Under the High Patronage of
Mr Emmanuel MACRON
President of the French Republic

2024 INTERMAT.

PARIS
24 - 27 APRIL 2024

Sustainable
construction solutions
& technology exhibition

The winners of the
international competition

INTERMAT Innovation Awards 2024

INNOVATION AWARDS by INTERMAT.

Sous la présidence de la FNTP
LES TRAVAUX PUBLICS FÉDÉRATION NATIONALE

CO-LOCATED WITH: WORLD OF CONCRETE® EUROPE

ORGANIZED BY COMEXPOSIUM

EVOLIS LES ACTEURS DE L'INDUSTRIE EN MOUVEMENT

SEIMAT

Contents

International innovation at INTERMAT 2024

INTERMAT has always been a platform for innovation in equipment, machinery and processes for construction and material production. Over the years INTERMAT has shone a light on this inventiveness by distinguishing the most remarkable initiatives with the INTERMAT Innovation Awards.

This ninth edition pays tribute to equipment, technology, services, solutions or products that contribute to driving progress in the construction, infrastructure and materials industries, and to achieving the major transitions in the sector.

Among the new developments in this ninth edition, competitors were able to compete in news categories New Technologies & Energy and Low carbon & energy transition while special awards recognising initiatives by companies offering a specific innovation.

The diversity and inventiveness of the products, equipment, technologies and services honored by the jury illustrate the tremendous capacity for innovation of equipment manufacturers, and the excellence of their practices in collectively providing innovative, sustainable solutions tailored to the needs of construction professionals.

Energy transition at the heart of trends

As a true illustration of INTERMAT 2024, the 2024 INTERMAT Innovation Awards:

- bear witness to the international construction equipment offering,
- illustrate the diversity of the sectors for which the equipment and machinery are essential production resources,
- support the broadening of the offer on show at the exhibition, with a specific focus on the concrete sector through World of Concrete Europe,
- highlight the major changes the capital goods for construction are experiencing and will continue to experience,
- clearly feature the flagship goal at Intermat 2024: that of decarbonising construction.

The energy transition to meet low-carbon goals – the standout theme at INTERMAT 2024 – was a particular focal point in this 2024 edition of the Innovation Awards.

Construction cannot avoid this obligation to share the same goal in the aim of limiting global warming, on a par with its contribution to carbon emissions, which stands at 37% worldwide. The entire industry is responsible for this imperative decarbonisation process.

The equipment, materials and processes distinguished by the 2024 Innovation Awards judges, whatever development avenue they have taken, all share the same intention of reducing carbon dioxide emissions.

17 awards winners

An international panel of 17 experts – nine French judges and eight international judges, selected a shortlist from among the 90 entries submitted by INTERMAT 2024 exhibitors, with the 30 nominated products unveiled at the 2024 Press Days.

The judges selected 14 winners (Gold, Silver and Bronze Awards) and awarded them prizes in the five following categories:

- **Earthmoving, Demolition and Transport**
- **Roads, Materials and Foundations**
- **Building, Civil Engineering and Concrete Sector**
- **Low carbon and energy transition**
- **New technologies**

The jury also awarded three Special Awards :

- **Two Start up Awards,** rewarding two companies registered in the INTERMAT Start-up Village (hall 5b) ;
- **World Of Concrete Europe Award,** for one of the companies exhibiting at the World of Concrete Europe in the Building, Civil Engineering and Concrete Sector.

The jury

FNTP-©Claire Dem

Chaired by Alain Grizaud

chairman of FNTP

The jury for the INTERMAT Innovation Awards, mainly made up of users, experts from construction sector companies or bodies, comprises nine French members and nine international members involved in the themes of zero carbon and energy but also in the areas of cost savings, safety or training, which are all central topics at the 2024 edition of the show.

INTERNATIONAL JUDGES

Domenico Campogrande
General Director, European Construction Industry Federation (FIEC)
EUROPE

Michel Petitjean
General Secretary, European Rental Association (ERA)
EUROPE

Maria Moreno
International Director, Asociacion de Empresas Constructoras y Concesionarias de Infraestructuras SEOPAN
SPAIN

Alessio Rimoldi
Secretary General, Federation of the European Precast Concrete Industry (BIBM)
EUROPE

Brian Jones
President, Construction Plant-Hire Association
UNITED KINGDOM

Massimiliano Ruggeri
Technical Director, Imamoter
ITALY

Michele Levati
Director, Lombardini 22 Civil Engineering
ITALY

Heinz G. Rittman
CEO, Deutscher Auslandsbau Verband
GERMANY

Kjetil Tonning
FIEC Honorary President Norway Civil & Structural Engineer
EUROPE

THE FRENCH JURY

Dominique Chevillard
Technical and Research Director – FNTP

Christophe Possémé
President, UMGO-FFB

Fabrice Blanc
Equipment Director, Eiffage Génie Civil

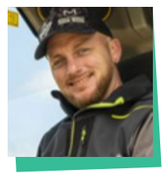
Maxime Chamillard
Labs coordinator & Innovation strategy consultant, Impulse Partner

Vincent Simon
Director of ambassador engagement, Worldskills

Matthieu Armengaud
Director of ambassador engagement, DLR

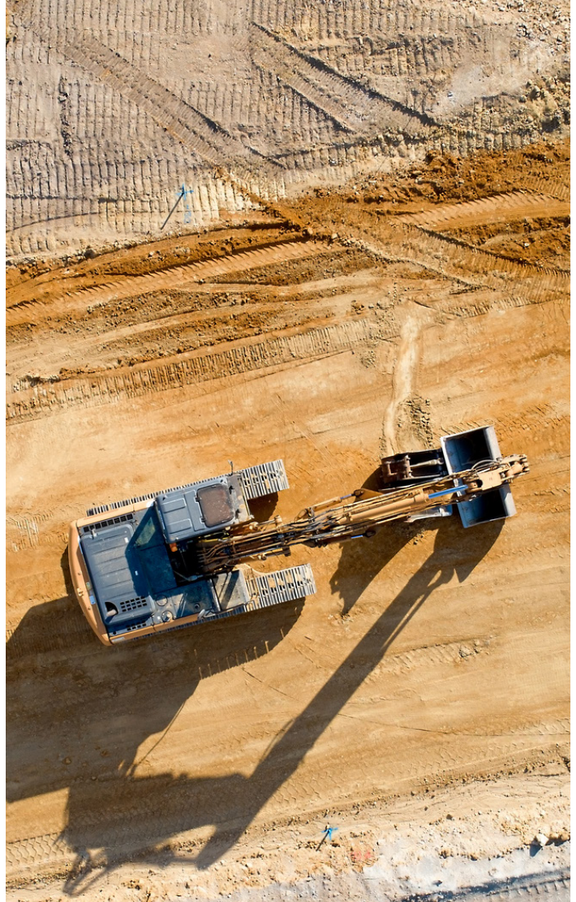
Frédéric Peigne
Project Director of Grand Paris Express lines 16 and 17,
Société du Grand Paris

François Renault
Equipment and Environment Director, Kiloutou



Anthony Goubert
influencer, Radio TP

Earthmoving, Demolition & Transport winners



The tipper body of quarry and mining dumpers is subjected to considerable stress during loading, transport and tipping. It is important to monitor their condition to ensure that these vehicles are spared unexpected downtime. **Duratray International** offers tippers and tipper modification solutions for dumpers from 40 t to 400 t, based on a rubber base that reduces the dead weight of this equipment, reduces noise emissions and limits rearward load migration. This specialist has developed the **Smart Tray**, an 'intelligent tray' that uses sensors to monitor the structural condition of the tipper and its lining. Software monitors the data transmitted in real time and alerts the operator in the event of excessive wear. This system reduces the need to monitor the tipper's condition and enables maintenance operations to be programmed more effectively, indirectly reducing downtime and boosting truck productivity.

Collecting scattered materials from construction and demolition sites, as well as from urban infrastructure and roadsides, for sorting and possible recycling, is a very tedious task. **Dynaset's HRVB - hydraulic recycling vacuum bucket** - is designed to mechanise this task. The bucket is fitted to the dipperstick of a hydraulic excavator, for example, using a quick-change attachment. Comprising a housing containing a hydraulic motor and a fan powered by the carrier's hydraulics, it offers an air flow of 1.4 m^3/s and a suction pressure of 8 kPa. Its suction opening can be adjusted for more precise work. It comes with a 7.5 m suction hose. Its operation is reversible, meaning the HRVB can be used as a blower for cleaning or gathering light materials such as fallen leaves.

Standardisation can be a tool to simplify the use of a certain type of equipment, or to guarantee the operation and interchangeability of the attachments concerned. **Steelwrist** has set out to create a normative environment for its products. **Open-S** is an open standard for automatic quick couplers, and in particular tiltrotators, devices that allow the attachment of a hydraulic excavator to be positioned by combining, at will, a tilting and a rotating movement. The Open-S is based on the existing standard of quick couplers. Rototilt, another tiltrotator manufacturer, has joined Steelwrist in defining Open S.

The adoption of this standard could, with common dimensions and tolerances, enable an efficient manufacturing process for manufacturers, as well as ensuring compliance with the highest safety requirements for users.

INNOVATION AWARDS GOLD 2024 by INTERMAT

DYNASET OY
HRVB Hydraulic Recycling Vacuum Bucket

Booth EXT6 E080

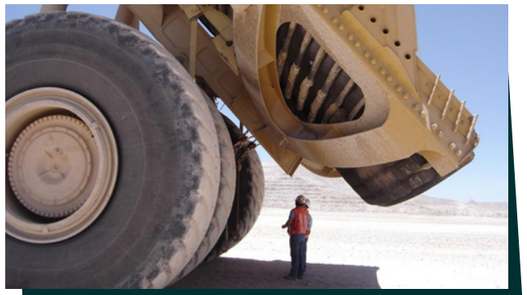
HRVB Hydraulic Recycling Vacuum Bucket transforms the hydraulic power of the base machine into powerful vacuum suction and air blower. HRVB is a compact and integrated all-in-one attachment unit for gathering, recycling, and sorting material, scrap, and similar matter found at construction sites, parks, roads, and railways.

The HRVB unit also works as a powerful air blower to clean and collect lighter matters like leaves. The HRVB is designed as an attachment for the excavators and material handling machines. As a stock order, the HRVB unit also comes with a 7,5m long suction hose for the auxiliary suction port for vacuuming material by hand.

INNOVATION AWARDS SILVER 2024 by INTERMAT

DURATRAY INTERNATIONAL
Smart Tray

Booth 5a D075



Duratray's Smart Tray (ST) is the most advanced dump tray for mining and construction trucks. The ST can monitor its condition (structural and wear) automatically and report to the user online and in real time.

INNOVATION AWARDS BRONZE 2024 by INTERMAT

STEELWRIST
Open-S

Booth EXT6 A091

The work to create the Open-S Standard was started in 2019, and has been spearheaded by Steelwrist and Rototilt, two companies that normally are fierce competitors but still decided to work together for the greater purpose of a common open, manufacturer-independent.

Global standard for fully automatic quick couplers.

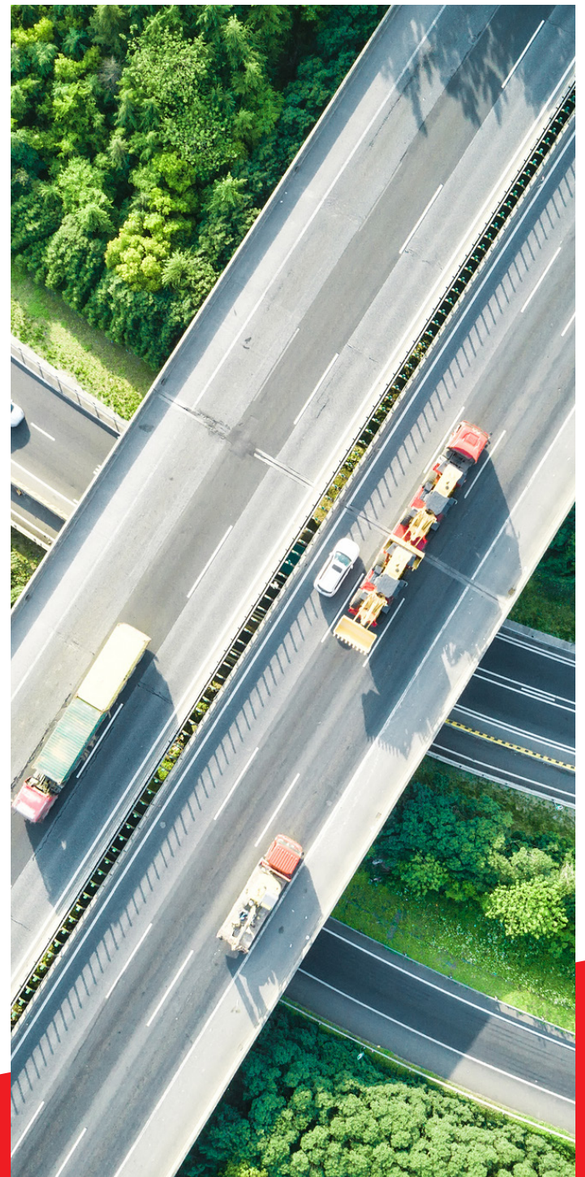
An immense amount of work has been put into the project and all initial funding has been carried by the two founding companies, Steelwrist and Rototilt. Several manufacturers are now in the pipeline for admission.

Roads, materials & foundations
winners

On roadworks sites, machines work at the same time and share the same space as site workers, with the risk of colliding with one another. **Bomag**, the compaction equipment manufacturer, is offering an **emergency braking assistance** system for road equipment. Based on the use of 3D LiDAR, the system scans the machine's environment 20 times a second over 360°, rather than at a predefined angle like other products. It analyses the machine's pre-calculated trajectory based on its speed, steering angle and steering mode, anticipating its next movement and managing complex situations such as crab steering. The system also detects any potentially dangerous objects or people near the machine. Before any dangerous situation arises, the machine automatically slows down and even stops if necessary. The operator can select different responsiveness settings for their machine, from 'soft' to 'hard', with the system prioritising safety at all settings.

Hydraulic excavators can be fitted with levelling blades at the front of the chassis. This is a classic configuration on mini-excavators and midi excavators. **DMS Technologie** has developed a **levelling blade control system** to optimise work. It consists of a laser receiver, a control system installed on the excavator, and side plates and a mast attached to the blade. Work productivity is considerably higher than when levelling with the bucket. It also eliminates the need for a second operator to check the height of the work done. Lastly, says the manufacturer, the system means that a smaller machine can be used for the same amount of work than would be required for traditional bucket work, thus saving fuel.

Colouring building materials without emitting any dust is the purpose of **Supply Company's pigment tablets**, which replace the powders traditionally used for this purpose. With no harmful particle emissions - titanium dioxide used in pigments is classified as a carcinogen - the product simply mixes into the material by friction. The pigment is applied in tablet form by pouring it into the concrete mixer, or using pulsed air for road applications. This product does not require any heating for road applications, which means no additional energy is required for dispersion, so it reduces the energy costs of the process. Its format makes it easy and precise to dose using automatic systems. Easy to handle and moisture resistant, it is also easy to store.



INNOVATION AWARDS GOLD 2024 by INTERMAT

BOMAG
Bomag emergency brake assist

Booth 5a
C134

BOMAG Emergency Brake Assist is a technology designed for road construction machines that prevents collisions while protecting the hot asphalt surface from damage.

The machine continuously scans its surroundings for perfect coverage. System is able to detect potential hazards before they occur. This allows for the early application of automatic deceleration strategies.

Key features:

- Scanning of surroundings using multi-level lidar technology
- Projection of the machine's travel path based on speed and steering angle
- Reliable detection of people and objects in the machine's travel path
- Fully integrated solution enables the machine to "see around corners"
- Collision prevention through automatic braking
- Multiple braking strategies that adapt to the operator's driving behaviour
- Early anticipation and braking strategies protect the hot asphalt surface from damage

INNOVATION AWARDS SILVER 2024 by INTERMAT

DMS TECHNOLOGIE GMBH
Excavator Blade Control (EBC)

Booth 5b
D097

The excavator blade control (EBC) is an automated control system for the excavator blade. Grading jobs can be done with the blade instead of the bucket, when the EBC in installed giving the possibility to do levelling jobs supported by an automated control system.

The system consists of a laser receiver, the control system which is installed to the excavator and the side plates and mast attached to the blade.

The system is highly productive, easy to use and affordable! The result is a doubled productivity and a better end result ov the levelling job.

INNOVATION AWARDS BRONZE 2024 by INTERMAT

SUPPLY COMPANY
Pigment in tablet form

Booth 6
E148

Pigment in solid form without dust, easy to dose with automatic systems (unlike its initial form: powder), no longer fears moisture (more product loss) respectful of human health (more nano particle with titanium dioxide: carcinogenic)according to (Titanium dioxide (FT 291). Regulation - Toxicological data sheet - INRS

Environmentally friendly, because it disperses just by friction and more by heat and friction (for the road sector) thus reducing the cost ..gas or electricity and a sharp decrease in CO2 emissions into the atmosphere.

This form can be used in all sectors of activity: Concrete industry, Road industry, paint industry or the form of pigment used and in the form of paste: "mixture of water and pigment" and transport with a too high carbon footprint. Storage is easier than powder pigment with less constraints as the humidity.

Building, civil engineering & Concrete sector
winners

Decarbonising precast concrete products is something that can be achieved in a number of ways. Using a binder that emits less CO_2 is the first. There are several alternative solutions to traditional cement now available. One of the other solutions is the partial or total substitution of fibres for reinforcing steels. Developed within the Michelin Group and the result of collaboration with a design office specialising in fibre-reinforced concrete structures, the **AraNea Composite** product is a compound of glass fibres and resin. The mechanical strength it imparts to concrete, as well as its insensitivity to corrosion, limit the thickness of the coating required, enabling savings to be made on materials and thinner structures to be produced. It also eliminates the need for a reinforcement plant.

Precast slabs are a common product in the concrete industry. They enable structures to be built using these self-supporting elements, which require less concrete and weigh less. Betolar is going one step further by providing a solution for creating hollow-core slabs using its Geoprime product. This is a cement-free concrete with low carbon emissions. The binder needed to make this concrete is obtained from the by-products of industrial processes. The **Geoprime Hollow Core Slab** solution, distributed under licence, requires no modification to prefabrication operations. The moulding cycle, curing time and retention time are identical to those for Portland cement-based products. Betolar has announced a 75% reduction in CO_2 emissions in the manufacture of hollow-core slabs compared with standard products.

In a conventional mixer carrier, the mixer tank is driven by a hydraulic motor-pump assembly, which in turn is driven by the engine of the carrier truck. This means that the truck's engine has to be running not only while the concrete is being transported, but also while it is waiting on site, to avoid the material separating. City centres are going to become increasingly inaccessible to diesel-powered vehicles, to protect residents from harmful emissions and noise. Putzmeister offers a solution for urban worksites with its **iOntron eMixer**. This is a truck-mounted mixer driven by a 315 kW electric motor with sufficient torque to ensure virtually silent operation with no CO_2 emissions. The iOntron's batteries, with a capacity of 350 kWh, give it a range of around 8 hours, after recharging overnight. The iOtron mixer, designed to be mounted on a 32 t GVM 8x4 carrier, has a capacity of 9 m3. Its use is similar to that of conventional equipment. This innovation won the World Of Concrete Europe Special Award.

Building and public works contractors, landscapers and private individuals often need small quantities of ready-mixed concrete, screed concrete, clean concrete, kerbstone concrete and so on. Why can't they buy it near their worksite from a self-service store? The **Selfbeton automatic concrete dispenser** replaces the on-site concrete mixer. It is quiet and provides greater control over the concrete mix, managed by an automatic system, as well as a guarantee that the operation will not cause pollution, thanks to an automatic cleaning system.

In its basic version, Selfbeton's concrete distributor is equipped with a 500-litre mixer, a 33m³ cement silo, a 2x3m³ compartmentalised hopper and an 8m conveyor belt. Clients can place orders for any of the concrete formulations on offer at the branch counter, at the plant terminal or online. Complementing the 2,000 plants in France designed to deliver large volumes, the distributor is designed to be installed by a network of independent companies, of which there are currently around 150 in France.

INNOVATION AWARDS GOLD 2024 by INTER MAT.

BETOLAR
Geoprime Hollow-Core Slab

Booth 6
G158

Betolar offers a sustainable, low-carbon concrete material with its Geoprime® solution. The proposed solution makes it possible to transform large volumes of previously unused industrial by-products into an alternative cement to replace portland cement, which is responsible for 8% of global CO2 emissions.Geoprime is a cement-free material designed for various concrete and construction product applications.

It is completely equivalent to traditional cement-based concrete but has up to 80 % lower carbon footprint.

With our Geoprime Hollow Core Slab solution, today's most environmentally-friendly hollow-core slabs, we are helping manufacturers of precast concrete elements to meet the demand for building products with a low carbon footprint. Our solutions are easy to implement in current production, without the need for major production modifications.

INNOVATION AWARDS SILVER 2024 by INTER MAT.

AraNea
Composite Fibers AraNea

Booth 6
G161

AraNea Composite (Michelin Group) offers the construction market a glass-resin composite fiber that can replace all or part of the reinforcement used in precast concrete elements. Our fiber provides interesting mechanical and chemical characteristics for the dimensioning of concrete structures: mass/weight ratio, anti-corrosion, reduced reinforcement coating, adaptation to low-carbon concrete.

These arguments make it possible to achieve significant C02 savings not only during construction, but also throughout the life of the structure. AraNea Composite is positioned as a highly technical, low-carbon reinforcement.

INNOVATION AWARDS BRONZE 2024 by INTER MAT.

SELFBETON
Concrete filling station SELFBETON

Booth EXT6
B041

The SELFBETON automatic concrete distributor is a global concept designed to give access to the purchase of fresh, ready-to-use concrete and mortar to all professionals and private individuals who need small quantities of concrete (from 3 wheelbarrows).

SELFBETON is an automated production system that allows users to buy concrete online or directly from a kiosk. The machine then produces the customer's order in complete autonomy and delivers the ready-mix concrete directly to the customer's trailer or adapted vehicle in less than 3 minutes. The originality of the concept lies in its automatic cleaning system, which generates no waste and no effluent. Selfbeton is less polluting than a simple concrete mixer.

Low carbon & Energy Transition winners

The electrification of equipment can extend far beyond a mere change of drivetrain. It can involve all the components of a machine, their interaction, control and monitoring. Moog Construction has created the **Terratech Ecosystem**, an integrated electrical ecosystem combining components, motors, electric cylinders, controllers and order modules, as well as control software.

Digital information from this ecosystem is brought together by the Internet of Things (IoT). This scalable, modular ecosystem makes it possible to design equipment that is at least as efficient as diesel-powered equipment, easier to manufacture (because it requires fewer components), easier to maintain (no need for hydraulic fluid), and with a lower total cost of ownership. And of course they emit less CO_2.

To combat global warming, electric equipment will have to be designed and built. But there is another way of decarbonising the construction industry: replacing diesel with electricity in existing equipment and vehicles. Novum Tech offers a range of 48 V to 800 V **electrification systems** for equipment from 5 kW to 350 kW. These include powertrains, lithium-ion battery packs, accessories and electrical auxiliaries, chargers, heating solutions and vehicle management electronics.

These assemblies are optimised for their mission: battery packs that optimise the space available in the machine, ECUs that interface with the rest of the vehicle, etc. All in all, this electrification will result not only in vehicles becoming carbon-free, but also in improved productivity thanks to the integration of Novum Tech kits, and easier maintenance.

INNOVATION AWARDS GOLD 2024 by INTER MAT.

MOOG CONSTRUCTION
TerraTech Ecosystem

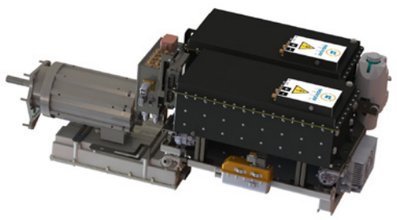
Booth 5b
C045

TerraTech is a proven, integrated, electric ecosystem combining control software, durable hardware (electric cylinders, vehicle control modules, motors, controllers, energy management), and digital insights through IoT.

INNOVATION AWARDS SILVER 2024 by INTER MAT.

NOVUM TECH
Electrifical system

Booth 5b
F087



We develop and manufacture on-site in Isère **a complete range of electrification systems from 48V to 800V, with a power range of 5kW to 350 kW, tailored to the current challenges of the market.**

These solutions address a wide range of applications, from small vehicles to large industrial vehicles (mini-excavators, road vehicles, trucks, agricultural machinery, etc.). These solutions consist of several technological components assembled together to deliver a finished, Plug'n'Play product in series, and at lower costs for our customers.

New technologies
winners

The electric actuator is a natural complement to equipment powered by an electric motor. It offers high efficiency, eliminates the danger of oil leaks, and requires virtually no maintenance. **Excess Engineering** has developed a high-power **electric actuator** designed to replace heavy-duty hydraulic systems. It offers 80 t of power and a stroke of up to 3 m. The manufacturer is targeting both new and existing equipment, with compact models that can easily replace hydraulic cylinders. It claims that its actuator is 90% efficient in an all-electric configuration for use on site equipment, compared with 10-15% for a hydraulic cylinder powered by a diesel engine, and 40-45% for an electrohydraulic system. The efficiency of this product translates into lower energy consumption, lower emissions, reduced maintenance requirements, and therefore much lower operating costs," stresses the manufacturer.

Moasure One makes it easy to take complex measurements using motion. The device consists of a device and a rod to be positioned on the points to be measured. It uses the operator's motion to take measurements, relying on inertial sensors and a proprietary algorithm. When in use, the Moasure One takes more than 500 measurements every second. The measurements take into account slopes and heights, and can calculate complex surfaces and spaces even if there are obstacles. Its dedicated application provides a real-time 3D view of the area surveyed. Moasure One is powered by an internal rechargeable Li-ion battery. The device can replace the traditional worksite optimometer-pedometer, but it also saves on the manual calculations and tools commonly used on worksites. It provides accurate measurements, reduces the need to return to the site to check measurements, and minimises possible errors in ordering materials.

The use of driving simulators is on the increase in the construction and public works sector. They make it possible to train site equipment operators at no risk to themselves or their machines, and at a much lower cost than using a machine. Tenstar Simulation, a specialist in simulators, has developed the **Tenstar Virtual Training Space**. This product is designed so that several operators can train together. It enables several simulators to be connected in a "sandbox", a shared environment that allows interaction. Users can train alone or with an instructor. Tenstar also offers a range of tailored tools, such as Tenstar Record & Play, which enables users to analyse and assess their performance and make improvements. In addition to the system's benefits in terms of safety and the cost of training set-up, the fact that it does not require the use of a machine saves on CO_2 emissions.

INNOVATION AWARDS GOLD 2024 by INTER MAT.

TENSTAR SOLUTION
VTS - Virtual Training Space

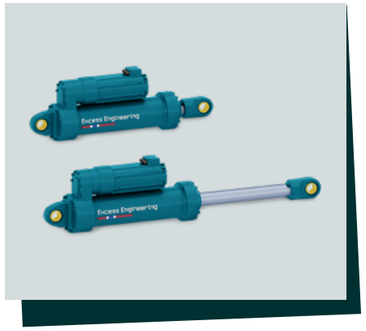
Booth 5b
B073

Our invention is the only one in the world that lets several users exercise and learn together in a range of different fields, such as construction, agriculture, or the transport sector. **It's a system of several training simulators connected in a sandbox environment.**

INNOVATION AWARDS SILVER 2024 by INTER MAT.

EXCESS ENGINEERING
Electric Actuator
-A Hydraulic-Free Option

Booth 5b
C081



We have developed **an electric actuator that replaces heavy-duty hydraulic systems, providing an all-electric system to push, pull, and lift with an energy efficiency of 87%. This solution combines high power (80+ tons) and a long stroke (up to 3 m).**

The electric system offers numerous advantages, including improved energy efficiency, the absence of hydraulic oil requirements, and an extended service life. It can be designed in a compact form factor comparable in size to existing hydraulic systems, eliminating the need for significant modifications to the construction machinery's structure when replacing hydraulic systems with electric actuators

---

INNOVATION AWARDS BRONZE 2024 by INTER MAT.

MOASURE
Moasure ONE

Booth 5b
B073

Introducing Moasure, the world's first motion-based measuring tool revolutionizing construction and civil engineering. Moasure's patented technology transforms how professionals work, enabling rapid and simultaneous measurement and drawing. By simplifying the measurement of challenging shapes and spaces, Moasure empowers construction experts to adopt a new approach with real-time data viewable on their devices.

This innovative tool allows users to draw, capture in 3D, factor in gradients, elevations, and calculate areas effortlessly, even around obstacles. Moasure provides accurate surface area and volume calculations, aiding in material ordering and site leveling.

2 Start up Special Awards

INNOVATION AWARDS START UP 2024 by INTER MAT.

A number of manufacturers of construction equipment are working on prototypes of autonomous machines that operate without human intervention. The start-up **Heracles Robotics** has focused its attention on existing public works equipment to equip it with the means to perform its task autonomously. The machine is told what to do: for example, in the case of an excavator, to dig a trench without assistance. In this case, the machine is equipped with a vertical GPS, inertial sensors, computers and a liDAR that scans the environment and checks that the task is being carried out correctly, and an automatic controller manufactured in-house. Artificial intelligence continuously optimises the speed and precision of movements. It also measures the machine's power consumption to ensure that it operates as economically as possible. The aim of this system is to reduce the carbon footprint of earthmoving projects by 18%, cut their costs by 30%, overcome labour shortages and, last but not least, ensure that deadlines are met, thanks in particular to the possibility of working around the clock.

Public works and civil engineering often come up against the impossibility of seeing through matter. Tunnel boring machines (TBMs) excavate in cluttered subsoils known only by maps that are not always up to date, or by probes taken only from place to place along the planned route. Similarly, the aging of existing bridges cannot be monitored on the basis of an internal vision of their weak points. The start-up Muodim aims to eliminate this blind spot by using the technique of **muography**, which is used in volcanology and archaeology. Muography records the flow of muons, cosmic particles present in terrestrial matter, to map the interior of an object. In the building and civil engineering sector, this technique, which consumes very little energy and poses no danger to either the environment or operators, is mainly used for risk prediction purposes.

HERACLES Robotics

Booth 5B
VS005

HERACLES Robotics is developing an autonomous navigation and work system, operationalon existing public works equipment, to perform driverless earthmoving operations. The goalis to offer public works companies complete earthmoving services, with reduced costs anddeadlines, carried out by autonomous construction vehicles.

This solution addresses three major constraints faced by construction companies: Intense price competition, linked to services lacking a differentiating factor, A need for flexibility to concentrate interventions during dry weather periods and A shortage of equipment operators.

MUODIM
Muography - structural imaging

Booth 5b
VS002

Today, the technologies available are very limited when it comes to seeing through matter.
Here are some examples of problems that current technologies cannot solve:

- « Blind » tunnel digging : Tunnel boring machines (TBMs) dig blind under cities with littleinformation available about the areas they will encounter.
- Aging bridges, we can't see inside the infrastructure to identify weak points.

However, muography, a new disruptive technology in the world of non-destructivemonitoring, is gradually making its appearance: Muography, or structural imaging, involves mapping the interior of an object to produceimages similar to those used in the medical world.

World Of Concrete Europe
Special Award

PUTZMEISTER
e-Mixer iONTRON

Booth 6
E144 et 6 G144

100% electric truck-mounted concrete mixer for 100% electric driving and mixing
Moving Electric truck 8x4 SANY 408P
Mixing Electric body P 9 G iONTRON

100% ecologic

- CO2 emissions down to zero, depending on the local energy mix
- Significantly reduced noise emissions
- Fuel consumption: zero liters of diesel
- eChassis consumption on the move (unladen): 120 kWh/100 km

The nominees

Earthmoving, Demolition and Transport

CANGINI BENNE SRL
Evo System applied to quick couplers

Booth 6 B115

The main added value of the Evo system relates to safety and operating efficiency, responding to the latest safety prerequisites introduced by the EN474 standard. With this innovative system, the operator can check whether the quick coupler has engaged correctly without leaving their seat in the cab.

DURATRAY INTERNATIONAL
Smart Tray

Booth 5a D075

Duratray's Smart Tray (ST) is the most advanced dump tray for mining and construction trucks. The ST can monitor its condition (structural and wear) automatically and report to the user online and in real time.

DMS TECHNOLOGIE GMBH
Sorting Grab including carrier tool Softgrip

Booth 5a D097

The DMS sorting grab SG is the first grab on the market with a fully enclosed plunger cylinder for digging and grabbing with excavators and loading cranes. The distinctiveness lies in the development of the patented, double-acting hydraulic cylinder. The reduced tare weight made possible by the unique, compact design allows any hydraulic excavator to carry more payload.

DYNASET OY
HRVB Hydraulic Recycling Vacuum Bucket

Booth EXT6 E080

HRVB Hydraulic Recycling Vacuum Bucket transforms the hydraulic power of the base machine into powerful vacuum suction and air blower. HRVB is a compact and integrated all-in-one attachment unit for gathering, recycling, and sorting material, scrap, and similar matter found at construction sites, parks, roads, and railways.

MINITOP
Tracksformer

Booth 5a J059

Tracksformer is an Italian project, born from the creativity of Giovanni Pietro Giacomino.

It's Minitop brand, synonym of experience, passion and innovation for over 25 years and leader in the European market of rubber tracks and tyres.

Tracksformer is the innovative and patented system which increases the performance of your skid steer loader everywhere and at all times. Tracks can change according to your working needs thanks to the four tools typologies, each one is oriented to a specific setting to be applied on the 'naked' Tracksformer tracks: Snow, Work Site, Asphalt and Underwood.

STEELWRIST
Open-S

Booth EXT6 A091

The work to create the Open-S Standard was started in 2019, and has been spearheaded by Steelwrist and Rototilt, two companies that normally are fierce competitors but still decided to work together for the greater purpose of a common open, manufacturer-independent. Global standard for fully automatic quick couplers.

STEELWRIST
TCX Tilt coupler

Booth EXT6 A091

Available as Direct mounted with S30/180 coupler. New technology on a simple product : Front Pin Safety Hook, Fully casted compact body, Expander pins.

Roads, Materials and Foundations Industries

BOMAG
Bomag Emergency Brake Assist

Booth 5a C134

BOMAG Emergency Brake Assist is a technology designed for road construction machines that prevents collisions while protecting the hot asphalt surface from damage.

The machine continuously scans its surroundings for perfect coverage. System is able to detect potential hazards before they occur. This allows for the early application of automatic deceleration strategies.

DMS TECHNOLOGIE GMBH
Excavator Blade Control (EBC)

Booth 5a D097

The system consists of a laser receiver, the control system which is installed to the excavator and the side plates and mast attached to the blade.

The system is highly productive, easy to use and affordable! The result is a doubled productivity and a better end result ov the levelling job.

ERMONT
TSX: the ecological asphalt plant

Booth 5a C134

The TSX is a new continuous asphalt plant, ecological, unique in the world, capable of recycling from 0 to 70% of recycled asphalt pavement (RAP) coming from road maintenance with just one drum, while ensuring environment respect and high-quality HMA.

SUPPLY COMPANY
Pigment in tablet form

Booth 6 E148

Pigment in solid form without dust, easy to dose with automatic systems (unlike its initial form: powder), no longer fears moisture (more product loss) respectful of human health (more nano particle with titanium dioxide: carcinogenic) according to (Titanium dioxide (FT 291). Regulation - Toxicological data sheet – INRS

WIRTGEN FRANCE
The recycling of road milling cutting tools

Booth 5a G158

The chemical process developed by BETEK, system partner of the WIRTGEN Group, enables through zinc based treatment to recover the entire tungsten carbide and cobalt remaining on the used cutting tools and reintroduce into the manufacture of new road milling tools.

Building, Civil Engineering and Concrete Sector

ARANEA
Composite Fibers AraNea

Booth 6 G161

AraNea Composite (Michelin Group) offers the construction market a glass-resin composite fiber that can replace all or part of the reinforcement used in precast concrete elements. Our fiber provides interesting mechanical and chemical characteristics for the dimensioning of concrete structures: mass/weight ratio, anti-corrosion, reduced reinforcement coating, adaptation to low-carbon concrete.

BETOLAR
Geoprime Hollow-Core Slab

Booth 6 G158

Betolar offers a sustainable, low-carbon concrete material with its Geoprime® solution. The proposed solution makes it possible to transform large volumes of previously unused industrial by-products into an alternative cement to replace portland cement, which is responsible for 8% of global CO_2 emissions. Geoprime is a cement-free material designed for various concrete and construction product applications.

PUTZMEISTER
e-Mixer iONTRON
Booth 6 E144 et 6 G144

100% electric truck-mounted concrete mixer for 100% electric driving and mixing. Moving Electric truck 8x4 SANY 408P. Mixing Electric body P 9 G iONTRON. 100 % ecologic : CO2 emissions down to zero, depending on the local energy mix, significantly reduced noise emissions, fuel consumption: zero liters of diesel and eChassis consumption on the move (unladen): 120 kWh/100 km.

SATECO
ThermoKit
Booth 6 E114

The "ThermoKit" is designed to maintain productivity on sites using low or very low carbon concrete. An insulating and heating tool that withstands the mechanical stresses of concrete. It is a metal formwork box that is added to the standard panels. It insulates, maintains and completes the heat generated by the concrete's exotherm during drying.

SELFBETON
Concrete filling station SELFBETON
Booth EXT6 B041

The SELFBETON automatic concrete distributor is a global concept designed to give access to the purchase of fresh, ready-to-use concrete and mortar to all professionals and private individuals who need small quantities of concrete (from 3 wheelbarrows).

SELFBETON
E-SELFTOUPIE: the electric concrete mixing traile
Booth EXT6 B041

E-SELFTOUPIE is a trailer-mounted electric mini-mixer that can be towed by a light vehicle to transport small quantities of concrete up to 1000 liters. Suitable for delivering to small sites or sites with difficult access, its electric motor gives it an operating time of almost 8 hours.

Low carbon & energy transition

MARINI
Marini EvoDRYER
Booth 5a C134

The Marini team of expert engineers and technicians conceived a new solution that would merge all the customer requirements into one: Marini EvoDryer represents, to date, the best available technology when it comes to introducing the RAP into the recycling ring and allow customer that flexibility of action that would significantly help meeting the most different market needs.

MULTLITEL PAGLIERO
New full electric range,
Axon: truck-mounted platforms
MT 162 Axon and MJE 250 axon
EXT5 D018

Mounted on an Iveco eDaily 35S10 Full Electric truck of 3.5 t GVW, it has straight line stabilizers with front and rear vertical descent, making it a vehicle easy to position even in tight spots. Telescopic aerial platform MJE 250 Axon on e-Daily 50C14 E of 5,2 ton GVW with twin wheels. At its maximum horizontal outreach of 16.5 metres, the platform's capacity is 100kg, rising to 250kg at 12.5m outreach. With the boom fully extended it is possible to work below ground reach at -3.5m. On both models, EVE ensures speed, linearity, and fluidity of vertical and horizontal movements. No sudden lurches but extending of the sections and elevation of the boom always in perfect balance and with instant adjustments.

NOVUM TECH
Electrifical system
Booth 5a F087

We develop and manufacture on-site in Isère a complete range of electrification systems from 48V to 800V, with a power range of 5kW to 350 kW, tailored to the current challenges of the market. These solutions address a wide

range of applications, from small vehicles to large industrial vehicles (mini-excavators, road vehicles, trucks, agricultural machinery, etc.). These solutions consist of several technological components assembled together to deliver a finished, Plug'n'Play product in series, and at lower costs for our customers.

MOOG CONSTRUCTION
ZQuip
Booth 5a C045

A plug and play modular platform that replaces diesel engines. Designed to connect and run the ZQuip battery modules to power the maintenance-free electric motors that drive the existing hydraulic systems.

MOOG CONSTRUCTION
TerraTech Ecosystem
Booth 5a C045

TerraTech is a proven, integrated, electric ecosystem combining control software, durable hardware (electric cylinders, vehicle control modules, motors, controllers, energy management), and digital insights through IoT.

New Technologies & Energy

BERGERAT MONNOYEUR
Digitalization, artificial intelligence and augmented reality for fleet management
Booth 5b E023

Services resulting from connectivity:

Ensure 100% connected fleet with quality data (including retrofit, including replacement of outdated 2G/3G equipment, all brands), transmitted on our platform or any other platform chosen by the client (ERP, GMAO,...); standard monthly report with benchmark and CO2 emissions. Remote diagnostic access: with augmented reality and telemetry, we offer direct access to our remote diagnostic service. Predictive maintenance: using AI, daily machine health data, historic work data on the machine and equivalent components in the territory, manufacturer data, combined with the expertise of our teams, personalized advice, function of the subscription levels is issued, directly to the client or through our network of after-salesmen (PSSR). And always proactive planning of preventive maintenance of the fleet

CHRONO FLEX
On-site hydraulic oil filtration service
Booth 5b E023

Since its creation, the main CHRONO Flex mission is to reduce the machine downtime to its customers, replacing the hydraulic hoses on site. Thanks to our 300 technicians' daily proximity in the field, we noticed three major elements : 70% of hydraulic failures are linked to the oil pollution (source: In Situ), a difficulty to find machine maintenance resources in workshops including hydraulic oil drains. And a context where customers have to implement a CSR approach and therefore, a change in habits and mentality must take place.

COJALI FRANCE
Jaltest Diagnostic AR
Booth 5b B074

Jaltest Diagnostics AR est le premier système de diagnostic multimarque développé dans la technologie de réalité mixte qui permet au mécanicien de diagnostiquer les unités électroniques d'un véhicule, d'interagir avec elles, de consulter l'information technique connexe et de recevoir une assistance technique avancée, en temps réel et dans un concept de mains libres complètement innovant et pionnier sur le marché.

EXCESS ENGINEERING

Electric Actuator-A Hydraulic-Free Option

Booth 5b C081

We have developed an electric actuator that replaces heavy-duty hydraulic systems, providing an all-electric system to push, pull, and lift with an energy efficiency of 87%. This solution combines high power (80+ tons) and a long stroke (up to 3 m). The electric system offers numerous advantages, including improved energy efficiency, the absence of hydraulic oil requirements, and an extended service life.

KOMATSU EUROPE INTERNATIONAL NV

Toolset to commodify as-built terrain data collection in an earthmoving environment

Booth 5b E168 – 5b E167 – EXT6 A118

Komatsu Smart Construction Europe is concluding the development of an inexpensive, user-friendly toolset for the collection of as-built terrain data. This advanced suite encompasses the Smart Construction (SC) 3D Machine Guidance, and Intermat exclusive 3D Machine Guidance Flex acting as IoT devices, the Smart Construction Remote for facilitating data transmission, and Smart Construction Dashboard for comprehensive 3D visualisation and analysis.

MOASURE

Moasure ONE

Booth 5b C070

Introducing Moasure, the world's first motion-based measuring tool revolutionizing construction and civil engineering. Moasure's patented technology transforms how professionals work, enabling rapid and simultaneous measurement and drawing. By simplifying the measurement of challenging shapes and spaces, Moasure empowers construction experts to adopt a new approach with real-time data viewable on their devices.

TENSTAR SIMULATION

VTS - Virtual Training Space

Booth 5b B073

Our invention is the only one in the world that lets several users exercise and learn together in a range of different fields, such as construction, agriculture, or the transport sector. It's a system of several training simulators connected in a sandbox environment.

About the organisers

S.E. INTERMAT brings together:

EVOLIS

EVOLIS, a grouping of CISMA (construction, infrastructure, steel and handling equipment association) and PROFLUID (French pumps and agitators, compressors and valves association), is the trade organisation representing the players in the French mechanical equipment market. Since its merger with SYMOP (organisation of machines and equipment for industrial production), EVOLIS now represents 600 member companies, 82,000 jobs in France and a turnover of 18 billion euros, of which 11 billion euros is exported.

www.evolis.org

SEIMAT

SEIMAT, the Association of International Civil Engineering, Mining, Construction and Hoisting Equipment Industries. SEIMAT federates and drives the leading global players in construction machinery and equipment operating in France. The trade association brings its members key expertise on legal, technical, social, environmental, customs, and health & safety issues. It also offers constantly updated information on economic and industrial activity, and produces equipment sales statistics for France. Through its society Club SEIMAT, it actively contributes to promoting and enhancing the brand image of jobs in construction and handling maintenance.

www.seimat.com

COMEXPOSIUM

One of the leading event organisers worldwide, creating events that bring communities together to discover and explore businesses, passions and interests. Comexposium organises more than 150 professional and general public events, covering more than 10 sectors of activity (agriculture/food, retail/digital, fashion/accessories, leisure...). The group connects 48,000 exhibitors and 3.5 million visitors, 365 days a year in 22 countries. Creating experiences and encounters between individuals, Comexposium enables throughout its events (SIAL, All4Pack, Paris Retail Week, One to One Monaco & Biarritz, Foire de Paris, Rétromobile, etc.) and its associated content its communities to be connected all year round through an effective and targeted omni-channel approach.

INTERMAT contacts

COMEXPOSIUM

Laura SANCHEZ,
Marketing and Communications Director
+ 33 (0)7 60 34 67 28
laura.sanchez@comexposium.com

Lisa MARCHAL,
International Marketing Officer
+ 33 (0)6 50 58 21 75
lisa.marchal@comexposium.com

Media enquiries

LA VILLA Maison de Communication

Esther LEMBLÉ
+ 33 (0)6 23 49 63 61
elemble@lavillagroupe.com

Noëlla ZEH MBARGA
+33 (0)7 69 52 21 83
nzehmbarga@lavillagroupe.com

Patricia DESMERGER
+33 (0)6 07 47 34 77
patricia.desmerger@orange.fr

PARIS.INTERMATCONSTRUCTION.COM

Follow us

#INTERMATPARIS

CO-LOCATED WITH:

WORLD OF CONCRETE® EUROPE