Address:
1221 Jefferson
Jefferson City, MO 65109

Phone: (573) 635-6071
Fax: (573) 635-6134

THE WAY I SEE IT

4 New Bill Brings Long Term Stability

For the first time in over 10 years, we have a long term Federal Highway Bill — the Fixing America's Surface Transportation (FAST) Act of 2015.

NOTEWORTHY NEWS

5 Patrick McKenna Named New Director of MoDOT

Patrick K. McKenna has been named the new director of the Missouri Department of Transportation by the Missouri Highways and Transportation Commission.

6 Welcome New MAPA Members

MAPA is PROUD to welcome our new members.

MAPA FEATURES

8 Member Profile

APAC KS-MO, headquartered in Columbia, MO is an Oldcastle Materials Company that is the number one asphalt producer in the U.S.

10 2015 MAPA-REF Golf Tournament

The annual MAPA-REF Golf Tournament raises funds to help support the MAPA scholarship fund designed for students pursuing higher education in transportation related fields.

11 Investigating the Keys to Japanese RAP Success

Excerpts from "Japanese RAP Practices 2014 Scan Tour: Lessons Learned"



Executive Director
Dale Williams



Fixing America's Surface Transportation

FAST Act of 2015
NEW BILL BRINGS
LONG TERM STABILITY

If you read my last installment of “The Way I See It,” you will recall that I paralleled the Federal Highway Bill to Bill Murray’s character in the movie “Groundhog Day.” We must have finally gotten it right, because we have a Federal Highway Bill! For the first time in over 10 years, we have a long term Federal Highway Bill — the Fixing America’s Surface Transportation (FAST) Act of 2015. The FAST Act of 2015, is a fully funded six year bill that will take us through September 30, 2020, year one of which is already in the books. The bill started in federal Fiscal Year (FY) 2015 with a baseline of \$40.9 billion. In FY2016, it will increase by 5.1% and will continue to increase by 2.1 to 2.4 percent per year through FY2020, increasing to \$46.3 billion. While this may not be the huge program we had hoped for, it does give us long term stability with a moderate increase in federal funding.

I am pleased to report that Missouri’s entire congressional delegation voted for the FAST Act of 2015. This would not have happened had it not been for the hard work of folks in our industry reaching out to their elected officials and helping them understand the importance of a long term highway bill. Please reach out once again and thank your members of congress for their vote and support of the bill. Now that we have won a key battle at the federal level, it is time to focus on funding at the state level. As I write this, the 2016 Missouri legislative session has not yet started, but a number of highway funding related bills have already been filed. There has also been some discussion among the gubernatorial candidates regarding transportation funding. While it is too early to tell if increased highway funding at the state level will gain any momentum, it is encouraging to hear that some are starting to recognize we have a problem. With that in mind, let’s now shift our focus to the state level and win the war.

For funding of your next project.
Look to the Commercial Loan
experts at

Hawthorn
BANK®

1-877-4HAWTHORN

Member FDIC www.HawthornBank.com NASDAQ: HWBK

ULTRAPAVE
MEMBER OF TEXTILE, RUBBER AND CERAMICAL CORPORA.

SBR Polymers for Hot Mix
Antistrip Polymers for Asphalt (UP5000)

John Murphy
706-618-3625
1300 Tiarco Drive SW
Dalton, GA 30721



Announcement

PATRICK MCKENNA NAMED NEW DIRECTOR OF MODOT

Patrick K. McKenna has been named the new director of the Missouri Department of Transportation by the Missouri Highways and Transportation Commission.

“After a nationwide search, the commission knew Mr. McKenna had the vision and experience to lead the department to a new level of success and achievement,” said Stephen R. Miller, chairman of the MHTC. Patrick McKenna previously served as the deputy commissioner of the New Hampshire Department of Transportation.

“I am excited and honored to take on the director’s position at MoDOT,” said Patrick McKenna, new director of MoDOT. “Missouri faces a lot of transportation challenges,

but MoDOT’s employees have proven time and again they can handle it. The department’s nationwide reputation for innovation is proof of that.”

In his role as deputy commissioner, McKenna served as the chief financial, operating and legislative officer for the organization. He has also worked in leadership positions in the public, private and non-profit sectors. Mr. McKenna also worked for several years as the sole proprietor of a real estate holdings company.

McKenna will replace Interim Director Roberta Broeker, who will return to her previous position as MoDOT’s chief financial officer.

New Director Highlights

Career

Patrick K. McKenna most recently served as the deputy commissioner for the New Hampshire Department of Transportation, a role that is the chief financial, operating and legislative officer. Before that, McKenna served in leadership positions in the public, private and non-profit sectors. He also worked for several years as the sole proprietor of a real estate holdings company. Mr. McKenna was previously chief financial officer for the Office of the Secretary at the United States Senate.

Education

McKenna has a Bachelor’s of Science Degree in Finance from Bentley University and a Master’s of Science in Management and Finance from the University of Maryland University College.

Personal

McKenna is married with three children. He and his wife, Suzanne, are enjoying raising two sons, Patrick Jr. and Connor, and a daughter, Kelsey.

He has been involved in youth sports organizations as a coach and serves on several boards of non-profit sports foundations.

Philosophy

Coming from a small state – New Hampshire – I learned how dedicated people are in government and how important public service is to people who have devoted their entire careers to this work.

I approach issues with a sense of mentoring and education, often seeking consensus between divergent viewpoints.

Leadership

I want to thank the commission for the confidence they have placed in me. As we all know, when a new leader comes in, the transition can be disruptive. I want to smooth that out as I move into my leadership role at MoDOT.

I believe in teamwork and letting experts in the field give their opinions as decisions are being considered. I think that’s how the best decisions get made.

WELCOME NEW MEMBERS

New members that were approved at the November 2015 Board of Directors Meeting are as follows:



ASSOCIATE

- Tag Truck Center**
Bill Mercial, General Manager
 2880 Hwy. 67 S.
 Farmington, Mo 63640
 573-747-0190
 Email: bill.mercial@tagtruckcenter.com
 Web: www.tagtruckcenter.com
- Home Builders of Central Missouri**
Stephanie Strobel, Executive Director
 1420 Creek Trail Drive
 Jefferson City, Mo 65109
 573-635-6001
 Email: stephanie@hbcentralmo.com
 Web: www.hbcentralmo.com
- Buckley Powder**
Eric Strope
 1221 Jefferson Street
 Jefferson City, Mo 65109
 573-690-1233
 Email: eric.strope@buckleypowder.com
 Web: www.buckleypowder.com
- Paving Maintenance Supply**
David Keener
 1808 SW Market Street
 Lee's Summit, Mo 64082
 816-525-8755
 Email: Dave.keener@pmsi-usa.net
 Web: www.pmsi-usa.net

CITY/COUNTY

- City of Springfield Public Works**
Brett Foster P.E.
 1010 West Chestnut
 Springfield, Mo 65802
 417-864-1937
 Email: bfoster@springfieldmo.gov
 Web: www.springfieldmo.gov
- City of Warrensburg Public Works**
Marvin "Slim" Coleman, Public Works Director
 102-A S. Holden St.
 Warrensburg, Mo 64093
 660-474-9135
 Email: scoleman@warrensburg-mo.com
 Web: www.warrensburg-mo.com
- City of St Louis**
Kent Flake
 1900 Hampton Ave
 St. Louis, Mo 63139
 314-647-3111
 Email: flakek@st.louis-mo.gov
 Web: www.st.louis-mo.gov
- Greene County Highway Department**
Rick Artman, Administrator
 Adam Humphrey
 2065 N. Clifton Ave.
 Springfield, MO 65803
 417-831-3591
 Email: rartman@greencountymo.org
 ahumphrey@greencountymo.org
 Web: www.greencountymo.org
- Lincoln County**
Dan Colbert, Presiding Commissioner
 201 Main St.
 Troy, Mo 63379
 636-528-6300
 Web: dcolbert@lcclerk.com

Hot Oil on Time

Coastal Energy Corporation
 Paving the way since 1979

1 Coastal Drive
 Willow Springs, MO 65793
 417-469-2777
www.coastal-fmc.com



Asphalt Mixture

- Superpave Volumetric Mix Design
- Marshall Mix Design
- Stone Mastic Asphalt Design
- Recycle Materials (RAP, RAS) Analysis
- Ultra-Thin Bonded Wearing Course Design
- Hamburg Loaded Wheel Test
- Asphalt Pavement Analyzer
- Moisture Damage Susceptibility Testing
- Profilograph Services
- Field and Engineering Service

Office Phone: 573-406-1383

Fax: 573-406-1398

Email: infotlabs@gmail.com

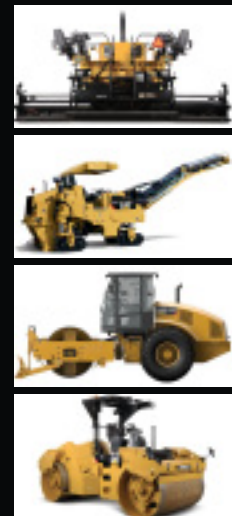
www.premiertestinglab.com

Asphalt Binder

- AASHTO M320 and MP19 PGB Verification and Classification Testing
- Asphalt Extraction Testing using Trichloroethylene
- Many other specialized testing capabilities



**PAVING ROADS
ALL DAY EVERY DAY!**



At Caterpillar Paving Products, all we think about is paving. Worldwide, no other manufacturer has more people dedicated to helping paving customers increase productivity, quality and profitability than Caterpillar.

Fabick provides the products and on-site support needed to improve your profitability. So you can bid with confidence, pave with efficiency and deliver on those non-negotiable performance specs.

Caterpillar is committed to your success. So is Fabick Cat. They are always there with financing, maintenance programs, parts and services needed to keep your equipment and crew on schedule. Or maybe ahead of it.

Toll Free: 1-800-845-9188
www.fabickcat.com

**NEW
USED
RENTAL
SERVICE
WE DO IT ALL**

"To Ever Serve Our Customers Better."



Member Profile
APAC KS-MO

APAC KS-MO, headquartered in Columbia, MO is an Oldcastle Materials Company that is the number one asphalt producer in the U.S. Their history can be traced back to the first patent on asphalt by Warren Brothers Asphalt.

With several different locations throughout Missouri, including three branch offices in Lake Ozark, Clinton and Springfield (also part of Arkansas Regional Offices), APAC employs over 600 people throughout central, western and southwestern Missouri at one of their ten asphalt plants.

APAC has grown through the years due largely to their strategic acquisitions. It began with Bill Eckhoff of Central Bridge Company that was started in 1968. Mr. Eckhoff later acquired Richardson & Bass Paving out of Columbia, MO in 1984 followed with Masters & Jackson out of Springfield in 1989. APAC entered the picture by purchasing all three companies in 1998. In 2000, they purchased Lake Ozark Construction (LOCI) and in December of that year they expanded to include Hall & Riley Paving and Quarries in Boonville and Marshall. In 2001, they purchased Paris Asphalt. Waiting several years, APAC expanded once more to acquire Hilty Quarries & Construction in 2010.

Through these acquisitions, APAC is able to remain committed to superior quality in their asphalt, bridge construction, concrete construction, excavating, milling, oil terminal and aggregate divisions by exploiting quality control initiatives, rigorous product testing and management plans and procedures. APAC has also championed their commitment to sustainability through investments in recycled materials such as reclaimed asphalt pavement (RAP) and recycled asphalt shingles (RAS) along with warm mix technologies that consume less burner fuel and release fewer emissions.

These efforts are reflected in their numerous national and state quality awards. Some include the Sheldon G. Hayes Award, the MODOT Contractor of the Year-Heavy Volume Award, numerous NAPA QIC Awards, MAPA QIC Awards and Diamond Achievement Awards. They are also noted for constructing the first full Superpave job in Missouri in 1996.





APAC is also committed to creating value and delivering “best in class” returns for their employees, customers, shareholders and community. APAC takes pride in all of their various community involvement efforts by supporting local sports teams, community improvement organizations such as Clean Up Columbia along with education by being involved with Partners in Education.

APAC is a global organization that is able to maintain the local identity and culture of the small companies that make up their respected corporation.



Bringing Integrity to the Surface.®
KANSAS CITY, MISSOURI 800-821-8549

On the job for over 90 years!



- POLYMER MODIFIED ASPHALTS
- EMULSIFIED ASPHALTS
- CUTBACK ASPHALTS
- MICROSURFACING
- CHIP AND SLURRY SEAL
- GEOTEXTILES/PAVING FABRIC INSTALLED
- PREMIUM COLD MIXES
- CRACKSEALANTS



WWW.VANCEBROTHERS.COM



8668 Olive Blvd
St. Louis, MO 63132
800-283-1336
314-993-1336

www.cmw-equip.com

Over 60 years of dependability supported by:



BLAW KNOX PAVERS, ROAD WIDENERS

ATLAS COPCO AIR COMPRESSORS

SUPERIOR BROOMS

MAULDIN DISTRIBUTORS/PAVERS

GORMAN RUPP PUMPS

CARLSON



STEWART AMOS SWEEPERS



VOLVO ROLLERS ABG PAVERS

Sales * Rental * Service * Parts



Komatsu Distributor

Need Equipment? Choose Roland

Reliable Equipment • Responsive Service
24-Hour On-site Emergency Service Available



Call The Location
Nearest You!

Bridgeton Columbia
314-291-1330 573-814-0083

Cape Girardeau Palmyra
573-334-5252 573-769-2056

KOMATSU®



15 locations throughout WI, IL, IN, MI, and MO

MAPA Event
2015 MAPA-REF
GOLF TOURNAMENT

It was a blustery day but that didn't stop just over 100 participants from having fun at the 2015 MAPA-REF Golf Tournament.

The annual MAPA-REF Golf Tournament raises funds to help support the MAPA scholarship fund designed for students pursuing higher education in transportation related fields.

We would like to extend a special THANK YOU to all our sponsors! Without the generosity of ALL of the participants and Event Sponsors, this event would not be possible.

Golf Outing Sponsors

- APAC-MO/KC
- Coastal Energy Corp
- Delta Companies, Inc.
- Ergon Asphalt & Emulsions
- Fabick CAT
- Fred Weber, Inc.
- Hutchens Construction
- MeadWestvaco (Now Ingevity)
- Missouri Petroleum
- NB West Contracting
- Pace Construction
- Pavon Corporation
- Phillips 66
- Prestige Powers
- Roadtec
- Superior Bowen Asphalt Co.
- UltraPave
- Van Keppel

And our First Year Tent Sponsors

- MayeCreate
- Roadtec



INVESTIGATING THE KEYS TO JAPANESE RAP SUCCESS

Excerpts from “Japanese RAP Practices 2014 Scan Tour: Lessons Learned”

By Randy West, Ph.D., P.E., and Audrey Copeland, Ph.D.

On average, 47 percent reclaimed asphalt pavement (RAP) is used in Japan’s asphalt pavements. In the United States, the average amount of RAP used in asphalt mixtures is about 20 percent. Since 2007, the U.S. pavement industry has made a concerted effort to increase the amount of RAP used in asphalt pavements due to increased cost of virgin materials and a desire to emphasize sustainable, environmentally friendly practices. Based on annual industry and highway agency surveys, there appears to be an upper limit on the average amount of RAP in asphalt mixtures of about 20 percent; however, these same surveys have identified that the majority of state department of transportation (DOT) specifications and standards will allow up to 30 percent RAP on average.

The National Asphalt Pavement Association (NAPA) and Federal Highway Administration (FHWA) promote the increased use of RAP in asphalt pavements. They wanted to learn how Japan has achieved a national average of 47 percent RAP in asphalt mixtures, the quality achieved, and the best practices applied. An industry scanning tour of Japan was planned and took place in December 2014 to learn about Japan’s use of high RAP. The scan trip also focused on construction operations and practices used in Japan.

Japanese contractors and road owners follow a simple mix design and materials testing process with a focus on performance. One of the most striking differences between Japan and the U.S. is the United States’ use of the Superpave tests and materials specifications. Japanese contractors and officials stated that the Superpave system is complicated and testing is expensive. In Japan, there is well-established trust among the government and industry; however, on government projects contractors must get permission to use RAP. The quality of Japan’s pavements and roadways is due to attention to details and a focus on quality.

There are about 1,150 asphalt plants in Japan, serving more than 90 percent of the country and producing about 55 million tons of hot-mix asphalt (HMA) annually. Of those 55 million tons, about 41.9 million tons (nearly 38 million metric tonnes) are recycled hot-mix asphalt (HMA). In the United States, there are more than 3,000 plants producing a total of about 350 million tons of asphalt mixture annually. The vast majority of asphalt plants in Japan are batch-type plants that use and produce smaller quantities of materials and have slower production rates than the drum plants common in the U.S. Approximately 15 percent of asphalt mixtures in Japan use polymer-modified asphalt binder. The majority of asphalt mixture production is for surface courses. Recycling HMA is considered routine in Japan, and the main focus for innovation centers on porous asphalt pavements (drainage pavements), water-retaining pavement structures, and heat-insulating pavements.

The average RAP content in Japan asphalt mixtures increased from 33 percent on average in 2000 to 47 percent on average in 2013. About 99 percent of RAP in Japan, similar to in the U.S., is recycled into new asphalt pavement mixtures, but some RAP is reused as base course. The average RAP contents are similar in colder northern and warmer southern regions, and vary from 20 to 60 percent on average.

Summary of Key Innovations

The tour of asphalt pavement innovations in Japan was enlightening in many ways. The U.S. tour group took away an appreciation of the Japanese attention to quality, simplicity, and trust between highway agencies and contractors. There were, however, some aspects of Japanese practices that are unlikely to take hold in the U.S., such as the return to batch plants and low production rates.

The primary area of interest for the U.S. tour group was to understand how Japan was able to accomplish very high percentages of asphalt recycling.



During a tour of RAP plant, the U.S. tour group was shown small piles of virgin asphalt mix, and mixtures with 45 and 60 percent RAP.

Japan's average RAP content — approximately 47 percent — is more than double the current average percentage in the United States. The tour group learned that several factors have enabled Japanese contractors to achieve such high RAP contents. Some factors are technical, and some are political or cultural.

Political and cultural factors include a strong emphasis on the need to preserve raw materials, to avoid generating waste, and to recycle. Japan has a number of environmental laws that require the responsible reuse of waste pavement materials. Milled pavement material and rubble from small-scale pavement demolition must be tracked from the project site through processing and recycling back into new asphalt pavements. Therefore, the primary motivation for recycling appears to be for conservation reasons rather than economic ones. Japanese contractors are willing to invest heavily in state-of-the-art RAP processing plants and sophisticated asphalt mix plants to effectively utilize RAP at high percentages. However, the Japanese specifications for mixes containing RAP are not complex. Rather, their specifications seem designed to encourage the use of high RAP contents. Key aspects of the Japanese asphalt recycling specification include:

1. RAP is processed from multiple sources. No restrictions are made as to the origin of the RAP.
2. RAP quality is judged by three criteria:
 - a. It must have a minimum asphalt content of 3.8 percent.
 - b. The recovered RAP binder must have a penetration greater than 20 or samples of the compacted RAP must have an indirect tensile (IDT) modulus of less than 1.70 MPa/mm.
 - c. The processed RAP material may not contain more than 5.0 percent P200 fines.
3. Fractionation of RAP is a contractor's choice, not a requirement. Most contractors choose to fractionate the RAP
4. Blending charts are used to determine ratios of virgin and recycled binders or dosage rates for recycling agents. Mix designers may use soft virgin asphalts or recycling agents to meet a target penetration value for the composite binder or a desired IDT modulus for the mixture.
5. Mix designs use the Marshall Method and criteria with a simple supplemental performance test, the IDT modulus, which limits mixes with very high stiffness (and low cracking resistance).

In several regards, Japanese contractors follow best practices for RAP management that have been recognized for years in the U.S., but are not necessarily widely used by many U.S. asphalt mix producers. Following are some of the standard practices used in Japan:

1. Stockpiles are covered and on a paved surface.
2. Moisture and dust contents of the RAP are minimized during crushing.
3. RAP binders are recovered and tested to evaluate their stiffness
4. RAP is fractionated, and the plants are equipped with multiple RAP feed bins.

The most obvious contrast in mix production between the United States and Japan is the prevalence of batch plants in Japan compared to continuous mix plants in the U.S. However, the most significant paradigm shifts were (1) the method of heating RAP in a separate dryer followed by mixing, and (2) conditioning the dry and hot RAP with a rejuvenator for several hours prior to mixing with hot virgin aggregate and asphalt. This is not to say that the production facilities (i.e. drum plants) in the U.S. are the limiting cause for lower RAP use; in most cases it may be specifications and local practices that have limited RAP use. The U.S. overall method for production — indirect heating in a steam (low oxygen) environment — has been proven not only on the NCAT test track but also by the millions of tons used in North America since the 1980s. If contractors use well-known best practices for running RAP, there is no technical reason the percent RAP in the U.S. can't continue to grow.

Key aspects of the Japanese method for high RAP mix production include:

1. Drying and heating of RAP in a separate parallel dryer.
2. Use of thermal oxidizers to handle emissions from the RAP dryer
3. Mixing a rejuvenator with the hot RAP and giving the material time to “activate and condition” the aged RAP binder.
4. Low production rates, typically 100–180 metric tons per hour. The conditioning step noted above is likely the controlling process.

Japan has reached its current high percentage of RAP utilization over several decades of research and field performance evaluations. Through analysis of pavement performance on hundreds of projects and experimentation in the lab and field, they have developed standards and practices that have proven to provide equal performance for high RAP content mixes and virgin mixes.

One aspect of Japan’s asphalt industry that has likely aided rapid implementation of new technologies is the small number of producers and contractors. These large companies have not only invested heavily in state-of-the-art plants and equipment, they also have built and staffed advanced central laboratories to explore innovations and development of proprietary products. The technical expertise of the Japanese companies is impressive, and the level of trust between the highway agencies and the contractors appears to be much better than is generally seen in the United States.

Safety, quality, and care for the environment are hallmarks of Japanese culture, and are clearly the top priorities in the road construction industry. Productivity and competition are much less of an emphasis compared to the U.S. road building industry. However, Japan’s focus on engineering production and construction creates an environment that results in quality pavements. Japan’s success with RAP can be summarized with simple mix design and testing requirements, a recycling specification for RAP use, and best practices for processing and handling RAP and production, which ensures the RAP binder is activated and blended in the asphalt mixture.

The tour group is finalizing a report that will document the findings from the Japan high RAP tour. The tour delegates included contractors, equipment manufacturer, State DOT representatives, researchers and a State Asphalt Pavement Association representative. Visit www.AsphaltPavement.org; the report will be available soon.

Dr. Randy West is Director of the National Center for Asphalt Technology. Dr. Audrey Copeland is Vice President of Engineering, Research & Technology at NAPA.



YOUR PAVING PARTNER
SALES • RENTAL • PARTS & SERVICE





Pete Martin
PRMartin@FoleyEQ.com
O: (785) 825-4661
C: (785) 488-7757



Randy Jordan
RDJordan@FoleyEQ.com
O: (785) 266-5770
C: (785) 256-1306

With over 55 years of paving experience between them, Randy Jordan and Pete Martin have experience in every aspect of the paving business including fleet management and maintenance, machine acquisition and life cycle management, work flows, resource allocation and profitable operations.

Give them a call for information and advice on the entire line of Cat® and Weiler paving machines.



FoleyEQ.com

Advertiser's Index

Coastal Energy Corporation	6
CMW Equipment	9
Fabick CAT	7
Foley Equipment.....	13
Hawthorn Bank.....	4
Keystone Engineering	14
Luby/Dynapak.....	14
Missouri Petroleum.....	16
Murphy Tractor & Equipment Co.	2
Premier Testing Laboratories, LLC	7
Roland Machinery Co.....	9
Ultrapave	4
Vance Bros Inc.	9

**With Keystone's Wedgelock Drum...
The Choice Is Yours
Standard Mill, Fine Mill
And Micro Mill**

**WITH THE
SAME DRUM**



KEYSTONE ENGINEERING

317-271-6192
keystonecutter.com

Wedge Lock Drum with single blocks - 5/8" standard spacing
Wedge Lock Drum with triple blocks - 2/10" micro spacing



CC424HF, CC524HF and CC624HF articulated tandem asphalt rollers:

- Designed for ease of use and maximum efficiency
- High frequency vibration is standard on all models
- Environmentally friendly iT4 engine

F1000 series wheeled or tracked asphalt pavers:

- Equipped with a powerful Cummins QSB 6.7 liter iT4 engine
- High-pressure fuel injection system reduces fuel consumption by up to 5% over earlier engines
- Ensure superior mat appearance, density and smoothness from a well-balanced tractor and proven screeds

Dynapac asphalt rollers and pavers

Visit your local dealer today to learn more:



Luby Equipment Services
Fenton, MO 636-343-9970
Cape Girardeau, MO 573-334-9937
Quincy, IL 217-222-5454
www.lubyequipment.com



The Victor L. Phillips Company
Kansas City, MO 816-241-9290
Springfield, MO 417-887-2729
Joplin, MO 417-781-8222
Topeka, KS 785-267-4345
Wichita, KS 316-838-3346
Garden City, KS 620-275-1996
www.vlpco.com

DYNAPAC
Part of the Atlas Copco Group

MAPA MEMBERS

The contractor's skill, experience and equipment relates directly to the ultimate quality of your asphalt paving project. Producing top quality work is the hallmark of MAPA's members. Whether you're building a highway, street, parking lot or driveway, look to a MAPA member. We'll be happy to show you the way.

Producer

APAC Missouri Inc.
Delta Asphalt/Apex Paving
Chester Bross Construction
Fred Weber, Inc.
G&M Concrete & Asphalt Company
Herzog Contracting Corporation
Hutchens Construction Company
Ideker, Inc.
Jefferson Asphalt Company
Leo Journagan Construction Company
N.B. West Contracting Company
Norris Asphalt Paving
Pace Construction Company
Simpson Materials Company
Superior Bowen Asphalt Company
Willard Asphalt

Non-Producer Paver

Byrne & Jones Construction
Ford Asphalt Company
Gevers Paving
Leritz Contracting, Busy Bee Paving
L. Krupp Construction Company
Seal-O-Matic Paving

Bituminous

Coastal Energy
Ergon Asphalt & Emulsions
Flint Hills Resources
Heartland Asphalt Materials
Missouri Petroleum Products, Inc.
Phillips 66 Asphalt

Aggregate

Ash Grove Aggregates
Boone Quarries/Norris Quarries
Bussen Quarries
Holliday Sand and Gravel
Martin Marietta
Southeast Missouri Stone Company,

County & City

City of Lebanon, MO
City of Springfield Public Works
City of St. Louis
City of Warrensburg Public Works
Cole County Public Works
Greene County Highway Department
Jefferson City Public Works
Lincoln County
State Technical College of Missouri

Engineering/Consulting

Central Missouri Professional Services
Engineering Surveys & Services

Associate

Akzo Nobel
Antigo Construction Inc.
Asphalt Drum Mixers, Inc.
Asphalt Shingle Grinding Services
Astec Industries
Barker, Phillips, & Jackson Inc.
Berry Tractor & Equipment
BOMAG Americas
Buildex, Inc.
Buckley Powder
CMW Equipment
Central Power Systems and Services

ChemStation
Dustrol, Inc.
FabickCAT
Foley Equipment
Getz Recycling Equipment, LLC
G.W. Van Keppel Co.
Home Builders of Central Missouri
Hansen RAS, LLC
Heatec, Inc.
Ingevity
Lockton Companies
Luby Equipment Services
Maxam Equipment
Mississippi Lime Co.
Murphy Tractor & Equipment Co.
Paving Maintenance Supply
Pavon Corp.
Petro Logistics, LLC
Premier Testing Labs
Road Science, Division of
ArrMaz Custom Chemicals
Roadtec, Inc.
Roland Machinery Co.
Scotwood Industries, Inc.
SealMaster of Saint Louis
Spirit Asphalt Inc.
Tag Truck Center
Tarmac International, Inc.
Transwest Truck Trailers
Ultrapave
Unique Paving
Universal Lubricants/RS Used Oil
Services
Victor L. Phillips Co.
Wright Asphalt Products Co.



P.O. Box 104855
Jefferson City, MO 65110
(573) 635-6071

PRSR STD
U.S. Postage
PAID
Jefferson City, MO
Permit 89

Missouri Petroleum

Preserving Pavements with Innovative Solutions since 1932



**Asphalt Emulsions
& Cutbacks**

•
**Micro Surfacing
Slurry Seal**

•
Chip Seal

•
Asphalt Underseal

•
**Tire Rubber Modified
Asphalt Sealer**

•
**Paving Fabric
Interlayers**

•
Geotextiles & Geogrid

•
Rainstore Systems

•
**Porous Paving
Systems**

•
Crack Sealants

•
**Endurablend Pavement
Coatings**

314-219-7305

www.MissouriPetroleum.com