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NOVEMBER-DECEMBER 2023 ■ A KHL Group Publication



OFFICIAL NORTH AMERICAN MAGAZINE

INSIDE **SCAFFOLD & ACCESS MAGAZINE**



INTERVIEW:  
**Ben Garner,**  
Equipment  
Depot

PREVIEW:



TRENDING:  
**Access  
equipment of  
the future**

**Alternative  
power and  
fuels**

# Micro scissors

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# COMMENT

## Moving forward

**A**s we wrap up 2023 with our final issue of the year, I find myself asking, "Where did the past 12 months go?" While I wish I could blame that solely on the fact that I have a 6-year-old daughter whose brain seems to take quantum leaps overnight (resulting in a constant chatter,) I can't. No, instead, the past 12 months hurtled by like a Kentucky Derby winner because this year, life seemed to get back to its regularly scheduled programming.

We booked flights and hotels; Returned to in-person conferences and shows. We shook hands, gave hugs and sat together for meals. We read "record-breaking" rental and manufacturer financial results nearly every quarter; Saw construction activity tick up across numerous segments; Battled ongoing supply chain problems that lead to equipment delivery delays; and continued the fight to secure - and retain - workforce talent.

There were headwinds, yes, but there were also tailwinds.

United Rentals, for example, saw Q3 revenues increase 23 percent year-over-year for the same period. Matthew Flannery, CEO, said, "Our full-year guidance speaks to the continued strength of our markets. Looking beyond 2023, we believe that our strategy positions us well to support our customers as they execute on the tailwinds we see across infrastructure, industrial manufacturing, and energy and power."

Sunbelt Rentals, which said it will deliver record full-year results for its fiscal year, also sees substantial growth opportunities for the coming year. "Our end markets in North America remain robust, supported in the U.S. by an increasing number of mega projects and recent legislative acts. This, combined with the substantial structural growth opportunities that we see for the business, enables the board to look to the future with confidence," the company said.

And adding to the momentum is Herc Rentals. During its recent investors day, the company said it is "prepared to capitalize" on its position to grow. "We've never had a more resilient business model, and the market backdrop has never been stronger," said Larry Silber, president and CEO.

As we champion some of the greatest wins and successes that came out of the past three years, we must also recognize that not every company came out on top. Numerous businesses (both suppliers/OEMs and rental operations) have shuttered this year, owners and management finally caving in after giving it all they could for the past 36 months.

Where do you stand on '23? Was it one for the record books? A "typical" run-of-the-mill year? Or did you face challenge after challenge?

Here's to 2024, may it be prosperous for us all. Thanks for reading.

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RELIABILITY IN ACTION

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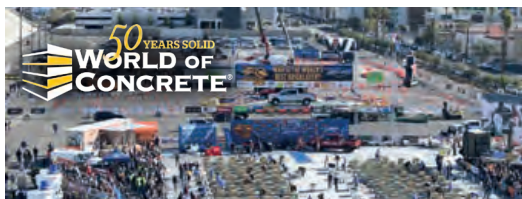
Anti-dumping investigation begins for China MEWP imports into Europe; IAPA judges announced and more.



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World of Concrete will celebrate its 50th anniversary in 2024. ALH provides a preview for the annual event.

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SAIA ASC A92 Committee meeting; SAIA calls for industry stakeholders to update industry best practices; plus IPAF manager to present at construction conference.

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Growing interest and market demand is fueling growth for the micro scissor sector. Pictured here is a MEC Nano 10-XD. To read more, turn to page 19.

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ALL ACCESS

## SA MAGAZINE

Through a joint venture with the Scaffold & Access Industry Association, KHL Group acquired Scaffold & Access Magazine in late 2021. Readers will find SA as a standalone publication located within the middle of Access, Lift & Handlers.



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## EVENTS 2024

Jan. 23-25  
WORLD OF CONCRETE  
Las Vegas, NV  
[www.worldofconcrete.com](http://www.worldofconcrete.com)

Feb. 18-21  
THE ARA SHOW  
New Orleans, LA  
[www.arashow.org](http://www.arashow.org)

March 3-7  
SAIA COMMITTEE WEEK  
Charleston, SC  
[www.saiaonline.org](http://www.saiaonline.org)

March 13-14  
IAPA AWARDS & IPAF SUMMIT  
Copenhagen, Denmark  
[www.iapa-summit.info](http://www.iapa-summit.info)

# Hy-Brid Lifts reveals new products for ARA

Hy-Brid Lifts has provided more details about the new products it plans to launch at the ARA Show, which is set for February in New Orleans next year.

Traditionally a specialist in low level access equipment, it was announced in September that Hy-Brid Lifts had been acquired by Turkish company ASKO, which already owns Turkey-based MEWP manufacturer ELS Lift.

Following the acquisition, Hy-Brid Lifts said the new partnership would result in a range of new products, and now the company has announced they will include new scissors, vertical masts and vertical mast lifts with jibs, as well as articulating boom lifts and telehandlers. The latter two represent a departure from the company's current product line.



A Hy-Brid PS-1930. PHOTO: HY-BRID LIFTS

MEC's NANO10-XD electric scissor lift. PHOTO: MEC



## China's Dingli to fully acquire MEC

Dingli is set to fully acquire MEC Aerial Work Platforms in a deal that will initially see it extend the 25 percent share it currently has in the company to nearly 50 percent.

MEC and Dingli became manufacturing partners in 2016 before the relationship was enhanced with the minority ownership stake in 2018.

China-based Dingli's further investment in MEC brings its total ownership to 49.8 percent. The plan is then for Dingli to buy the

outstanding shares of MEC and take entire ownership.

According to MEC, the synergies between the two companies has led to rapid growth and advances in innovation, including the introduction of MEC's Micro Scissors, Leak Containment System and scissor lift Xtra-Deck.

David White, president of MEC, said the company will now be able to expand its US facilities with additional investments, including in a California-based research center

and an East Coast parts center.

"Dingli's manufacturing expertise and quality is truly world class and industry leading. We have had a great partnership unlike any I've seen in my 30-plus years in this industry and I am truly excited for our future together."

White added, "Because we've been working together so long already, it is business as usual but elevated with greater synergies and working capital to achieve our mission of 'Better Solutions.'"

## United Rentals posts record numbers in Q3 results

United Rentals has posted revenues of \$3.7 billion for the third quarter of 2023, a 23 percent increase on the same period last year.

Meanwhile, rental revenues increased by 18 percent, up to \$3.2 billion, a third quarter record for the company.

United said the growth was down to the "broad-based strength

of demand across the company's end-markets and the impact of the Atern Rentals acquisition".

Its specialty rentals segment saw a 16.1 percent increase in rental revenue to a third quarter record of \$917 million, while net income was up by 16 percent to \$703 million, another third quarter record.

Elsewhere, used equipment sales

saw the highest growth, with the \$366 million representing a 102.2 percent increase.

Matthew Flannery, chief executive officer of United Rentals, said, "I'm very pleased with our third-quarter results across growth, profitability and returns, which were underpinned by broad-based activity. Our ability to provide our

United saw rental revenues increase 18 percent for the third quarter.



PHOTO: UNITED RENTALS

**\$15 billion**

Cost of cancelled Cali project between Lendlease and Google

**50%**

Global infrastructure projects 'failing'

**15.9%**

N.A. equipment rental growth in 2022

**\$5.5 billion**

Cost of Hyundai Motors EV plant build happening in Georgia

**43%**

Tarriff on Dingli MEWPs into the U.S.



PHOTO: HERC RENTALS

**Herc said it will expand its branch network through new greenfield additions and acquisitions in select markets over the next 36 months.**

## Herc Rentals sets new three-year targets

Herc Rentals has set new long-term targets for its organic rental revenue growth, aiming for a compound annual growth rate (CAGR) of 10 percent to 14 percent from 2024 to 2026 as part of its

new three-year targets.

Revealed during its investor day event, the company said the targets will see it "leverage organic strengths, invest in high-return areas of the business and capitalize on secular and structural market opportunities."

As well as rental revenue, the company is targeting 11 to 16 percent annual growth rates for its organic adjusted EBITDA.

At the same time, it intends to invest between \$2.8 and \$3.7 billion, net, on fleet for its existing network.

Meanwhile, Herc said it will expand its branch network through new greenfield additions and acquisitions in select markets; improve user experience by enabling mobile solutions; improve fleet-utilization tracking and logistics management; and work its 2030 sustainability goals.

Additionally, the company is introducing an

operating system called E3OS, which it said will enhance culture and performance.

Larry Silber, president and chief executive officer, Herc Rentals, said, "This system is about operational effectiveness and continuous improvement through standard processes, principles, practices, and tools to ensure we deliver the optimal customer experience at every touchpoint in the customer consumption chain as we continue to grow."

Herc also revealed its three-year plan progress launched in 2021. Rental revenue CAGR stands at 17 percent, exceeding the initial 15 percent target.

**Herc Rentals** has acquired California-based independent equipment rental company Summit Equipment Rentals. No financial details of the deal have been disclosed. Summit Rentals has three locations in Menifee, Chula Vista and Santa Ana and employs around 70 members of staff.

**H&E Equipment Services** has acquired California-based equipment rental company **Giffin Equipment**. Following the acquisition, H&E will add three branch locations in Ventura, Goleta and Santa Maria as well as a fleet size worth \$13.4 million. Recently, H&E also relocated its Atlanta branch to Ellenwood Industrial Drive, as well.

The extended version of the **IRN100** survey of the 100 largest equipment rental companies is now available at [www.khl.com](http://www.khl.com)

France-based access equipment manufacturer Haulotte has reported consolidated sales of €164.6 million for its 2023 Q3, up 23 percent on the same period last year.

For the first nine months of the year, the company reported total new equipment sales of €497.9 million, an increase of 36 percent compared to the same period last year.

Regionally, North America saw the company's largest increase in sales, with an 86 percent leap in the first three quarters, which was driven by a 128 percent increase in access equipment sales to the region.

In Europe, where the market is stabilizing, Haulotte recorded sales growth of +19 percent over the first nine months of the year, while in Latin America, Haulotte sales were up +37 percent.

"Driven by a backlog that remains above average, Haulotte forecasts annual revenue growth from +25 to +30 percent in 2023," the company said.



PHOTO: HAULOTTE GROUP

customers with a highly differentiated value proposition, led by safety and productivity, is enabling us to outpace the broader industry and create value for our investors.

"Our full-year guidance speaks to the continued strength of our markets. Looking beyond 2023, we believe that our strategy positions us well to support our customers as they execute on the tailwinds we see."

### ALH SHARE INDEX

**NOVEMBER 2023****-4.59%**

Company		Sep 1	Nov 15	% change
Ashtead Group	UK	53.10	51.62	-2.79%
H&E Equipment	US	46.71	46.61	-0.21%
Oshkosh Corp	US	106.13	97.08	-8.53%
Tanfield Group	UK	0.37	0.40	8.11%
Haulotte Group	France	3.34	2.48	-25.75%
Terex Corp	US	62.88	51.21	-18.56%
Manitex	US	4.61	6.35	37.74%
United Rentals	US	491.17	480.23	-2.23%
<b>SHARE INDEX</b>		<b>1467.30</b>	<b>1400.02</b>	<b>-4.59%</b>

## U.S. rental market sees softening growth in Q3

U.S. equipment rental saw softening growth in the third quarter of this year, a trend officials say is a return to “normal” for the industry which has seen a frenzy of expansion over the past few years.

In its updated forecast, the American Rental Association (ARA) indicates the U.S. equipment rental industry’s growth will slow but still grow.

Last quarter, the year-over-year growth was expected to be 7.6 percent in 2023 and 3.1 percent in 2024. The most current projections indicate 11.8 percent growth in 2023 totaling \$71.5 billion in construction and general tool rental revenue.

“Rental is going back to ‘normal,’ but normal means that strategy matters again – geography matters, fleet mix matters, customer type matters,” said Josh Nickell, VP of equipment rental, ARA. “In late 2020 to 2022, the conversation was, ‘How much are you up?’ And now, the conversation is, ‘What’s my market like?’”

The forecast includes both traditional and specialty as the new industry measure. Last quarter, the association corrected the forecast that underestimated nonresidential construction spending by at least 20 percent and ‘specialty rental’ in overall rental revenues.

“We are more bullish this quarter than last quarter,” said Scott Hazelton, managing director at S&P Global. “We are seeing a decent uptick with inflation moderating and our projections are relatively similar – stagnant but strong. It’s important to note that there will be more growth in construction and industrial equipment (CIE) than in general tool.”

► For more on this story, visit [www.accesslifthandlers.com](http://www.accesslifthandlers.com)

## JLG Q3 fueled by ‘strong demand’

JLG Industries, Inc., the world’s largest access equipment manufacturer, has reported equipment sales of \$1.32 billion for the three months ending Sept. 30, representing an increase of 27 percent over the same period last year.

The increase comes in response to “growth in all major regions,” JLG said, including improvements in operational execution, the easing of supply chain issues, higher pricing in response to higher input costs and the inclusion of sales of \$19.0 million related to the Hinowa acquisition.

Looking directly at product sectors, aerial equipment sales

amounted were up 26.5 percent to \$654.3 million compared to the same period last year, while telehandlers saw sales of \$393.8 million, an increase of 24.6 percent.

JLG said it has a “robust outlook” supported by “strong demand drivers, including mega projects, infrastructure spending, industrial construction projects, new use cases and aged customer fleets,” and it expects its 2024 orders to be mostly booked by the end of 2023. As a result, the company has upped its full year guidance from \$4.9 billion to \$5.0 billion for the full year.

The company’s backlog, which hit record levels over the last year, was up 2.3 percent to

**JLG experienced “growth in all regions” during its third quarter, the company announced.**

PHOTO: JLG



■ **United Rentals** has been selected as one of Forbes’ Best Employers for Women in 2023. Forbes’ sixth annual list of America’s Best Employers for Women was created in partnership with market research firm Statista. The ranking derives primarily from surveys that asked participants to evaluate their employers on dimensions such as atmosphere and development, working conditions, salary and wage, diversity, parental leave and family support.

■ **MEC Aerial Work Platforms** has appointed Robert Cox as its new Regional Business Development Manager. Cox joins will focus on growing strategic business partnerships and expanding the company into new growth opportunities. He comes to MEC with over 10 years’ experience in the industry.

\$4.0 billion in Q3 versus the prior year.

Total net sales for JLG’s third quarter amounted to \$1.31 billion, an increase of 27 percent over last year.

## Durante Equipment names branch manager

Florida-based rental company Durante Equipment has named Josh Djokic as its new branch manager. Djokic will oversee the day-to-day operations of the company’s Hollywood branch and will be responsible for leading a team of sales professionals while implementing strategic revenue initiatives to fuel further growth.

“I have had the pleasure of working with Durante Equipment as a vendor for the past few years and am thrilled to be joining the team. Durante Equipment has quickly become a name synonymous with superior customer service and quality equipment in South Florida,” said Djokic.

“I’m grateful for the opportunity to lead a team that is driven to

deliver for not only our customers but also our aggressive growth goals for the

**Josh Djokic. PHOTO: DURANTE EQUIPMENT**



next few years.”

Djokic has more than 15 years of experience in the equipment industry, in both sales and operations. His sales career includes roles with brands like Chicago Pneumatic and APT.

## Equipment Depot announces leadership appointments

Equipment Depot has announced key executive and sales appointments, which include Jeremy Rock being named as regional vice president of the South region, Michael Norelli as vice president of sales, and Bryan Leslie as regional vice president of the Pacific Northwest region.

The news comes following the company’s recent announcement that it’s targeting \$1 billion in revenues by 2025. For more on Equipment Depot’s plans and an exclusive interview its leadership team, see page 13.





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E18MCL



E18MML

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» VIEW FEATURES & CAPABILITIES AT [VERTICALLIFTS.JLG.COM](https://verticallifts.jlg.com)

# Anti-dumping investigation begins for China MEWP imports going into Europe

The European Commission has begun an investigation into imported MEWPs from China, following official complaints from suppliers based in Europe, which claimed that low cost or 'dumped' imports are harming the industry.

The complaint was first lodged

in September by the 'Coalition to restore a level playing field in the EU Mobile Access Equipment Sector' and could potentially lead to tariffs being imposed on imported goods, as happened in the U.S.

The identities behind the coalition have not been made public.

France-based Manitou Group welcomed the anti-dumping investigation, saying: "In the last months, unusual commercial practices have emerged on the European market, at a time when healthy and fair competition is more necessary than ever for the development of a robust European industry in this sector."

"The European Commission was therefore informed of this situation and received substantial evidence."

Michel Denis, president and CEO of Manitou Group, added, "We welcome the launch of this

investigation. Fair competition on the European market is a prerequisite to ensure that businesses remain sustainable.

"We are therefore calling for swift and decisive action by the European Commission so that our activities and that of hundreds of our industrial suppliers in the EU can continue to innovate, to provide quality jobs to their workforce and continued safety to workers..."

China-based Sinoboom said it planned to work with the Commission. "Sinoboom is cooperating fully with the investigation and looks forward to confirming that it has followed the highest standards of professionalism while introducing its high quality products to European customers."

► For updates, visit [www.accessinternational.media](http://www.accessinternational.media)



PHOTO: HAULOTTE GROUP

Part of the recent Haulotte delivery for ConX Hire.

## Haulotte delivers to remote spot

ConX Hire, based in the state of Victoria, Australia, has taken delivery of several new scissor and boom lifts from Haulotte.

The two-truck delivery of MEWPs is set to serve southern New South Wales, as well as Victoria.

ConX Hire has seen significant growth and demand for scissors and articulating boom lifts across its network, and is opening a new branch in Ferntree Gully, adding to its existing locations in Airport West, Brooklyn and Shepparton. They feature a range of rental units, including dry hire equipment for earth moving and civil construction industries, as well as MEWPs.

The order from Haulotte includes Optimum 8, Compact 10 and Compact 12 DX scissors, plus HA16 RTJ PRO, HA16 RTJ and Sigma 16 Pro articulating booms, which were initially delivered to the Shepparton branch.

## IAPA judges announced

Four of the five judges for the IAPA awards 2023 can now be confirmed, as they prepare to consider entries from the industry across 13 categories.

As always, the International Awards for Powered Access (IAPAs) represents the global access industry at its highest level and encourages individuals and companies, large or small, that can demonstrate best practice, to enter. The deadline for entries is Dec. 1.

The judging panel includes:

- **Vicki Allen**, Managing Director of International Platforms
- **Elisabeth Ausimour**, President of the Product division, Manitou
- **Dawei He**, Global Sales and Marketing Director, Sinoboom
- **Vipul Tulsian**, Managing Partner at India-based RentEase International.

► To learn more about the IAPAs, IPAF Summit or to enter the awards, visit [www.iapa-summit.info](http://www.iapa-summit.info)



Winners from the 2022 IAPAs celebrate. PHOTO: KHL



■ Brazil-based rental company **Mills** saw a 21.5 percent increase in net revenues for its third quarter of 2023. The business posted R\$280 million throughout the entirety of the quarter while rental revenue, which was responsible for 94 percent of growth, was up by 24.1 percent from 2022 at R\$320 million.

■ **Manitou Group** is set to acquire 75 percent of two companies specializing in welded parts and laser cutting, Come and Metal Work, to support its Italian plant, the company announced.

■ **Speedy Hire** and hydrogen genset supplier **AFC Energy** have launched Speedy Hydrogen Solutions Ltd (SHS), a 50:50 joint venture company dedicated to renting hydrogen fuel cell powered generators.

■ **Sinoboom** is set to establish a new subsidiary for the UK in January, while the company's current Regional Manager for the UK and Ireland Julie Houston Smyth moves to its Ireland distributor Lolex. Houston Smyth will take a leadership role with Lolex, joining her husband Trevor Smyth at the company. As authorised Sinoboom distributor, Lolex will handle Sinoboom business and activities on the Island of Ireland, with further projects planned to develop the manufacturer's presence there.

■ **Deutz** previewed two new engines at Agritechnica 2023, the TTCD 7.7-litre, six-cylinder diesel engine, and the TTCD 5.1, a four-cylinder model which has a maximum power output of 129 kW at 2,200 rpm and maximum torque of 750 Nm (950 Nm peak).

# DYNAMIC energy

The **Snorkel S3970RTE** compact rough terrain electric scissor lift delivers dynamic performance. Equipped with long-lasting lithium-ion batteries, this scissor lift offers clean and quiet operation. A compact design makes it easy to maneuver tight areas and powerful 4-wheel drive tackles tough terrain.

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REDUCTION

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AND OUTDOORS



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# Plato and equipment rental

Ben Garner, vice president of Equipment Depot, speaks with Jenny Lescohier about ancient philosophy, and urges old-school thinkers to embrace the benefits of technology



worldview for the future and stop resisting the developments that are rapidly and irrevocably changing the ways we do business.

Equipment Depot is at the cusp of its own new era, having named Anthony Garcia as its new president just last month. For his part, Garcia has said, "The industry is in a state of unprecedented technological advancement. From how automation, electrification, robotics and AI are playing a role, the potential to reshape the landscape is at our fingertips – and I envision Equipment Depot being on the forefront."

To dig into some of those changes and what they mean to the company and to the industry, we talked with Garner about all of the above.

## TELL US WHAT 'ONTOLOGICAL SHOCK' IS?

Ontological shock is when you experience something that's so life changing, it forces you to transform everything you do, to the point that you might laugh at the way you did things before. In the speech I gave, I used some silly examples, like what if a Martian walked across the room right now? We would all go home and tell



“ A lot of people, especially on the construction side, are old school. They don't like letting go of some things. ”

**BEN GARNER**, vice president, Equipment Depot



ALL PHOTOS: EQUIPMENT DEPOT

Artificial intelligence and digitalization are going to be life changing, says EQD.



Equipment rental is a straightforward proposition: You own machines that people need, and they pay you for the privilege of using them for a limited time. We all understand this, but what if that simple business model we've known has now, in reality, grown into something more complex? What will it take for us to really see it – and its potential – with open eyes?

This is a question posed by Ben Garner, vice president of Equipment Depot, a nationwide, independently operated material handling rental company. Garner gave a presentation titled, "Applying allegorical metaphysics to rental," and if that doesn't tell you something about how this man's mind works, his next question will: How can the rental industry get over its collective "ontological shock" and see today's reality for all of its potential?

Feel like you're in Philosophy 101 again? That's just how Garner wants it. It's time to gain a new

our families, “Martians are real!” We would be laughed at as fools, but that wouldn’t make the truth of it any less real.

It’s like Plato’s allegory “The Cave,” which talks about prisoners who’ve been inside a dark cave their whole lives. Once they are released, they see the world and all of its light, but when they go to tell the remaining prisoners what they saw, they’re met with misunderstanding and disbelief. The light, however, is still real.

### HOW DOES THIS APPLY TO EQUIPMENT RENTAL?

The whole point was to get people to open up to what artificial intelligence and digitalization mean for our businesses, and the importance of data. I talked about our customer value mapping, where we can really track our profitability at the customer transaction level, and I talked about benchmarking efforts, which are finally getting around to the rental industry.



“ I think artificial intelligence and digitalization are going to be life changing to how we do business, frankly, it in rental. ”

**BEN GARNER, vice president, Equipment Depot**

## Executive changes

In 2020, Equipment Depot announced it was on track to meet its financial growth goal of \$1 billion in revenue by 2025. The company’s then-leadership team created its “2025 Vision Strategy,” which included investment in strategic hires, expansion into key U.S. material handling markets, employee advancement training and the creation of two new divisions; EQSOLUTIONS and heavy trucks and port equipment.

With strategy in mind, the company appointed Anthony Garcia as president, effective September 11.

Garcia succeeds President and CEO David Turner, who announced his departure after 12 years at the helm of the equipment rental company.

Garcia joined Equipment Depot in 2022 as the regional vice president of the South Region. Prior, Garcia spent 15 years in managerial and executive roles at Mammoet, the Dutch heavy lifting and transportation service company.

Most recently, he served as Regional Vice President of Mammoet Americas, overseeing the \$250 million U.S. and Mexico business.

Additionally, Jonathan Hesener advanced from vice president of sales and customer experience to chief sales officer and Hugh Parry rose from vice president of operations to chief operating officer.

Turner exits after successfully integrating five new companies into Equipment Depot, reaching more than 50 nationwide locations while creating numerous new sub-business units.

“Over the past 12 years, I have been privileged to be a part of the transformational journey and to have seen the extraordinary passion, commitment and drive to be the best service organization from our people,” said Turner.

“As our recent performance shows, it is clear we are delivering, and after significant investments, Equipment Depot is well positioned to generate consistent, strong returns.”

Ken Barina, president of Mitsubishi Logisnext Americas Inc., Equipment Depot’s U.S. parent company, said, “Since joining Equipment Depot in 2022, Anthony has made a positive contribution to the South Texas and Louisiana regions with his strong business instincts, leadership skills and work ethic.

“Anthony has also brought a renewed sense of focus and excitement to these critically important growth regions. We look forward to his leadership as Equipment Depot charts its course into the future.”

Garcia added that he sees technology playing a more significant role in Equipment Depot’s business; “The industry is in a state of unprecedented technological advancement.

“From how automation, electrification, robotics, and AI are playing a role, the potential to reshape the landscape is at our fingertips – and I envision Equipment Depot being on the forefront.

“Investing in our people is critical as well. They are our greatest asset, and advancing their skills is an important part of the equation. We must also preserve the strong culture we have created while living our core values every day.”



**Anthony Garcia, president, Equipment Depot.**

PHOTO: EQUIPMENT DEPOT

I think artificial intelligence and digitalization are going to be life changing to how we do business, frankly, in every aspect of the world, but we already see it in rental. We’ve gone from preventive maintenance fault codes to predictive maintenance. As we gather more data and more experience in real-life situations, the OEMs will gather that data, and rental companies will be notified that the machine has an error or is about to go bad before the operator knows. That’s exciting in what it means for the life of our machines, but it could also save people’s lives. Safety sensors, like we already see on some cars, can automatically slow your vehicle down to prevent hitting obstacles and so on.

**In May, Equipment Depot celebrated the opening of its new 75,000-square-foot facility in Romeoville, IL.**





Technology has helped shift maintenance to predictive from preventative fault codes.

JLG has already launched something to that effect, which is not fully autonomous but some of its operation is. Operators can now control scissor lifts from an app. I can use augmented reality to see, virtually, if a machine will work inside of a space.

There are some cool things that are fun and salesy, but there are also changes happening throughout the whole rental process, from beginning to end. Contractors are starting to see a little bit more involvement from the beginning, sharing the APIs from their bidding and mapping out how the usage on our machines can help them move the project along.

**CAN YOU WALK ME THROUGH WHAT THAT MIGHT LOOK LIKE?**

Contractors are using statistics on actual hours in the machines in realistic applications to bid



their jobs and plan the phases and the spacing of assets. For example, when they scaffold the side of a building, and they have seven trades trying to work on an application, it used to be they would just scaffold it and say okay, you get it next week, and they get it that week. Now, they can build a model of when certain types of machinery can come in and who can use them. It's basically logistics for maximum efficiency.

**WHAT DO YOU SAY TO THOSE WHO ARE NERVOUS ABOUT CHANGING THE WAY THEY DO THINGS AFTER SO MANY YEARS?**

That was one of the reasons I gave three or four examples of the ontological shock, where people literally laughed at the way we did things before. The message is: If you hear one thing from this talk, just accept that it's okay to move into this >



Digitization and automation could play key roles in the future of equipment rental.



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digital transformation. It's 2023 in America. I can't explain the efficiencies you'll get by some of the most rudimentary technology that we now have, much less the direction that we're going to be in probably two or three years from now with AI.

I call it getting out of your cave – going back to Plato's "The Cave" – you've just got to accept the changes, dip your toe in and you can realize exponential benefits.

A lot of people, especially on the construction side, are old school. They don't like letting go of some things. I was at a big convention last year in Florida, and the COO of one of the biggest rental companies told me he had the same problem with his customers using their online portal to rent equipment. They still have not got all the logic built around qualifying the customer for the exact right machine. So there's still a



relationship aspect to the business, but some of the sales reps don't want to share the technology because they feel they're going to be replaced by it. I'm one of the first to say that sales reps who embrace the technology free up so much of their time that they can actually do a little more relationship building.

**HOW WOULD YOU CHARACTERIZE THE RENTAL INDUSTRY'S READINESS TO EMBRACE THE CHANGES THAT ARE COMING?**

We're way far behind on a lot of it. Look at all of the technological advancements they've made in the European market. For example, we still don't have light sensors on telehandlers in America. They've had them forever over there. More and more telehandlers are being built in the United States, so when are we going to start using those regularly?

**IS THERE HOPE FOR THE TECH LAGGARDS?**

I do think construction rental is far more advanced than material handling rental. Look at all the construction folks that are using and embracing telemetry and things like that. Look at the pay-as-you-use model in construction; we call it the Uber effect. Because of the technological advancements with telemetry and the CANBUS system, we can now track actual machine usage, and we're seeing it in billing, as well, which could be an opportunity for us in the rental business. Perhaps we can finance our assets with leasing companies on a pay-as-you-use basis. There's no end to the possibilities. ■



“ I think artificial intelligence and digitalization are going to be life changing to how we do business, frankly, in every aspect of the world, but we already see it in rental. ”

**BEN GARNER, vice president, Equipment Depot**

**Personnel investments**

Equipment Depot announced key executive and sales appointments recently, which include Jeremy Rock being named as regional vice president of the South region, Michael Norelli as vice president of sales, and Bryan Leslie as regional vice president of the Pacific Northwest region. The news comes following the company's recent announcement that it's targeting \$1 billion in revenues by 2025.

"Equipment Depot has been on a strong revenue trajectory since it announced its plan to double revenue in three and half years," said Equipment Depot's President Anthony Garcia. "We are a fast-growing company, and hiring exceptional leaders is critical to supporting the company's aggressive growth goals."

Rock will lead the South Texas, Louisiana and Mississippi markets. Throughout his 13-year career with Equipment Depot, he has a proven track record as general manager of the Houston branch, and within three years, he grew revenue by 162 percent. In addition, in 2020, Rock led the South region as director of sales, where he handled the merger of a newly acquired material handling company and the transition and implementation of a strategic account-based marketing and sales structure across the South region, resulting in a market share increase from 4 to 10 percent. Before working for Equipment Depot, Rock was a



**Jeremy Rock, regional vice president of Equipment Depot's South region.**  
PHOTO: EQUIPMENT DEPOT

sales manager in the power generation division at Cummins Crosspoint in Nashville, where he was responsible for project lifecycle, design, innovation, sales and implementation. Prior, he served in the U.S. Air Force as a Civil Engineer.

Norelli will work directly with the regional sales teams and national accounts organization to achieve the company's ambitious revenue and market share targets. He will also lead the overall business development efforts, focusing on new markets and customers across its 3,000-mile footprint.

Before Equipment Depot, Norelli was vice president of sales and business development at Northeast-Western Energy Systems, the largest distributor of Jenbacher onsite power generation equipment in North America.

Prior to working at the largest U.S. distributor for Jenbacher equipment, Norelli worked at the Jenbacher factory, which at the time was owned by General Electric (GE). Norelli held multiple positions at GE, including sales, marketing and strategic planning roles.

As the company's new Pacific Northwest lead, Leslie is charged with driving the overall business growth in both the Portland and Seattle markets. Leslie grew up in the material handling business at Norlift of Oregon, Inc., which was a family business operated by his parents, Tom and Joan Leslie, since 1985. Leslie joined Norlift in 2015, rising to operations manager in 2018 and general manager after the acquisition by Equipment Depot in 2022.





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# Leveling up from ladders: The booming demand for micro scissiors

**T**iny tots. Micro machines. Low-level access equipment. No matter what they're being referred to as, micro scissor lifts – units which have less than 19 feet of platform height – are becoming more prominent within fleets and on jobs as the construction industry shifts from the use of ladders and scaffolding toward safer work-at-height means.

And one big reason behind the change, according to Gary Crook, vice president of engineering at MEC Aerial Work Platforms, is the number of “ladders last” initiatives major contractors have recently adopted.

“Due to falls, injuries and fatigue associated with the use of ladders, there are many reasons to eliminate [ladders] from the workplace,” says Crook.

Often, ladders can result in compliance issues, safety concerns and lost time. According to the Occupational Health and Safety Administration (OSHA,) ladders account for roughly 20 percent of workplace fall injuries—a number that jumps to 81 percent in the construction industry—and as a result of ladder use, about 90,000 people

per year receive emergency room treatment.

Additionally, ladders ranked third on OSHA's 2022 list of the top 10 most-cited standards with 2,449 violations, and according to the National Institute for Occupational Safety and Health (NIOSH,) more than 100 people die and thousands are injured from ladder-related falls each year in the U.S.

While some might argue that with safe use, ladders still have a relevant place on the jobsite,

**With an increased focus on floor loading, and strong emphasis on working safely at height, demand has skyrocketed over the years for the under-19-foot club. ALH reports.**

it's apparent that low-level access solutions, including micro scissor lifts, are taking some of the ladder's market share.

## Getting to work

Micro scissor lifts strike a perfect balance between their non-powered work-at-height siblings such as ladders, and their larger, powered-access solutions like boom lifts. The units are often seen as a more efficient alternative to applications that traditionally have called for a ladder or a scaffold in years past, which include painting, electrical work, insulation installation, maintenance, drywall hanging, warehouse stocking, piping and plumbing.

And those ‘core’ applications haven't changed much in the past two decades, says Justin Kissinger, marketing manager at Hy-Brid Lifts, “But what has changed is the market's acceptance of low-level scissor lifts,” Kissinger says. “Contractors are realizing that low-level scissor lifts are an effective replacement for ladders and scaffolds on most jobsites. They are seeing the benefits that [micro] lifts offer over, such as easier maneuverability, reduced safety hazards and improved efficiency.”

With their benefits being touted loud and clear, interest and use for these miniature MEWPs has gained steam over the last decade, and Corey Connolly, senior product manager at Skyjack, says the North American market shows no signs of slowing down.

“There's been considerable market growth, and each subsequent year it has continued,” Connolly says. “And 2023 is continuing to show

**JLG's ES1330L micro scissor lift on a jobsite.**  
PHOTO: JLG



**MEC Aerial Work Platform's 1330SE micro scissor lift.**  
PHOTO: MEC AERIAL WORK PLATFORMS





MEC Aerial Work Platform's NANO10-XD micro scissor lift.

PHOTOS: MEC AERIAL WORK PLATFORMS

MEC Aerial Work Platform's Micro19-XD micro scissor lift.



considerable demand still for these types of machines.”

Skyjack says that the micro scissor's low total weight – most units weigh just shy of 2,000 pounds – afford its customers to use micros on jobs that often feature raised or finished sensitive flooring, such as data centers, hospitals, schools, hotels, office buildings and retail. Additionally, the lower a lift's weight, the more materials a rental center or their customer can transport on a jobsite.

“I would say the big trend in the micro scissor sector was the development of its own segment,” Connolly says. “Separated from the larger electric scissors, it's no longer seen as a niche subgroup of those machines. The micro lift has developed into a distinct segment in the rental industry.”

### Looking back while looking ahead

Another major influence in the rise of micro scissor use was the global pandemic.

“With exponentially more people working or attending classes remotely since 2020, data centers have never been more crucial to society, and the demand for construction in this segment is skyrocketing,” says MEC's Crook. “We expect this sector's growth to continue.”

Kissinger says that Hy-Brid Lifts has also seen the micro scissor lift purchasing pace trend upward since the pandemic's peak – even with challenges such as supply chain difficulties,

labor shortages and, recently, interest rate spikes.

“[But we] believe 2024 will be another strong year

for the low-level scissor lift market, and we are planning for growth, Kissinger adds.

At Genie, Product Manager Christian Dube agrees that regulations and employer restrictions have discouraged the use of ladders and increased the demand for micro platforms, particularly the UK, “but we are also seeing demand for micro-scissors around the globe, including elsewhere in Europe and in North America.”

Singing the praises of compact scissors, Dube adds, “Slab scissor lifts in general are extremely popular because they enhance safety and productivity for a variety of tasks. For example, for applications in warehouses and data centers.”

### Machine launches and updates

Earlier this year, MEC Aerial Work Platforms launched its Nano 10-XD, the company's first all-electric scissor lift.

Powered by standard lithium-ion batteries to enable faster charging and longer operation, the machine is equipped with an all-electric lift, steer, and drive and is said to require zero hydraulic oil.

With a maximum platform height of 10 feet and an operating weight of 1,234 pounds, the Nano 10-XD can easily fit into a standard

“ Contractors are realizing that low-level scissor lifts are an effective replacement for ladders and scaffolds on most jobsites. ”

GARY CROOK, VP of engineering at MEC Aerial Work Platforms

elevator and is said to be suitable for use on a wide range of floor types.

According to the company, its compact design makes it “perfect for data centers, hospitality, food, and pharmaceutical applications,” while also allowing it to pass through standard door frames.

Other features include a standard Xtra Deck to get through 2-foot by 2-foot ceiling grids and use in hard-to-reach areas, standard swing gate and ground to platform step height which removes the need for a ladder.

“We took a fresh look into the low-level access segment and what constituted as a true solution to the ‘Ladders Last’ commitment,” Crook says. “It became clear that not only should the risks of using a ladder be mitigated but productivity

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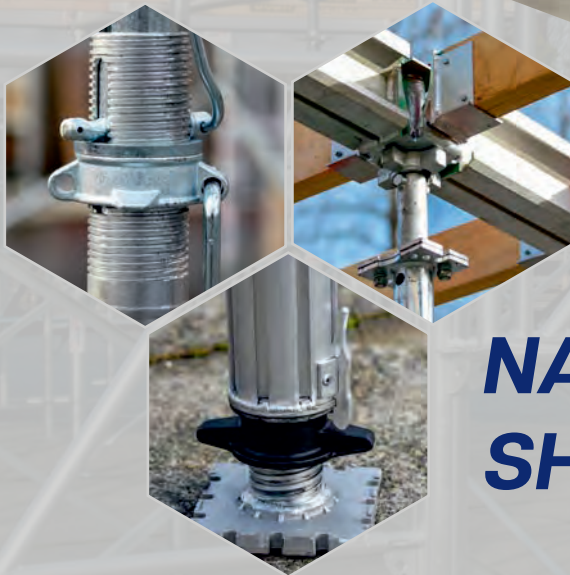
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# STRONG SUPPORT

What a week we had in Vancouver for our Annual Convention & Exposition this year! I am so proud of what our group accomplished during the past few months, weeks and days leading up to the event.

It was a whirlwind – albeit a *good* whirlwind.

During our Oct. 16-20 event, we had a total of 549 attendees and spouses in attendance.

Of those attendees, 134 were member companies, and 51 were non-member companies.

In total, our attendance represented 17 countries from around the world!

But the good news doesn't stop there.

More than 109 people were walk-in registrations for our event, and, the cherry on top: we saw a record-breaking 252 first-time attendees.

The Scaffold & Access Industry Association also trained 30 students across three training sessions from our local ATIs.

“This year’s Annual Convention & Exposition in Vancouver was a success.”

**TRACY DUTTING-KANE**

We also offered up our most diverse panel of speakers ever, who covered topics such as the “age gap” when hiring, how to attract (and retain) workers, an update on the construction economy from the Associated General Contractors of America, and so much more.

I hope each of you found the information interesting and beneficial, and have started to implement it for positive results.

Like I said – what a week! Thank you for making it happen.



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More than just a listing, the SAIA Annual Membership Directory & Handbook provides a wealth of information about the Association, its executive committee and board of directors, training, products, resources and SAIA Councils. SAIA members can access the directory both in print and digital formats, as well.

For more information, visit [www.saiaonline.org](http://www.saiaonline.org)



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The 2023 Annual Convention and Exposition beat all expectations. The SAIA looks forward to building on that momentum in the coming years.

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DICA partners with Hydro Mobile; John Michael Robert Rosenthal: 1941-2023; Four fatalities in German scaffold collapse; Doka helps construct Hyundai Motors' EV plant; Registration opens for SAIA Committee Week; SAIA hosting PFPE webinar series; OSHA places Hyundai EV plant contractor on 'Severe Violator' list, and more.

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Marr Scaffolding recently utilized a robot for a one of its largest scaffold builds on record. *Lindsey Anderson* discusses the details with *Bob Dembitzki*, president and general manager of scaffold and shoring.



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**14 PROJECT REPORT: DOKA**

With challenging structures and a tight schedule, the 36-story Alloy high-rise in Los Angeles was no easy build. Doka USA, who provided shoring and formwork for the project, details the job.

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# JOHN MICHAEL ROBERT ROSENTHAL: 1941-2023



PHOTO: SAIA

John Michael Robert Rosenthal.

It is with great sadness that SA has learned of the passing of John Michael Robert Rosenthal on September 1 after battling cancer for over a year. He was born on August 26, 1941, in Toronto, Ontario, the eldest son of Murdock and Joan (O'Neill) Rosenthal.

Rosenthal graduated from the University of Toronto's Mechanical Engineering program in 1967. Soon after, he spent five years working

for the Aluminum Company of Canada in Guyana, Northern Quebec, and in Jamaica before joining *Aluma* Systems in 1972 to help develop the Aluma Beam and the Flying Form system. When Aluma acquired a scaffold company in 1978, Rosenthal expanded his knowledge to include scaffolding as well as concrete shoring and forming systems.

Rosenthal was the company representative to the SSFI, Canadian Standards Association, the Scaffold & Access Industry Association (SAIA) and SIAC. He has written many articles published in the Access Canada and Scaffold and Access industry magazines, has written engineering design manuals, product manuals and maintenance manuals for several companies in Canada and in the U.S.

Rosenthal has won many awards from the SAIC, Professional Engineers Ontario, Construction Safety Association of Ontario, Ontario Voluntary Service, Engineers Canada and the Peel Literacy Guild.

Rosenthal was a long-time member of SAIA and participated in several committees, as well as being an Accredited Training Provider for several SAIA training programs. He was recently involved with the re-development of the SAIA Competent Person Training Program for supported scaffolds. He always emphasized safety and left a legacy of developing safety standards, establishing training curricula, providing expert testimony and training thousands of workers across Canada and abroad.

He will be greatly missed by his wife, Francine, and his daughters, Jennifer and Julie.

His family wishes to thank all the doctors, nurses and staff at the Thunder Bay Regional Health Sciences Centre, who offered Rosenthal exceptional care over the past year.

Donations can be made to the Thunder Bay Regional Health Sciences Centre and the Canadian Cancer Society.

Condolences, fond memories and notes from loved ones and friends may be expressed at [www.sargentandson.com](http://www.sargentandson.com).

KHL Group and the staff of its magazines including *Scaffold & Access* send their sincere condolences to the family and friends of John Michael Robert Rosenthal.

## GEDA TRANSPORT PLATFORMS ASSIST ON IRISH APARTMENTS

Crews building a housing development in the coastal town of Dalkey, Ireland – about 15 km southeast of Dublin – recently utilized a GEDA 1200 Z/ZP transport platform to move materials and workers safely and quickly on the construction site.

Irish rental company Mantis Cranes LTD determined the GEDA 1200 Z/ZP was the “optimal device” for the project after a site inspection and installed the platform in an underground parking lot on the jobsite, where it could access all five floors of the building through an opening at ground level.

The 1.4-meter-by-2-meter platform, which has a load capacity of 1,500 kg, was able to transport up to seven people, in addition to materials such as plasterboard and roof slates.

The building of one- and two-bedroom apartments is situated near the coast of the Irish Sea and has views of Dalkey Island.

Current high demand for housing in Ireland meant the timing of the construction had to be quick, and the project was finished with the GEDA transport platform in about seven months, the company said.

For additional project and jobsite details, visit [www.scaffoldmag.com](http://www.scaffoldmag.com).



PHOTO: GEDA

## FOUR CONSTRUCTION WORKERS DIE AFTER SCAFFOLD COLLAPSE

Four construction workers have died on a construction site in Germany and another was seriously injured after scaffolding fell down an elevator shaft.

The workers were all reported to be Bulgarian and were working in a building when the scaffolding collapsed from the eighth floor.

The accident happened on

a site in the Ueberseequartier in Hamburg's HafenCity, Europe's largest ongoing urban redevelopment project, on the Elbe river.

“One person was rescued with serious injuries, but help came too late for four other people,” authorities said.

The cause of the scaffolding collapse has not yet been established.

## Four people died in a recent scaffolding collapse near Hamburg, Germany.



PHOTO: EIBNER VIA REUTERS CONNECT

# DOKA HELPS CONSTRUCT HYUNDAI MOTORS' EV PLANT

Doka USA, provider of formwork and safety solutions, announces Doka's involvement in a massive three-building Hyundai Motors project that is relying on a fast timeline.

Located 30 minutes west of the coastal city Savannah, Ga., Hyundai Motors' \$5.5 billion electric vehicle (EV) and battery plant sits on 2,000+ acres of land. The plant is expected to employ more than 8,000 people to build EVs for the fast-growing North American market – and U.S. consumers incentivized by a \$7,500 tax credit for domestically produced EVs, courtesy of the

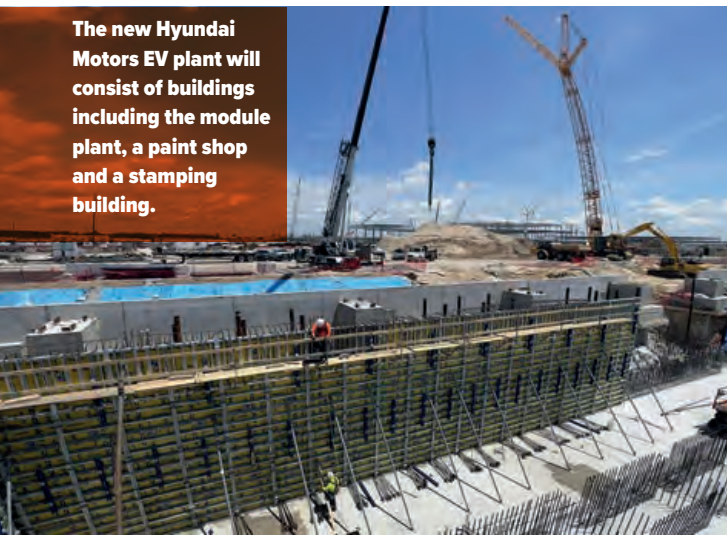
Inflation Reduction Act.

The EV plant is the largest project in the state's history, says Georgia Governor Brian Kemp. It consists of several buildings that will be used to produce vehicles along with the batteries and powertrains to power them. Construction began January 2023, and the automaker plans to begin initial production at the new facility by April 2024. Full production is expected to happen by the first half of 2025.

**Doka USA is helping construct Hyundai Motors' new 2,967-acre EV plant in Georgia.**



The new Hyundai Motors EV plant will consist of buildings including the module plant, a paint shop and a stamping building.



## SAIA HOSTING PFPE WEBINAR SERIES

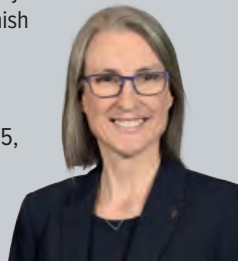
The SAIA's Fall Protection Council is kicking off its four-part personal fall protection equipment webinar series with its first virtual event having been held October 30.

The series is presented by SAIA Fall Protection Council Chair Becky Danielson (below), who is also Tractel North America's height safety specialist and product manager, and she will have a special focus on the latest proposal from OSHA about proper-fitting fall protection to ensure that attendees are up to date on the latest safety trends.

The webinars will continue in January 2024 and finish next May. Forthcoming topics and dates include:

- Lanyards & Connectors: Jan. 19, 2024
- Self-Retracting Lanyard: March 13, 2024
- Vertical Lifelines and Anchorage Connectors: May 15, 2024

The event is free for SAIA members and \$50 for non-members. To register, visit [www.saiaonline.org](http://www.saiaonline.org).



## DICA PARTNERS WITH HYDRO MOBILE

DICA and Hydro Mobile have collaborated to design and manufacture specialty SafetyTech Support Pads for use with all of Hydro Mobile M, P, F and S-Series units.

"Hydro Mobile started working with DICA in 2017 to develop a pad that would provide effective support for our M2 series. Earlier this

year, we decided to partner with DICA again to modify the SafetyTech Outrigger Pad to expand the versatility of the pad to now work with all four of our product lines," said Rob Faro, dealer network senior manager for Hydro Mobile.

The SafetyTech Support Pad is specifically designed for use with all

Hydro Mobile equipment. Built using DICA's proprietary engineered thermoplastic material it provides the strength, toughness, and rigidity needed to support and stabilize this equipment in most ground conditions.

Each pad weighs 58 pounds. The pad features four recessed Hi-Viz Green TuffGrip Handles, which eliminate protrusions beyond the pad perimeter.

PHOTO: DICA



# REGISTRATION OPEN FOR SAIA COMMITTEE WEEK

Registration is now open for the Scaffold & Access Industry Association's (SAIA) annual Committee Week event, set for March 3-7, 2024 in Charleston, SC. For those looking to book ahead, early bird pricing is available until December 31.

Committee Week focuses on the work of the SAIA's 12 councils include their current projects, goals and objectives; issues facing their respective industry segment; emerging trends and new programs, initiatives or activities for the coming year.

"This yearly event is also one of the best opportunities for members to converge, face-to-face, in a central location to voice concerns, share opinions and

expertise, discuss best practices and make decisions about the Association, their industry, and related topics," the SAIA said.

In addition to working meetings, there will also be training opportunities.

Training is a core element of Committee Week. Next year, the SAIA will offer five different classes through its internationally acclaimed SAIA University (SAIAU) Training Program. Early registration is recommended due to limited class sizes and to allow for plenty of study time. Please note that all training classes are



separate events from the SAIA Committee Week and incur an additional fee.

■ Sunday, March 3, 9 a.m. - 4:30 p.m.: Train the Trainer Facilitator Skills Workshop

■ Monday, March 4, 8 a.m. - 5 p.m.: Competent Person Training – Frame Scaffold

■ Monday, March 4, 8 a.m. - 5 p.m.: Competent Person Training – System Scaffold

■ Monday, March 4, 8 a.m. - 5 p.m.: Competent Person Training – Suspended Scaffold

To learn more about the event or to register, visit [www.saiaonline.org](http://www.saiaonline.org).

## AGC LAUNCHES LEGAL ACTION TO BLOCK LABOR CHANGES IN U.S.

The Association of General Contractors (AGC) has launched a legal action to block the US government from making a major update to construction labour regulations.

The U.S. Department of Labor (DOL) issued its Final Rules updating certain requirements under the Davis-Bacon Act to the way in which workers are paid on federally funded projects earlier this summer.

One of the key changes to the Davis-Bacon Act, a Depression-era law intended to protect local jobs, is a revival of what is called the '30 percent rule' in relation to workers' wages. But the AGC has filed a suit in federal court to block the expansion. To read the full story, visit [www.scaffoldmag.com](http://www.scaffoldmag.com).

## OSHA PLACES HYUNDAI EV PLANT CONTRACTOR ON 'SEVERE VIOLATOR' LIST FOLLOWING DEATH ON SITE

The U.S. Department of Labor has placed Eastern Constructors Inc. into its severe violator enforcement program following a 34-year-old worker's fatal fall at Georgia worksite due to the contractor's failure to follow fall protection requirements.

Federal workplace safety investigators determined Eastern Constructors could have prevented the death of the steel worker from suffering fatal injuries – following a 60-foot fall at a Hyundai electric car plant in Ellabell, GA – by following legally required fall arrest equipment procedures.



OSHA said Eastern Constructors failed to follow legally required fall arrest equipment procedures, thus resulting in a fatality that could have been prevented.

A U.S. Department of Labor Occupational Safety and Health Administration investigation into the April 2023 incident found that workers employed by Eastern Constructors Inc. had been guiding an I-beam in place atop the plant's paint building when the fall occurred. One worker, walking along the top of the building's upper frame lost his balance and fell, resulting in the sharp edge of the structure cutting his safety line. Despite efforts of emergency personnel who arrived soon after, the worker died at the scene.

OSHA determined Eastern Constructors Inc. failed to ensure workers were provided fall arrest equipment that was appropriate for the work conditions and capable of resisting sharp edges, which exposed employees to fall hazards. The company also exposed employees to fall hazards by not taking worn and damaged fall arrest systems out of service.

"The risks of serious and fatal injuries for people working at these heights are well-known and no step should ever be overlooked during the process of inspecting the worksite for hazards," said OSHA Acting Area Office Director Jessica Bookman in Savannah, Georgia. "Eastern Constructors' failure to protect its employees from the leading cause of death in the construction industry are inexcusable and resulted in tragic consequences."

Since 2016, Eastern Constructors, Inc. has been inspected in response to four other worker fatalities. These inspections resulted in serious and willful violations for hazards related to steel erection, including fall protection. As such, the employer will be added to OSHA's Severe Violator Enforcement Program intended to focus enforcement efforts on noncompliant employers who demonstrate indifference to the health and safety of their employees through willful, repeated, or failure-to-abate violations.



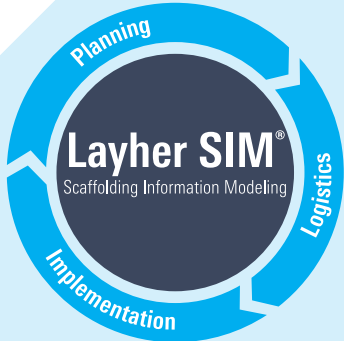
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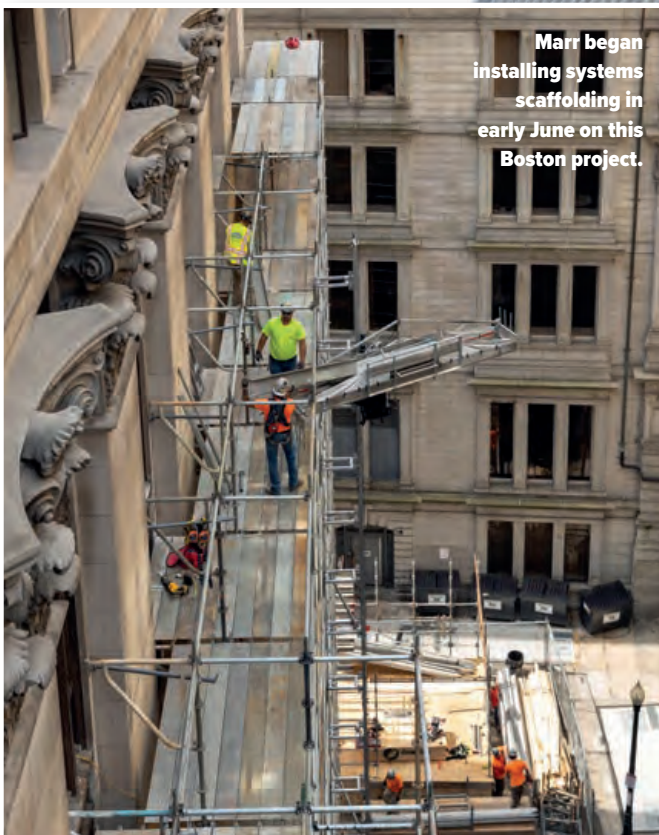
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Marr Scaffolding recently utilized a robot for a one of its largest scaffold builds on record. **Lindsey Anderson** discusses the details with **Bob Dembitzki**, president and general manager of scaffold and shoring.

# ROBOTIC SOLUTIONS



Marr began installing systems scaffolding in early June on this Boston project.



26 Court St is a 130-foot-tall municipal office building in Boston.

ALL PHOTOS: THE MARR COMPANIES

“When completed, there will be approximately 250 tons of scaffold wrapping the east, west and north elevations,” Bob Dembitzki, president and general manager of scaffold and shoring at Marr Scaffolding Company, tells SA.

Dembitzki is detailing the project at 26 Court Street in Boston. The 175,000-square-foot municipal office building owned by the City of Boston is currently undergoing a full interior and exterior restoration. The project covers 11 floors above grade, three basement levels and a redesign of the exterior plaza.

26 Court Street is a 130-foot-high

## FACTS AND FIGURES

**80%**

of scaffold erection and dismantling jobs “still done completely manually”

**80%**

of time during scaffolding assembly is spent on material transport

**73%**

of all costs in scaffolding are labor costs

SOURCE: KEWAZO

structure with deep recessed windows that required outriggers and a large cornice on the 10th floor, approximately 100 feet off ground level – it is one of the largest scaffold projects in Marr’s 125-year history.

And it is also the first in the Boston area to utilize Kewazo’s LIFTBOT, a “robot” aimed at reducing worker fatigue while automating material lifting and transport.

### GOING THROUGH THE PHASES

Kewazo was founded in 2018 with the vision to digitize on-site construction operations with robotics and data analytics, according to the company. The Germany-based business, which now has U.S. headquarters in Texas, contacted Marr Scaffolding when the company was in town for a robotics seminar.

“While in Boston with LIFTBOT, Kewazo and Marr arranged for a demonstration in our South Boston yard,” Dembitzki explains. “With a positive response from our scaffold erectors, Marr and Kewazo decided to test LIFTBOT live on our Court Street scaffold installation project.”

Starting in early June, Marr’s Scaffold Division began the first phase by installing systems scaffolding on the east and west side elevations of the building. By Sept. 20, all scaffolding had been installed and will remain in place for approximately six months.

During the first phase of the project, two LIFTBOTs assisted scaffolders in moving materials between levels. The battery-powered remote-controlled LIFTBOT has an operating speed of 138 feet/minute, a load



**Workers watch as the Kewazo LIFTBOT moves materials to numerous floors.**



**Marr Scaffolding crew work with Kewazo’s LIFTBOT to secure materials ready for lifting.**

capacity of 220 pounds and a working height certified up to 164 feet; its on-board computer also collects operational data and analytics, which enables Marr’s project managers to track on-site progress in real time.

“Marr was able to build an elevation with five scaffold erectors plus the LIFTBOT in lieu of with erectors and two electric winches,” Dembitzki says. “The labor was able to be deployed elsewhere on the project.

“Due to the age of structure and unknown structural integrity, Marr did not sit any scaffold legs on the cornice and opted to knee-brace around the cornice,” Dembitzki adds. “In addition, some of the sidewalks around the perimeter of the building required reshoring from below grade to support the load imposed by the scaffold.”

### SAFETY AT THE FOREFRONT

“Using LIFTBOT saves up to 44 percent of man-hours, which directly addresses the labor shortage, a long-term problem in the industry,” Kewazo says. “The robot reduces the risk of accidents and improves the working conditions on-site. With minor adjustments, the technology can be applied to additional tasks such as insulation, painting and other on-site material transport.”

The LIFTBOT, KEWAZO and Marr say, does all of that while also enhancing worker safety.

“The LIFTBOT has numerous safety features,” Dembitzki explains. “At startup of each shift there is an automated checklist to

ensure everything is in proper working order. There are sensors located on the basket that will not allow you to overload or distribute the load unevenly. The risk of falling materials during load-in is dramatically reduced if not eliminated. The basket swivels into the staging which allows the scaffold crew to unload from a fully guardrailed deck and without reaching over the edge.”

So, with safety and savings leading the way, could this – and future – robots be the “new normal” of scaffolding erection?

“I would say yes,” Dembitzki says. “With LIFTBOT, we had a crew that worked more efficiently and without expending energy on the non-installation related handling, tugging and lifting of materials. Our crew members were able to establish a predictable and sustainable working pace with LIFTBOT operating at an ideal speed. Downtime was reduced and we were able to maintain a healthy, productive pace of installation that was sustainable for our scaffold erectors. With data collection, we were able to review key performance indicators to help confirm our productivity.”

SA

**For more on this story, visit:**  
[www.scaffoldmag.com](http://www.scaffoldmag.com)

#### EDITOR’S NOTE:

This is an exclusive interview following our in-depth project report that ran in our September/October 2023 issue.



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## THE FACTS

**PROJECT:** Alloy

**LOCATION:** 520 Mateo St., Los Angeles

**GENERAL CONTRACTOR:** Carmel Partners

**CONCRETE CONTRACTOR:** Largo Concrete

**ARCHITECT:** Solomon Cordwell Buenz

**DEVELOPER:** Carmel Partners

**TYPE OF STRUCTURE:** High Rise,  
Residential and Commercial

**HEIGHT:** 390 feet

**STORIES:** Residential Tower (36 levels);  
Parking and Mixed-use (6 levels)

### CYCLE TIME:

**AT RESIDENTIAL TOWER,  
CYCLING IS AS FOLLOWS:**

**CORE:** 5 days

**SHORING:** 5 days

**TOTAL SQUARE FEET:** Residential Tower  
(105,000); Parking and mixed-use (100,000)

**CONSTRUCTION TIME:**

August 2022 – Q4 2023

### PRODUCTS USED:

**CORE:** Super Climber Platform (SCP), Top 50,  
Telescopic shaft platform, MF240

**FACADE:** Protection Screen

**RESHORING:** Eurex prop, Super Prop

**SHORING:** Superdek, Dokaflex, 10kip

**OTHER:** Frami (foundation walls, columns),  
Concremote (monitoring)

Doka utilized various wall, slab, climbing formwork and safety solutions for the Alloy skyscraper project in Los Angeles.

# INSIDE THE GUTS OF A SKYSCRAPER

With challenging structures and a tight schedule, the 36-story Alloy high-rise in Los Angeles was no easy build. Doka USA, who provided shoring and formwork for the project, details the job.

**K**nown for its work in providing shoring and formwork solutions for a range of projects and applications, Doka USA recently played a pivotal role in crafting one of LA's new towering high-rise buildings.

Nestled on the western edge of the 4th Street Bridge, the Alloy skyscraper stands within Los Angeles' Historic Arts District. The towering edifice boldly ascends at a striking 45-degree angle from its foundation, crafting an exceptional architectural masterpiece that contributes a layer of intricacy to this remarkable endeavor.

The development unfolds as a harmonious blend of a five-story commercial edifice seamlessly intertwined with a soaring 36-story residential tower. Elevating itself above a multi-level parking complex, the tower dramatically rests upon six tiers, three of which are below-grade. A large parking expanse offers a generous capacity of 748 parking spaces, each meticulously planned around 103 distinct columns, with 72 columns boasting unique dimensions. These parking facilities are designated to serve the needs of both the expansive 105,000 square feet of office space and the 475 residential units.



**The Alloy project involved multiple structures and project organization.**



**On the Alloy project, crews integrated loading platforms into the protection screen for inbound and outbound loading of equipment.**

With the SuperClimber system, the formwork is suspended and secured from gantry beams, which allows for easy access of the form face for cleaning and applying form-release agent.



In crafting Alloy, the designers drew inspiration from the robust grids characteristic of the district's historic warehouses and factories. The structure boasts distinctive concrete elements, showcasing board-formed walls, columns, beams, and soffits that grace the lobby at street level. Notably, an ornate ribbed architectural wall adorns the northern façade, which gazes out upon the majestic 4th Street

Bridge. In total, the ambitious project commands the placement of over 70,000 cubic yards of concrete, a testament to its grandeur and architectural ambition.

### THE CHALLENGES

The project involved multiple structures and project organization while on a tight schedule. Both the material procurement and design had tight deadlines and coordination was necessary with both local companies and support groups, such as engineering. Another challenge was managing multiple contracts for many contractors and suppliers on this large project.

Building the Alloy called for the use of

a hydraulic unit for automatic climbing core formwork and a specialized shoring to meet all unique shapes of the project's plan. Continuous team coordination was vital for multiple structures needing formwork/shoring solutions, including:

- Columns
- Foundation walls
- Office core (Area 1 & 2)
- Office shoring
- Podium slab shoring (Area 1 & 2) with high decks, Level 2
- Podium level shear walls
- Shoring for parking garage P3 through L3
- Protection screens
- Residential tower shoring
- Tower core

### THE SOLUTION

The solution for Alloy involved using a hydraulic unit for Super Climber SCP automatic climbing core formwork and a specialized Superdek shoring to efficiently meet all the unique shapes of the project's complex plan. Doka's Top50 core and shear wall formwork provided fast formwork setting in multiple uses and locations. By using Doka, Alloy had a full package solution from one vendor, which saved time on contractual and administrative tasks and ensured smooth job progression. Doka was chosen because they provided a fair price and competitive solution for all formwork needs for Alloy. It was an additional advantage that Doka's pre-assembling services were complemented by the provided field service assistance.

In the end, the result is a striking development that's considered "destination retail" with inspired design and creative offices.

With the SuperClimber system, the formwork is suspended and secured from gantry beams, which allows for easy access of the form face for cleaning and applying form-release agent.

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**Doka's Top50 core and shear wall formwork provided fast formwork setting in multiple uses and locations.**



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# CELEBRATING 50 YEARS IN VEGAS

The Scaffold & Access Industry Association will host a scaffold builders challenge during World of Concrete 2024. **SA** provides details for the event.

To help celebrate the 50th Anniversary of the World of Concrete the Scaffold & Access Industry Association (SAIA) is bringing its SAIA Scaffold Builders Challenge to Vegas.

Each year at World of Concrete, the Scaffold & Access Industry Association hosts a networking reception for members and potential members to gather and see each other. The event has become a staple for SAIA members so that they have an opportunity to connect between the Association's Committee Week and Annual Convention.

In partnership with the SAIA 2024's Scaffold Build Challenge Sponsor AT-PAC, eight teams from around the country will compete against the best in the field on Jan.

23, 2024 in the LVCC's South Hall.

The teams include:

- Brewer Equipment Co.
- Heat Tech Industrial
- Leading Edge Scaffold
- Scaffold Solutions
- Skyline Scaffold
- Superior Scaffold Services
- Trekker Group

Speaking about the event, the SAIA said, "The response has been overwhelming, with team sponsorships selling out in just two days! Don't miss out on the opportunity



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**PREVIEW: WORLD OF CONCRETE**

to be a part of history as we commemorate the 50th Anniversary of World of Concrete and join us at SAIAs Scaffold Builders Competition for an exciting experience filled with networking opportunities and fun!”

**WORLD OF CONCRETE'S 50TH**

World of Concrete is an annual international tradeshow dedicated to the commercial concrete and masonry construction industries. In 2024, it will take place at the Las Vegas Convention Center with exhibits open January 23-25 and education occurring Jan. 22-25.

This year, World of Concrete will celebrate its 50th anniversary in 2024 and show



Attendees at last year's World of Concrete had a range of exhibits to see, live competitions to watch and networking opportunities.

PHOTOS © WORLD OF CONCRETE





Select fall protection and scaffold exhibitors on display during WoC 2023.

PHOTOS: KHL GROUP



## SCAFFOLD BUILD CHALLENGE

**WHEN:** Tuesday, January 23, 1 p.m. – 5 p.m.

**LOCATION:** Las Vegas Convention Center, South Hall, 3150 Paradise Road, Las Vegas, NV United States 89109

**TIMES: 1 P.M.** - Team meeting at build site

**2 P.M.** - Build starts

**3:30 P.M.** - Build ends

**3:30 P.M.** - Judging and reception to start

**4:45 P.M.** - Winners announced and trophies awarded

**5 P.M.** - Reception ends

**REGISTRATION:**

[www.saiaonline.org](http://www.saiaonline.org)



AT-PAC is sponsoring the 2024 SAIA Scaffold Builders Challenge. PHOTO: AT-PAC

organizers are expecting quite a turnout. “World of Concrete has been serving the global concrete and masonry construction industries for 50 years,” show organizers said. “We connect and educate buyers and sellers through live and digital events throughout the year, facilitated via [worldofconcrete.com](http://worldofconcrete.com) and WOC360. Our goal is to provide this important community with the connections, intelligence, and opportunities that help customers grow, do business, and make better informed business decisions.”

According to Kevin Thornton, senior vice president of construction, Informa Markets, more than 300,000 concrete contractors are employed in the United States and “they represent the backbone of the American and international workforce. World of Concrete is proud to support laborers in education and connection providing opportunity to advance the industry toward enhanced sustainability, efficiency and safety, and continuing growth.”

### BUILDING ON SUCCESS

During the 2023 event, WoC brought in 48,009 registered professionals from more than 120 countries and took more than 587,000 net square footage (NSF) of the convention center, with both indoor and outdoor spaces full of product displays, demonstrations and competitions.

“The 2023 edition of World of Concrete far exceeded our expectations,” said Jackie James,

## SELECT SCAFFOLD EXHIBITORS AT WOC

\*For a full list and guide to the 2024 event, see our Jan/Feb 2024 issue.

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<b>STVA SCAFFOLD AND SHORING</b>	S11557
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<b>VIJAY ENGINEERING WORKS</b>	C3133
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<b>WESTERN FORMS</b>	C4327
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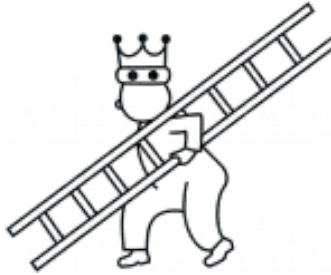
vice president, World of Concrete. “The crowded show floor and packed educational sessions proves how essential meeting face to face is, that it remains important now more than ever to have a space to connect, to learn, to share across the concrete, masonry and construction industries as a vital contributor to our economy. In-person attendance is on its way back to pre-pandemic levels and the World of Concrete event leads global trends in construction.”

sa



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# DESIGN BY REGULATION

Industry veteran **David Glabe** asks: If your industry knowledge goes beyond OSHA regulations, can you pass this pop quiz?

The business of scaffolding is quite fascinating in that parts and pieces can be assembled in countless combinations to provide elevated worker access. Scaffolding can be built up from the ground, suspended from the top of buildings, and cantilevered off the sides of structures.



When looking at this picture, how strong is the tie?

And, as an added plus, the parts and pieces can be assembled with minimal expertise and knowledge! For some workers, whether it conforms with applicable design parameters and regulations appears to be of little to no importance.

Interestingly, the parameters governing the design and construction of scaffolds has defaulted to the U.S. Occupational Safety & Health Administration, OSHA, regulations. It is accepted custom and practice that if a scaffold substantially conforms to the OSHA regulations, it is assumed safe and it is generally accepted that if you successfully assembled scaffold parts and



Is this a good design? Or something OSHA would cringe seeing?

ALL PHOTOS ATTRIBUTED TO DAVID GLABE

## QUALIFIED PERSON POP QUIZ:

- 1 What is the difference between supported and suspended scaffolds?
- 2 What minimum safety factor is required for all supported scaffolds?
- 3 What information do you need to determine the safety factor?
- 4 How do you calculate the safety factor?
- 5 How do you determine if you, or anyone else, is a Qualified Person?
- 6 Are you a Qualified Person?
- 7 What's the difference between a Qualified Person and a Competent Person?
- 8 What is typically the controlling component in a rolling tower (mobile scaffold)?
- 9 What's the minimum number of 2x10 planks do you need to make a scaffold platform?
- 10 Do scaffold planks have to be scaffold grade?
- 11 Can you calculate the number of counterweights needed for a suspended scaffold cantilever beam (outrigger)?
- 12 If you choose to extend the suspended scaffold cantilever beam further than what is shown on a manufacturer's charts, or you use an I-beam of your choosing, what information do you need to have to determine if it is safe?
- 13 Can you determine that the surface supporting "suspension scaffold support devices" is "capable of supporting at least 4 times the load imposed on them?"
- 14 What do you need to know to determine if a suspended scaffold tieback anchor is adequate?
- 15 What information do you need to calculate the strength of a toeboard?
- 16 What is the required strength of a scaffold top rail and what is the required minimum safety factor?
- 17 Is it true that the top rail must support any outward and downward force?
- 18 Can you calculate the actual load on a supported scaffold leg?
- 19 OSHA specifies the maximum horizontal and vertical tie spacings for supported scaffolds. Are there occasions when this is insufficient?
- 20 What do you need to know to calculate tie loads?
- 21 How many scaffold regulations are there?



How many pounds can be loaded safely onto a roof?



## ABOUT THE AUTHOR

**David Glabe** is the founder of DH Glabe & Associates. He is also actively involved in the Scaffold & Access Industry Association and serves as a member on the ANSI A10.8 subcommittee for scaffolding.



Does this apparatus look safe? Does it meet OSHA regulations?



pieces in a manner that won't collapse, a safe and successful scaffold you have built. It's a dangerous assumption since the one regulation that is consistently ignored is the one that requires a scaffold to be designed by a qualified person.

OSHA defines a qualified person as "one who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge,

training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project."

Based on this definition, a qualified person will have scaffold knowledge that goes beyond just following the OSHA regulations and will have the ability to answer questions such as these presented on the previous page. Did you answer them correctly?

### PASSING GRADE

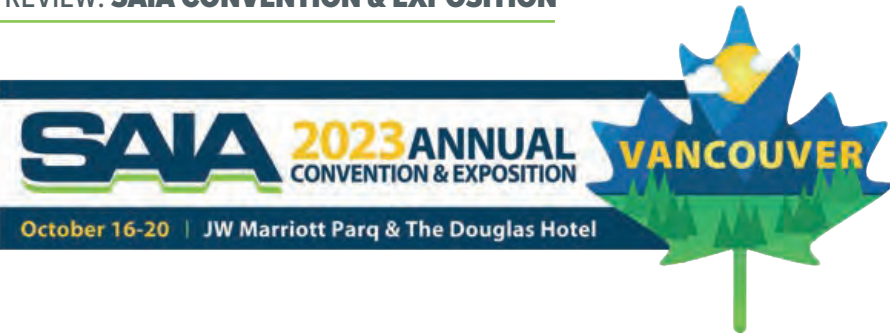
How did you do? Designing scaffolds is not the same as simply building a scaffold to comply with the OSHA regulations since the OSHA regulations are minimum requirements, not instructions or directions for design. A qualified person will incorporate the requirements specified in the regulations in the design, not use the regulations as the design. **sa**



## CHECK YOUR WORK

Here are the answers:

- 1 Supported scaffold platforms are supported by rigid means; suspended by non-rigid means. You need to know this in order to comply with the applicable regulations when designing a scaffold.
- 2 Four.
- 3 The allowable or ultimate load and the actual load.
- 4 Divide the ultimate load by the actual load.
- 5 You have to know the subject matter to determine if the person knows the subject matter. This can be a problem when, for example, an employer, or OSHA compliance officer is attempting to determine whether an individual is actually qualified.
- 6 Can you successfully demonstrate an ability to solve or resolve problems related to the subject matter, the work, or the project? If so, then you are a qualified person.
- 7 To put it in the vernacular, the competent person can recognize the hazard and has the authority to do something about it. The qualified person knows how to resolve the hazard. For example, the competent person notices the platform has excessive deflection, recognizing that it could be a hazard. She tells everyone to get off the platform. She then asks the qualified person to determine what the maximum permissible load can be placed on the platform, or, alternatively, asking the qualified person to design a stronger platform.
- 8 Casters.
- 9 Two, since the typical permissible minimum width platform is 18 inches. (458 mm)
- 10 No. But if you are a qualified person, you will be able to calculate the safety factor to ensure that it is at least four.
- 11 Well...can you? If not, you are not a qualified person in suspended scaffold design.
- 12 Material properties, Section Modulus, Moment of Inertia, Area, dimensional properties, anticipated loads, and the required safety factors.
- 13 Well...can you? Typically, this requirement is beyond the scope of the typical suspended scaffold qualified person. Therefore, it would be necessary to enlist the help of others, such as the structural engineer who designed the supporting surface, to give the scaffold qualified person the necessary information to verify that the surface will have at least a safety factor of four. Alternatively, if the suspended scaffold qualified person has the skills, education, and training to make the analysis, that, of course, is acceptable.
- 14 You must know the load on the anchor, the strength of the anchor, and the strength of the structure to which the anchor is attached.
- 15 The dimensional properties of the toeboard, the type of material, the Section Modulus, Moment of Inertia, and the Cross-sectional Area of the toeboard. Alternatively, if it is a manufactured item, just ask the manufacturer.
- 16 200 pounds and there is no safety factor on the 200 pounds.
- 17 No. It "shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along its top edge." Note that it is not just outward, but any horizontal direction, that is in, out, and sideways.
- 18 Can you?
- 19 Absolutely. One example is when the scaffold is wrapped in enclosure material, such as netting.
- 20 Local wind conditions, shape of the scaffold and adjacent structure, height and location of the scaffold, knowledge of applicable codes, and the training and expertise to apply the American Society of Civil Engineers (ASCE) formulae, codes, and standards, to name a few.
- 21 A lot.



The 2023 SAIA Annual Convention & Exposition featured record attendee numbers, a range of pertinent sessions and celebrations all around. **SA** reviews the event.

# BIG WINS IN VANCOUVER

The 2023 Scaffold & Access Industry Association's Annual Convention & Exposition showcased the Association's "solid unity and commitment across borders," said SAIA President Tracy Dutting-Kane, P.E. following the Oct. 16-20 event in Vancouver.

The conference and exhibition featured record numbers for the Association – more than 250+ first-time attendees were on hand, as well as 18 new members and 12 new exhibitors, highlighting the success of the Canadian show, the SAIA said.

In addition to networking opportunities and an awards gala dinner, attendees also heard from some of the industry's top speakers who presented on finding and retaining talent, age gaps in the workforce, and an economic outlook for North American construction.

## CONFERENCE NOTES

Kicking off the conference keynote was Lisa Ryan, CSP, chief appreciation strategist, Grategy, who presented, "Building Engagement: How to Keep Your Top Talent from Becoming Someone Else's."

"As an owner, manager or professional in the scaffolding industry, you understand the challenges of finding and retaining skilled employees," Ryan explained. "The industry faces unique obstacles, including limited qualified professionals, physically demanding work with high safety risks, project-based work and stiff competition from other industries for top talent."

In her keynote, Ryan explained how to create a loyal and committed workforce that results in increased productivity, better customer service and a stronger reputation

within the industry. Ryan explored best practices for creating a positive workplace culture that fosters employee engagement and retention, as well as strategies for providing opportunities for growth and development, including training and mentoring, that can help retain top talent.

"It's not the big things that you do," Ryan said. "And it's not just about the money.

"It's about small gestures and gratitude. It's about making employees feel valuable, it's the little things. And it's not going to cost as nearly as much as you think it would."

Ryan said company executives need to "bring to mind the best boss" they ever had. "What did they do for you?" she asked. "How can you extend that type of leadership to your employees? Invest and give them the chance.

"We have to redefine what employee



SAIA President Tracy Dutting-Kane officially opened the exhibit hall by cutting the ribbon.

ALL PHOTOS ATTRIBUTED TO SAIA





**Plenty of networking opportunities were on hand in Vancouver. Attendees enjoyed connecting with clients and more.**

retention looks like,” Ryan added. “It comes down to gratitude.”

Additionally, employers should invest in training because “it is an investment in your people,” Ryan said. And before you lose an employee – whether to a higher-paying job or a new position – Ryan said to re-think ‘exit’ interviews.

“It’s crucial to conduct ‘stay’ interviews,” she explained.

‘Stay’ interviews are interval-scheduled ‘catch-ups’ with employees where various topics can be explored. Ryan gave the following questions as good examples of what could be included in a ‘stay’ interview:

What keeps you here?

What would cause you to leave?

What are we doing wrong?

What could we improve upon?

Ryan admitted that employees might not

be as open as you’d want right off the bat – but keep at it and studies show, they warm up and are honest with their happiness, needs and concerns.

### CONSTRUCTION OUTLOOK

The building construction sector has undergone a major shift among project types since the pandemic hit in 2020. With the run-up in financing and construction costs, paired with weakening demand in some sectors, 2024 promises to be equally tumultuous, if not more so. Ken Simonson, chief economist for the Associated General Contractors of America and one of the industry’s leading analysts, provided his “2024-cast” for the principal scaffold-using markets.

“Construction firms have plenty of projects but a dip in non-residential

employment last month shows how hard it has been to find enough skilled workers,” Simonson said. “Job openings remain stubbornly high, even though the industry has been raising hourly pay at an elevated rate.”

The elevated rate comes from all major segments of construction in the U.S. seeing increases in spending in August, although an ongoing shortage in skilled workers could put the brakes on growth.

Regarding construction spending, Simonson said when not adjusted for inflation, the total was \$1.98 trillion at a seasonally adjusted annual rate in August.

Spending on private residential construction increased for the fourth consecutive month in August, by 0.6 percent. Spending on private non-residential construction increased by 0.3 percent in August, while public construction investment increased 0.6 percent.

Spending was mostly positive among large non-residential segments. Spending on manufacturing plants increased 1.2 percent between July and August. Spending on power, highway and street, office, and health care construction each grew by 0.4 percent for the month. Educational construction was flat.

By contrast, commercial construction – comprising warehouse, retail, and farm construction – fell by 0.9 percent in August compared to a month ago.

Simonson said, “For now, all types of



**Guests filed into the SAIA exhibit hall following its official opening on the first official day of the event in Vancouver.**



construction are growing. But unless the supply of qualified workers increases, many projects are likely to be delayed.”

### CELEBRATING THE INDUSTRY'S BEST

Held in conjunction with the Association's Annual Convention & Exposition, the awards recognize SAIA members for their service, dedication and contributions to the Association, as well as successes within the scaffold and access industry.

Broken into two categories – project awards and association awards – 17 winners took home trophies. For the full list, see below.

The SAIA also had its own “wins” to honor during its Annual Convention & Exposition, which was held Oct. 16-20 in Vancouver, including more than 160 first-time attendees and 12 new exhibitors at this year's event. The SAIA also announced it gained 50 new members this year.

“I'd like to take this moment to thank our members who renewed in 2023 and those who joined us during the event,” said SAIA President Tracy Dutting-Kane, P.E. “Your involvement makes us stronger and safer, and I cannot thank you enough.”

The SAIA awards recognize Association members for their service, dedication and contributions to the Association, as well as successes within the scaffold and access industry. The awards are broken down into two categories: Projects of the Year and Association Awards. **sa**

### PROJECT OF THE YEAR AWARDS

The SAIA Project Awards recognize member companies that have gone above and beyond in contributing to the overall success of a project within the scaffold and access industry. This year's winners were:

#### **MOST DRIVEN HOISTS AND PLATFORMS**

BandSafway – Two Manhattan West

#### **THE INNOVATION AWARD**

Skyline Scaffold, Ltd. – Justice Institute

#### **SUSPENDED ACCESS**

Bee Access – El Vado Dam

#### **SUPPORTED SCAFFOLD**

Scaffold Resource, LLC – Maryland State House

Restoration – Ph.1 – Dome Rehabilitation

#### **SHORING**

Skyline Scaffold, Inc. – Echowater Tertiary

Treatment Facilities

#### **INDUSTRIAL COLLABORATIVE**

D.H. Charles Engineering – Gordie Howe International Bridge

#### **COMMERCIAL COLLABORATIVE**

Performance Contracting, Inc. – Benson Polytechnic High School



### ASSOCIATION AWARDS

The SAIA bestows a number of awards to Association members who have contributed their time, devotion, passion and expertise to the overall growth, mission and initiatives of the SAIA. Winners this year include:

#### **ATI INSTRUCTOR OF THE YEAR**

Joel Almqest with Scaffold Service Inc.

#### **WILLIAM T. AYERS FOUNDERS AWARD**

David Johnson with SkyLine Scaffold

#### **SPIRIT AWARD**

Mike McAnnally

#### **UNSUNG HERO**

Paula Manning

#### **OUTSTANDING SERVICE**

Harold Gidish

#### **OUTSTANDING COUNCIL CHAIRPERSON**

Brian Andrews

#### **OUTSTANDING COMPANY CONTRIBUTION**

D.H. Charles Engineering

#### **HALL OF FAME**

Eric Schmidt

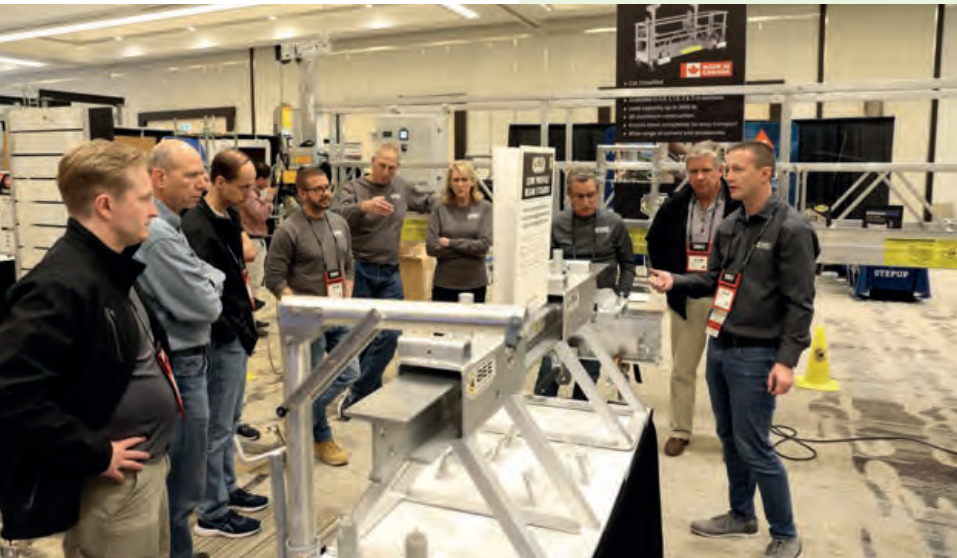
#### **COUPLING PIN**

Tracy Dutting-Kane

#### **VICTOR SALEBY AWARD**

Michael Paladino

To learn more about the SAIA or to become a member, visit their website at [www.saiaonline.org](http://www.saiaonline.org).



**EDITOR'S NOTE:** Full project details will be revealed throughout the 2024 issues of SA Magazine. To subscribe, click here.





**SAVE THE DATE!**

# SAIA COMMITTEE WEEK

**MARCH 3-7, 2024**

**Charleston Marriott  
Charleston, SC**

Committee Week is open to all professionals who are interested in advancing the scaffold and access industry. The meeting focuses on the work of the SAIA's 12 councils: their current projects, goals, and objectives; issues facing their respective industry segment; emerging trends; and any new programs, initiatives, or activities for the coming year.



## MAKE PLANS TO JOIN US IN 2024

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# SAIA ANNUAL CONVENTION & EXPOSITION

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Denver, CO**

The SAIA Annual Convention & Exposition brings together the largest gathering of scaffold and access industry professionals. The Convention features industry-focused educational courses and showcases the nation's top scaffold and access exhibitors.

Networking with peers and SAIA leadership is a key component of the SAIA Annual Convention & Exposition, and several programming elements have been built into the schedule to foster this important and valuable relationship building.



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needed to be an integral ingredient to the recipe. "The Nano 10-XD brings the quantum leap in productivity over ladders and push around lifts that is a self-propelled MEWP in a package more compact than ever before."

Snorkel's latest launch, the S3210P, was developed in response to customer demand, according to the company. "The S3210P offers the same operation and serviceability as the indoor-rated unit, yet is rated up to a maximum wind speed of 12.5m/s," Snorkel says.

Equipped with an auto-brake system as standard to prevent movement when the lift is raised, the S3210P can be easily pushed when stowed between work areas and carried in a passenger elevator. With saloon-door style entry gates, non-marking casters and simple push-button controls as standard, the Snorkel S3210P is built tough.

In the U.S., Snorkel says it is working hard to grow the visibility of low-level products within the rental channel, including placing units on display in rental branches across the country to encourage conversations between rental stores and customers.

### Electrification for the minis

For Hy-Brid Lifts, its most recent update to its line of the under-19 club was the option of lithium batteries.

The option was first shown at the ARA Show earlier this year, where the company was also



SkyJack's SJ3013 micro scissor lift.

exhibiting its new confined access solution and safety light option.

The engineering phase for the lithium option was completed leading up to the ARA Show and has now entered the sales phase. It means three battery options are now available on the company's Push-Around Series and Pro Series scissor lifts; those being lead acid, AGM, and lithium. Lithium is also an upgrade option for the Pro Series and Zero-Turn Series lifts.

PHOTOS: SKYJACK



## Compact Haulotte scissors go 'down under'

Australia-based Handy Hire recently expanded its Haulotte MEWP fleet with a major new order.

The order from the rental company, located in Queensland, includes 12 of the latest Compact 12 and 12 units of the Optimum 8 scissor lifts.

Zac Wallwork, Haulotte's area sales manager for Queensland, visited Handy Hire six times from his base in Brisbane this year to demonstrate the advantages of partnering with Haulotte.

The deal takes into consideration Handy Hire's shift towards total cost of ownership and includes benefits like preventative maintenance, streamlined inspections and technology integration.

Haulotte's new Compact 12 offers an improved design for easier maintenance. Components are easily accessible, while electrical and hydraulic elements have been separated and the routing of hoses has been designed to avoid the risk of friction and leaks.

"We take pride in our unwavering support for businesses throughout Queensland, spanning the entire state. Our goal is to establish strong partnerships with each business, offering comprehensive assistance through training, service and technical support whenever required."

The Compact line didn't make its way to Australia until May 2022, when the country received its first deliveries of Haulotte's updated Compact range.

The upgraded range was first previewed in the country at the HIRE22 exhibition in May 2022, just after it was launched, allowing hire companies a preview of model before it hit the market there.

The machines include AC drive, which is designed to provide smooth operation, and allows easy maintenance and accessibility to components.

Part of Handy Hire's Compact Haulotte order.



PHOTO: HAULOTTE

As the company pointed out, lithium batteries can be a hard sell as the cost of a lithium battery added to Hy-Brid Lifts' low level access equipment is quite high. Lithium batteries can increase the cost of machines by 8 to 10 percent, compared to those supplied with lead acid batteries.

However, over the long-term lithium has a cost benefit, says a company spokesperson. "Despite the higher upfront cost of a lithium battery, the true cost of ownership is far less than lead acid batteries when considering lifespan, maintenance, and performance."

Lead acid batteries will need to be replaced several times over the life of a lift and require frequent maintenance to maximize battery life.

"Switching to lithium will lower the cost of ownership by buying fewer batteries and reducing labor costs. These savings make a lithium battery the more valuable long-term investment than lead acid batteries," adds the company spokesperson.

The company continues, "From slow charge time to yearly battery changes lead acid batteries are just not worth the hassle. Lithium provides a maintenance-free, better return on investment, and more efficient battery solution."

### Small carbon footprints

JLG's latest compact, "green" models are the 19-foot working height ES1330L and 21-foot ES1530L, which both offer direct electric drives and integrated components, that boast reduced hydraulic hoses and fittings, again for reduced operating costs.

For example, these ES series models have only six hoses, a significant reduction over hydraulic drive machines, which reduces the chance of leaks. Both have a platform capacity of 500 pounds and width of 2.5 feet.



Hy-Brid's ZT-1230 micro scissor lift.

On the electric drive discussion, JLG explains they are gaining favor.

"For example, fully electrified models offer an eco-friendly solution thanks to having no hydraulics or oil – these lifts are leak-free and

operate quietly, making them a preferred piece of equipment for work in environmentally sensitive areas, as well as in hospitals, schools, libraries and office buildings where noise restrictions exist," the company says.

Their compact footprints also feature, what JLG says is a unique zero turning radius for work in tight spaces. For JLG that also means a lightweight machine that provides operators with ample space for tools and materials.

Ultimately, customers also expect newer compact models to feature the same technologies as their larger counterparts.



JLG's ES1330L micro scissor lift.

### Next steps in technology

The latest GS-1932m and GS-1432m micro scissors from Genie are an example of how the company's approach to low level access is evolving.

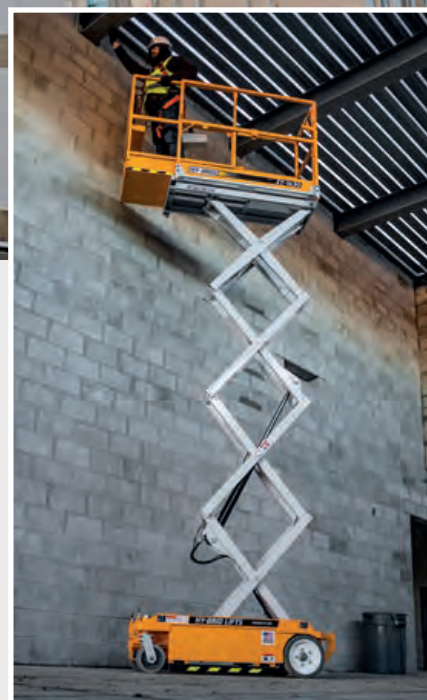
Introduced last year, the micro scissors feature fully sealed and maintenance-free AC electric drive.

They use Genie's E-Drive system, which the company says helps reduce the total cost of ownership while boosting productivity. The GS-1932m and GS-1432m feature a stowed height that is low enough to fit through a doorway with its standard fixed guardrails.

Dube says Genie is seeing a strong push towards electrification for compact scissors. "That's because the technology has reached the point where it can deliver better jobsite performance, reduced maintenance, and a lower total cost of ownership."

“ Contractors and safety managers are seeing the benefits that low-level lifts offer over scaffolds and ladders, such as easier maneuverability, reduced safety hazards and improved efficiency. ”

**JUSTIN KISSINGER,**  
marketing manager at Hy-Brid Lifts



PHOTOS: HY-BRID LIFTS

Hy-Brid's ZT-1630 micro scissor lift.

The next step will be to continue evolving this technology, including areas like lithium batteries. "But," says Dube, "just like the first steps toward electrification, it has to be the right technology at the right time and purposefully designed for the equipment it is meant to power."

Echoing the point that micro scissors are not just aimed at typical low level access applications such as the replacement of ladders, Dube says they are also a good choice for other jobs where you would use a standard sized scissor lift.

As for future opportunities and challenges with low-level access, the micro scissor lift segment is ready to continue growing.

"MEC created this wave that is the micro [scissor lift], and we will continue to bring more innovation to the ever-growing challenges that our customers present to us," Crook says. ■

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Since as early as the 1960s, robots have been assisting with car manufacturing. Pictured here is a 2022 production line at SAIC-GM Dongyue Automobile Co LTD in China. Construction equipment manufacturing is on track to soon follow suit.

PHOTO: REUTERS/  
CFOTO/SIPA USA



# The future of access

**From autonomous equipment to artificial intelligence, the jobsite of today is quickly changing. Andy Brown, Lindsey Anderson and industry experts report on recent developments across the industry.**

Boston Dynamics' Spot robot was at Trimble Dimensions in November. PHOTO: BOSTON DYNAMICS



Construction has long held a reputation – often justifiable – of not being the quickest of industries to adopt new technologies and methods of working but, at least when it comes to autonomy, that could be changing.

This view is given weight by a survey from Hexagon, specifically on Autonomous Construction Tech. The survey of more than 1,000 technology decision-makers from general contracting firms of all sizes across North America, the UK and Australia revealed that 84 percent of firms have already adopted autonomous technology at some level.

Of these, the majority report clear benefits, ranging from sustainability improvements and waste reduction to improved safety compliance. In addition, the construction firms surveyed plan on investing an average

of \$7.1 million in autonomy within the next three years.

“Construction firms are turning to autonomous solutions to mitigate risks better and improve the effectiveness of operations, which are both key to overcoming the productivity, sustainability and profitability issues they face every day,” says Thomas Haring, president of Hexagon’s Geosystems division.

## ‘Transformative technology’

The benefits that autonomy can bring are clear: autonomous tech makes jobsites safer, more efficient and sustainable. A key way it does this is by what Haring refers to as the ‘data leverage gap’. He explains this as, “that ever-widening chasm that exists between the data created during the lifecycle of a project and the data actually used to produce meaningful insights, outcomes and opportunities for growth.”

“Autonomous technology is transformative technology that will define the next era of construction. The key right now is to help the industry leverage technology in a way that

JLG partnered with RE2 in early 2022. Pictured here is the heavy-lifting RE2 Sapien 6M.



PHOTO: RE2

ensures optimization and lasting, scalable results.”

**Different stages of the journey**

Autonomy isn't binary; something isn't either not autonomous or fully autonomous. There is a whole spectrum of semi-autonomy, of which the technology has long been used in the form of machine control and the automation of some process in the construction cycle.

In fact, there are generally considered to be five levels autonomy – from level one where the operator performs most tasks with some basic AI guidance, to level five where the machine operates with full autonomy, doing anything that an experienced human operator could achieve. So, where is construction on this continuum?

“We're seeing a lot of spectrum between Level one and three, across a lot of vehicles, with a bigger push toward Level three, in construction specifically,” says Peter Bleday, head of autonomy at Danfoss Power Solutions.

Hilti's Jaibot drilling robot, seen here, could take the pain – and potential hazard – out of drilling overhead ceiling holes on jobsites. PHOTO: HILTI



What are the best ways the industry can adopt new technology in construction?

Autonomous machines are more common in mining than in construction

Regarding equipment, Moog – which works with OEMs including Bobcat, Komatsu, and Case – suggest that owners and operators being able to adapt as the technology progresses is key.

“To design automation solutions for construction, engineers must consider the consequence of failure, which depends on the machine's environment and application,” says Scott Scheffler, Moog Construction's marketing manager.

“The smart path is building vehicles with a control platform that owners can easily adapt and evolve as technology and industry processes adapt.”

Being able to evolve with new technology is obviously key but Cameron Clark, earthmoving director for Trimble's Civil Infrastructure Solutions Division, says that fully autonomous equipment is not something that we will see for a long time.

“When I see these machines with no cabs and other things, I just cringe because that's a long, long, way away. People are critical, they do the complex things. We need operators; we're just going to use them a little bit differently.”

The idea of a construction site with machines operating autonomously is, for now, science fiction. However, the technology that is being used now to automate machines, data and processes, would also have been unthinkable a few decades ago.

It is also clear that, as the industry takes its steps on this path, there are significant benefits that will be delivered along the way such as sustainability, increased productivity and efficiency and being able to do more with fewer people and machines.

Moog Construction was involved with developing the Bobcat T7X, an all-electric compact track loader.

PHOTO: MOOG CONSTRUCTION



“The reason for this is an increasing lack of experienced labor, let alone a lack of labor in general. Rework, quality of work, things that are costly to a contractor; if you can add some capability onto the vehicle, you can give the vehicle that five years of experience that you don't have with a novice operator. There's a lot of value

around driver assist technology.”

Regardless of what level of autonomy is being used, what is key is that it is providing tangible benefits, agrees Scott Scheffler, Moog Construction's marketing manager. “There are



Moog Construction demonstrated an autonomous compact track loader during ConExpo this year. PHOTO: MOOG CONSTRUCTION





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increasing levels of autonomy, from augmented operation to full autonomy. All along the way, it's critical to introduce technology that improves productivity while working safely with people."

### Manual versus automatic

Autonomy can mean a task being done by a piece of equipment – such as an excavator with machine control digging to a depth of 30m automatically – or processes being done by a machine rather than a person, such as the reformatting and organization of data. These

**Moog Construction worked with Komatsu to build this fully electric compact wheel loader concept. Companies are promoting concept machines frequently these days, suggesting the time for robots on construction sites is coming sooner than we think.**

PHOTO: MOOG CONSTRUCTION



processes may be less eye-catching than a 20-ton machine moving by itself, but they are just as important, if not more.

"When you've got the design and you're doing costings and bidding, a lot of the

times things are just fed over on paper plans and contractors are having to re-digitize and create a model when it already exists," says Cameron Clark, earthmoving director for Trimble's Civil Infrastructure Solutions Division.

"Having a process that can automate taking it in and pulling the information that they don't need out saves time," he says.

### Autonomy's impact on construction

Construction is a much harder industry in which to automate equipment due to it being more 'dynamic' than other sectors, such as mining. There are more moving parts and different equipment on a construction site and it may also



Could compact aerial equipment, such as this JLG T500J, soon receive the autonomous touch? Time will only tell. PHOTO: KHL GROUP

## Robots and AI: Drivers of change

**From robots and autonomous equipment to artificial intelligence's role in the workforce, Jennifer Stiansen, former marketing director for JLG, takes a look at what could come next for scissors, boom lifts, telehandlers, or, the access industry as we know it.**

Since the dawn of the industrial revolution, the one constant has been change. As successive waves of technology have made work significantly more productive and safer, the roles of workers have also evolved. As a manufacturer, JLG has experienced the challenges and opportunities of adopting technology firsthand, from the design and engineering of equipment to the manufacturing floor and even to supporting machines in the field.

Until the 1970s, most factory production work was performed by manual labor. During this decade, many manufacturers adopted robots for welding applications that required a high degree of precision. In part, they also adopted these automated solutions to compensate for a shortage of skilled labor. During this factory floor revolution, the role of human workers

evolved to focus on oversight and inspection.

Today's robots are more flexible, which means they can be reprogrammed to handle a variety of tasks. The role of human workers has continued to evolve as a result, designing workflows and programming robots to perform increasingly sophisticated tasks. Robots have become so powerful and flexible that they're starting to move outside of factories into an array of in-the-field applications where they show similar promise.

### A new challenge

Today, manufacturers and fleet owners face a major challenge: An unprecedented labor shortage. Even before the global pandemic, workers were retiring in record numbers and fewer people were entering the construction industry. COVID-19 accelerated this trend, leaving fleet owners with no choice but to explore new ways of working, utilizing new tools and technologies – including robotics.

At the same time, job site safety remains an ongoing focal area for equipment owners, especially in applications where employees must work at height or perform heavy, repetitive tasks. Advances in technology now make it possible for workers to control or monitor a machine at a safe distance on an autonomous or semi-autonomous basis.

A final driver of robotics in construction is the constant need to improve productivity, streamline repetitive processes and reduce operating costs. Robotic technology can handle repetitive tasks faster and at a more consistent

level of quality.

Across the construction industry, advances such as self-driving machines, auto-compensation for load dynamics and automated site grading couldn't even be imagined a generation ago. But they're becoming more common today. Inevitably, robotics will play a role in the design and applications of MEWPs and telehandlers in the years ahead.

### Current uses of robotics

If we want to envision where the use of robotics in access equipment is headed, a great place to start is how it's now being used in adjacent product categories and industries.

One industry that is consistently 5-10 years ahead of the construction industry is the automobile industry. Here, technology follows a familiar path: New technologies are often first introduced on luxury vehicles because of their initial high cost. As these technologies mature, they are adopted by more consumers and build economies of scale, then they move downstream to less expensive car brands. Examples include self-driving cars, active body control and adaptive cruise control. All involve autonomous or semi-autonomous control of the vehicle, which could be broadly considered a type of robotics.

Technology has been following a similar trajectory in the construction industry. Grade-leveling systems on crawler dozers and motor graders and auto-dig systems on hydraulic excavators, once considered specialized examples of automated machine control, have become commonplace.



**A Hitachi machine equipped with Built Robotics' Exosystem runs autonomously.**

PHOTO: BUILT ROBOTICS



**Built Robotics' Exosystem on the back of a Caterpillar machine. The Exosystem is installed to enable the machines to operate autonomously. It includes an all-weather enclosure, proximity radar, 360 degree cameras, GPS and a liquid-cooled computer.**  
PHOTO: BUILT ROBOTICS

PHOTO: BUILT ROBOTICS



only be there for a short period of time. Despite this, autonomy has already impacted equipment used on sites around the world on a daily basis.

"Maybe before you'd have a dozer work and a grader would finish it, clean it up. Now you don't necessarily need the grader to finish it," says Clark. He adds that on many sites machine control on excavators means that they can do

**Built Robotics' RPD 35 robotic pile driver combines four steps – layout, pile distribution, pile driving, and as-builts – into a single robot.**

work on slopes where previously bulldozers would have been used, freeing up these machines to do other work.

"Adoption is growing and then, as we add more value, it's around people understanding it to make sure it's going to fit in their z++++," adds Clark. "It's a good business to be in at the moment because we all have to do more with less, and this is what we do. A side effect is sustainability, which is awesome, as the technology enables us to do things quicker, cheaper and faster." ■

Here are some examples of areas where robotics are currently making some major advances in the construction industry.

## Handling dangerous work

Most buildings have mechanical and electrical pipes, tubes and conduits that are suspended from the ceiling and weave throughout the structure.

During new building construction, pipe hangers and strut support systems must be anchored to the underside of concrete decks.

This requires manually drilling hundreds of holes in an awkward overhead position, where silica dust from concrete drilling is a constant safety concern. A new construction robot can locate and drill holes for these overhead anchors based upon a BIM or CAD worksite layout, in a fraction of the time of a human laborer.

## Speeding up time-consuming tasks

A robot prints chalk lines onto concrete floors to mark the placements of walls, mechanical systems and other building elements, based on CAD drawings of floor layouts. This is normally a laborious task that requires several workers.

Another solution uses a robotic arm rigged to a gantry crane to find rebar junctions and attach ties before a concrete pour, saving many hours of back-breaking labor on road, bridge and other projects. It can tie up to 1,100 intersections per hour, day or night, rain or shine.

## Moving large or heavy equipment

A new system now under development by JLG

and RE2 will automate the transfer, lifting and placement of solar panels using a robotic arm and manipulator tool attached to the end of the boom of a JLG 450AJ articulated boom lift. This system will use a vision system to guide the machine to autonomously retrieve solar panels from a delivery vehicle and precisely place the panels onto a racking system. A worker follows behind to secure the panels.

This highly specialized project is part of a larger effort at JLG to implement semi-autonomous and autonomous solutions to minimize the impact of worker shortages, both on the factory floor and the job site.

"There's no question in my mind that robotics for MEWPs will follow the same technology curve we've seen in other industries," explains JLG's Senior VP of Global Product Development and Product Management, Rob Messina.

## Using a robot's strength

What if a robotic arm equipped with interchangeable end-of-arm tooling could be attached to the end of a boom lift – like a mobile industrial robot? Utilizing position data from GPS, vision systems and sensors, it could handle many specialized tasks.

The electric motors of industrial robots can be programmed to precisely repeat the same motions and actions, making such a setup ideal for repetitive tasks such as drilling or painting.

## Connecting equipment on sites

The Internet of Things (IoT) is a set of technologies that enables machines and devices

to share data without human intervention. Why not adapt IoT to mobile equipment and workers on construction sites? This type of rich data sharing would enable autonomous or semi-autonomous machines to coordinate with each other, leading to more efficient work processes, reduced waiting and idling times and improved job site safety.

Imagine an autonomous MEWP or telehandler picking construction materials and performing lifts to the second floor of an apartment building that's under construction.

As it performs these cycles, it would utilize data from other IoT-equipped machines and workers on the site to plot the safest, most efficient path to and from the building.

## The robotics revolution

Labor shortages don't appear to be subsiding any time soon, driving the need for new ways of working – including automating repetitive, heavy or dangerous tasks. In much the same way as robotics have impacted manufacturing, their future use in the lift industry represents an opportunity for fleet owners to redeploy their workers to tasks where they can add greater value.

"We're just at the very beginning of the robotics revolution for access equipment," Messina points out.

"As the technology continues to mature for MEWPs and telehandlers, and more customers see the value of it, I predict we'll see a remarkable variety of mainstream uses. We aim to be at the forefront of this revolution," he said.

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# SAIA COMMITTEE WEEK

**MARCH 3-7, 2024**

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Committee Week is open to all professionals who are interested in advancing the scaffold and access industry. The meeting focuses on the work of the SAIA's 12 councils: their current projects, goals, and objectives; issues facing their respective industry segment; emerging trends; and any new programs, initiatives, or activities for the coming year.

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SCAN ME

SHOW DETAILS

**WHAT:** The ARA Show  
**WHEN:** Feb. 18-21, 2024  
**EXHIBIT HOURS:**  
 Feb. 19: 9:30 a.m. – 5 p.m.  
 Feb. 12: 9 a.m. – 5 p.m.  
 Feb. 21: 9 a.m. – 1 p.m.



PHOTO:  
 ERNEST N.  
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**WHERE:** Ernest N. Morial Convention Center, New Orleans  
[www.arashow.org](http://www.arashow.org)

The show floor was packed in 2023.  
 PHOTO: THE ARA SHOW



EVENT SCHEDULE

**SUNDAY, FEB. 18**

7 a.m. – 5 p.m. Registration Open  
 7 a.m. – 8 p.m. Badge Pick-Up Kiosk Open  
 8:30 a.m. – 4 p.m. The ARA Show Education  
 11:30 a.m. – 1 p.m. ARA Industry Awards Lunch  
 5 p.m. – 7 p.m. ARA Young Professionals Network Reception  
 5 p.m. – 8 p.m. Canadian Hospitality Reception Exclusive to ARA members residing in Canada

**MONDAY, FEB. 19**

7 a.m. – 8 p.m. Badge Pick-Up Kiosk Open  
 7 a.m. – 5:30 p.m. Registration Open  
 8 a.m. – 9:30 a.m. Keynote: Jon Taffer  
 9:30 a.m. – 5 p.m. Trade Show  
 10:15 a.m. – 11:15 a.m. Jon Taffer meet and greet  
 5 p.m. – 6:30 p.m. Regional Receptions 1 – 9  
 7 p.m. – 9 p.m. ARAPAC Reception

**TUESDAY, FEB. 20**

7 a.m. – 5:30 p.m. Registration Open  
 7:45 a.m. – 9 a.m. Women in Rental Breakfast  
 9 a.m. – 5 p.m. Trade Show  
 5 p.m. – 6:30 p.m. ARA Foundation Charity Auction and Reception  
 7 p.m. – 10 p.m. Tuesday Night Event

**WEDNESDAY, FEB. 21**

8 a.m. – 1 p.m. Registration Open  
 9 a.m. – 1 p.m. Trade Show

Please note some special and networking events require separate tickets. Please visit [www.arashow.org](http://www.arashow.org) for more information.

# Rental in the Big Easy

The ARA Show returns to New Orleans in 2024 for three days of exhibits, education and more. *ALH* previews the event.

The American Rental Association (ARA) Show is set to open its doors Feb. 18-21, 2024 at the Ernest N. Morial Convention Center in New Orleans. The annual rental-focused event is expecting to bring in 10,000 attendees for its 2024 event and will feature 19.5 hours of tradeshow floor time alongside nearly 40 hours of education sessions.

“We are thrilled to bring The ARA Show 2024 back to New Orleans for an engaging, insightful and fun week for our members,” said Tony Conant, ARA’s CEO. “Last year’s show set the bar high, and we’re excited to carry that momentum forward with a mix of educational



programs, professional networking and our popular social gatherings throughout the week.”

In 2023, the ARA Show saw 750 exhibitors on hand showcasing their latest products, equipment, services and more.

Speaking to last year’s event, Christine Hammes, vice president of association services/events said, “Overall attendance exceeded our initial expectations, and the momentum seemed to build from Saturday education programs to the trade show floor opening. It was exciting to see the trade show floor buzzing with activity.”

Attendees at this year’s show can expect to see a wide range of access and telehandler equipment, as well as rental software providers and more. Select exhibitors include: All Access Equipment, AUSA, Bobcat, Bravi Platforms, DinoLift, Gehl, Genie, Haulotte Group, Hy-Brid Lifts by Custom Equipment, IMER Group USA, JCB, LGMG North America, Lizzy Lift, Magni Telescopic Handlers, Manitou North America, MEC Aerial Work Platforms, Niftylift, Noblelift North America, Ruthmann Reachmaster N.A., Sinoboom North America, Skyjack, Snorkel, Sunward America, Teupen North America, Zoomlion and more.

For a full schedule, including updated exhibitors and new products that will be on hand, make sure to pick up the January/February 2024 issue of *Access, Lift & Handlers*.



PHOTO: JON TAFFER

## Bar Rescue’s Jon Taffer to present ARA keynote

To kick off the three-day show, Jon Taffer, a hospitality expert and star of the hit TV show “Bar Rescue,” will headline ARA’s keynote session on Monday, Feb. 19, 2024. “With his extensive knowledge in the hospitality industry and exceptional business acumen, Taffer is set to deliver an inspiring and enlightening keynote that promises to leave a lasting impact on all attendees,” ARA said.

**Jon Taffer, star of television’s “Bar Rescue”, will kick off the 2024 ARA Show with a keynote speech.**

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World of Concrete will celebrate its 50th anniversary in 2024. ALH provides a preview for the annual masonry-focused event.

# Concrete solutions

Set for January 23-25, 2024 in Las Vegas, World of Concrete (WoC) will celebrate its 50th anniversary next year and show organizers are expecting quite a turnout.

“Over 300,000 concrete contractors are employed in the United States and represent the backbone of the American and international workforce,” says Kevin Thornton, senior vice president of construction, Informa Markets. “World of Concrete is proud to support laborers in education and connection providing opportunity to advance the industry toward enhanced sustainability, efficiency and safety, and continuing growth.”

During the 2023 event, WoC brought in 48,009 registered professionals from more than 120 countries and took more than 587,000 net square footage (NSF) of the convention center, with both indoor and outdoor spaces full of product displays, demonstrations and competitions.

“The 2023 edition of World of Concrete far exceeded our expectations,” says Jackie James, vice president, World of Concrete. “The crowded show floor and packed educational sessions proves how essential meeting face to face is, that it remains important now more than ever to have a space to connect, to learn, to share across the concrete, masonry and construction industries as a vital contributor to our economy. In-person attendance is on its way back to pre-pandemic levels and the World of Concrete event leads global trends in construction.”



## Winning innovations

New in 2023 was WoC’s Innovative Product Awards, which the event will bring back in 2024 following the success of the inaugural celebration.

The second annual Innovative Product Awards aim to honor cutting-edge equipment, materials, tools and services that help shape the concrete and masonry industries. There are two award categories, People’s Choice and Expert’s Choice, each featuring nine categories.

“The Innovative Product Awards powered by World of Concrete is a program that gives manufacturers and service providers the chance to showcase their most cutting-edge solutions to the industry,” say show organizers.

“Industry professionals, in the WoC and WoC360 audience will vote in each category on products and services that are entered into the program for the People’s Choice award. Experts’ Choice winners will be selected by World of Concrete editors and industry experts.”

Voting will open Jan. 8, 2024 and will close on Feb. 9, 2024 with winners being announced on Feb. 20, 2024.

The product categories to vote in include:

- Business & Technology Software & Services
- Concrete Construction Materials
- Concrete Production & Delivery
- Concrete Surfaces & Decorative Concrete Equipment & Materials
- General Construction Tools & Equipment
- Masonry Construction Materials
- Precast & Block Production
- Repair & Demolition Materials, Tools & Equipment
- Slab Tools, Equipment & Materials

For more information or details, visit: [www.worldofconcrete.com](http://www.worldofconcrete.com)

SHOW DETAILS



### EDUCATION:

January 22-24, 2024

8 a.m. – 5 p.m.

For a detailed list of sessions, times and pricing, visit [www.worldofconcrete.com](http://www.worldofconcrete.com)

### EXHIBITS:

January 23-25, 2024

9:30 a.m. – 5 p.m.

\$90 (before Dec. 12) | \$120 (after Dec. 12)

**WHERE:** Las Vegas Convention Center

3150 Paradise Road, Las Vegas, NV

89109

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[www.worldofconcrete.com](http://www.worldofconcrete.com)

PHOTOS: WORLD OF CONCRETE

EVENT SCHEDULE

## Targeted show floor areas

World of Concrete will be celebrating its 50th anniversary in 2024 with more new products, innovations and technology than ever before. Here is the coming year’s layout and floor guide.

### CENTRAL HALL

Material Handling

World of Concrete General

Work Truck Live!

### NORTH HALL

The Producer Center

Technology for Construction

Precast

Concrete Masonry

Concrete Reinforcement

World of Concrete General

Cement Production Pavilion

Autoclaved Aerated Concrete (AAC)

### SOUTH HALL

Concrete Repair and Demolition

Concrete Surfaces and Decorative

World of Masonry

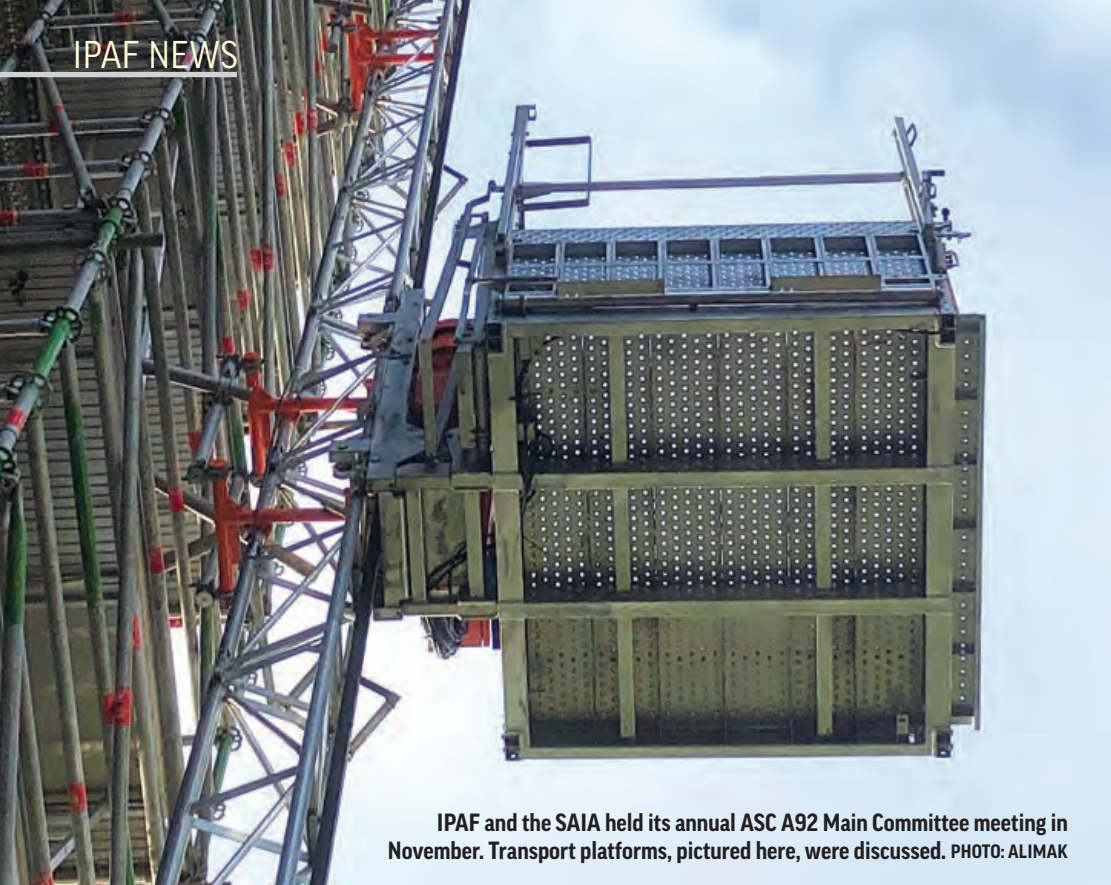
### OUTDOOR LOTS

Silver

Bronze

## EXHIBITORS AT A GLANCE

AUSA	C6677
Bobcat Company	C5347
Combilift USA	C3121
Magni Telescopic Handlers	C5559
Merlo America LLC	C7281
REIC Specialty Rentals	C3055
Snorkel	030099
Xtreme Manufacturing	030099



IPAF and the SAIA held its annual ASC A92 Main Committee meeting in November. Transport platforms, pictured here, were discussed. PHOTO: ALIMAK

## IPAF Elevation event update

The IPAF Elevation conference and dinner was held in mid-November with the theme: "It's all about the people."

The event ran alongside the Federation's 40th anniversary celebrations, which take place this year.

Chaired by IPAF UK's General Manager Richard Whiting, Elevation's presentations focused on the challenges and solutions of attracting talent, particularly in the form of young people, to the powered access industry, among other issues.

Peter Douglas, CEO and Managing Director of IPAF, looked back at some of the key developments in the Federation's history since it was established in 1983, including its eight original members, to the start of its PAL Card training program in 1993, followed later by the accident reporting initiative.

On the subject of accident reporting, Douglas commented, "It is our most important initiative; It drives all the other initiatives."

The Accident Reporting Portal has also seen significant growth since the program was introduced 12 years ago. In 2022, there were 746 reports across 34 countries.

Today, IPAF's membership includes 1,638 from 80 countries.

# Report: SAIA 2023 ASC A92 Main Committee meeting on November 9

The Scaffold and Access Industry Association (SAIA) held the annual ASC A92 Main Committee meeting November 9 in Kansas City, MO. Many of the standard drafting committees met earlier in the week to continue their work in the ongoing periodic review of the mobile elevating work platform (MEWP), mast climbing work platform (MCWP) and transport platform standards.

During the annual meeting, nominations and resignations to subcommittees were approved, the status of the A92 standards were reported upon by their respective chairs, and the regular business of the standard body was conducted.

It is noteworthy that the suite of mobile elevating work platform (MEWP) standards (A92.20 design, A92.22 safe-use, A92.24) reported their intention to republish in a similar time frame in

the next two years.

The A92.9 mast climbing work platform (MCWP) and A92.10 transport platform standards will also be working to develop a safe-use and training standard separate from the design standard.

In the process to approve and publish new standards, each new standard will be issued for public comment before final approval. All industry stakeholders will have an opportunity to review proposed standards and prepare for compliance before final approval and effective date.

IPAF's North American Regional Manager Tony Groat is chair of the ANSI/SAIA A92.22 safe use standards. He said, "All meetings were extremely productive and all committee members should be applauded for their commitment of time

and sharing their expertise in the efforts to develop these essential industry standards that benefit all industry stakeholders." ■

## IPAF regional manager to present at Construction Expo & Safety Conference in Chicago



IPAF's regional manager **Tony Groat** has been invited to present two sessions at the 2024

Construction Expo & Safety Conference, March 4-5 in Chicago. The event is co-sponsored by IPAF members The Construction Safety Council and the ASA Chicago. The first is "Above and Beyond:

A comprehensive guide to MEWPs and Elevated work safety is the key" is scheduled for 3.5 hours. The presentation will delve into the critical intersection of efficient work practices and safety protocols when working at height with MEWPs. This extended session will provide the opportunity to look into key issues such as safe use planning, training, risk assessment (key hazards) and compliance with regulations and

# SAIA calls industry stakeholders to update industry best practices

Back in 2010, industry associations identified the need to develop MEWP best practice documents to raise awareness, educate users and offer best practices consistent with the ANSI/SAIA A92 standards.

Best practices were developed for "Training and Familiarization," "Personal Fall Protection Systems for Aerial Work Platforms" and "Workplace Risk Assessment and Aerial Work Platform Equipment Selection."

While these best practices still provide valuable information, they have fallen out of date as new A92 standards have been published and improvements can be added.

The Scaffold & Access Industry Association's (SAIA) Mobile Elevating Work Platform (MEWP) Council, chaired by Tony Groat, has taken the lead to bring back contributing associations to update and revise the Best practice documents.

## Moving forward

SAIA, IPAF, ARA and AEM were all contributors in the initial

standards. You are guaranteed to learn something new!

A second presentation will be limited to one hour and will address the topic of "Innovation and trends in MEWP technology and applications." The focus of this session is on harnessing the power of MEWP accessories and secondary supplier devices.

Just as you don't want to miss out on the benefits of the newest cell phone, you are likely missing out on new products and accessories that can make a real difference on your jobsites.

Register today for the Construction Expo & Safety Conference ASA Chicago Construction Safety Council.

**The 2010 Best Practices document will be updated by SAIA's MEWP Council starting soon. PHOTO: IPAF**

documents, and each have members who have committed to be part of the effort to complete this task. The current documents reside on each association's website and are available to all for free download.

The current plan is to have the SAIA MEWP council begin developing drafts to update each best practice document. The ARA has again volunteered to create the artwork and editing for the documents.

The key meeting to progress



this work is schedule at the SAIA committee week when all are invited to review and continue to development of these documents.

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He MEWP council meeting is schedule for one full day on March 6. Register now at SAIA ([saiaonline.org](http://saiaonline.org)).



## Promote your company or customer for job a well done – enter the IAPAs

It is always a great feeling to be recognized for your hard work and accomplishments. Sometimes you are just too busy to even think about how you can be appreciated or appreciate others. The International Awards for Powered Access (IAPAs)- provide you the opportunity to receive recognition for your accomplishment in a celebration of best practices and excellence across this great industry.

Now is the time to take a moment and consider what you have accomplished this year and register for one of the many award to be presented in March 2024 in Copenhagen Denmark. Simply visit the website [www.iapa-summit.info](http://www.iapa-summit.info) to ID one of the award categories you should get an award for and apply! Don't miss another year of watching others get recognition for an award YOU should be getting recognition for – apply NOW.



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# Engine bits and pieces



**SRIKANTH PADMANABHAN,**  
president, engine business, Cummins Inc.

“ As we all know, it takes over 200 years for carbon to go away, which means that we've got to start today. ”

Srikanth Padmanabhan, **executive vice president and president of operations at Cummins, speaks with KHL's Editor Becky Schultz about 'all the small things' when it comes to power.**

**C**ummins Inc. has had a banner year. Acquisitions have helped drive sales revenues substantially higher. The closing of the Meritor acquisition in 2022 – at \$3.7 billion, the largest in Cummins' 103-year history – proved a springboard for the company's Components segment, sending sales skyrocketing 74 percent in the first half of the year and edging out the Engine Business segment for first place in overall sales.

Yet, the Engine Business continues to retain a solid foothold among the company's business segments, thanks to the steady leadership of its president, Srikanth Padmanabhan, who was recently promoted to executive vice president and president, operations at Cummins. He's spent over three decades at the company in various roles before becoming responsible for a division focused on development and production of 2 L to 15 L displacement engines for the on- and off-highway markets. In 2022, the Engine Business generated \$11 billion in revenue and produced more than 1.2 million engines globally. It is on track to further that growth in 2023.

*Diesel Progress* Editor Becky Schultz spoke to Padmanabhan to get his insights on

opportunities and what lies ahead for internal combustion and the path to Destination Zero.

**Schultz: As a company, Cummins has completed a number of acquisitions over the past couple years. What opportunities do they represent, and what do you anticipate from them going forward?**

**Padmanabhan:** The way we've been thinking about some of these opportunities that have come about as being related to help with... the internal combustion engine business, and then there are those that are agnostic to the internal combustion engine. Meritor is one we consider as agnostic to the internal combustion engine. Whether it is a battery-electric or a fuel cell electric or an internal combustion engine, you will always need an axle, which means that this acquisition helps us - whether it's an E-axle in the electrified world or a conventional axle. How it dovetails for us with the internal combustion engine is the performance and efficiency of the overall powertrain gets to be improved.

We have an Eaton-Cummins joint venture [for automated transmissions], so we have the engine, we have the transmission and we have



Earlier this year, Cummins celebrated the 5 millionth medium-duty engine produced at its Rocky Mountain, NC, manufacturing facility. ALL PHOTOS © CUMMINS

the axle. When you combine them together with the electronics that are there, efficiency of the overall powertrain improves, which means that it helps with not only decarbonization but also overall fuel economy savings...

On the other side of it, there have been some acquisitions that we have made, [such as] Jacobs Vehicle Systems, that are primarily related to the efficiency improvements that we would need over the next several decades as we introduce higher efficiency internal combustion engines, and that help with the valvetrain. So, we think about both within and outside of the internal combustion engine as we think about the powertrain.

Then, there are acquisitions that we have made that directly go into our new power business, which are related to zero-emissions technologies, as well. So, we are thinking about this as both related to what we are doing today, as well as zero-emissions technologies that we will do tomorrow.

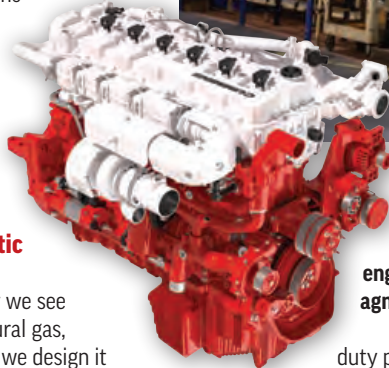
### Where is Cummins at on its journey toward for fuel-agnostic engine technologies?

The fuel-agnostic engine the way we see it, whether it's diesel, petrol, natural gas, hydrogen, it should not matter if we design it from the ground up. That's the difference.

Historically, we have designed a diesel engine and then we will go and re-apply it for a natural gas application.... The way that we have been thinking about [the fuel-agnostic engine] is that from the head gasket down, all components will be similar, and [from the] head gasket up - which is where the fuel delivery system is typically - is what will change. We are designing from the ground up, so we have been able to do the design that will generate the same power and torque that is required of a diesel engine in these new applications... and we are able to do it because it is a brand new set of platforms.

We can't introduce it all at the same time. We are starting with, for example, the X15. We will introduce a natural gas engine in the next year. We're also starting to introduce, on the medium-

The 10 L X10 medium-duty fuel-agnostic engine will be available in 2026, initially in a diesel version and later for gaseous fuels.



Cummins plans to go into full production with a 15 L hydrogen engine, built on its fuel-agnostic platform, in 2027.

duty platform, our octane engine, which has diesel-like durability and diesel-like performance...

In different parts of the world, we are introducing certain things differently. Hydrogen use [started] to happen in Europe and some in India, and depending on how things go, the U.S. Natural gas applications have already started happening in China.

### Earlier this year, Cummins celebrated a couple of milestones at two of its engine facilities in the U.S. Tell us about them.

We have said that we are going to invest over \$450 million [in Jamestown,] and that investment is for the new engines. In fact, my hope is that the next milestone would be a hydrogen internal combustion engine for the 15 L. It's what I challenged the team [to produce for] the 3 millionth engine.

Likewise, we're doing quite a bit of investment in Rocky Mountain, NC, and that would be for the fuel-agnostic engines [powered by] octane that... we'll start producing in the next year or so. And then we would follow that up with propane. That will be followed up with natural gas and a few other applications, as

well. So, all these fuel-agnostic engines will get produced in North America, particularly in those two factories.

### With so much focus on alternative fuels and the energy transition, what do you feel is the long-term future for diesel engine technology? Do you see it having a place in the market going forward?

Destination Zero is the right thing for all of us to do in terms of how we decarbonize this world... Transportation and mobility is about 20 to 25 percent of the total carbon that gets produced, and once you put that out there, it's hard to take it out. As we all know, it takes over 200 years for that carbon to go away, which means that we've got to start today. We cannot afford to wait.

There are going to be applications where zero-emission technologies work, whether it's battery-electric or fuel cell electric or other things. We should accelerate those applications; school buses, transit buses, pickup and delivery vans.

But there are going to be lots of applications that are what I would consider 'hard to abate' places. Our view is that we should start using lower carbon fuels as quickly as possible, and then, over time, if zero-carbon fuels could be used and the infrastructure is ready, then we should use zero-carbon fuels like hydrogen as a method by which we could take long haul trucking to a hydrogen internal combustion engine. Likewise, in places where it is difficult for charging infrastructure to happen, this kind of low-carbon or zero-carbon fuel could be used.

So, my view is that there is going to be a long tail and that it is going to take a long while before all of this is going to go to some form of zero emissions. Until that time, I think diesel and renewable diesel, natural gas, renewable natural gas, as well as other low-carbon and zero-carbon fuels are going to be used for a long while in reciprocating engines.



A look at the Cummins factory in Jamestown, NY

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