

TOMORROW

International Information Magazine of the FASSI GROUP



THE NEW S SERIES

The six new crane versions fitted with an innovative control system and a practical and ergonomic operator's station

THE FX-LINK SYSTEM

From a collaboration between Fassi and Volvo, the first cranetruck connection system

FIA EUROPEAN TRUCK RACE

An interview with Steffi Halm, driver for Team Schwabentruck IVECO, co-sponsored by Fassi.



FASSI

Share photos with us of Fassi cranes at work



Fassi cranes operate all over the world in new and different places and sectors. Stories speak through images that come from dealers and customers on five continents and are posted throughout the year on social media. In this section we have chosen and shared some of them.

















01 EILOLA Finland

02 FASSIUK UK

03 ARSIS Ltd Greece

04 RASIM MAKINA Turkey

Driving tomorrow, Lifting tomorrow

The future is not a distant horizon that awaits us. The future is a promise to be kept now, in the present. This is why we have to represent innovation itself, rather than simply produce innovative products. It is not enough to call ourselves innovators, we have to be innovators. Exceeding all limits, all confines, all obstacles. We are part of a world that sees the future as a necessary reality, not just in terms of competitiveness, but also in full awareness of the speed and rhythm with which change is constantly taking place. Change that affects all sectors, from construction to logistics and obviously including industrial vehicles, a sector that is showing renewed growth in numerous global markets. This is why commercial mobility is experiencing a new renaissance, clearly oriented towards the future: the focus is on "Driving tomorrow", a concept that draws inspiration from and moves towards increasingly efficient technology in terms of performance and potential, as well as - it goes without saying - environmental sustainability. It is an idea that is closely linked to the dynamics and solutions of the entire Fassi Group, which is ready to take its place on the front line with innovation dedicated to the industrial vehicle sector. "Driving tomorrow" is also, and above all, "Lifting tomorrow", through an extraordinary revolution in the world of lifting systems, now making possible what was unthinkable in the past. The Fassi Group has invented the Internet of Cranes®, a system designed to control the truck directly from radio control units, revolutionising the concept of stability and performance, and which has developed digital technology for remote assistance anywhere in the world. All of this with the aim of simplifying all that seemed to be difficult, complex and out of reach. This is why the Group's solutions can be found all over the world, anywhere where there is a need to move more quickly, to build more rapidly, to manage handling operations with increased efficiency, to be lighter, to perform better, in a safer and more sustainable manner. Wherever there is a need to move, lift and handle. This extraordinary energy in designing the future also needs a new way of being presented and explained, once more as evidence of our characteristic spirit of innovation. And so, we present "Lifting Tomorrow", the new Group magazine which takes over from "Without Compromise", the house organ that for years has accompanied the evolution of the company with style. As of today, we have a new format, a new layout, a new approach to the contents (also from a social media point of view), in order to present this continuously evolving world with an avant-garde voice. Happy reading! #liftingtomorrow

LIFTING

The new versions of Fassi's S Series focus on comfort

Safe crane cabins with the CCD system

p.06

p.10

p.44

00 | September 2018



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Focus

Cranes and trucks connected with FX-Link

From the collaboration between Fassi and Volvo, the first device that allows the crane to be controlled from the truck dashboard

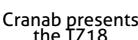


Marrel celebrates its 100th anniversary

> Marrel is enjoying the run-up to its most important anniversary, with challenges won, markets conquered and new products released

Fassi's new S Series

Cranes equipped with an innovative control system and a practical and ergonomic operator's station



The new crane was presented at the recent IFAT trade fair in Munich. It can be used in both the forestry and recycling sectors

Cranab presents the TZ18

The Internet of Cranes® conquers the USA. An interview with Bernie Faloney p.12 p.18 A universal set-up for the most common types of basket p.20 With FX-Link, cranes and trucks are connected p.22 Cranab presents the new TZ18 for the recycling and forestry sectors Towards the 100th anniversary of Marrel: one hundred p.26 years of achievements, challenges and inventions p.28 With TSM, Fassi continues to be a "leader in innovation" An interview with Steffi Halm, the "lady of motoring" for Iveco and Fass p.34 p.40 From Germany, a case study of the performance of the F1650RA

Fassi and Kogler, together for 27 years. Assistance at the forefront of service



THE NEW S SERIES FOCUSES ON COMFORT

The new versions of the S series are fitted with a new control system and a practical and ergonomic operator's station

Six cranes, each available in three different versions. A total of eighteen versions of machines designed and developed specially for the transportation, handling and delivery of pallet-stored building materials. They are all united by speed, efficiency, comfort and precision. We are talking about the new Fassi cranes from the S Series, created principally for the German market and, more generally, for construction companies and clients operating in the logistics and building material distribution sectors. The new S Series includes the F145AS, the F160ASXP, the F195AS, the F210ASXP, the F215AS and the F240ASXP, each of which is available in three different versions to respond to all requirements. These cranes offer unbeatable performance and a high level of versatility in building material logistics.



#serieS

#fassicrane

#Sserieseat

#Sserietopseat

#workincomfort

#bestperformances

#F145AS

#F160ASXP

#F195AS

#F210ASXP

#F215AS

#F240ASXP

LIFTING

FX500 Fassi Electronic Control control

* FSC Fassi Stability Control

* CPM
Crane Position
Monitoring

* MOL

Manual
Outriggers Lock

control

RPS
Rack and Pinion
System

strength

FWD Fewer Welds Design strength

UHSS
Ultra High
Strength Steel

CQ Cast Quality

MPES
Multi Power
Extension System
performance



TARGET SECTORS

- The German market
- Construction companies
- Logistics
- Distribution of building materials







Together with operating speed and efficiency in loading and unloading manoeuvres, operators can now better manage moments of inactivity thanks to a new easy-to-use control system and a practical and ergonomic operator's station which simplifies managing the various stages of operation.

THE MAIN INNOVATION OF THE S SERIES IS THE OPERATOR'S STATION, WHICH OFFERS SIGNIFICANT LEVELS OF COMFORT THANKS TO THE RECLINING ERGONOMIC SEAT WITH LONGITUDINAL AND BACKREST ADJUSTMENT

VERSIONS	OUTREACH	LIFTING CAPACITY	WEIGHT
F145AS.21	6,95 m	13,76 tm	1950 kg
F145AS.22	9,10 m	13,15 tm	2075 kg
F145AS.23	11,20 m	12,64 tm	2200 kg
F160ASXP:21	6,95 m	14,88 tm	1950 kg
F160ASXP:22	9,10 m	14,27 tm	2075 kg
F160ASXP:23	11,20 m	13,76 tm	2200 kg
F195AS.22	11,10 m	18,45 tm	2840 kg
F195AS.23	13,65 m	17,64 tm	3040 kg
F195AS.24	16,15 m	16,82 tm	3240 kg
F210ASXP:22	11,10 m	20,18 tm	2840 kg
F210ASXP:23	13,65 m	19,37 tm	3040 kg
F210ASXP:24	16,65 m	18,35 tm	3240 kg
F215AS.22	11,10 m	22,02 tm	2980 kg
F215AS.23	13,65 m	21,10 tm	3180 kg
F215AS.24	16,15 m	20,39 tm	3380 kg
F240ASXP:22	11,10 m	23,85 tm	2980 kg
F240ASXP:23	13,65 m	23,04 tm	3180 kg
F240ASXP:24	16,15 m	22,22 tm	3380 kg



FEATURES OF THE NEW S SERIES

1

The SEAT fitted to the right of the column allows a clear view of the truck bed.



2

The OUTRIGGERS can be controlled from the seat and have an additional emergency command panel on the crane base.

₽ B

3

MPES (Multi-Power Extension System) with regenerative valve, boom arm extension for rapid operations independent of the opening sequence of the rams.

(

4

Prolink system for improved moment lifting class, with an increase from 6° to 8° of the working angle of the crane above the horizontal line.



5

Fitted with a JOYSTICK connected to the FX500 electronic system.







CABIN SAFETY WITH CCD

The new system developed
by Fassi allows control of the
movement of the crane arms,
in order to avoid collisions with
the truck cabin



t is called CCD which stands for "Cabin Collision Detection", offering a further guarantee of safety, operational efficiency and protection for the integrity of the truck.

The new system designed and perfected in the Fassi plants in fact marks an important step forward in terms of controlling the movement of the main and secondary arms where there is a risk of invading the "protection zone" surrounding the truck cabin.

The system uses position sensors to control the movement of the crane arms, detecting the distance from the truck cabin and automatically blocking them when they come too close. The movement of the column is controlled by rotation sensors, which suspend operations, thus avoiding collisions.

This guarantees the safe use of the crane, automatically inhibiting all potentially dangerous movements of the main and secondary arms.

"CABIN COLLISION DETECTION" CAN BE APPLIED TO:

- Slew ring cranes
- Rack cranes with control of the angle of rotation of the column via magnetostrictive sensor
- Cranes with hydraulic extension
- Cranes with a winch

configured with:

- A tilt sensor on the main arm
- An FX500 or FX900 electronic moment limiter



CCD, THE ADVANTAGES



LIFTING





Bernie Faloney, CEO of
Fascan International,
explains the advantages
offered by the IoC® in
terms of savings, time
and efficiency

he red wave of Fassi cranes
reached the United States in 1992
thanks to the efforts of Fascan
International. Since then, 25 years
of continuous innovation have gone
by, which have allowed the company
to identify and reach various sectors
beyond the construction industry.

These innovations concern not only products, but above all service and

client support because when faced with a territory of 9 million square kilometres to cover, perfecting assistance becomes fundamental.

The Internet of Cranes® patented by Fassi effectively reduces distances, improving the relationship between the manufacturer, the distributor and the assistance organisation. Bernie Faloney, the CEO and president of Fascan International, is convinced of this, and in this interview, he explains the tangible advantages and future possibilities of Fassi's Internet of

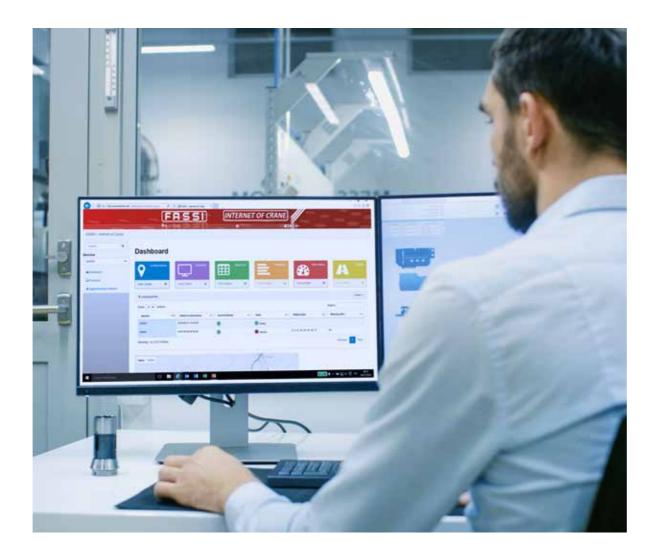
Cranes®.

How important is assistance for an organisation like Fascan, which sells Fassi cranes in a territory as vast as the United States?

Fascan has been the Fassi distributor for 25 years. Our headquarters are in Baltimore, Maryland. Over this period, we have imported 10.000 Fassi cranes to the USA, and we have sold them throughout the country. This is a huge



#InternetOfCranes
#fassiusa
#fassigroup
#fassicrane
#fascaninternational
#RealTimeAssistance
#highperformances



territory which extends for 5,632 kilometres from the east coast to the west, and for 4,023 kilometres from north to south. Providing product assistance can be difficult in such a large area. Furthermore, American clients who have purchased Fassi cranes expect

THE INTERNET OF CRANES® PATENTED BY FASSI HAS ALLOWED FOR DISTANCES TO BE REDUCED, IMPROVING THE RELATIONSHIP BETWEEN THE MANUFACTURER, THE DISTRIBUTOR AND CLIENT SUPPORT.

the best possible product support, as well as rapid and efficient response. The Internet of Cranes® was created with exactly this in mind: providing machines with intelligent control for the remote management of their efficiency.

What do you think of this service? The Internet of Cranes[®] is an important turning point in assistance and product support activities. Why? It allows the manufacturer (Fassi), the importer (Fascan International), the dealers and the clients to be truly "networked", because - thanks to the IoC® - everyone has real-time information on the existence of problems, and this allows the support department to contact the client and intervene. If, for example, a crane has a problem, we call the client, we tell them that, once the job has been finished, they can go to the closest service centre and receive the spare part they need by the next day. The IoC® is a very important resource for clients and a service which they cannot find elsewhere.

A resource which results in an optimisation of time and cost?

There is no doubt about this. Limiting machine breakdowns means having lower running costs and more efficient cranes, and this translates into financial savings, as well as guaranteeing performance in operations. The service created by Fassi allows these companies to save millions of dollars because the majority of downtime for cranes is due to bad maintenance.

The Internet of Cranes® and the future. In what way could this system evolve?

In my opinion, the Fassi IoC® system represents a turning point for our clients and the way of doing business in the future. A way of working and interpreting the idea of assistance which we distributors expect from crane manufacturers. A partnership involving manufacturers, dealers, assistance networks and fleet managers that can be counted on.

AVAILABLE IOC® FUNCTIONS:



TELEMETRY

Immediate readings from all the sensors/actuators including the output of the moment limiter.



GEOLOCATION/ALARMS

Localisation of the crane and viewing of its position and status: whether it is operating or switched off, with the presence of any active alarms.



BLACK BOX

Visualisation of the data held in the black box, with data export in Excel format, and with analysis to identify particular events or anomalous crane use.



USAGE STATISTICS

Working data for the crane, such as - for example - pressures read by the transducer, for analysis and assessment of usage.



RESIDUAL LIFE

Estimate of the number of years of operation remaining based on the actual usage and intensity of work.



CONSULTATION OF PARAMETERS

Visualisation of the crane's operating parameters.



MODIFICATION OF PARAMETERS

Remote modification of parameters, with either temporary or permanent effect.

Modification is permitted solely after authorisation by the operator.



FIRMWARE UPDATES

Update to the most recent version of the crane's firmware.



DAILY ROUTE TRACKING

Tracking the vehicle even when the crane is switched off (during transportation), through the direct power supply to the IoC® electronic device supplied by the vehicle's battery.





FASCAN INTERNATIONAL



4515 NORTH POINT BLVD, SPARROWS POINT, MD 21219, USA

FASSI DISTRIBUTOR FOR PROPERTY OF THE PROPERTY

FASCAN HEADQUARTERS

SERVICE

ASSISTANCE FROM COAST TO COAST AND FROM NORTH TO SOUTH

ASSISTANCE IS SWIFT AND REDUCES MACHINE DOWNTIME TO A MINIMUM

OVER

10.000

CRANES

IMPORTED
AND DISTRIBUTED
THROUGHOUT
THE USA
SINCE 1992

THANKS
TO THE
OC®

3 3 3 3 3 3 3 3 3

3 3 3 3

MACHINES
ARE SUPPLIED
WITH INTELLIGENT
REMOTE CONTROL

9 MILLION Km²

OF TERRITORY COVERED BY THE ASSISTANCE SERVICE

fascan.com





A UNIVERSAL SET-UP FOR THE MOST COMMON TYPES OF BASKET ON THE MARKET

The new Platform Stability Control device enables switching from CRANE to PLE mode with a single command

t is now possible to fit an Elevating Work Platform (PLE) to standard Fassi cranes thanks to a single command.

A single selector to activate the **PSC (Platform Stability Control)** device, and the Fassi crane is ready to be used in PLE mode.

The latest innovation by Fassi brings advantages in terms of safety, speed, time optimisation and performance for operators who need to switch from "Crane" mode to "PLE" mode quickly and in complete safety.

All of this is possible thanks to Platform Stability Control, and it is compatible with the most

common types of basket present on the market: electrical self-levelling platforms, hydraulic self-levelling platforms, electric self-levelling baskets, gravity baskets with incline sensors and levelling activation valves, gravity baskets with incline sensors.

With the selector in the PLE position, reduced motion speed and safety

In PLE mode, the radio control can be used solely via the cable fitted to

The transition from one mode to the other and back takes place through a kev selector.

functions are activated.

the basket.

INCREASED SAFETY LEVELS THANKS TO:

- The installation of dedicated components
- Electrical configuration for existing baskets with "plug and play" connection
- Management of left and right working sides for all slew ring cranes and all rack cranes equipped with a magnetostrictive sensor.

#psc

#platformstabilitycontrol

#fassicrane

#security

#PLEmodality

#liftplatforms

#innovation

ADVANTAGES FOR THE OPERATOR:

The possibility to opt for a PLE set-up instead of a CRANE set-up, developed and configured directly by the crane manufacturer.

An increase in the machine's level of safety thanks to the installation of components suitable for safety applications.

A REDUCTION in fitting work for dealers or fitters.

Electrical configuration for almost all baskets on the market.

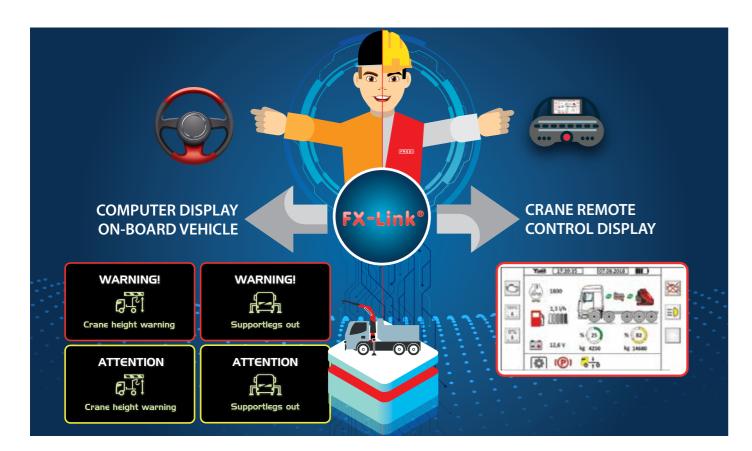
TO SWITCH FROM "CRANE MODE" TO "PLE" MODE **QUICKLY AND IN COMPLETE SAFETY**

IT IS POSSIBLE









CRANES AND TRUCKS CONNECTED Another first from together with another street of the control of t

From the collaboration between Fassi and
Volvo comes the first device that enables the
truck to be controlled by the crane's radio
control unit, and the crane to be controlled in
turn from the dashboard of the truck

#

#fassitotruck #fxlink #volvo
#fassicrane #cranetotruck
#integratedcranetruckconnectivity
#cranecontrol #fassileaderininnovation
#technochip #connection

Another first from Fassi, this time together with another market leader, Volvo Trucks. Together they have created FX-Link, an innovation which connects cranes and trucks, controlling various truck functions from the crane radio control unit and crane functions from the truck dashboard.

This innovation, previewed at IAA 2018, can be applied to all Volvo FH, FM and FMX vehicles fitted with CAN-BUS technology.

Currently, there are various analogue connections between the vehicle and the crane which relate to various functions, including the CPM (Crane Position Monitoring) command device in the cabin,

Aims:

- To simplify the electrical connections between the crane and truck
- To control the truck from the crane radio control unit
- To develop new functions from the information provided by the truck.



regulating the accelerator, and switching the engine off and on. With FX-Link, the current myriad of cables will be replaced by a single CAN-BUS connection.

It is currently possible to eliminate the CPM device in the cabin by using the vehicle display to show whether the crane and/or outriggers are open. With FX-Link, the flow of information is in two directions, from the crane to the truck and vice versa, thanks to a new and more complete interface.

FX-LINK ALSO OFFERS A WIDE RANGE OF POSSIBILITIES FOR DEVELOPING NEW INTEGRATED FUNCTIONS AND PROVIDING FURTHER INFORMATION, AS ALWAYS VIA THE CRANE RADIO CONTROL UNIT OR THE ON-BOARD DISPLAY IN THE VEHICLE.



3 Status of the POWER TAKEOFF

4 Level of ENGINE REVOLUTIONS

Status of the parking BRAKE

Load on the AXLES



LIFTING



CRANAB PRESENTS THE TZ18

The new crane presented at the IFAT 2018
trade fair in Munich can be used in both the
forestry and recycling sectors



FASSI GROUP



#cranabgroup
#fassigroup
#forestry
#recycling
#cranabtz18
#tz18
#technology
#lifting
#innovation

One crane with two hearts, one for forestry and the other for recycling. The brand-new TZ18 has been designed and manufactured for both the lumber sector and for handling recyclable materials. It marks a "return to the past" for Cranab, to the world of loader cranes for trucks, characterised by innovation and an important technological and industrial commitment that has seen the Swedish company working in synergy with Fassi.

THE MAIN
PERFORMANCES
OF THE NEW MODEL:

• CRANE WITH TWO EXTENSIONS AND A MAXIMUM OUTREACH OF 10.2

> • STABILITY INCREASED TO 5.3 M

LIFTIN



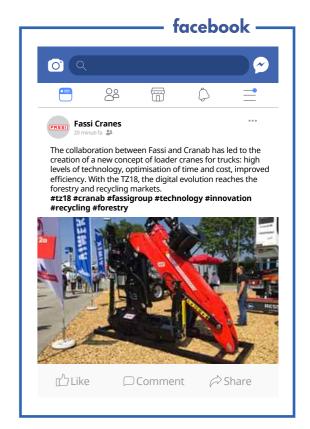




SPECIFICATIONS: Lifting capacity: Maximum up to 170 kNm outreach: 10.2 metres TZ18 Weight: 2,800 kg **Target sectors:** forestry recycling

A first "taste" came with the TZ12, the 12-tonne/m timber crane that paved the way for this new chapter, which began with the collaboration between the two companies.

Now, with the TZ18, a further step forward has been taken, expanding the configurations available to guarantee increased lifting capacity for this new model. The aim is to offer the market, step by step, a complete system for typical operations in the handling of materials for recycling and forestry.



"TOWARDS DIGITALISATION IN THE FORESTRY SECTOR"

A new product from Cranab. What are its strengths?

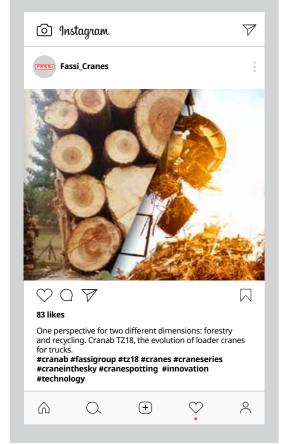
The new TZ18 is most definitely a high-quality product with a high level of technology inside. Developed for both forestry and recycling, this model represents the continuation of a range of loader cranes for trucks that we are dedicating a lot of effort to.

What is the state of the market?

The market has shown positive development over the last 2 years. In particular, the markets for our traditional products and for the new loader cranes for trucks are both showing strong growth.

What are the future prospects for the global forestry sector?

The future of forestry machinery and equipment is moving towards technology which guarantees ever-increasing efficiency. Forestry management will also concentrate on interconnected machinery to better plan their use from a cost point of view. The aim is to further reduce the environmental impact of new technology by increasing digitalisation in the forestry industry.





Cranab Group



TOWARDS A CENTURY OF MARREL

Marrel is enjoying the run-up to its most important anniversary, with challenges won, markets conquered, and new products presented. Since 1919, the company has made

history in the hooklift segment





#marrel #marrelanniversary
#100yearsold #amplirollgrue
#loadingequipment #skiploaders
#tipperscissors #technology
#hydrauliccylinders #fassigroup



The first photographs of Marrel tippers are in black and white, a sign of the time that has passed since the company's activity began. **2019**

will mark its 100th anniversary.

an important event which Marrel is preparing to celebrate in the same place - the small town of Andrézieux-Bouthéon, not far from Lyon -, with the same innovative spirit. Only now, Marrel has new faces and a decidedly wider radius of action which reaches overseas and, above all, is now part of the Fassi Group, with which it started to set out challenges and new opportunities five years ago.

The history of Marrel is full of inventions – the tippers with hydraulic extension and cable, the



MARREL IN THE PRESENT

FASSI GROUP

MARKETS

The European and United States markets are growing. Marrel's aim is to continue with this trend and develop its commercial presence throughout Europe and in the Middle East

TRADE FAIRS

In 2018, Marrel has been a leading figure in the most important trade fairs in the sector: IFAT in Munich, Eurosatory in Paris, IAA in Hanover and Ecomondo in Italy

PRODUCTS

2017

2018 saw the arrival on the market of the new range of 24T and 26T high-capacity Ampliroll hooklifts, in versions for all container lengths from 4.2 to 7.8 metres

Ampliroll hooklift, the skiploaders, and tipper scissors – and this has allowed the company to make its mark on the market as a symbol of technological advancement on an international level.

The process of internationalisation for Marrel began as far back as the 1980s, with the exportation of roll-off hooklifts to the USA. Since then, the French company has become a leader in that market.

The drive forward has never ceased.
On the contrary, it has accelerated sharply, above all in 2017, driven by two factors: on the one hand the success of the Ampliroll S range, and on the other the contribution of the Fassi Group. The new range has in fact allowed Marrel to increase its market

share thanks to the 14T and 22T hooklifts in very dynamic markets such as Europe and the United

States. In the meantime, the presence of Fassi has boosted the development of sales in new countries and markets, with the same positive trend likewise projected for 2018.

MILESTONES

▶ 1919	Marrel was founded
▶ 1935	The first appearance of hydraulic tipping systems
▶ <u>1965</u>	The invention of the Marrel tipper scissor
▶ 1968	Marrel becomes the exclusive distributor of HMF cranes
▶ 1970	The Invention of the Ampliroll® hooklif
▶ 1980	Marrel USA was founded
▶ 1998	Marrel becomes part of the Caravelle Group
▶ 2005	Separation of businesses and founding of the Bennes Marrel branch
▶ 2006	Introduction of the Ampliroll® range with linkage
▶ 2011	Introduction of linkage in the 3T Ampliroll range
▶ 2013	Marrel becomes part of the Fassi Group
> 2017	The Fassi Group acquires the

majority share of CTELM

LIFTING



PARTNERSHIP

WITH TSM, FASSI CONTINUES TO BE A LEADER IN INNOVATION

Fassi has chosen TSM Sensors for the development and supply of industrial sensors for the measuring and control of all crane functions

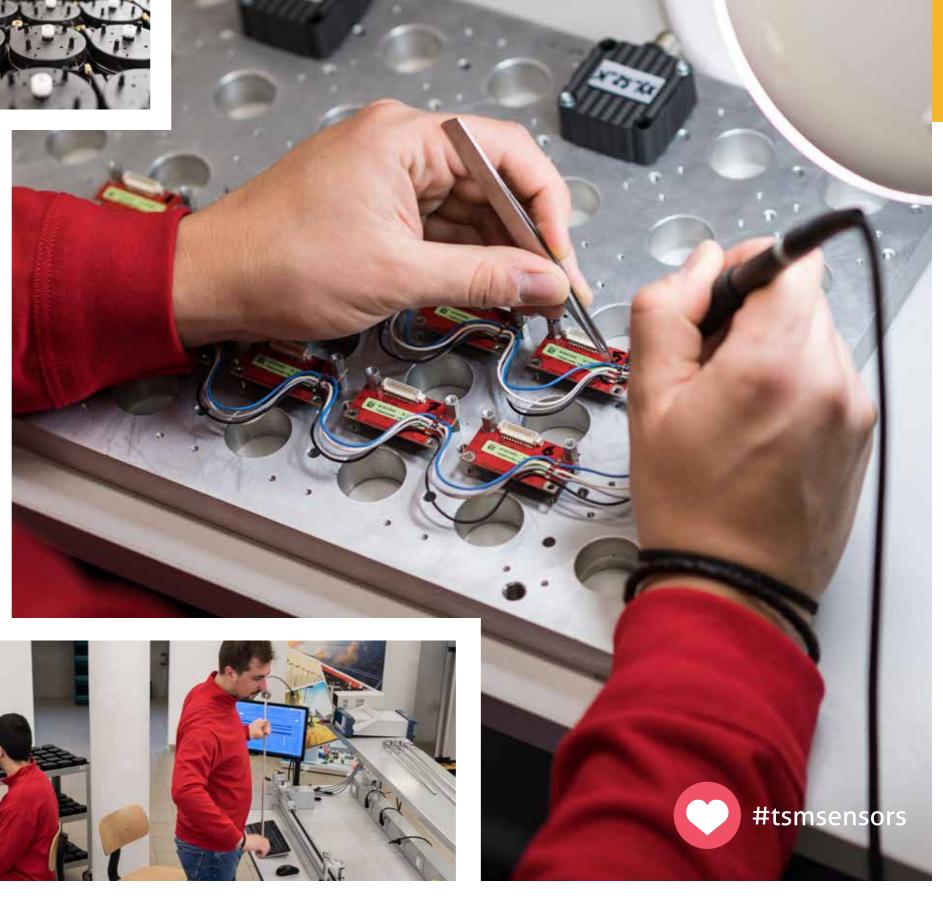


Fassi, a "leader in innovation" once again. This time, the credit goes to the partnership with TSM Sensors, a start-up in the province of Brescia that has enabled Fassi to be the first company in its sector to introduce digital applications on articulated cranes.

TSM is a young company specialised in producing highly innovative industrial sensors for position detection and control.



#tsmsensors
#fassininnovation
#industrialsesors
#partnership
#cranecontrol
#technology
#highprecision
#mydigitalcrane





The start-up headed by Antonio
Agnesi is active on the international
market in various industrial sectors:
lifting, construction, earthmoving,
logistics, agriculture, renewable
energy and medicine.

TSM Sensors manufactures four

product families, all created to improve the safety and efficiency of the machines on which they are installed. Through the precise measuring of their parameters, it is possible to manage all functional situations automatically.

Tektronix TBS 1102B-EDU Digital Decillomrupe | Massure | Molphar | Molphar

IN THE WORDS OF THE COMPANY





Antonio Agnesi Director General of TSM Sensors

"TSM Sensors was founded in 2015, the result of the determination and ability of a group of young people with previous experience in the same field, accompanied by the fundamentally important figure of Marco Carrara, the current Technical Director, who has over 30 years' experience in this sector. It is not only the date of foundation that makes our company young but also the age of the people within the organisation. The average age among our ten staff members, assisted by another four collaborators, is less than thirty. We design all of our products, often responding to specific requests from clients, but also developing our own research, with the aim of anticipating client requests when possible, and continuously

offering innovative solutions. In our headquarters we produce hardware, software and firmware and we design the printed circuits, while sourcing mechanical and electronic parts from external suppliers who have been selected according to criteria of reliability, quality and precision. Lastly, we carry out assembly and functional testing internally.

We guarantee complete traceability for all our products, monitoring the entire production process, and every sensor is certified with a final check carried out at calibration and testing stations that have been designed exclusively for our requirements. The company has obtained ISO 9001 certification for Quality Management."





Rossano Ceresoli Research and Development Director of Fassi Gru S.p.A.

"The collaboration with TSM sensors resulted from our need to identify a partner who could work alongside us in the field of sensor development, which was not available at the time. TSM Sensors is a young and dynamic start-up that has enabled us to be the first to introduce digital applications to cranes.

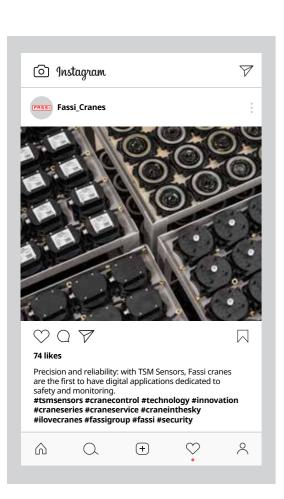
Our technical offices work in perfect harmony and it is therefore possible to implement ideas to design, and then to production, with a swiftness that would be unimaginable with a traditional supplier/client relationship. It is also an important opportunity for TSM Sensors, who, through this direct relationship, understands the needs of the client more quickly and can therefore develop solutions which can also find application beyond the lifting sector. In practice, we have made integrating sensors into our cranes a vertical process, with solutions that are industrialised from the outset, thanks to our reciprocal knowledge: Fassi Gru S.p.A. in the hydraulic sector and TSM Sensors in sensor development."



with respect to Earth's gravity and guarantee the stability of the machine with high precision.

Thanks to the recent introduction of MEMS gyroscopes, it is now possible to guarantee increased static and dynamic accuracy of the signal, compensating for any external disturbances such as, for example, vibration.

Cable transducers monitor transverse stability by measuring the outreach, or rather the distance from the centre of gravity, with a mechanical system (in practice, a wire), up to a maximum distance of 10 metres. They also guarantee a high level of protection, above all in demanding working conditions.





Magnetostrictive linear position sensors are another form of linear sensor which measure the position of a cylinder through a magnetic cursor placed on a shaft for a maximum distance of three metres. They are made of stainless steel and can be fitted to either the exterior or the interior of the cylinder. The technology guarantees elevated precision, with a maximum margin of error of just a few tenths of a millimetre for a precise measurement of the full range of operation. Furthermore, as there is no mechanical contact, the life cycle is practically infinite.



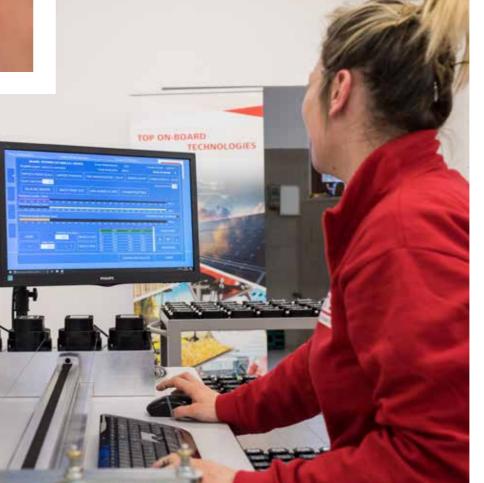
The Fassi & TSM Sensors partnership

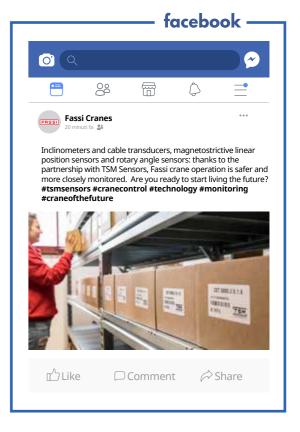
Thanks to TSM, Fassi is introducing cranes with digital applications onto the market for the first time

Fassi and TSM Sensors work in an integrated manner thanks to their reciprocal knowledge

The collaboration between the two companies optimises time and cost, from the design stage to manufacturing the sensors

Four product families: inclinometers, cable transducers, magnetostrictive linear position sensors and rotary angle sensors





Top Sensors Manufacture

Rotary angle sensors use magnetic technology to measure the angle of rotation, for example, the rotation between the joint and slew-ring. They are available with an external rotor or spindle, allowing for various fixing solutions according to different requirements.

LIFTING



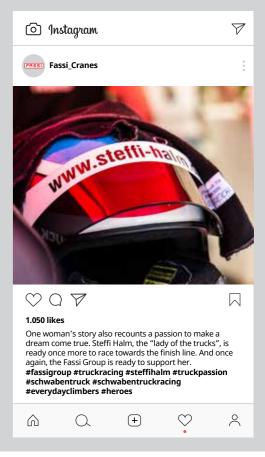


When she got on her first kart at the tender age of 10, Steffi Halm was already thinking big. Her head was full of dreams of Formula 1, characterised by the "greats": Ayrton Senna (who died that very same year, in 1994), Schumacher and Hill. She followed her passion, heedless of the fact she had entered a predominantly "masculine" world. She started competing in 1998, and since then has collected victories in all the categories she has participated in. Driven by that passion, in 2011 she had no qualms about passing from karts to trucks, where she is currently the only woman to compete. Every year she has floored the accelerator and has refined her skills, climbing the rankings and becoming the adversary to beat at the 2018 FIA ETRC. Steffi, with her truck (number 44) is the official driver for Team Schwabentruck Iveco, co-sponsored by Fassi.



#fia
#europeantruckracing
#ivecotruck
#fassigroup
#schwabentruck
#fassisponsorship
#SteffiHalm
#44GoSteffiGo
#passion
#sponsorship
#motor







FASSI, SPONSOR FOR IVECO AT THE EUROPEAN TRUCK RACING CHAMPIONSHIP

AS OF THIS YEAR, FASSI IS SPONSOR
FOR ONE OF THE TWO IVECO TEAMS IN
THE 2018 FIA EUROPEAN TRUCK RACING
CHAMPIONSHIP, TEAM SCHWABENTRUCK
IVECO. THE TEAM SEES THE VERY SKILLED
STEFFI HALM, MARKUS ALTENSTRASSER AND
GERD KÖRBER AT THE WHEEL.

How did your passion for truck racing come about?

My passion for truck racing started by chance. In 2011, I had the opportunity to take part with a truck in the FIA ETRC, without really knowing what to expect. After trying it out, I wanted to keep going, with the aim of becoming faster and more competitive in truck racing. And I am still here today.

What is your favourite race track and why?

I really like Hungaroring for its very exciting elements: there are a lot of difficult transitions, with very slow bends, combinations of faster bends, and changes in height.

How do you handle the competitive aspect of truck races?

It is an incredible experience every time. It is fun and exciting to find

myself on the starting line in my racing truck; starting off and fighting to gain a good standing in the race. Space on the race track is incredibly tight, and there is very little difference in timing between the racers. This makes it all really fantastic and very exciting every time.

Have you ever considered racing in F1?

Naturally. It has always been my dream, ever since I got into my first kart at the age of 10. It is my main objective, and I want it to become a reality.

What does it feel like to be the only woman in this kind of competition?

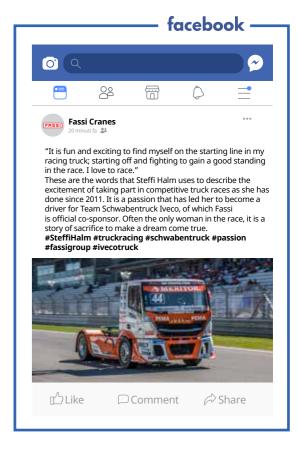
Being the only woman is nothing special for me. It is a completely normal situation, not only for the truck races, but for all of the races I have taken part in up to now. It's just fine.

LIFTINC TOMORROW





STEFFI HALM



STEFFI, WITH HER TRUCK
(NUMBER 44) IS THE OFFICIAL
DRIVER FOR THE TEAM
SCHWABENTRUCK IVECO,
CO-SPONSORED BY FASSI

ALL ABOUT STEFFI







2017 - FOURTH PLACE • REINERT RACING GMBH TEAM

2016 - FOURTH PLACE • TEAM REINERT ADVENTURE

2015 - EIGHTH PLACE • TEAM REINERT ADVENTURE

2014 - TENTH PLACE • LION TRUCK RACING TEAM

2013 - FIFTEENTH PLACE • LION TRUCK RACING TEAM



LIFTING TOMORROW



THE F1650RA SURPASSES ITSELF



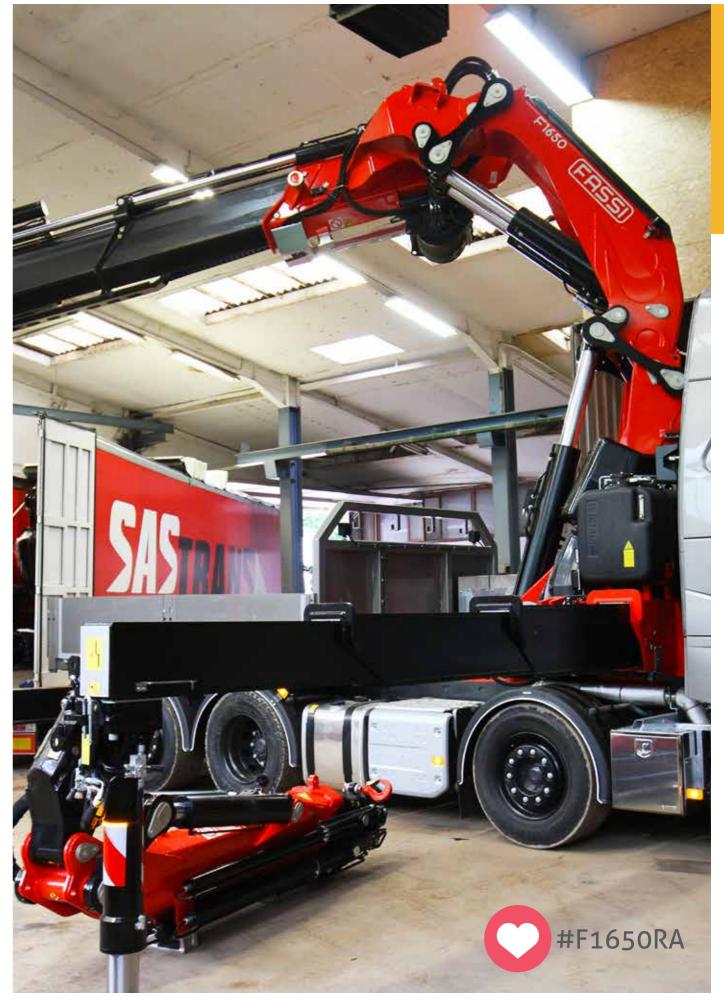
The crane from Fassi's heavy-duty
range, belonging to the company Jurda
Hebetechnik, was used to unload two
F820RAs and an F1650RA in the Buchen
warehouses of the company Lyma





Versatility, speed and strength.
In short, the F1650RA, one of the largest models in the Fassi range, a crane that is becoming well-known in Germany thanks to the work of its dealers, re-sellers and clients within the country. One of these, Marcel Jurda, owner of the company Jurda Hebetechnik, based in Heilbronn, sought out the F1650RA for its

strength and its high performance.
One of the very first jobs undertaken by the Jurda F1650RA was carried out "at home", lifting and moving two F820RAs and its "twin" in the warehouses of the company Lyma Autokran, which specialises in constructing industrial vehicles.
The delivery of the three cranes from Fassi's heavy-duty range



LIFTING

LIFTING



was scheduled at the Lyma headquarters in Buchen. It was a delicate operation, and this is why the company Jurda was called on to intervene, with its brand-new crane fitted to a Volvo FH 540.

The unloading operations took place inside the warehouse, beginning with the "smaller" F820RAs. The two cranes were

stored in a semi-trailer and, due to the reduced space, the manoeuvre

The F1650RA was placed laterally, and - given the limited height of the warehouse - once the F820RA was attached, the load was moved carried out by the driver, Wazyl Karpenko, using the radio control unit to monitor the manoeuvres with precision.

Both F820RAs were positioned near the other nine Fassi cranes parked inside the warehouse, ready to be fitted to suitable trucks. After the two "smaller" cranes, it was the turn of the twin F1650RA, which was also to be unloaded in the same area. This

was not the easiest to carry out.

with great care. The operation was



was a larger and heavier crane - 15 tonnes - which required the utmost concentration from all the operators. The crane, which was on a semi-trailer, was lifted without hesitation. The precision and the perfect control of the movements of the F1650RA impressed all those present, confirming the elevated levels of performance that this crane can reach in any situation.

FASSI F1650RA CRANE SPECIFICATIONS









Lifting capacity: up to 130 tonne/m



Maximum hydraulic outreach: up to just under 32 m horizontally with jib



Dimensions: w 2.54 m I 2.81 m h 2.6 m



combinations



#heavyweight #craneseries #bestperformance #powercrane #precision #innovation #technology #fassigroup #craneinthesky #cranespotting #ilovecranes

#jurdahebetechnik #F1650RA

#craneinaction #fassicrane









n Austria, the Fassi brand has been a by-word for quick and always efficient real-time assistance for 27 years. This can be confirmed by the clients, as evidenced in this interview with Ulf Zürner, manager of the company Kogler Krantechnik. Perhaps it is having over 20 authorised workshops spread throughout the country, experience in the lifting sector, the immediate availability of Fassi spare parts in the central warehouse, or the recent arrival of the Internet of Cranes® system, but the fact is that Kogler's is currently one of the best structured aftersales services in Austria, as far as cranes are concerned.

How and in what way has Kogler built its leadership over the years?

The mission of Kogler Krantechnik is to guarantee long-term advantages and excellent business results for our clients. We have

always aimed to have spare parts for the components installed on cranes available in our central warehouse, in order to guarantee immediate availability through automated handling. The purchase orders for items in stock are issued on a daily basis and quickly handled within the established deadlines. We want to offer our clients the best possible levels of assistance and, at the same time, guarantee the rapid supply of spare parts. The dedication and clientoriented attitude of our employees is the foundation for our company's success.

How is Fassi positioned on the Austrian Market?

In Austria, the Fassi brand is seen as solid and reliable, and above all present on a global level. Over the last twenty years it has continued to gain importance due to the wide range of products on offer.





Kogler was founded in 1991

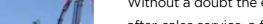




More than 20



<u>Ulf Zürner took charge</u> of the company in 2014



Without a doubt the efficient after-sales service, a factor which, in Austria, is extremely important, as our clients use their cranes to carry out work outside standard working hours, and therefore require any breakdowns to be repaired promptly. We have numerous authorised workshops throughout the country and we offer a technical assistance service 24 hours a day, 7 days a week.

What is your strength?

Can you give us an example that shows why the speed of the assistance service provided by

Kogler Krantechnik is so important?

Just recently, an accident on the motorway caused that section to be closed to traffic. A Fassi crane was used to assist, but it could not be folded away. If it hadn't been for our rapid assistance, it would not have been possible to quickly re-open the motorway.

What is the most important innovation recently introduced by Fassi for the market? At the moment I would say the IoC® system, which offers the possibility of carrying out maintenance remotely, directly from the office.



• Importer of Fassi cranes • Importer of Cranab lumber cranes • Importer of Marrel hooklift systems



KOGLER

STRENGTHS:

- 1 A completely automated spare parts warehouse
- 2 Immediate availability of spare parts
- 3 Assistance throughout the Austrian territory
- Constant professional training
- 5 Efficient post-sales service
- 6 Technical assistance available 24 hours a day, 7 days a week



9063 Maria Saal, Austria

























