

# WITHOUT COMPROMISE

No.19 - year 2016

International information magazine of the **FASSI** Group

## The dawning of the **INTERNET OF CRANES®**

Fassi pioneers the creation of an innovative application that gives operators a real-time assistance service



**FASSI**

# IoT

### **∞ Previews**

The brand new F1650RA and F305 respectively expand Fassi's medium- and heavy-duty ranges with cutting edge technology

### **∞ IAA Special**

At the Hannover Fair, Fassi presented the F26A, the F32A, the F305A xe-dynamic, the F710RA xe-dynamic and the V7 Radio control units with the FSC system

### **∞ Partnerships**

Out of the union of Fassi and Cranab comes the new TZ12, a truck-mountable recycling crane in versions with 8.3, 9.3, and 10.5 metres outreach

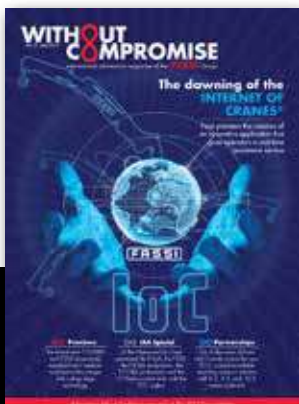
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# Pioneers of the INTERNET OF CRANES®

There are times when reality can amaze us more than our own imagination. We are reminded that we live in a world where the concept of the future is ever closer to our daily lives. That which we imagine to be far off, impossible and incredible soon transforms into a possible, feasible and concrete project.

The Internet is surely the greatest revolution that the history of humanity has ever seen. In the space of just a few years, it has radically transformed the way in which we now consider information, culture, society, politics, economics and our very lives. And it has also transformed "things".

Nowadays, "things" – objects – not only communicate with us; they interact with each other, they are connected, they exchange data, they change their behaviour, and they evolve. All of this takes place via the web.

Every day five and a half million new objects connect and in 2020 it is expected that there will be more than 22 billion connected things.

It is the era of the so-called "Internet of Things" (IoT) which will progressively change our way of living: cities will become increasingly smart, cars will move autonomously, objects on supermarket shelves will communicate with us, and much, much more. We are not just talking about something that will happen; it is something which is taking place now. It is already here.

In the context of this scenario, we at Fassi have chosen once again to be pioneers. And so we have created the "Internet of Cranes - IoC ®" – a project that confirms our natural role as front-runners and innovators in the sector.

We have come up with the idea of putting our cranes online to offer a revolutionary approach to operators for using and communicating with their machines.

It is a system that simplifies, improves and optimises the user experience of the crane, especially in critical or challenging situations, allowing for the intervention of remote support. But that's not all.

Our cranes are the first in the world to offer this extraordinary added benefit. It is the first step towards a completely new path, towards a horizon that only recently seemed to be unreachable, but which for us, starting today, is really very near.

EDITORIAL

# Presenting the **F305A xe-dynamic**

## Truck - **CRANE**

Thanks to its characteristics, the F305A xe-dynamic is perfect for those who are looking for a high-performance truck loader crane combination, with excellent lifting performance and generous residual load capacity

The latest model in the medium-duty range wins for lifting performance, weight-to-power ratio, agility and versatility

# Fassi's medium-duty range is ever-more groundbreaking



Following the recent presentation of the F255A model in April of last year, Fassi continues the expansion of the xe range with the introduction of a new medium-duty model. The F305A's highest lifting moment is 27.5 t/m and it has a maximum hydraulic outreach of 20.9 m, which is increased to 22.3 m in the version with four removable boom sections, combined with the L214 hydraulic extension plus manual extensions. This crane is the ideal solution for those requiring excellent lifting performance, agility and versatility; thanks to the excellent weight/power ratio, it is perfect for situations requiring a high-performance truck-crane combination: excellent lifting and generous load capacity.

The new model is a rack and pinion rotation crane which comes fitted with the tried and tested FX500 control system, the D850 digital hydraulic distributor bank, the Fassi RCH/RCS radio control unit and FSC-S or FSC-H stability control as standard.

The crane is available in various versions up to a maximum of 6 hydraulic extensions in the basic configuration and in four versions with a short secondary section. To further increase the working range, a number of additions are available with jibs to satisfy all requirements.

**Fassi F305A Xe-dynamic crane specifications**

- Lifting capacity: up to 27.5 t/m
- Maximum hydraulic outreach: up to 20.9 m
- Overall dimensions: w 2.55 m, l 1.165 m, h 2.4 m

**Electronic/hydraulic equipment:**

- xe-dynamic

# The new F305A xe-dynamic

## The models:

- Version .2.22: 8.15 metre outreach  
Lifting capacity: 23.34 tons/m - Weight: 2,750 kg
- Version .2.23: 10.2 metre outreach  
Lifting capacity: 22.83 tons/m - Weight: 2,965 kg
- Version .2.24: 12.3 metre outreach  
Lifting capacity: 22.32 tons/m - Weight: 3,175 kg
- Version .2.25: 14.55 metre outreach  
Lifting capacity: 21.61 tons/m - Weight: 3,350 kg
- Version .2.26: 16.85 metre outreach  
Lifting capacity: 21.1 tons/m - Weight: 3,515 kg
- Version .2.28: 20.9 metre outreach  
Lifting capacity: 20.08 tons/m - Weight: 3,775 kg
- Version C.2.24: 10.65 metre outreach  
Lifting capacity: 22.94 tons/m - Weight: 3,090 kg
- Version .2.25/L213: 22.7 metre outreach  
Lifting capacity: 21.61 tons/m - Weight: 3,935 kg

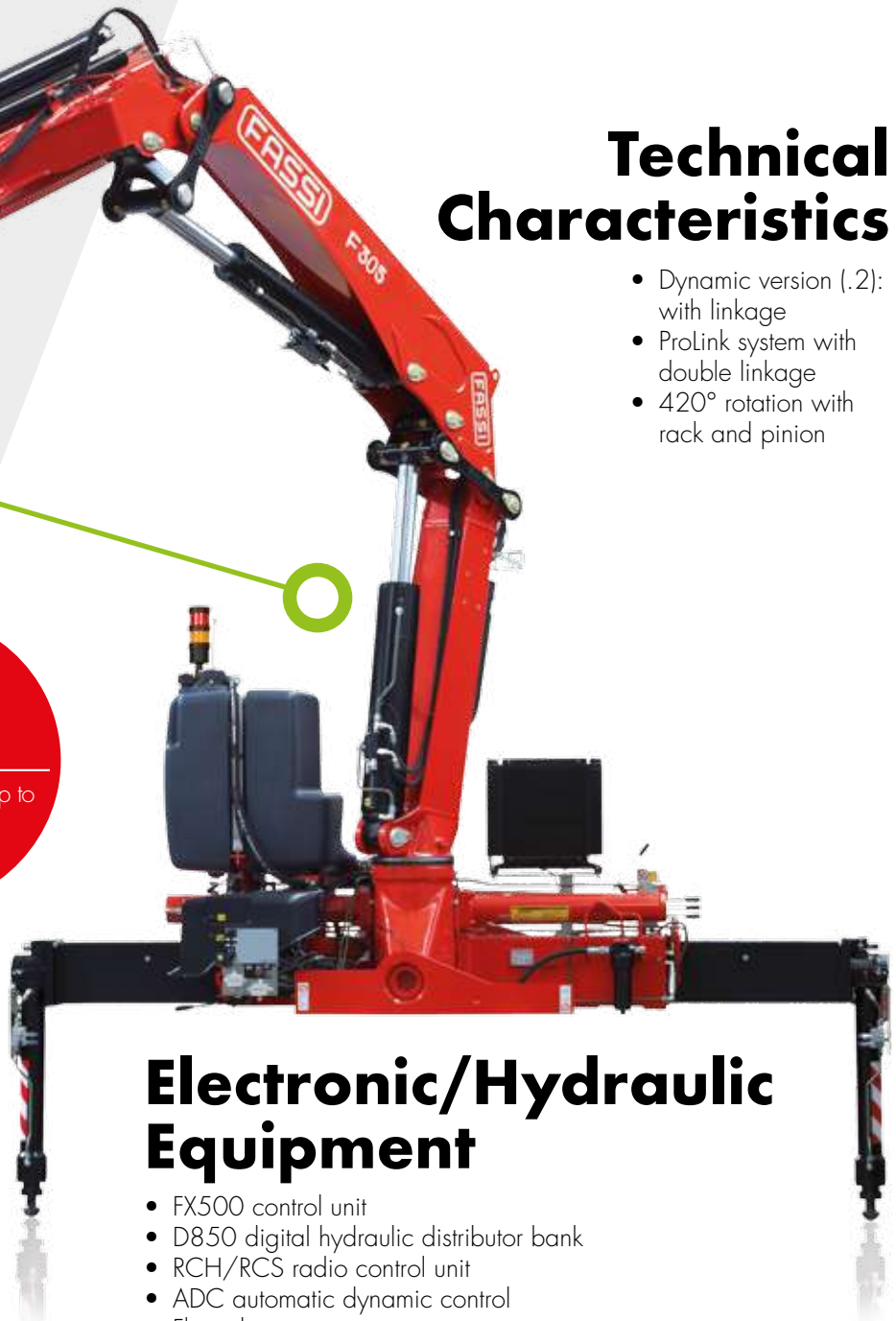
## F305A xe-dynamic

<b>ADC</b> Automatic Dynamic Control control	<b>D850</b> Digital Multifunction Distributor Bank control	<b>RCH/RCS</b> Radio Remote Control control	<b>FX500</b> Fassi Electronic Control control	<b>*FSC</b> Fassi Stability Control control	<b>*CPM</b> Crane Position Monitoring control	<b>FS</b> Flow Sharing performance	<b>XF</b> Extra Fast performance	<b>MPES</b> Multi Power Extension System performance
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# Technical Characteristics

- Dynamic version (.2): with linkage
- ProLink system with double linkage
- 420° rotation with rack and pinion

Lifting capacity: up to **27.5 tm**  
 Hydraulic outreach: up to **20.9 m**



## Electronic/Hydraulic Equipment

- FX500 control unit
- D850 digital hydraulic distributor bank
- RCH/RCS radio control unit
- ADC automatic dynamic control
- Flow sharing

### OPTIONAL

<b>PROLINK</b> Progressive Link performance	<b>UHSS</b> Ultra High Strength Steel strength	<b>FWD</b> Fewer Welds Design strength	<b>CQ</b> Cast Quality strength	<b>RPS</b> Rack and Pinion System strength
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<b>IMC</b> Integral Machine Control control	<b>D900</b> Digital Multifunction Distributor Bank control	<b>GV</b> Graphic Visualizer control	<b>AV</b> Alphanumeric Visualizer control
<b>ME</b> Manual Extension control	<b>OTC</b> Oil Temperature Control control	<b>FL</b> Full Lift performance	

● Mandatory for European Market

# All the latest from Fassi at the IAA 2016 Fair

From 22nd – 29th September 2016, Fassi presented a wide range of new cranes, innovation and technology for the market

## IAA 2016

IAA is the international trade fair for commercial vehicles for mobility, transportation and logistics. Every two years it brings together more than 2,000 exhibitors from 45 different countries

Following the success of Bauma 2016, Fassi was present at a new and very important fair, to show and present to the world a number of new models from the light, medium- and heavy-duty ranges. This time the international showcase was the Hannover IAA 2016 exhibition, one of the most important events for commercial vehicles in the world for the mobility, transportation and logistics sectors. Covering an area of 265 thousand square metres, the previous edition of IAA in 2014 saw thousands of visitors for the 2,066 exhibitors from 45 different countries. Fassi Gru was in Hannover with a display located in external area F, stand M51, covering an area of 659 square metres, where the most representative models of the current product line were shown, including various new products and a number of custom-fitted vehicles. The new models in question were: the F26A, the F32A, the F305A xe-dynamic and the F710RA xhe-dynamic. These were accompanied by the brand new V7 radio control units with FSC devices, and the Internet of Cranes®.





# Fassi F26A active crane

This model replaces the F22A and is characterised by a more compact structure with a consequential reduction in overall dimensions thanks to the use of special Ultra High Strength Steels and cast components for a reduced weight. The special UHSS have an extremely high level of elasticity which increases the structural resistance of components while lowering the total

weight of the crane in favour of the residual load capacity of the vehicle. The new F26A guarantees a significant improvement in weight/power ratio, consequently offering better performance: it in fact combines the unique characteristics of the previous model with improved weight and overall dimensions, and a performance of just under the limit of 30 kNm.



**Fassi F26A active crane specifications**

- Lifting capacity: up to 2.3 ton/m
- Maximum hydraulic outreach: up to 6.9 m
- Overall dimensions: w 1.82 m, l 0.53 m, h 1.5 m

**Electronic/hydraulic equipment:**

- Active/e-active

Lifting capacity: up to  
**2.3 tm**

---

Hydraulic outreach: up to  
**6.9 m**



**Overall dimensions**  
**l 0.53 m**  
**w 1.82 m**  
**h 1.5 m**



**Maximum hydraulic outreach**  
**6.9 m**



**Maximum load moment**  
**2.3 tm**

## Fassi F32A active crane

This new crane inherits the characteristics of the F28A, one of the most successful of Fassi's light-duty cranes, while significantly increasing its ability to fit on light vehicles. In particular, the F32A boasts more compact dimensions, which translate into a reduced overall size, and reduced weight, thus increasing

the overall residual capacity of the vehicle on which it is fitted. Another fundamental characteristic is the improved lifting capacity, always much appreciated for the rapid handling of building equipment and materials.



Lifting  
capacity: up to  
**2.75 t/m**  
Hydraulic outreach: up to  
**6.9 m**



### Fassi F32A active crane specifications

- Lifting capacity: up to 2.75 t/m
- Maximum hydraulic outreach: up to 6.9 m
- Overall dimensions: w 1.82 m, l 5.3 m, h 1.5 m

#### Electronic/hydraulic equipment:

- active/e-active



**Overall  
dimensions**  
**l 5.3 m**  
**w 1.82 m**  
**h 1.5 m**



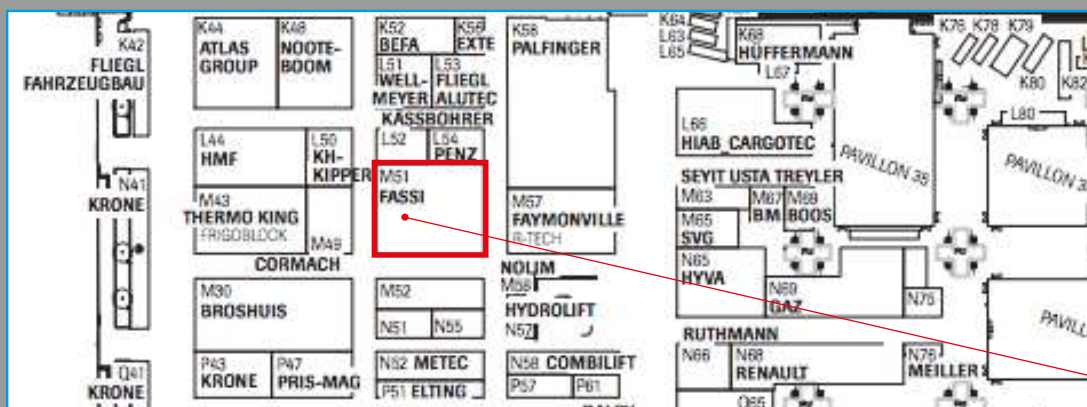
**Maximum  
hydraulic outreach**  
**6.9 m**



**Lifting capacity**  
**2.75 t/m**

# Fassi STAND

Outdoor area F, stand M51.  
Area of about 659 m<sup>2</sup>.



659 m<sup>2</sup>

stand M51

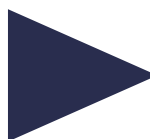
## Fassi F710RA xhe-dynamic crane

The range of continuous rotation cranes with a high lifting capacity is enhanced with a new model in the xhe range.

The distinction of the new F710RA xhe-dynamic lies in the fact that it has the dimensions and the weight of the lower-range model F660RA and the performance of the superior F720.

This model is available in versions with two to eight hydraulic extensions with a maximum lifting capacity of 68.5 t/m and a hydraulic outreach of 20.6 m. It offers combinations with various types of hydraulic extension: the version with seven extensions and the L426 extension has a hydraulic outreach of 30.35 m.

The xhe-dynamic version offers "carbon look" finishing; a 7" colour touch screen display which, thanks to its captivating graphics, allows the clear and rapid control of an extensive quantity of information; the most recent version of the Fassi FSC/SII stability system which takes advantage of the improved efficiency of the new angular sensor combined with the moment limiter; continuous rotation on a slew ring; the FX900 control unit and the new V7 radio control with colour display.



### Fassi F710RA xhe-dynamic crane specifications

- Lifting capacity: up to 68.5 t/m
- Maximum hydraulic outreach: up to 20.6 m
- Overall dimensions: w 2.55 m, l 1.67 m, h 2.465 m

#### Electronic/hydraulic equipment:

- xhe-dynamic



Overall dimensions  
**l 1.67 m**

**w 2.55 m**  
**h 2.465 m**



Maximum hydraulic outreach  
**20.6 m**



Maximum load moment  
**68.5 tm**

# Power and agility with the **F1650RA** **xhe-dynamic**



The market continues to support high-performance models, and this is why Fassi has decided to add another new crane to its heavy-duty range straight after the launch of the top-of-the-range F2150RA/RAL model. It is a crane with exceptional performance characteristics when compared to other models of its class.

With the F1650RA xhe-dynamic model, Fassi creates a new benchmark for a market segment in which it has consolidated its position over the last few years thanks to the success of models such as the F1500RA.

The F1650RA xhe-dynamic has been designed not only to satisfy the requirements of those who want to carry out challenging lifts, but also – thanks to the ProLink system – it demonstrates outstanding capability when operating in restricted and difficult spaces.

As with all of the models in the xhe range, the F1650RA has sophisticated design features, including a stylish carbon-look protective casing.

The crane is available in three versions with four, six or eight

extensions (with the model numbers .24, .26 or .28). To further increase the working range, various combinations with jibs are offered to satisfy every need.

This is a continuous rotation crane with a substantial range of features: the innovative FX901 control system, a 7" touchscreen colour display which allows the viewing of detailed information on the crane's stabilisation and operational conditions; the RCH/RCS digital radio control unit with the new V7 radio control unit as an option; the ADC Automatic Dynamic Control, which verifies all of the crane's functions, maximising the speed of motion according to the load; and the IMC Integrated Machine Control system, the digital "brain" which, as well as manages the crane's safety systems, also coordinates the operational conditions for optimal performance and control. As with all of the xhe models, it also has Fassi's advanced FSC/SII stability system, which couples the efficiency of an innovative angular sensor with a moment limiter.



The new crane from Fassi's heavy-duty range can work in restricted and challenging spaces thanks to the ProLink system



## AESTHETICS and design

It's not just about high performance; the new Fassi crane has sophisticated design elements, including the carbon-look protective casing



**Fassi F1650RA XHE-Dynamic crane specifications**

- Lifting capacity: up to 130 t/m
- Maximum hydraulic outreach: up to 41 m with jib
- Overall dimensions: w 2.55 m, l 2.81 m, h 2.6 m
- Three basic versions designed with 4, 4.6 and 8 extensions and 5 possible jib combinations



**Technical characteristics:**

- xhe-dynamic version (.2): with linkage and XP device
- continuous rotation on slew ring

**F1650RA xhe-dynamic**

**IMC**  
Integral Machine Control  
control

**ADC**  
Automatic Dynamic Control  
control

**D900**  
Digital Multifunction Distributor Bank  
control

**V7 RRC**  
Radio Remote Control  
performance

**FX900**  
Fassi Electronic Control  
performance

**FX901**  
Touch Screen Display  
performance

**\*FSC**  
Fassi Stability Control  
control

**\*CPM**  
Crane Position Monitoring  
control

• Mandatory for European Market

# Fassi F1650RA xhe-dynamic crane



Lifting capacity: up to **130 t/m**

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Hydraulic outreach: up to **41 m** with jib

## The models:

Version .2.24: up to 11.35 metre outreach  
lifting capacity: 129.15 t/m - weight: 11,770 kg

Version .2.26: up to 15.6 metre outreach  
lifting capacity: 122.22 t/m - weight: 12,650 kg

Version .2.28: up to 19.8 metre outreach  
lifting capacity: 120.9 t/m - weight: 13,250 kg

Version .2.26 L816: up to 27.65 metre outreach  
lifting capacity: 122.22 t/m - weight: 14,270 kg

Version .2.28 L616: up to 31.65 metre outreach  
lifting capacity: 120.9 t/m - weight: 14,800 kg

Version .2.28 L816: up to 31.65 metre outreach  
lifting capacity: 120.9 t/m - weight: 14,900 kg

## Electronic/hydraulic equipment:

- IMC integral control system
- FX900 control unit
- D900 digital hydraulic distributor bank
- V7 RRC radio control unit
- ADC automatic dynamic control
- FX901 - touch screen display
- Flow sharing

### OPTIONAL

<b>ME</b> Manual Extension control	<b>OHT</b> Outriggers Hydraulic Tilttable performance
<b>JDP</b> Jib Dual Power performance	<b>FSA</b> Fassi Smart App performance

<b>OTC</b> Oil Temperature Control control	<b>FS</b> Flow Sharing performance	<b>XF</b> Extra Fast performance	<b>MPES</b> Multi Power Extension System performance	<b>XP</b> Extra Power performance	<b>FL</b> Full Lift performance	<b>PROLINK</b> Progressive Link performance	<b>UHSS</b> Ultra High Strength Steel strength	<b>FWD</b> Fewer Welds Design strength
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# V7 RADIO CONTROL units and the FSC system combine for improved efficiency and control

Fassi's stability control system is integrated with the V7 radio control units to significantly improve the work of the operator

## FSC NEWS

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With the new versions, FSC/S and FSC/SII, Fassi introduces a more sophisticated management system by using dual control on the stabilisers



## VERSATILITY

With the FSC/S and FSC/SII systems, the crane's performance is automatically adjusted according to how the stabilisers are set up and the extent of any inclination of the crane base. The speed of the crane is automatically slowed where necessary and the moment limiter prevents overload by reducing the capacity rating.



The RCH, RCS or V7 RRC radio control units integrate to ensure that the operator has not only more control but, above all, improved efficiency.

This combination, a product of Fassi's research & development department, secures the best possible performance of the crane with total control.

The FSC (Fassi Stability Control) systems differ according to the model of crane and type of installation. In particular, the S and SII versions are cutting edge products from both a design and functional point of view. They have completely automatic management and can be installed exclusively on cranes fitted with the FX500 or FX900 electronic devices, RCH, RCS or V7 RRC radio control units and hydraulically extending stabilisers.

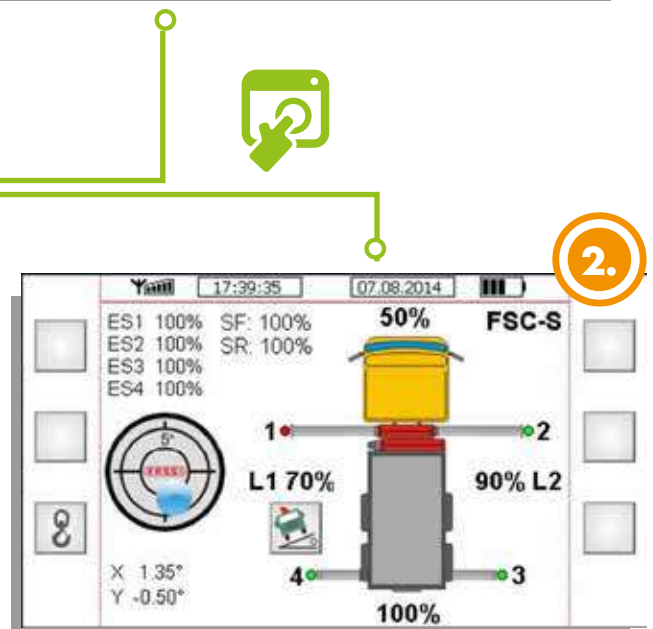
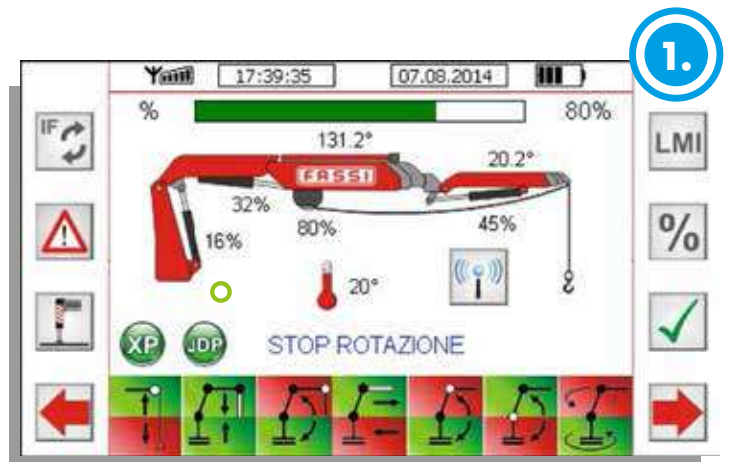
The FSC system intervenes automatically and prevents any crane movement that threatens the stability of the vehicle: it interacts with both the lateral extension of the stabiliser beams and the positioning of the stabiliser rams.

It monitors both out and down stabiliser deployment through two devices: a proximity sensor verifies the positioning of the rams on the ground, and a micro/encoder unwinder reads the extension of the beams.

The operator can monitor every step instantly. The radio control unit display or the crane's control panel show information about the status of the crane and confirm clearance to lift once the stabilisers are correctly set up.

# The evolution of Fassi's STABILITY SYSTEM

**Compared to other systems, Fassi's FSC/S and FSC/SII versions represent a more sophisticated management of control by having dual control of stabilisation, by verifying the position of the stabilisers and the angle of inclination of the base via a double XY axis inclination sensor. As a complete package, the system is highly versatile, always ensuring the highest levels of performance of the machine with complete safety.**



## ADVANTAGES of stability management combined with the new V7 radio control units

- Large colour displays
- Easy understanding of processes with clear icons and written information about the operating conditions of the crane, status of functions, and conditions of stability, diagnostics and maintenance, in accordance with international standards.
- Availability of 6/8 function buttons on the sides of the display in addition to the quick selection buttons.



### 1. V7 RADIO CONTROL UNIT MAIN MENU

- ✓ **Icon scroll indicator**
- ✓ **Alarm exclusion**
- ✓ **Change in pressure reading**
- ✓ **Menu access**
- ✓ **Virtual button**
- ✓ **Dynamic dashboard**
- ✓ **Stabiliser control**  
(Access to Stability Menu)
- ✓ **Blocked/Active alarms**

## Combination with the new **V7 RADIO CONTROL** units

The new V7RRC radio control units, which can be used only with Fassi cranes fitted with FX500 or FX900 electronic devices, have a large graphic display for the remote control of the crane's functions and also, on request, options for the vehicle and the stabilisers.

The graphic interface of these radio control units represents a step forward in the efficiency of communication functions, arming the operator with information to work more efficiently.

### 2. DEDICATED STABILITY MENU

- ✓ **Type of stability control**
- ✓ **Status of stabiliser support extensions**
- ✓ **Return to crane screen**
- ✓ **Visualisation of lateral and longitudinal inclination**
- ✓ **Visual warning if the limit of inclination is exceeded and stability compromised**
- ✓ **Load capacity at different points around the vehicle**

# “Real time” assistance and maintenance with Fassi’s **INTERNET OF CRANES®**

Fassi is a pioneer in its sector with the Internet of Cranes®, an innovative application that allows the operator to rely on a permanently active assistance service

## **ASSISTANCE AND MAINTENANCE**

The operator is constantly supported in their work thanks to this new technological efficiency provided by a continuous connection to the web via a multi-network SIM card





Cranes go online thanks to Fassi's Internet of Cranes®, which allows operators to rely on a permanently active assistance service through the potential of the web.

The Internet of Things is an evolution in the use of the web: objects (or "things") connected become identifiable and acquire intelligence thanks to their ability to communicate data and access consolidated information from other objects. The aim is to simplify our lives by automating processes or by obtaining information that was not previously available.

Fassi is a pioneer in its sector for the original application of this technological resource, "the Internet of Cranes® - IoC", for using its cranes. Thanks to a series of monitors fitted on the crane and connected to the web, it is possible for the

operator to get remote assistance if in any difficulty or when they require help with demanding working conditions. It represents a significant advance in the overall relationship between user and machine. The benefits offered by Fassi's new **Internet of Things** platform, being adopted for the first time in the articulated crane sector, is aimed principally at resolving critical situations in the work of crane operators, enabling assistance to be provided remotely.



With the patented "Internet of Cranes® - IoC", Fassi proposes a completely new approach and an experience which is, under certain aspects, revolutionary with regards to the dialogue between operator and crane

**A true change**

Speed of response and simplicity in assistance are critical for those involved in assistance and maintenance activities: from service managers to all employees and technicians involved. There is one single objective for everyone: quality service for the end user. With the patented "Internet of Cranes® - IoC", Fassi is putting forward a completely new approach and an experience which is, in certain respects, revolutionary with regards to the dialogue between operator and crane, taking advantage of the opportunities offered by the web. The operator has constant access to online assistance via multi-network

SIM cards. Optimal working conditions for the crane are therefore continuously guaranteed by comparing operational indicators with the relevant statistical parameters obtained

by processing data recorded from the working conditions of the crane.

This is thanks to a dedicated electronic circuit board which is interfaced with the digital logic of the crane via **CAN communication**, fitted with a **gsm-umts** module, a cloud server where the data transmitted by the crane is processed, and a dedicated web portal via which the Fassi support centre can quickly intervene to provide support in any situation presenting a challenge to the client.

Fassi's patented "Internet of Cranes® - IoC" system manages all of the information available from the functioning of the crane to give the operator (or the support centre) the advantages of a machine with active intelligent logic while it is in operation. The information that the system makes remotely available via a specific software application and cloud architecture supplies the following types of data:



1

**Telemetry and diagnostics**

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



2

**Vehicle tracking**

Instant reading of geographic position data of the vehicle/crane with visualisation of the status (active/inactive) of the crane. These readings show the route taken by the truck and crane over the course of the day.





3

**The crane's usage status**  
Indications of breakdowns.



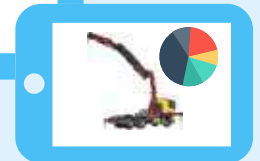
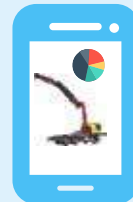
4

**Life and analysis of the machine: black box**  
History of events linked to the functioning of the crane.



5

**Statistics regarding the usage conditions of the crane**  
Output information regarding lifts carried out by the main boom, the secondary boom and the hydraulic extension when present.



6

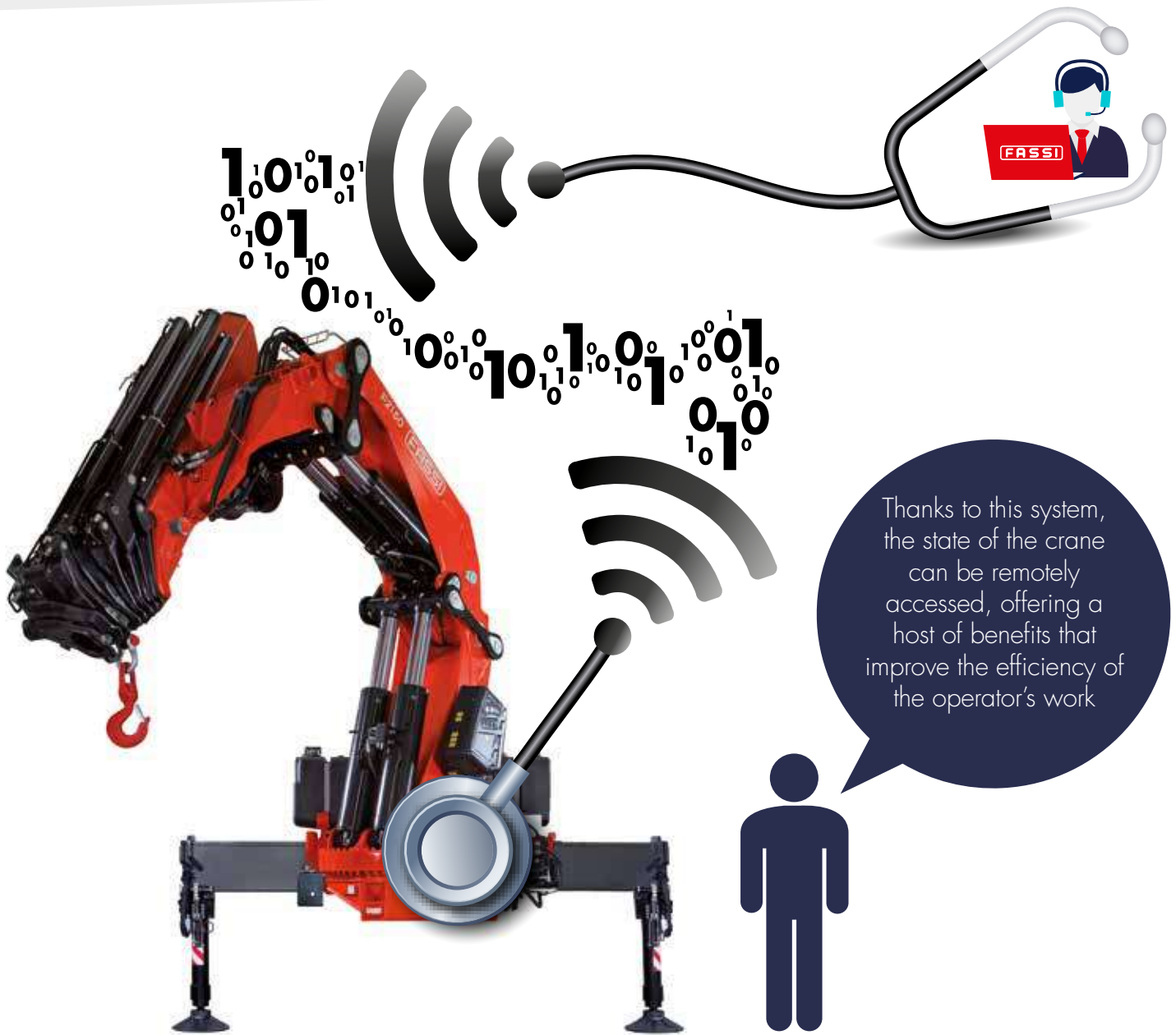
**Monitoring of residual life and predictive maintenance**  
Estimate of residual life calculated from the use of the crane, evaluating the number of work cycles carried out and their intensity.



7

**Parameters and software updates**  
Control and setting of parameters for the electronic moment limiter and automatic installation of new versions of software (with the consent of the end user).





Thanks to this system, the state of the crane can be remotely accessed, offering a host of benefits that improve the efficiency of the operator's work

Some of these functions will be available to the crane operator and others will be available to the support centre. The vehicle tracking system is active when the truck is running (either with the crane active or inactive), and can therefore be used as a tool for daily checks on fleet vehicles and monitoring their usage.

"Thanks to this system, the state of the crane can be remotely accessed, offering a host of benefits that improve the efficiency of the operator's work," explains Rossano Ceresoli, Fassi's Research and Development Manager. "Remote diagnosis, software upgrades, indicators of the machine's efficiency and predictive maintenance are all possible".

The very concept of the product generates a service mindset that sees the crane operator more involved during the **support phase** for their own machine. It is the operator

who evaluates when to use this system by confirming the acceptance of the proposed remote assistance/maintenance.

Fassi's **IOC** is therefore an important support tool for operators in their every-day work. Furthermore, via the **DMA** (Dynamic Maintenance Assistant) function, Fassi has also chosen to include periodic maintenance programming, allowing the user to be alerted to any repair or maintenance requirements. These system characteristics are based on the capacity to evaluate and process data from identical or similar cranes, or cranes that can be grouped together according to type of electronics, distributor or shared problems experienced.

As it is a resource based on the collection and processing of a large quantity of data (big-data), Fassi directly controls the security of the system. The security and the efficiency of "**Internet of Cranes® - IOC**" are both of equal importance.

# ADVANTAGES

A complete change in product support. Moving from a scenario where the maintenance technician carries out work using a bag of tools, and compiles reports and log books, to one where crane function information is gathered and managed remotely using the digital tools of Fassi's "Internet of Cranes® - IoC".



# New on the market, the first **CRANE MODEL FOR RECYCLING** by Cranab



From the synergy between Cranab and Fassi, the first truck-mounted crane for scrap handling

## CRANAB TZ12

The TZ12 is a 12 tm crane available with three outreaches, 8.3 m, 9.3 m and 10.5 m. Made according to the principals applied to forestry machines, this new crane guarantees solidity, safety and performance quality

On the one side is Fassi with its experience, its high tech control systems and a series of innovations; on the other is Cranab, with all its expertise in the forestry crane sector, cranes that over time have become synonymous with robustness and quality. Since these two worlds came together three years ago, when Fassi invested in the Swedish company, a new crane has been created: the TZ12, a perfect synthesis of two companies, each a leader in their respective sector.

The TZ12 is made for mounting on trucks for loading scrap a new product area for Cranab. The 12 tm crane is available with three outreaches of 8.3 m, 9.3 m and 10.5 m. It is a compact, powerful, versatile, flexible and safe crane, designed for recycling, waste collection and demolition applications. Cranab's long-term plan is to create a family of L and Z cranes for vehicles destined for the forestry and recycling sectors.

Although this is the first recycling crane that Cranab has ever made, it is a close relation to its existing range. "Our engineers and crane installers have a lot of experience with the strict principles that are applied for forestry machines," explains Hans Eliasson, Chairman of the Cranab Group. "Many of them are the same, even if there are important differences in developing cranes for trucks: weight is more of a priority and there are other challenges to face, such as protection for hoses, corrosion protection and safety requirements. Safety and quality are always high priorities for us".



## **FASSI ACQUIRES** a majority share of Cranab

Fassi has become the majority owner of the Cranab Group, including its subsidiaries Vimek, Bracke, Forest and Slagkraft, by the shareholding of Z-forestab. Z-forestab, a subsidiary of Inlandsinnovation, Mittkapital and Ekonord, agreed to sell its stake in Cranab to Fassi, which was already a shareholder.

The Swedish company Cranab, with headquarters in Vindeln, near to Umeå, manufactures cranes for forestry machines.

Hans Eliasson, President of the Cranab group, views Fassi's increased ownership as a positive development. "Fassi has been a

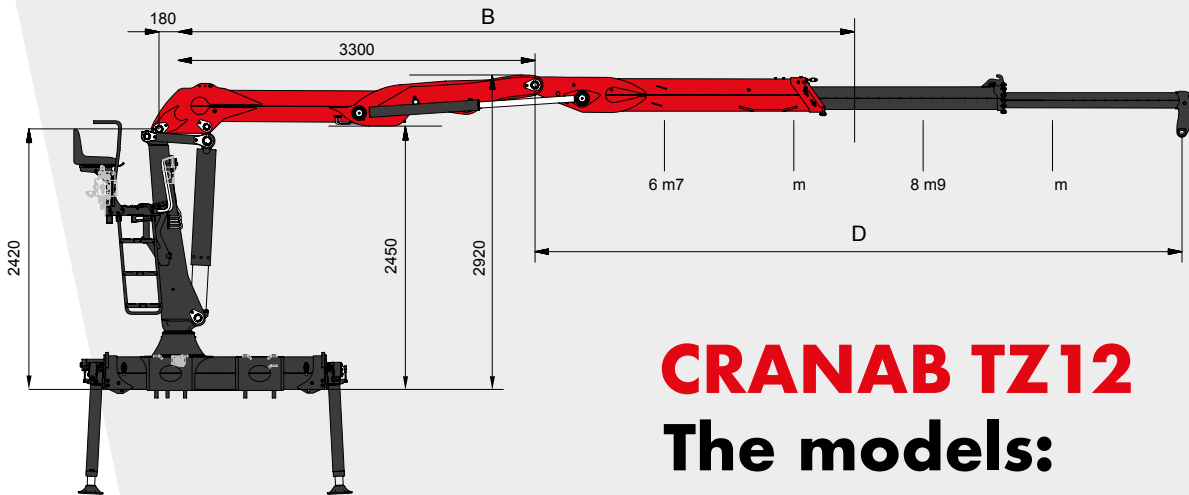
shareholder in Cranab for three years and has already contributed significantly to the growth of the company. They operate all over the world, and the deal will give us more opportunities for growth and new business," he says. "Over the years, Z-forestab has played a significant role in the strengthening of the industrial cluster around the Cranab group and we look forward to even closer collaboration with Fassi."

Giovanni Fassi, Managing Director of the Fassi Group, says: "We see the joint development of a new crane line as an important contribution to future growth in the road-going crane segment. Cranab's focus on the

forestry sector complements Fassi's other product ranges and represents an excellent market opportunity for us."

"We are delighted to see that the efforts of Z-forestab with this company are now bearing fruit", confirms Lars Johansson, President of Z-forestab.

Peter Gullander, Managing Director of Inlandsinnovation, majority shareholder of Z-forestab, is also pleased with the industrial structure that Z-forestab and Fassi have together built up around the Cranab group. "It has strengthened Cranab's global competitiveness and secured job opportunities in Northern Sweden", he declares.



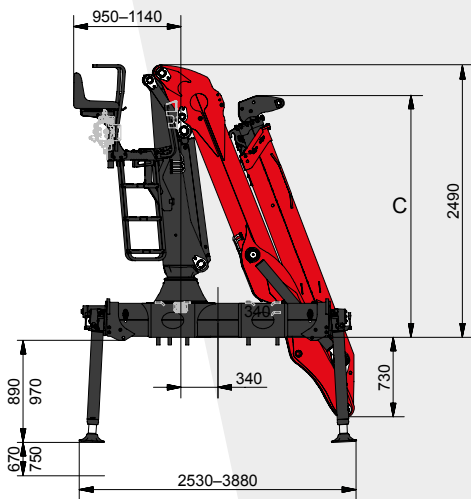
## CRANAB TZ12

### The models:

8.3 version: 8.3 metre outreach  
Lifting capacity 112.1 kNm - Weight: 2050 kg

9.3 version: 9.3 metre outreach  
Lifting capacity 102.8 kNm - Weight: 2100 kg

10.5 version: 10.5 metre outreach  
Lifting capacity: 99.7 kNm - Weight: 2250 kg



Lifting  
capacity: up to

**2250 kg**

Hydraulic outreach: up to

**10.5 m**



# Fassi and TRANSGRUAS, a winning team since 1978

Over the past 40 years, this Spanish company has sold more than 8,500 cranes. Success is attributed to specialisation and high quality after-sales service



## The **SPANISH** branch

**Transgruas has 27 dealer branches in Spain and 43 service points. The head office is in Barcelona and there are another three regional offices in Madrid, Vitoria and Valencia**

Between Italy and Spain there is a history of innovation, specialisation and success. History unites Fassi and Transgruas, Fassi dealer for the Iberian region, with the latest model vehicles and top quality after-sales service. This story began in 1978, the year that Transgruas was founded. From the very beginning Transgruas wanted Fassi as its partner and supplier. As of today, more than 8,500 Fassi cranes have been sold, and orders are on the rise, particularly for larger cranes.

The company is led by Marc Trenzano, President and General Manager, his brother Ian, Commercial Director, and their sister Karen, Marketing Director. They are assisted by a team that focuses on specialisation, quality of service and, over the last few years, a special focus on the internet as a channel for promotion and dealer support.

In this interview, Marketing Director Karen Trenzano talks about their beginnings and, more particularly, the growth of the company.





**Karen, can you briefly tell us about the story of Transgruas?**

The company was founded in 1978 in Granollers, not far from Barcelona. Initially it sold exclusively Fassi vehicles, and then grew gradually over the years, building up and expanding its products and service. Since 1980 we have developed a dealer network across Spain, which currently has 27 authorised distributors and 43 service outlets. The product range and our portfolio have grown since 1989 when we also added: aerial work platforms, skip loaders, forestry cranes, trailers and semi-trailers, and chipping and shredding machines.

**So Transgruas and Fassi have been together since 1978. How has this partnership grown?**

I like to use a motto when I talk about our relationship with Fassi: "Since 1978. Constantly growing". There are many factors that have played an important role in this growth, such as, for example, the opening of our branches in Madrid, Vitoria and Valencia, and having highly qualified technicians and experts in electronics and hydraulics in our organisation. Our slogan is: "Among specialists". We are specialists in the products (and Fassi is an endorsement of this) while our clients are specialists in their work. We have grown a lot, or at least up until 2008, the year of the global crisis. Today the market is beginning to move again and in 2016 we are receiving numerous orders for the larger Fassi cranes (F2150RAL, F1650RA, F545RA).



**SPANISH**

Fassi is a leading worldwide manufacturer of hydraulic cranes and the Spanish market has, over the years, recorded solid sales figures. As of today, more than **8,500** Fassi cranes have been sold



Marc and Ian Trenzano, Director General and Commercial Director of Transgruas

**How are Fassi products positioned on the Spanish market?**

Fassi is a leading worldwide manufacturer of hydraulic cranes and the Spanish market has, over the years, recorded solid sales figures. As of today, more than 8,500 Fassi cranes have been sold. In the beginning we were the third largest brand for sales volume in Spain, but since 2005 we have reached second place. In 2007 we set our record for Fassi crane sales with 1,500 units.

**How is your sales network structured?**

We have our headquarters in Barcelona and three branches in Madrid, Vitoria





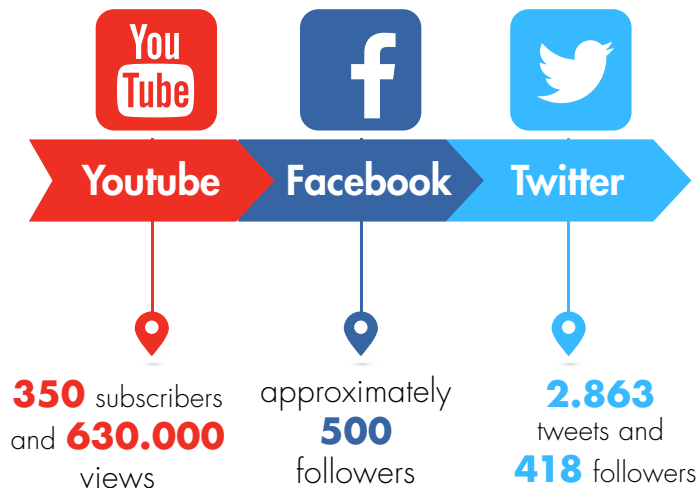
The headquarters of Transgruas in Barcelona



and Valencia, plus 27 dealers spread throughout the territory. Over the years we have structured a forward-looking after-sales service operation which has a total of 43 service points, with the strongest presences in Seville, Malaga, Granada and Cádiz, and the Balearic Islands (Minorca, Majorca and Ibiza).

**In recent years Transgruas has decided to focus on the web. What channels do you use?**

We keep our website constantly updated with news and product information. It can be navigated with any platform (PC, tablet or smartphone) and it can also be accessed by our dealers via a private area. In this way, we have facilitated the general relationship between company, distributor and user, always bearing in mind what the user is looking for and wants to find online. We launched an application last year designed to facilitate access to information, thus creating easier and faster communication between client and company. We are also working on the positioning of the website and on digital marketing.



**1 HEAD OFFICE**



**27 DISTRIBUTORS**



**3 BRANCHES**



**43 ASSISTANCE POINTS**

# Fassi invests in JEKKO and takes mini cranes worldwide

Since 2014, Jekko has been growing by more than 30 percent a year. With the arrival of Fassi, it will receive a further boost to its global expansion



From the left: Mauro Tonon, Rossano Ceresoli, Pierluigi Tonon, Diego Tomasella and Giovanni Fassi

## Jekko MINI CRANES

**Jekko mini cranes are particularly suitable for lifting and installing glass façades, and for lifting building materials, panels and beams, and for general industrial maintenance**

Cranes that can pass through doorways or ride in a lift. Fast, and capable of installing glass façades and lifting building materials. Cranes that offer excellent performance in restricted spaces that are hard to reach with any other lifting machinery. These are mini cranes, small vehicles with big potential. It is a sector that Fassi has now become part of through its investment in the company Jekko S.r.l., with the aim of providing a boost to its development and global market expansion.

Jekko's mini cranes first appeared on the market at the end of the 1990s and, seeing the rapid growth of the last three years, a new stand-alone company has been established with Fassi as the main shareholder.

"The Jekko mini crane brand", explains Mauro Tonon, Sales & Marketing Manager of Jekko Minicrane, "was born in 2006,



"Jekko will take advantage of Fassi's distribution network to further expand around the world. Fassi's global reach will provide us with support and advice for the entire production process."



although the mini crane, mini picker and vacuum lift products had already been on the market for 15 years."

Today, Jekko is the third-largest player in the world for the production and sale of mini cranes, thanks to a network of more than 30 dealers around the world with a presence on every continent, and to products that are always a step ahead of the market.

"Our products," Tonon continues, "are sold all over the world, especially in Europe and America. The credit goes to a mainly young organisation, to the innovative spirit which exists throughout the company, to our after-sales service and to the specialised technical office." In the last three years Jekko has stepped up its growth by more than 30% per year, "a result of teamwork supporting a high-quality product". Fassi's involvement is now expected to further accelerate this growth. "We are sure that Fassi's know-how and its global presence will open up new horizons for us and above all bring even more growth," he says.

"Our collaboration with Fassi will be on both a commercial and a production level", Tonon

stresses. "Jekko will take advantage of Fassi's distribution network to further expand around the world. Fassi's global reach will provide us with support and advice for the entire production process. "Currently, Jekko's range of products includes: six mini crane models; three mini pickers; one crawler crane; and two vacuum tech attachments. Mini cranes can be fitted with hydraulic manipulators or hooked suction cups for glass and panels. Both are completely integrated with the functions and the safety controls of the base machine. Jekko products are mostly used for lifting and installing glass façades, for lifting in the building industry and for general industrial maintenance. "These are products with compact dimensions and this enables them to pass through doorways and small spaces where other cranes cannot go", emphasises Mauro Tonon. "It should be highlighted that their light weight does not in any way compromise their lifting capacity. On the contrary, they offer practical and easy lifting, with consequential savings in time and money."

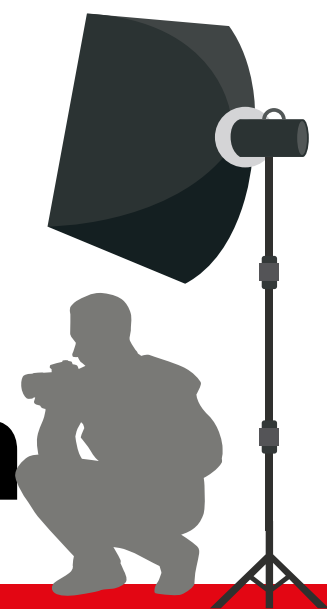
Jekko's production headquarters are in Colle Umberto, in the province of Treviso. At the end of 2016, a new 11,000 square-metre plant will be inaugurated, dedicated exclusively to the assembly and testing of mini cranes.

## JEKKO SRL

**Ormet S.p.A.** has **40** years' experience in the handling and lifting sector. It had been making Jekko mini cranes, mini pickers and vacuum lifters for 15 years when in January 2016 it established **Jekko S.r.l.** as a separate company, with Fassi as a partner.

Jekko S.r.l. is the leading Italian mini crane producer and third biggest in the world. The company, based in the province of Treviso, has a brand new factory that occupies an industrial area of more than **11,000** square metres, of which **4,000** square metres are covered. It employs approximately **40** staff. The entire range is exported and distributed in all five continents through a network of more than **30** authorised dealers around the world. The Jekko product line originated at the end of the 1990s. The first mini cranes were produced in response to commissions for special machinery. In 2006 the Jekko brand was created and a dedicated production line was set up for series manufacturing.

# Fassi's 2017 CALENDAR speaks English



Ten young photographers from London South Bank University have produced their own individual perspective of Fassi through photography, touching on creativity, sport, art and romanticism



## Fassi Crane ART

For the sixth edition of Fassi Crane Art, the choice for collaborator went to London South Bank University and its "South Bank Collective" photography course which brings together some of the best young photographers in the British capital

For the 2017 edition of its calendar, Fassi has decided to draw on British creativity. A creativity that has grown and matured within London South Bank University - LSBU, with one of the leading courses dedicated to the study of professional photography, with creative workshops where students propose their own projects for development. Among the activities of the 2016 "South Bank Collective" workshop, ten students were tasked with creating the perfect image to capture the Fassi universe. Each student was guided and informed by their own personal interests, passions

and creativity. The young students, guided by their tutor, a professional photographer, visited Fassi's plant in Albino to learn something about Fassi and experience first-hand the beauty, strength and uniqueness of the cranes so that they might find form for their ideas. And so these mechanical objects, with their famous aesthetic elegance and their great capacity for extension, have temporarily become real protagonists, even red carpet celebrities, for some of these photographers. Others have instead decided to bring Italy and London together through Fassi cranes;

some have chosen to highlight the beauty or complexity of the machines, and some have transformed them into abstract objects. Each student photographer has transferred into their work the emotions and sensations provoked by their experience of Fassi's aura.

The creation of this calendar forms part of the "Fassi Crane Art" project, which is now in its sixth edition, created with the idea of representing the aesthetic, functional and practical characteristics of the cranes in a creative and dynamic view of the product, a generally unusual interpretation for an object with such particular characteristics. Previous editions have seen the participation of students from the Istituto Italiano di Fotografia, Spanish students from the Jefe Estudios del Área de Fotografía and young students from the Market Photo Workshop of Johannesburg.

These projects represent an exciting opportunity for two worlds, business and academia, to come together and collaborate. These two worlds have managed to welcome and benefit from the stimuli offered by the artistic research of the young photographers, capable of capturing in images the revolution of the elements which, in a strange journey between imagination and emotion, produces a new language that becomes an image and offers us an unusual but ingeniously creative interpretation of the world of cranes, with the simple brilliance of a "click".



## How the students have interpreted the **WORLD OF FASSI**

**CHRISTOPHER ARRONDELLE**

**"FASSI HAS ARRIVED"**

Christopher has presented Fassi as a VIP, a crane which arrives on a red carpet and is welcomed like a celebrity met by the paparazzi.

**ARTURAS BONDARCIUKAS**

**"CRANES IN MOTION"**

Arturas has focused on the movement of Fassi cranes, to highlight the beauty and precision of these machines.

**TRIX CARVER**

**"FASSI REBORN"**

Trix has chosen to capture the complexity of Fassi crane design and the visual impact from an engineering perspective.

**TOM CHAPLIN**

**"FASSI IN LONDON"**

Tom has represented the world of Fassi creatively, as an abstract object, bringing the English scene to the Italian company.

**LISA DREW**

**"FASSI PROJECTIONS"**

In her art, Lisa explores culture and society, focusing on London. It is an approach that she has used in her image for the calendar.

**BILLY EDMONDS**

**"DRAWING LIKE PICASSO"**

Billy is an extreme sports photographer and makes extensive use of lighting. For his image for the calendar, he has created a dynamic and unique London skyline.

**ARONI LAMAR**

**"DANCING CRANES"**

Aroni loves travel photography. Her calendar photo has been created using everyday objects that nonetheless reveal the beauty of Fassi cranes.

**DANIEL ALEXANDER**

Daniel set up the "South Bank Collective" and is involved in the creative direction of the workshop.

# The F1100RA in the Caribbean with the Substation Curacao

Every day this Fassi crane lifts the Curasub submarine, which takes researchers thousands of feet underwater, and places it in the sea

## **SUBSTATION** Curacao

The Curasub submarine is used to explore the coral reef near to Curacao and study the impact of climate change





Fassi went on board Substation Curacao, located in the beautiful waters of the Caribbean Sea. This took place via its F1100RA crane, capable of lifting up to 110 tm, and what it lifts off the shores of Curacao is truly unique. It is the Curasub mini submarine which takes researchers down as far as 320 metres (1,000 feet) on the edge of the coral reef four times a day, every day.

Curasub is used to help researchers and marine biologists to study the impact of climatic change on the coral reef.

The Fassi crane has been installed on the rear bridge of Substation Curacao, so that it can hook onto the submarine, place it in the water and then recover it. The crane can also hook and lift the floating dry dock, which, once in the water with the submarine, allows passengers to board.

This F1100RA was designed and configured specifically for the marine application. It is fitted with a special base plate for ease of installation onto any type of sea vessel, with centralised commands and all components



Substation Curacao in the Caribbean Sea



Fassi crane while lifting the submarine Curasub

Curasub is used to help **RESEARCHERS** and **MARINE BIOLOGISTS** to study the impact of climate change on the **CORAL REEF**



## Fassi Dealers

The F1100 XP was sold by Fassi's Dutch dealer, De Jong IJmuiden, which has been importing cranes since 1983. The company is based in Velsen-Noord, in North Holland.



specially treated to protect against the effects of saltwater corrosion.

The team's last expedition ended in April and thanks to the use of the American NOAA (National Oceanic & Atmospheric Administration) vessel RV Chapman, it was possible to study new species at a depth of between 200 and 1,000 feet, document the conditions of the ocean fauna, identify future sites for deep-water studies and also recover archaeological finds.



Substation Curacao ship off the island of Curacao



The submarine Curasub while hooks the dry dock

## CURACAO

**Curacao is the main island in the archipelago of the Dutch Antilles and is one of the most attractive destinations in the Caribbean. Together with Aruba and Bonaire, it forms part of the so-called ABC islands, all characterised by crystal-clear waters, a beautiful reef and breath-taking beaches. It is the largest and most populated of the group. Its capital, Willemstad, founded around the mid 1600s, is a designated UNESCO World Heritage Site.**



# WITHOUT COMPROMISE

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• Presenting Jekko • Caribbean case study • The 2017 Fassi calendar