



GREEN & TECHNO A new era for Fassi cranes

New Generation Cranes

The F1450R-XHP Techno, the FX990 and the SHT system mark a new chapter in Fassi innovation

From the Fassi Group

The most important news from the Group's companies: Marrel, Cranab and ATN. In the name of green and innovation

Stories from around the world

Accounts, stories, words and images from Fassi dealers and clients in Germany, the Netherlands and Norway





Share your photos of Fassi cranes at work with us

Fassi cranes operate worldwide in new and diverse sectors and locations. Their stories speak through the images sent by dealers and clients spread over five continents and posted over several months on Instagram. In this section, we have chosen and shared the posts (with the five Fassi hashtags) that have received the most likes in the period from January to April 2021.



Innovation signified by acts

Choosing innovation as a cornerstone, as an essential element of one's identity, means making a very concrete commitment to the market. Going beyond, never compromising, seeking out new goals and even inventing new horizons. This is all well and good on paper, explained in words, or in a slogan to bring out at the right moment. But it all needs to be backed up with actions. Promises are made to be kept.

So, here we are, presenting in this magazine a number of new milestones set along the path of our group's constant evolution.

We present "Techno", a new generation of cranes. The F1450R-HXP TECHNO is the first. It is a true leap in innovation, which enhances the performance of the machine thanks to the combination of various revolutionary functions and technologies. From the innovative digital control system to the new display interface, to the weight-power ratio, to stability control, to the increase in vertical capacity, to dynamic lifting control. All this and much more, as you will discover in the article we have dedicated to this crane.

Moving on, in 2000 Fassi was the first company in the sector to introduce an electronic system on a crane and data transmission via CAN-bus. This marked the beginning of a period of constant digital innovation, technological solutions and devices for automation. 20 years on, Fassi is once again a forerunner and a pioneer for a new technological generation, and the first company in the sector to use an Ethernet standard. What does this mean? A more powerful control unit with higher data processing capacity.

This is the FX990, Fassi's new electronic control unit, which stands out for its processing power and flexibility in relation to control and intelligent functions. All of this is made possible by its five connection ports, two of which are Ethernet and the other three CAN-bus.

Lastly, we are marking another important milestone. Fassi has made its grand entrance into the electrical world with the innovative SHT system (an acronym for Smart Hybrid Technology), which allows cranes to be used in a range of situations that require machines that operate silently and with zero emissions. The SHT system allows the crane to function on power provided by a lithium battery pack and to be recharged directly by the truck's internal combustion engine while travelling or via electrical mains power outlets when the vehicle is parked.

These are the many new features to be discovered in the pages of this issue of "Lifting Tomorrow". Every day we make a promise, one which we have once again kept.



LIFTING # 05 | January 2022





TORIAI

Featured



The new F1450R- XHP Techno

05 | January 2022



The new F1450R-XHP Techno has been presented to the market. Innovative functions to enhance crane performance

4

LIFTING TOMORROW



P. 18

The crane becomes electric

Thanks to the Smart Hybrid Technology system, Fassi cranes gain an electric mode. Zero emissions and a silent machine





New products for Marrel and Cranab

A new rear underrun protection range for Marrel and an all-new crane for Vimek Next Generation thanks to Cranab



40 years of history for Fassi in Norway

1981-2021, 40 years of history and growth for Nord-Kran AS, the Fassi dealer for Norway

| p.14 | FX990, Fassi's new electronic control unit |
|------|--|
| p.18 | Fassi cranes go electric with the SHT system |
| p.22 | Marrel, the new rear underrun protection range |

p.26

p.06

p.32

p.36 An F455RA at the service of "Aunty JU"

p.40

p.44

2022 is full of art and creativity for Fassi

Fassi and Nord-Kran AS, 40 years together

Cranab has developed an all-new crane for Vimek Next Generation

38 years for Fassi in the Netherlands with De Jong

FASSI

| • | |
|-----------|---|
| \bullet | |
| \bullet | _ |
| | |

ONTENTS

LIFTING TOMORROW n.05/2022

Publication legally registered at the Court of Bergamo no. 20/2011 on the 30/08/2011

A Fassi Gru publication via Roma, 110 24021 Albino (BG) Italy tel +39.035.776400 fax +39.035.755020 www.fassi.com

Published by Cobalto Srl via Torquato Taramelli, 2 24121 Bergamo (BG) Italy

Managing director Silvio Chiapusso

Editor-in-chief Mauro Milesi

Printed by Modulimpianti Snc via G. Leopardi 1/3 24042 Capriate S. Gervasio (BG) Italy

Graphic design and layout Cobalto Srl



FASSI **F1450R-XHP TECHNO.** MAKE WAY FOR THE **NEW GENERATION OF CRANES**

The new Fassi crane has been previewed at GIS. It represents a leap forward in innovation in terms of lifting capacity, versatility, precision, control and efficiency



05 | January 2022



F1450HXP

FASSI





The F1450-HXP TECHNO marks the beginning of a new generation of cranes. It is truly a leap in innovation that enhances the machine's performance thanks to a combination of diverse and innovative functions and technologies.

There are in fact many elements that have come together to produce this exceptional result. Increased dynamic control over work speed thanks to the new technology that manages and adapts the use of work areas in line with the lifting capacity, for example. The new design for the extension booms has also

actively contributed to an improvement in vertical performance and the hydraulic circuit, with its double feed, has increased handling speed.

The advanced digital control system, the new display interface, the possibility of using the outriggers via radio remote control and the new set-up further optimise performance.

Lastly, the winch's foldable pulley system, the option to add the new Fassi L826 jib and the excellent power-to-weight ratio further add to the strengths of this revolutionary crane.





X-DESIGN DECAGONAL SECTION

Thanks to its improved functionality, the brand-new decagonal section of the secondary boom and extension booms called X-Design, makes it possible to use smaller sheet metal thicknesses, significantly reducing the weight of the crane. This has also led to an increase in machine performance: capacity is improved by up to 15% in the horizontal configuration, and up to + 70% in the vertical configuration, compared to models with the traditional hexagonal section. The joints of the lifting arms of the crane have been completely redesigned thanks to the adoption of double jacks on the main and secondary joints. This element also made it possible to significantly improve performance compared to models in the same category.



EASIER USE OF THE CRANE WITH WINCH

Thanks to the creation of a new model of hydraulic extension called L826, using the crane with a winch is now easier for the operator. Above all, the actions of putting the crane at rest in configuration with winch and extension are simplified.

DOUBLE HYDRAULIC CIRCUIT

The hydraulic system of the F1450R-HXP TECHNO has a double circuit with D900 digital distributors complete with double heat exchangers and a double oil tank of 250 litres each. The presence of an XF system for the shutoff valves guarantees maximum operating speed and precise movement. A rotation system with two gearmotors has also been provided to ensure maximum safety and rotation power.

THE NEW ELECTRONIC CONTROL SYSTEM

The powerful new FX990 is the digital heart of the new electronic control system. This important Fassi innovation is based on intelligent functions and robotics logic for handling that make the cranes even safer and more efficient.

The main features are: an IP69K rating which corresponds to the highest degree of protection; a protective shell in die-cast aluminum; an operational temperature range between -40 and +85 degrees.

The new FX990 electronic control unit is smart connected: the connection lines have been upgraded to 3 CAN-bus and 2 Ethernet. Thanks to the communication line connected to the sensors via Ethernet, the ability to manage large data flows has improved. Consequently, data processing responds brilliantly and instantaneously to the complexity of real-life work operations.

NEW DISPLAY INTERFACE

The new display is equipped with an IP67



rating which ensures, among other things, watertightness in case of immersion of the device in water.

The display communicates with the CPU through an Ethernet line, making the display fast and effective.

REDESIGNED SOFTWARE FUNCTION

The functional logic of the Techno range software has been completely redesigned in line with the principles of simplicity, performance and safety. Its main functions are:

- A new moment limiter
- Work area management
- New FSC (Fassi Stability Control)
- JDP (Jib Dual Power)
- PSC (Platform Stability Control)
- Manual Extensions Limiter
- Electric outrigger control
- IoC

STABILITY CONTROL

The new Techno generation has been designed to facilitate ad hoc stability control, making it one of the top performers in the

PSC FUNCTION

Improved PSC (Platform Stability Control) function increases the operating capabilities of the crane in basket mode.



articulated crane market.

- The new FSC Techno stability system combines the two FSC H and FSC SII control systems.
- This allows it to be used applying the logic of the crane extensions' performance capacities and in proportion with the outriggers.

Compared with just using the FSC H system, the FSC Techno stability system has the advantage of not having a defined number of steps but providing continuous proportional control of the outrigger extensions.

If the operator requires it and the working parameters allow it, it is possible to select the function mode linked to the inclination sensor at the same time.

WORK AREAS

It is possible to define countless crane work areas, both when the set-up requires power downgrades and also geometrically by creating virtual truck bodies as is done with the CCD function.

MOMENT LIMITER

The placement of the moment limiter on a main jack and a second pressure transducer makes the reading it gives more accurate, leading to improvements in performance.

AUTOMATION OF JDP AND XP SYSTEMS

In all Techno versions, the activation of the JDP and XP takes place automatically thanks to the presence of the FX990 system which autonomously recognises the conditions for which activation is required.







NEW IOC SYSTEM

The IoC system represents a step forward in speed and power compared to the previous version. It acts as a WiFi router that allows the crane to communicate wirelessly with any mobile device.

THE F1450-HXP TECHNO MARKS THE BEGINNING OF A NEW **GENERATION OF CRANES. A** TRUE LEAP IN INNOVATION THAT EXALTS THE PERFORMANCE OF THE MACHINE

THE F1450R-HXP TECHNO IS:







POWERFUL VERSATILE PRECISE





- The X-Design profile for the secondary arm
- A new design for the extensions
- An incredible weight-power ratio
- New vertical lifting performance
- New stability control
- An innovative digital control system
- A new display interface
- Double hydraulic circuit
- New dynamic lifting control
- New electronic crane load condition control units











CONTROLLED





EFFICIENT



FX990 FASSI'S NEW ELECTRONIC CONTROL UNIT

Fassi is once again a technological pioneer. The new FX990 control unit marks a passage to Ethernet communication and sees the introduction of a series of innovations that are the result of years of research



#Fassileaderininnovation

In 2000, Fassi was the first company in the sector to introduce an electronic system on a crane and data transmission via CAN-bus. This marked the beginning of a period of digital innovation, technological solutions and devices for automation. 20 years on, Fassi is once again a forerunner and a pioneer for a new technological generation, and the first company in the sector to use an Ethernet standard. This translates into a more powerful control unit with higher data processing capacity.

This is the FX990, Fassi's new electronic control unit characterised by processing power and flexibility in terms of intelligent



functions and control. All of this is made possible by 5 connection types, two of which are Ethernet and the other three CAN-bus.

The new control unit lies at the heart of a new system that also includes a new electrical and hydraulic system, a new Fassilim, a new touchscreen display and a new IoC.

It is available on the recently released TECHNO range (from the F600RA.2 upwards), beginning with the F1450R.2 HXP-TECHNO.

REWRITTEN FIRMWARE

The new firmware for the TECHNO range has been completely redesigned and rewritten, following the principles of simplicity, performance and flexibility. Specifically, it will be possible to satisfy particular operative requirements in a more efficient manner thanks to increased programmability and personalisation of work areas. The electronic moment limiter has been perfected. and a new FSC stability system has been developed that offers two versions; P (Proportional) and HP (High Performance).

With the first version (P), an evolution of the FSC-H, the working pressure reading is considered in relation to the level of extension of the stabilisers, while in the second, an evolution of the FSC-S, both the P and the HP mode can be activated, the latter allowing the reading via an inclinometer of the inclination of the vehicle in relation to the extension of the stabilisers.





With regards to stabilisation in PLE mode, the control unit is set up to manage the controls necessary for lifting via a personnel lifter basket/platform. The new characteristics of the FX990 control unit, based on connectivity and on an increased capacity for data processing and the provision of information, have led to the development of the DMA (Dynamic Maintenance Assistance) function, which dynamically defines how much time remains until the next

. At an

service. This allows machine downtime to be programmed at a convenient moment and in line with the working requirements for the crane.

NEW FASSILIM

The introduction of the new control unit has been accompanied by the creation of a **new version of Fassilim, the crane configuration and diagnosis tool**. The updates include a new interface, new functions and a crane setup wizard.

It is now also possible to configure

work areas and diagnosis of crane sensor status.

NEW RADIO CONTROLLER INTERFACE

The interface has been

reorganised for better legibility, and has been enhanced with **new** information functions.

NEW ELECTRICAL AND HYDRAULIC SYSTEM

The electrical system has been completely redesigned for multiconnectivity. With the FX990, the connection lines have been increased to: 3 CAN-bus lines and 2 Ethernet lines.

By choosing hardware with two Ethernet lines, Fassi has become the first company in the sector to introduce this innovation and take advantage of its potential.

TIMELINE:

2003 The Evolution project was created, with the first Fassi FX000 electronic system

2017 Cranebot experimentation

2019 The beginning of the FX990 project

2021 Conclusion of phase 1 of the FX990 project



TWENTY YEARS OF FASSI ELECTRONICS

Fassi was the first ever company in the sector to understand the potential of introducing electronics to cranes and to see the strategic advantage that could be gained through its application in terms of performance and safety.

On the basis of this awareness, the early 2000s saw the launching of the Evolution project with the first integrated CAN-bus system; this project was a forerunner of developments throughout the sector. It was based on electronic units that, by processing the information from a widespread network of sensors, memorised inbound and outbound information and created a database regarding functioning.

From 2017 onwards, in the wake of this project, Fassi further developed the idea of a crane conceived as a



The new connectivity draws on the new functions of the control unit and allows for better integration with the new devices in the ecosystem.

The three CAN-bus lines are dedicated to: - sensors on the crane

- crane function commands
- connection with the vehicle

These three lines have allowed for the development of a part of the system that facilitates maintenance and troubleshooting.

The two Ethernet lines allow for increased connectivity power and, via a new access portal, the possibility for multi-device connection to the crane via a dedicated WiFi network.

NEW INTERNET OF CRANES

In the wake of an evolution in the service offered by Fassi in terms of remote control of the crane, **the IoC system has been completely re-written, and now has a more exhaustive and intuitive graphic interface**. The IoC now operates with more stable, faster and more precise connectivity, without the need for any wiring, with an even more efficient real-time diagnosis section and an increase in the information and processing available remotely.

> "robot", therefore becoming ever more automated. This led to the "Cranebot" project. The project served as a springboard for a series of applications, including ACF, AWC and ACM.

> Less than twenty years on from the first integrated CAN-bus system, Fassi is now the first company in the sector to bring Ethernet communication to cranes.

NEWS

FASSICRANES GOELECTRIC WITH THE SHOW

Fassi has entered the world of electrical vehicles with the innovative SHT system, an acronym for Smart Hybrid Technology, which allows cranes to be used in a range of situations that require machines that operate silently and with zero emissions. The SHT system allows the crane to function on power provided by a lithium battery pack and to be recharged directly by the truck's internal combustion engine while travelling or via electrical power outlets when the vehicle is at a standstill.

The new technology can be applied to a wide range of crane models, from Micro cranes to models with a lifting capacity of 40 tm. In this initial market launch phase, the system has been presented on the F345RB.2.26 L214 crane, but can easily be adopted for other models. The decision to introduce an electrical mode on its cranes is the result of a specific market demand, above all from Northern European countries; to have a crane capable of working in residential areas without the need to have the vehicle engine running, therefore avoiding exhaust gases and noise. Fassi has developed an electric crane powered by a lithium battery pack, which can be recharged either from the truck's internal combustion engine while travelling or via electrical power outlets when the vehicle is at a standstill





#SHTSystem



control

HYBRI



The Smart Hybrid Technology system meets all these requirements, because the crane works with the truck engine switched off thanks to its own electric motor powered by the battery pack.

The system is also safe, as it runs on low voltage (48V-51V). This features does not require any particular training for operators during maintenance, as would be the case with medium-high voltage systems. The system has also been successfully tested in an anechoic chamber to verify compliance with the UN/ECE R10 Regulation, which governs compliance with the electromagnetic compatibility requirements for electrical and electronic components installed on board the vehicles.

RECHARGING METHOD

The dual charging system uses 220V single-phase 16A mains electricity, with a recharging time of nine hours if the batteries are completely discharged, which is unlikely as the batteries are recharged by the truck's engine while on the move, meaning that by the evening when the vehicle returns to its home base, part of the recharging process has already taken place. Moreover, this operation can also be carried out with the crane at work and the AC generator in operation. The latter, via the vehicle's PTO (which can be disconnected), recharges the batteries when the vehicle is in motion. Its recharging voltage is 48V and can recharge a fully exhausted battery pack in 4-5 hours.

BATTERY SYSTEM

The Fassi SHT system consists of a 560 Ah battery pack capable of guaranteeing, in total electric operation,

SHT System

• Applicable to a wide range of crane models, from Micro models to 40 tm cranes.

• Electric crane powered by a 560 Ah lithium battery pack.

• All the system control information is shown on the FX902 display and on the radio controller monitor.

• Batteries can be recharged from the truck internal combustion engine or from a power outlet.

• Low voltage (48V-51V).

autonomy equal to 80% of daily requirements. The case that contains the battery pack is equipped with a heater that guarantees operation down to -20°C, and has dimension of 750 x 550 x 585 mm. The AC motor-generator weighs a mere 22 kg, while the rest of the system is housed in a second stainless steel case where the variable displacement pump (from 55 cc/turn) is placed and guarantees significant energy savings by providing the crane exclusively with the oil required at that precise moment (up to a maximum of 50 l/min). The dimensions of the second box are 1100 x 600 x 600 mm and the total weight (including the battery pack) of the Fassi SHT system is 550 kg. To ensure efficient use of the electrical







system, SHT is equipped with dedicated software to maximise the use of motor power while reducing hydraulic power loss. In addition, this technology is able to decrease and modulate the hydraulic power required by the crane when the motor has reached its limit.

Cranes equipped with Smart Hybrid Technology are fitted with a control panel that allows the battery and the various devices to be switched on. In any case, the pump can also be switched on and off via the radio controller.

The FX902 display in the truck cabin provides the driver with all the



information needed to monitor the system while the vehicle is running. All data is also replicated on the radio controller to provide the user the same information during crane operation.

THE SHT SYSTEM ALLOWS THE **CRANE TO FUNCTION ON POWER PROVIDED BY A LITHIUM BATTERY** PACK AND TO BE RECHARGED **DIRECTLY BY THE TRUCK'S** INTERNAL COMBUSTION ENGINE WHILE TRAVELLING OR VIA ELECTRICAL POWER OUTLETS WHEN THE VEHICLE IS AT A **STANDSTILL**



MARREL, THE NEW REAR UNDERRUN PROTECTION RANGE

The new Marrel Rear Underride Protection range has been created to fit with the new European R58-03 regulation and the market needs. An interview with the product manager Dominique Durand



On 1 September 2021 the R58-03 regulation for Rear Underrun Protection came into effect, increasing admissible stresses to RUPs by 80% in the event of a crash. It's a standard that Marrel has taken as an opportunity to improve its product range by completely redesigning the RUP range with a series of important innovations, as Dominique Durand, one of Marrel's product managers, tells us in this interview.



#Marrel





FASSI GROUP

Product managers



The new Rear Underrun Protection (RUP) range. How and why was this new product range created?

The RUP is a complementary accessory to the Ampliroll® Hooklifts and Skiploaders. Available for many years, like other products it has benefitted from continuous innovations, while adapting to regulations in place. The R58-03 standard came into effect in European territory on 1 September 2021.

This standard increases admissible stresses to RUPs by 80% in the event of a crash. Rather than adapting our existing RUPs, we have chosen to make the introduction of this standard an opportunity to improve our product. We have thus completely redesigned the RUP range, simplifying its assembly for the bodybuilder, improving its durability for the end-user and introducing new models.

The creation of this new range involved teamwork between you, the engineers and the R&D centre. What is the innovative value of this range?

The head office and the Marrel factory are on the same site: it is a great opportunity for us because it allows us to be present at each stage of the creation of a product: design, building the prototype, tests, industrialisation, and mass production.

All the teams concerned are thus present to

discuss and adjust the process when necessary, whether in our specific RUP test centre, or in the unit created especially for manufacturing in our factory.

Thanks to shared knowledge and Marrel's sense of innovation, we are able to offer four types of rear underrun protections, all approved - telescopic, fixed, Panto and inclined, in a ready-to-install kit. The RUPs are assembled and painted in our factory, saving time during assembly for our dealer partners. The set-up is done guickly: the Inclined RUP with offset bar from Marrel is assembled in 4 hours compared to the 10 hours of assembly + 2 hours of painting offered by our competitors. The new model in the range is the Inclined RUP which also benefits from a patented sprocket orientation system, allowing its inclination to be adjusted without drilling or welding. It is therefore very quick to install while guaranteeing easy adaptation to the specificities of each assembly.

From where do you get Marrel's expertise?

The spirit of innovation is part of Marrel's DNA; since its creation in 1919, the company has invented products that are now available all over the world, such as the Ampliroll® hooklift, the Skiploader and the Tipper Scissors. Our teams are continually working on technical innovations to improve the daily lives of users of our



products and accessories. Feedback from the field by our Fassi Group distribution partners allows us to be attentive to market needs in order to offer them products that meet them, such as the ready-to-install RUP kits.

What advantages do these innovations bring to users of Marrel products?

In addition to the savings in assembly time enjoyed by the bodybuilder, the end user is not left out. In response to the new regulations, Marrel has increased the mechanical resistance of its RUPs, allowing

MARREL COMPLETES ITS VISUAL IDENTITY:

NEW DOCUMENTATION AND WEBSITE

Two years after celebrating its centenary and unveiling its new visual identity, Marrel is finalising its range of visual aids for its distribution partners, dealers and customers. Literature has been created for different targets: prospective and current users and experts. In total, there are four documents in five languages: French, English, German, Italian and Spanish, to meet the needs of its 46 distributors worldwide.

The corporate literature, as its name suggests, presents the Marrel company: history, activity, products and operation. It has been presented on the occasion of Marrel's 100th anniversary. The Ampliroll[®] hooklift and Skiploader product documentation presents the range of hooklifts under 3 families: Urban, Flex and High, presented in fuchsia.

AN INVENTIVE

The Multibenne Skiploader range is presented in green. This literature presents the advantages and strengths of each product family to guide the user in his choice. These colour codes have thus become the common thread in the presentation of Marrel products; they can be found on all other communication media. The 28 product sheets have also been updated. "Two years may seem like a lot," says Céline Castaldo, Marrel Communications Manager,



them to withstand a force of 18T. The use of RUPs has also been simplified thanks to a rapid deployment system that is easy to implement, guaranteeing a high level of safety during operation.

MARREL

"but it was actually the time needed to completely rethink our communication media. We have also been joined by Oh! Studio, a communications agency from Saint-Étienne, since the beginning of this project. All the documentation and website content has been redesigned: photos, text, segmentation, in five languages. It is a long-term project that is part of the continuity of the graphic charter presented during the centenary." Another important building block is the completely updated marrel.com website: the layout, graphics and texts were designed to adhere to the needs of Internet users and the rules of SEO.



CRANAB HAS DEVELOPED AN ALL-NEW CRANE FOR VIMEK NEXT GENERATION

The crane has been developed to be the perfect match for the new forwarder and has already received very positive feedback from users



#CranabAB







The new generation of cranes from Vimek is now on the market. A new range of cranes that focuses on sustainability, work environment, driving satisfaction and productivity. The new crane is the result of collaboration within the Cranab Group, between Vimek and Cranab. The crane's features and geometry are similar to Cranab's larger, more modern cranes, but the FC4 is a more compact design, specially developed for Vimek Next Generation. Anders Strömgren, CEO of Cranab, and Johannes Nilsson, CEO of Vimek, tell us in this interview about the details and "behind the scenes" development of this collaboration.

Cranab has provided Vimek with experience, products and innovation. How did this collaboration develop?

Vimek conducted a market and customer survey about what performance values and features were expected from the crane on its new machine. Since there were no good matches on the market, Cranab developed a new forwarder crane for the compact class of forwarder.

How much of Cranab's experience and product design is there in this new crane for Vimek?

Cranab has been developing and producing cranes for forestry machines for more than 60 years. It's been a long time since we made a crane in the FC4 size, but we used all our experience from bigger models and its main design lines can be recognised from them.

Vimek is working on its new generation of products. Cranab also started its new product generation some time ago. What's its main features?

There are several. The main ones are a slewing drive, a crane column in casted housing with lubricated rack and pinion mechanism, accurate and reliable design that we have used with longstanding success, a welded column and booms. Our welding processes are certified to ISO 3834-2 standard, providing smooth design and robust components; 4-point linkage between the main and outer booms ensures even lifting torque over the entire work area; hydraulic hose and pipe routing which provides good protection and lifetime of the lining components; boom tip with well protected hoses for minimal downtime and low maintenance needs; Cranab CR19 grapple.

The issue of environmental sustainability is increasingly central. How are you applying this within your work and machines?

Through different actions: recyclable raw material, for example steel; well-protected components that need less repairs and maintenance; hydraulic system design to reduce losses and save fuel for the machine. We take sustainability into consideration in general when developing and producing our products.







Anders Strömgren CEO of Cranab



THE NEW VIMEK CRANE GENERATION IS NOW ON THE MARKET. A NEW MACHINE SERIES DEDICATED TO SUSTAINABILITY, OPTIMUM WORK ENVIRONMENTS, DRIVING SATISFACTION AND PRODUCTIVITY. THE FC4 WAS CREATED FROM THE COLLABORATION BETWEEN VIMEK AB AND CRANAB AB, BOTH OF WHICH ARE PART OF THE CRANAB GROUP.





What are the main features of the new series crane model developed by Cranab?

It's a mini forwarder crane with a modern design including sensors tailor made for the compact class forwarder. It's a fast and light crane designed to make Vimek Next Generation forwarders efficient both in work and energy consumption. We use the sensor data in our control system to achieve Smart Crane Control (SCC), a software solution that centres operator control in the position of the tooltip, not each hydraulic cylinder. SCC gives the operator more assistance from the machine and is helpful in sustaining higher production at less energy consumption.

What are the specific market needs for this kind of crane and which requirements does it meet?

Compact class forest machines like Vimek's have become popular for sustainable forestry. Since the thinning machines require less space, scrub be thinned with the utmost quality as no trees need to be cut down to make room for the machines. This means the best individual trunks can be saved to produce high quality forestland with high growth rates. As these machines are dimensioned to handle smaller trees and are designed to improve runtime in the transmission and work hydraulics, this machine is energy efficient with low diesel consumption per hour and per produced volume of wood. The main function of the compact class machines is thinning, but they are also used for other operations, such as clearing or collecting dead or dying trees in older forests, without needing to fell healthy, growing trees to get the machine in place. Therefore, the crane needs to be



strong enough to lift what are often large logs and carry them up to road sites.

This new crane is part of Vimek Next Generation - a generation of machines that focus on sustainability, work environment, driving satisfaction and productivity. Can you tell us about the "Next Generation" project?

We are entering a new era where sustainable forestry will be one of the keys to defeating climate change and maintaining forest biodiversity. We need to be more accurate in how we carry out forestry activities, and the compact class machines can be useful tools for foresters to shape the forest as they wish, with minimal impact from the machine. Being a forester and operator of forestry machines is important work and we must offer a good work environment to retain skilled staff who can enjoy their work and workplace, so that they stay in the industry for a long time and continue to develop forestry. There is always the economical aspect to consider, and production needs to be high in modern forestry to be comprehensive.

This crane is a concrete example of the collaboration with Cranab. How was this project built together?

From the start, Cranab designers have had full insight into project. We prefer to prioritise discussing what the crane's functions should achieve and the user experience over numbers. We introduced the working prototype into real work situations as fast as we could to collect feedback from operators. There have been several changes to the crane function during the



project, but I would say we greatly benefitted from Cranab's extensive experience to make a prototype close to what we wanted first time.

The issue of environmental sustainability is increasingly central. How are you interpreting this within your work and machines?

The Vimek company benefits from the fact that our products have been shaped by the needs of Scandinavian families as forest owners and customers. Their focus in forestry has naturally been sustainability as forest ownership is handed down from generation to generation, with the purpose of deriving economic benefit from living off the land, while also using the forests for recreation, hunting and hiking. From this, we know our machines have the features for being sustainable models in several aspects and I would say it is the best practice for today. Now there is also a lot of current research into how forestry can help us deal with ongoing climate change and we are keeping our attention on how we can adapt our products to reflect this expertise.

VIMEK NEXT GENERATION

Working environment

- Driving Satisfaction
- Online Connectivity
- Minimal Climate Impact
- Agility
- Productivity
- Intuitive Design

Technical Data 6WD/8WD: 8WD

- Weight: 7 tonnes
- Width: 1.95m 2.25
- Gross load: 7 tonnes
- Steering: Dual steering
- Engine: Caterpillar
- Crane: Reach 6.7m



FASSI AND NORD-KRAN AS, 40 YEARS TOGETHER

Steinar Nord chairman of Nord-Kran AS

History binds Fassi to the Norwegian company Nord-Kran AS, which this year is celebrating its first 40 years of activity. It is an important anniversary, one that Giovanni Fassi, the chairman of Fassi Gru, and Steinar Nord, the president of Nord-Kran AS, have chosen to celebrate. Both belong to the second generation of their companies. Both have taken over from their fathers, building two companies united by values, openness, a focus on people and a sense of belonging.

.

Nord-Kran AS was founded in 1981 by Erik Nord, who had discovered Fassi in 1974, because that was the year he had sold his first Fassi crane. He set up his first office in a room in his home, explains his son Steinar Nord in this interview. Over the years the company grew, to become the official Fassi dealer for Norway in 1981. 1981-2021, 40 years of history and growth for Nord-Kran AS, the Fassi dealer for Norway. Steinar Nord, chairman of the company and son of the founder, Erik Nord, looks back at the successes and memories that have led to this significant milestone





#NordKran

NORD-KRAN AS Postboks 104, Industriveien 5 Hagan, Oslo 1483 - Norway









Nord-Kran became a Fassi dealer in 1981. From the very beginning, the company staked a role as leader in the construction of setups for trucks, trailers and cranes. It now has an extensive fleet of cranes, mobile cranes and special trailers for

40 years of activity with Fassi is an important milestone. What were the important moments in the growth of your company?

There is no one moment in particular. There are many. Undoubtedly the most important thing that has allowed us to grow over the years has been our focus on people and human relationships. We are and always have been a family. Both as Nord-Kran and in our relations with Fassi.

From the very beginning, both my father and I have felt part of a large family, and this is the strength behind our relationship.

Forty years on, what will be the next milestone? How is your company growing in today's competitive market?

We are growing well, above all thanks to the continuous work with Fassi and to our special client-oriented focus. We recently moved to new, larger and more attractive

headquarters. We have grown in terms of innovation and technology, and we now have a workforce of 18 people. The next goal? This is more a personal goal. I would like to carry forward the story of Nord-Kran as a family company, and it will therefore be wonderful if my children take part.

When and why did your father begin working with Fassi?

Immediately. My father sold his first Fassi crane in 1974. It was an M4, sold in Oslo. I recently looked for it, because I wanted to buy it and bring it home, but it wasn't possible. In 1981 the relationship with Fassi was strengthened and we became the official dealer for Norway. Fassi has always supported us, particularly in that period.

What are your strengths as a company?

Undoubtedly customer service. I grew up

MILESTONES:

1974 Erik Nord's first encounter with Fassi 1981 Nord-Kran becomes an official Fassi dealer 2009 **Steinar Nord becomes the Director** General of the company 2020 The new headquarters in Industriveien





NORD-KRAN AS

all forms of transport and sectors. Nord-Kran AS supplies the entire wide range of Fassi cranes, from 1 to 215 tons, for a total of approximately 60 different cranes and 30,000 different configurations. This means made-to-

measure solutions and an incredibly wide range. In 2020 the company moved from Oslo to Industriveien, in the industrial area of Skytta. The company has a covered area of 2,400 square metres, in addition to external space.

in the company, and a focus on client needs, demands and support has always been a central factor. In a market that is often challenging, two aspects are fundamental; know the product and listen to people. We created our service in Nord-Kran AS by following these two guidelines.

What are Fassi's strengths as seen by the Norwegian lifting market?

The quality of the product, the attention to market demands, and innovation.

How are the technological characteristics of Fassi cranes received by the Norwegian market?

Very well, because Fassi is the leader in terms of innovation in the lifting sector, and from a point of view of new technologies, it is always at the forefront. The market has changed a lot over the last 10-15 years, and clients are now calling for more innovation than before.



AN F455RA AT THE SERVICE OF "AUNTY JU"

The classic German Junkers aircraft has been dismantled and transported from Mönchengladbach to Mühlheim, in Germany. A central role was played by the Fassi crane and its owner, the company Auto-Obermann, which was assigned the operation

An F455RA crane has come to the rescue of "Aunty JU", the German Junkers aircraft that will soon be celebrating its one hundredth anniversary. Despite no longer being able to fly, the JU 52 remains a symbol of twentieth-century German history and European aviation.

Until a few months ago, the Junkers 52 had its home in the Hugo Junkers Hangar, near to the regional airport of Mönchengladbach. This May, WDL Luftschiffgesellschaft decided to move the aircraft to its headquarters at the airport of Essen-Mühlheim, around fifty kilometres away.

The transportation operation first required the pieces of the aircraft to be dismantled, and then the parts had to be handled, loaded onto a truck and transported to the new destination.

It was in these phases that a fundamental role was played by the F455RA crane, belonging to the German company Auto-Obermann based in Mühlheim and specialised in the hiring of equipment for heavy lifting and transportation.





THE DISMANTLING AND HANDLING OPERATIONS

The aircraft, made mainly from aluminium, was completely dismantled; tail sections, wing flaps, the propeller, chassis parts, pilot seats, engine cowling and the 9-cylinder radial engines.

The handling of the mid-section of the JU 52 and the wings called for the intervention of the Fassi crane.

"Italian Fassi cranes have been proving their worth for our company for many years", explained the Junior Manager Nick Obermann, who for the occasion was driving the 4-axle Renault Premium on which the crane is mounted. "We really appreciate these machines, both for their lifting power and for their versatility".

This power and versatility of the Fassi crane were just what was needed inside the Hugo Junkers Hangar. The first operation concerned the lifting and transportation of the two 3.80 m-wide wings from the hangar to the trailer outside.

The hangar was rather low, and so the crane had to work with a negative approach angle between the lifting arm and the main arm.

The manoeuvres were handled and followed by Obermann himself via the V7 radio controller.

The fuselage, approximately 14 m in length, was first moved outside with an auxiliary frame and then lifted by the crane and positioned onto its own dedicated trailer.

Three semi-trailers were needed to transport the aircraft. Once at the destination, the parts were positioned in the WDL Luftschiffgesellschaft hangar, which was set up for the occasion as a temporary workshop for the reconstruction of "Aunty JU". "This was a very special task for us", explained Kreutzer, the head of operations who, together with Dirk Obermann, organised transportation. "Practically all the members of the Obermann team knew exactly what the combination of letters and numbers J-U-5-2 meant. However, only a few had seen the aircraft first-hand, let alone in individual pieces!".



JUNKER JU 52

The Junkers JU 52 was a three-engine freight and passenger aircraft produced by the German company Junkers since the beginning of the 1930s and used initially as a civil aircraft and then for transportation, mainly by the Luftwaffe. Nicknamed Tante Ju (Aunty Ju [2]) by the Axis powers, and Iron Annie by the Allied troops during the Second World War.



TO MOVE THE CENTRAL **BODY OF THE JU 52 AND** THE WINGS, IT WAS **NECESSARY TO USE A FASSI CRANE**











CASE HISTORY

THE STRENGTH OF FASSI IS REPRESENTED IN THE NETHERLAND BY DE JONG

For the Fassi dealer in the Netherlands, there are two key words: "experience" and "quality". "Experience" that De Jong IJmuiden has formed over 38 years of history with Fassi, and "quality", when responding for years to the company's loyal clients with care, attention and passion. The encounter between Fassi and De Jong dates back to 1982. On the one hand was Fassi, in the midst of its international expansion, and on the other a family-run business active for years in the Netherlands in the transportation and commerce sectors. A year on from that first encounter saw the founding of De Jong IJmuiden, the company set up by the spouses Jan and Marianne de Jong, which was to become the official dealer for the Fassi brand throughout the Netherlands. A brand that was recently joined by Cranab and Marrel.

De Jong IJmuiden Eendrachtsstraat 1 - 1951 AZ Velsen-Noord - The Netherl



www.dejongijmuiden.nl

VOL

#DeJonglJmuiden

LIFTING | 40

05 | January 2022

An interview with Jan de Jong, the owner of De Jong IJmuiden, the Fassi dealer for the Netherlands. A story that began in 1983



When was De Jong IJmuiden founded?

De Jong IJmuiden was founded in 1983 by Jan and Marianne de Jong.

Jan previously worked in a familyrun business operating in the transportation and commerce sectors that had been founded in 1900. Thanks to all his work in the family company, Jan had the pioneering idea to set up his own company.

How and when did the relationship with Fassi begin?

During a car show in 1982 in Brussels. I went to the show with my father and I was very much struck by Fassi cranes. That was when I first got in touch with them. Soon after, together with Franco Fassi and Luigi Porta, we discussed and set out the contract to allow us to sell Fassi cranes in the Netherlands.

What was the first crane sold in the Netherlands, and for what kind of work was it sold?

It was an F3.1 fitted to a Ford D truck. The crane was sold to the municipality of Bloemendaal, which used it for all municipal works in combination with a rear tipper bed and a gripper.

Which sectors show demand for Fassi cranes?

The most important sector for the Dutch market is building and construction. Naturally, there are a wide range of markets

FIGURES De Jong IJmuiden



Employees





and service points



Area size



Fassi cranes sold in one year



of particular interest for us. for example logistics, heavy transportation, the government sector, waste collection, the maritime sector and shortly also the military sector, thanks to the agreement with Fassi Gru S.p.A. and Scania Sweden for the Dutch Royal Army.

Fassi is now no longer simply a company. It is a group that has expanded its product and service range thanks to the inclusion of Cranab, Marrel, ATN and Jekko. What added value does the Fassi Group represent for you?

Thanks to the possibilities provided by the Fassi Group, we can now offer our clients a complete package. This increases opportunities for sales, allowing us to approach different markets and rendering us an even more important player in the Dutch market. In terms of the Group, we represent the three brands Fassi, Marrel and Cranab for the Netherlands. The addition of hooklifts and cranes for waste recycling and forestry has opened a new market for us and for our organisation of dealerships, because Dutch clients prefer buying the complete unit, such as cranes or hooklifts, from a single supplier, rather than contacting diverse companies.

What are the strengths of De Jong IJmuiden?

There are many. Undoubtedly the extensive skills of the employees,





excellent customer service, the significant proportion of the market conquered, the personal and long-lasting relationships formed with clients, the leadership in product innovation and the highly efficient service. Our strength lies in our knowledge of all the crane models, which allows us to plan and create personalised setups "in-house". We are also the crane dealership that has the longest relationship with a crane manufacturer in the Netherlands.

Of the many cranes sold, is there one sale that made a particular mark?

Many of our collaborations are long-term, and it is hard to identify one particular order. We have clients such as the Royal Navy, the Royal Army, the National Police Force, the Fire



Brigade, a number of government agencies and private companies both large and small, and even Royal KLM Airlines. There are also clients who have been with us since the beginning. I have to admit that I am proud of my first F10.3 crane sold and fitted to a

truck. This was 38 years ago, and at the time the F10.3 crane was considered a very heavy model. Fassi was one of the few brands that had such a heavy loader crane.

Another very special project was for Royal KLM, which involved the consignment of a series of different trucks used for Schiphol airport, and for which we developed a special crane used for refuelling aircrafts. Our cranes can also be found on the Ain Dubai, the largest observation wheel in the world, which is due to open in October 2021.



2022 IS FULL OF ART AND CREATIVITY FOR FASSI



The "CraneArt Project" 2022

calendar by Fassi is the result of the work and the collaboration between the pupils of the École de Condé institute in Lyon and the photographer Dario Trisoglio. Twelve projects and twelve photographs by twelve young students

#ÉcoledeCondéLyon



Cranes that become fairground rides, or make up parts of internationally famous sculptures. Machines that are famous for their power and versatility and which, through the imagination of the young creative students, can become street lights in the old centre of Lyon, or pendants on a necklace. These and other fascinating and original images make up the "CraneArt Project" 2022 calendar by Fassi, once again created in collaboration with the École de Condé institute in Lyon, an internationally renowned school of art and design, which also participated in the 2019 edition.

The twelve images have been created by as many young students with the help and collaboration of the photographer Dario Trisoglio, as this year, due to COVID-related restrictions, the students were unable to travel to Fassi to take the necessary pictures of the cranes.

"My role was to help the students adapt their sketches to reality", explained Trisoglio. "They proposed what they envisaged through their designs, explaining how they wanted to interpret the cranes. We took photographs of the machines on the basis of their indications, and then shared the results with them". Each project is the fruit of suggestions made by the pupils of the second year of the Bachelor of Photography at the





École de Condé. Each idea became a draft and a project complete with drawings, specifications and explanations on how to "transform" the cranes in a creative manner. Once the twelve "winning" projects were chosen, production went into full swing. "Unfortunately, this year the youngsters were unable to see and photograph the cranes in person", continued Trisoglio, "and everything was done remotely".

The twelve photographs that make up the new edition of the "CraneArt Project" are the result of the creativity of the youngsters and Trisoglio's skill in photographing cranes.







director of the École de Condé institute in Lyon

Following the 2019 edition, a new Fassi calendar involving the École de Condé school of photography in Lyon. What does this collaboration with Fassi mean for you?

We as an institute are delighted and very proud that our students have been called on to work on such a professional and significant project.

How was the 2022 calendar project organised?

The students from the second year of the Bachelor course began working on the project at the end of the school year. They began with sketches and then moved on to preparatory work. What made this year particular was that due to COVID, the students were unable to travel to the company to take the necessary photographs. This aspect was covered by Dario Trisoglio, a professional photographer who often works with Fassi and who did a wonderful and extremely difficult job in adapting the sketches to reality. Once the students' work was done, Dario then re-worked some of the shots in order to adapt them to Fassi's requirements.

What is the common thread in this new calendar? The students were not given any specific theme or subject. They were all free to choose, and this led to the presentation of a wide range of ideas, from games to art.

How did the students approach this project?

Each student worked on their own idea, with the support of the teaching team and directly with Fassi. The initial research phase was followed by the creation of a dossier complete with a sketch of the final image (a photomontage containing Fassi cranes) and a creative idea with a written description. These documents were sent to the photographer in Italy, who took the shots of the cranes on site. The students then integrated and composed the various elements to create the final image.

What was the most difficult aspect?

Considering the situation, there were two difficulties; providing sufficiently clear indications to the photographer for the pictures to be taken at Fassi, and the composition of the wide-ranging elements to create a unique image.

How was the idea of the crane transmitted through the images?

Each of our students put their own dreams and their creativity into the projects created. Their imagination allowed them to lend these machines an anthropomorphic identity, with their own arms, hands and brains. These creative ideas from the students "transformed" these strange steel humanoids into creatures.

ÉCOLE DE CONDÉ

The photographers are from the Lyon branch of the École de Condé, one of the most important institutes in the city in the field of art and design, offering its students courses of applied design, graphic and digital arts, photography and asset conservation. The Bachelor of Photography at the École de Condé is based on the main aspects of the job of the photographer from a technical, creative and professional point of view. Offered by the three branches of the school in Lyon, Nancy and Paris, it places the value of photography at the centre of visual communication challenges, seeking new forms of interaction and synergy between photography, graphics and video.





CRANEART PROJECT

The Fassi "CraneArt Project" calendar, each year the result of collaboration between the company and the young creative minds of a range of European art institutes, seeks to explore new aesthetic and functional characteristics of hydraulic cranes viewed from different points of view and represented via creative photography.







 $\mathbf{0}$

05 | January 2022

fassigroup.com



COMING SOON

The new Fassi SHT System (System Hybrid Technology) applied to an operating Fassi crane



