WITHOUT compromise

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Fassi Gru international magazine with information and updates

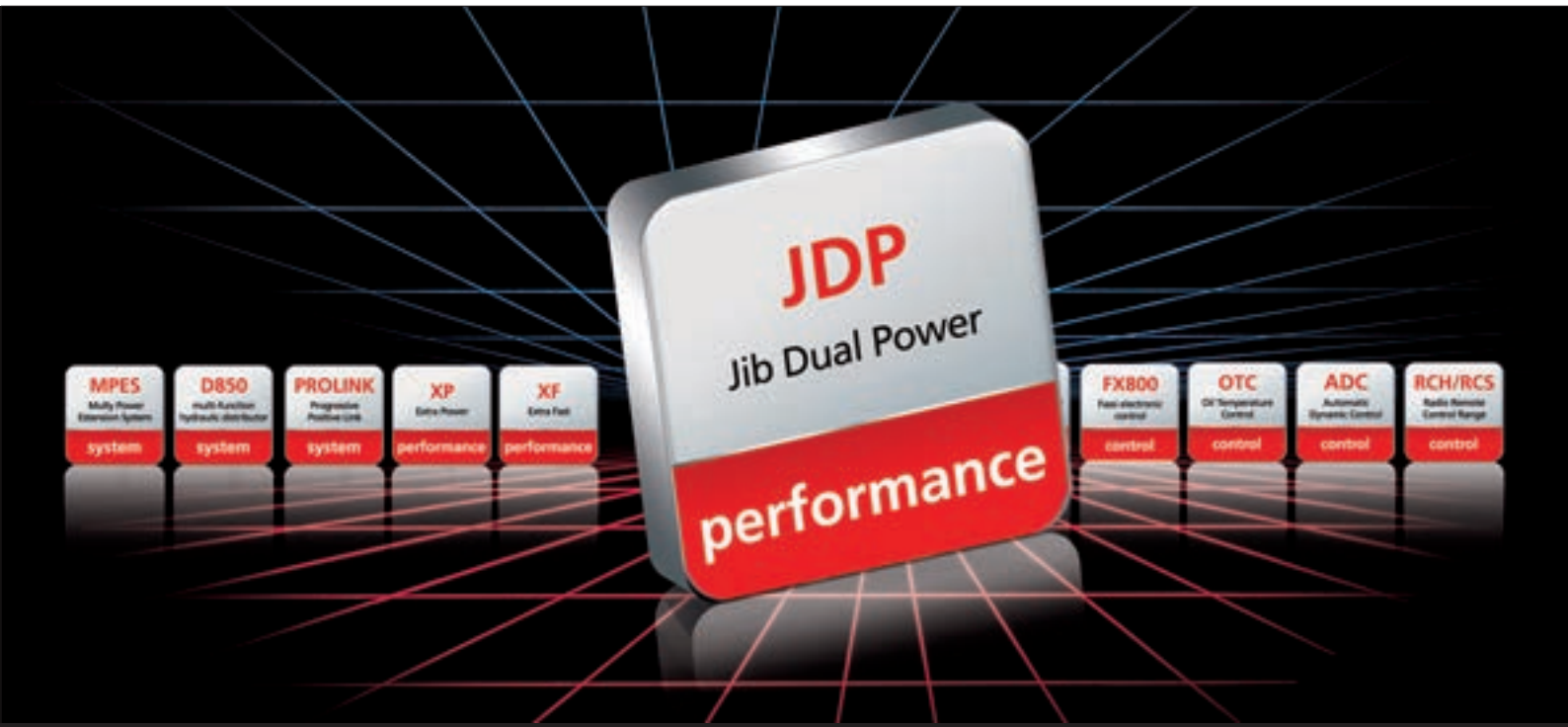
FASSI TECHNOLOGY BECOMES EVIDENT

INTERNATIONAL MEETING IN BALTIMORE

CRANES AT WORK IN ANTARCTICA

FASSI
CRANES WITHOUT COMPROMISE

Evident technologies, conscious choices



Fassi introduces “Techno Chips” for conscious investments

Fassi fits its cranes with an innovative technology series from the mechanical, hydraulic and electronic fields. To clearly communicate this great legacy, Fassi decided to combine the distinctive features of its systems in “Techno Chips.” Each chip corresponds to an icon that identifies the technological plus features that are linked to it. The icons are used in all the Fassi documents and are also placed to the body of the cranes: a consistent choice with the history of Fassi reliability and transparency, serving those who purchase and use Fassi cranes.

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In this edition

Transforming difficulties into opportunities. Anticipating the recovery using the Fassi potential on the global market: these are the opening themes the number 11 of our magazine proposes. Fassi sought to organize an **international meeting in Baltimore** *on the theme of growth in line with the quality of the product, an essential condition to face the world market of today.*

In times when buying a work machine has increasingly become a conscious investment choice, it is important for the technical Fassi knowledge to be very clear and precise to the crane users. Therefore, we dedicate full attention to the distribution of the technical contents that make the difference in our cranes quality, being now **organized in Techno Chips** *based on new parameters according to the facilities of each crane model.*

The crane offer, designed to fit specific needs, is also a topic we are dealing with in the articles about the **XS and SE ranges**, *where the Fassi flexibility and experience shape the cranes needed in certain geographical areas, sectors or special applications in every corner of the world. Finally, the interesting case studies presented here observing the Fassi cranes at work in contexts varying in significance: the site for the reconstruction of Ground Zero in New York and special work situations in the extreme cold of Antarctica.*

FASSI BALTIMORE MEETING

pag. 04-05
Fassi international meeting in Baltimore

pag. 06-07
Initiate new challenges

pag. 08-09
Fassi trade Worldwide

pag. 10-11
Worldwide dealers in Baltimore Fassi's meeting

SPECIAL TECHNOLOGY

pag. 12-13
Fassi technology becomes evident
Performance, Control and Safety, are the new "Techno Chips" revealed by Fassi R&D and marketing team. The purpose is to wisely introduce to the cranes market transparent information for conscious investments.

pag. 14-21
Control Chips
Performance Chips
Stength Chips

IN DETAIL

pag. 22-23
SE range

pag. 24-27
SE range for USA building and construction industry applications
Following a typical day at work with the SE Fassi cranes, there is immediately revealed their capacity to lift and position the prefabricated materials at high altitude with great precision and in complete safety.

pag. 28-29
XS range for publics work
These cranes are provided with an"EXTRA SPEED" feature set-up.

CRANES AT WORK

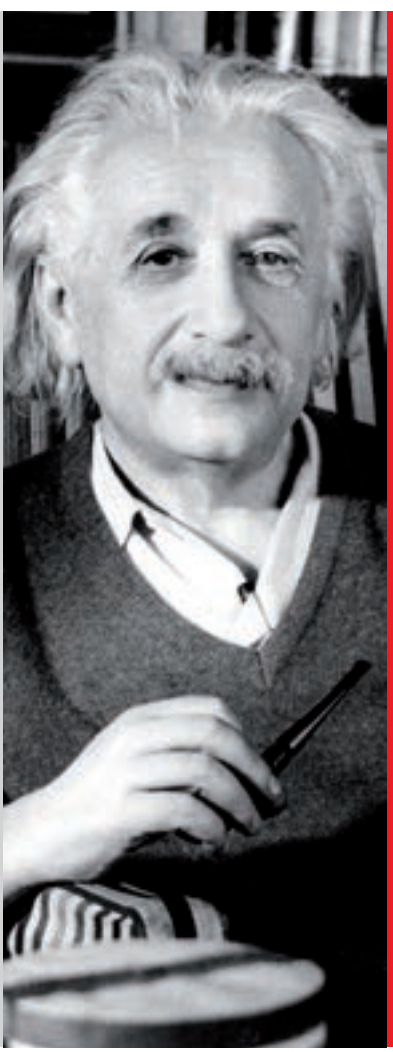
pag. 30-35
Fassi cranes, to build 24/7 the Freedom Tower
The Fassi engineering system has developed a concept never before experienced in order to optimize time and cost of works on site.

pag. 36-39
-40°C. Fassi cranes work in extreme conditions
The Fassi cranes work smoothly even in extreme cold conditions, as evidenced by these pictures taken during the construction of the Chinese scientific research station "Kunlun Station" in Antarctica.

pag. 40-43
Special cranes for railways
Due to their technical and performance quality, the Fassi cranes are also preferred for the rail applications as well: motorbogies, rail wagons and road-rail vehicles (truck with dual running system for both road and rail use). It is a significant witness the activity of company SVI S.p.A. specialized in the design, construction, marketing and servicing of vehicles and equipment dedicated to works on railway lines.

FASSI INTERNATIONAL MEETING IN BALTIMORE

We want to open this edition of "Whithout Compromise" quoting Albert Einstein: "Let's not pretend that things will change, if we keep doing the same things".



Let's not pretend that things will change if we keep doing the same things.

Albert Einstein

This western economic crisis should not represent an obstacle for the conscious growth, but be an opportunity to take new paths.

The current difficulties call for a reflection on industrial, marketing and commercial strategies of enterprises engaged in global markets.

The recession of the western economy and the dimensions of the problem are an opportunity to be creative in re-establishing our business, product and market concepts. With this revolution we can now implement innovative choices towards the goal of conscious consumption that is key to sustainable growth. In this respect Fassi has already planned the prospects for recovery and brought together its global team in Baltimore.

One of the first challenges that we have accepted was to optimize the technological equipment of our cranes.

Simplicity, effectiveness of every choice, rationality of the processes and the range of offer: these are the guidelines upon which to build and look to the future with confidence. One of the first Fassi responses to the new market conditions was to give a perfect technological equipment to each crane, offering users optimally performing machines with outstanding value for money.

Fassi has always been a solid company that has built its growth in line with product quality and today this solidity finds us ready to face the recovery.

Fassi, always consistent with the principle of the centrality of the crane product strategies of its business, has built its growth on quality.

A legacy of experience in the crane construction field that associates a continuous investment in innovation and research of the production processes: an experience that today helps us advantageously face the recovery. The capital strength, process technologies and innovative product are our weapons to tackle the after crisis. Three aspects which are equally competitive factors of the Fassi company and the Fassi cranes.

The innovation Fassi brings in 2011 is the proposal for an even more competitive and configured range for various types of use.

We are reorganising the Fassi range for the after-crisis period. The Fassi cranes are now grouped into only five category names identifying macro configurating characteristics. The rebranding of the models, based on the parameters and technology in use, has been elaborated with the intention of making the Fassi range more competitive and more able to meet the various types of use. A choice respecting the Fassi history and, at the same time, innovative.

Giovanni Fassi

INITIATE NEW CHALLENGES

A renewed relationship with the needs of the crane users, sees Fassi engaged along three synergistic fronts: the consolidation of innovative choices, accurate update on its distinctive technology and range renewal.

Fassi first believed that only the integrated electronic crane system could meet the future requirements of performance and safety of hydraulic crane users. This path of innovation and consistency rewarded us often taking us a step ahead of our main competitors. The confirmation of this choice is being consolidated with the adoption of digital technology on most of Fassi cranes. Not in all cases, as, due to a market survey, some of our models are used in contexts where the electronics would be unnecessary, and for these cranes is then proposed a simplified configuration adapted to the niche market.

But today, in times when the investment is increasingly sensitive, it is important that our technical knowledge is made transparent to everyone, especially to those who decide to choose our cranes. This issue of our magazine illustrates the technological sets presented at the international meeting in Baltimore.

A made-in Fassi corageous choice, covering new ways to clearly and transparently define the cranes innovative contents.

This will allow us to completely redefine the range with new parameters based on the technological equipment. In this way, each crane will have a "speaking name" and shall feature the applied "Techno Chips" standard and its capacity characteristics. All of this to make the market perceive the added value each Fassi crane is made of.

Luigi Porta
Export Manager

Change Opportunity Ideas
Baltimore 2nd september 2010

WELCOME TO BALTIMORE









FASSI TRADE WORLDWIDE

The world market is differentiated between macro areas with emerging business trends and operational specifications of the crane product. For this, Fassi has promoted the establishment of working groups, coordinated by six speakers, to better realize the concept "think globally and act locally."

Think globally and act locally: this principle of the Fassi philosophy is primarily applied in understanding the needs and expectations of the market and users. Requests that, as the experience proves it, are organized by market "trends" and homogeneous areas, not necessarily territorial, in relation to the perception of the crane product and business conduct with the lifting machineries. All this means for Fassi to be able to listen, starting of course from its dealers. They are in fact those to have "the pulse" of these scenarios, by keeping them monitored and being both interpreters and vigilant observers.

To make this strategic and tactical dialogue more effective, Fassi formed, together with the dealers, working groups entrusting them with choosing expectations and translate them into concrete proposals, in projects, to be put in relation to the activity the Fassi international marketing system plans at its company level. These real market "laboratories", constantly active, are responsible, through six speakers, to relate with the company and develop synergies based on their indications coming from the "trend areas". Thus, it develops the concept of thinking globally and acting locally. Due to the work of the groups and its spokesmen, Fassi obtains an overview of the cranes global market and simultaneously gains access to analytical information, necessary to offer more targeted solutions to the specific user requests.

Change Opportunity Ideas

Baltimore 2nd september 2010

Mr. Leigh Carter of Fassi (U.K.) Ltd. - United Kingdom

Speaker of: U.K., Spain, France, Portugal, Holland, Greece, Belgium, Israel, Turkey.

Mr. Wolfgang Feldmann of Fassi Ladekrane GmbH – Germany

Speaker of: Germany, Austria, Switzerland.

Mr. Wieslaw Szoplik of Hewea Centrum Techniki Cargo SP.ZOO - Poland

Speaker of: Poland, Slovenia, Czech Republic, Slovakia, Hungary, Romania, Russia, Belarus.

Mr. Gert Rasmussen of Fassi Kraner APS – Denmark

Speaker of: Denmark, Sweden, Norway, Finland, Iceland, Esthonia, Latvia.

Mr. Thomas Notter of Eurogru S.A. DE C.V. – Mexico

Speaker of: Mexico, U.S.A., Canada, Venezuela, Chile, Peru, Argentine, Uruguay, Colombia.

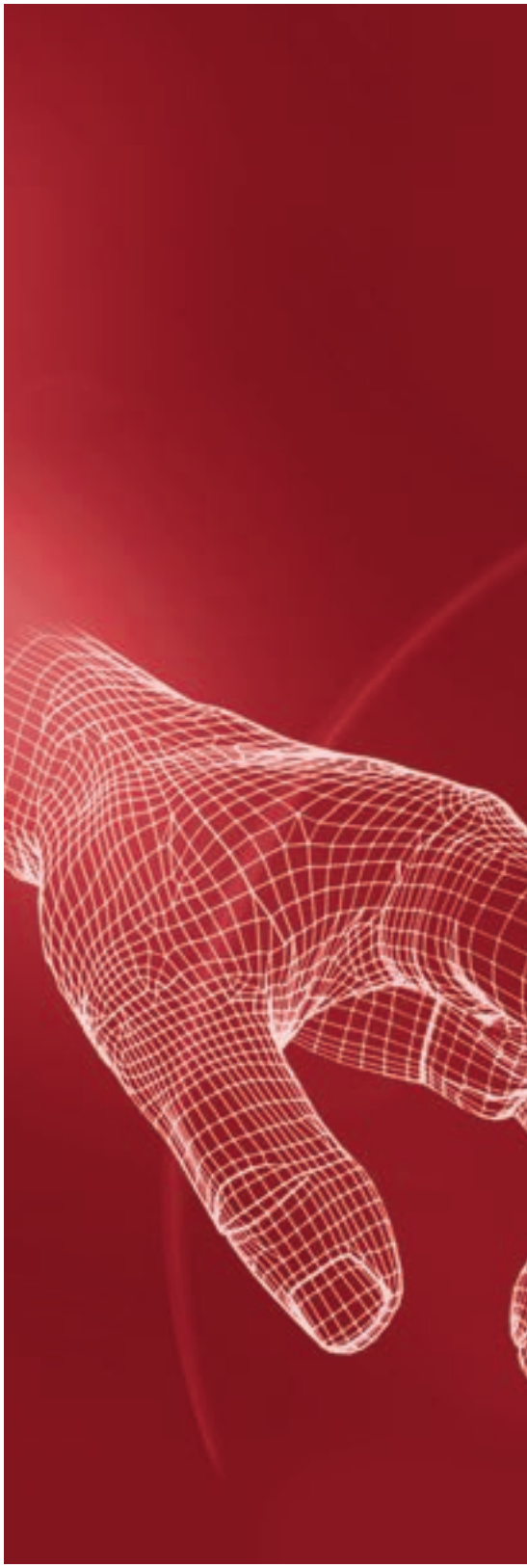
Mr. Tony Henson of 600 Cranes Australasia Pty Limited – Australia

Speaker of: Australia, South Africa, Singapore, U.A.E., Saudi Arabia, India, Egypt, Oman, Hong Kong, Bahrain.

WORLDWIDE DEALERS IN BALTIMORE FASSI'S MEETING

Fassi technology becomes evident

Performance, Control and Strength, are the new "Techno Chips" revealed by Fassi R&D and the marketing team. The purpose is to wisely introduce to the cranes market transparent information for conscious investments.

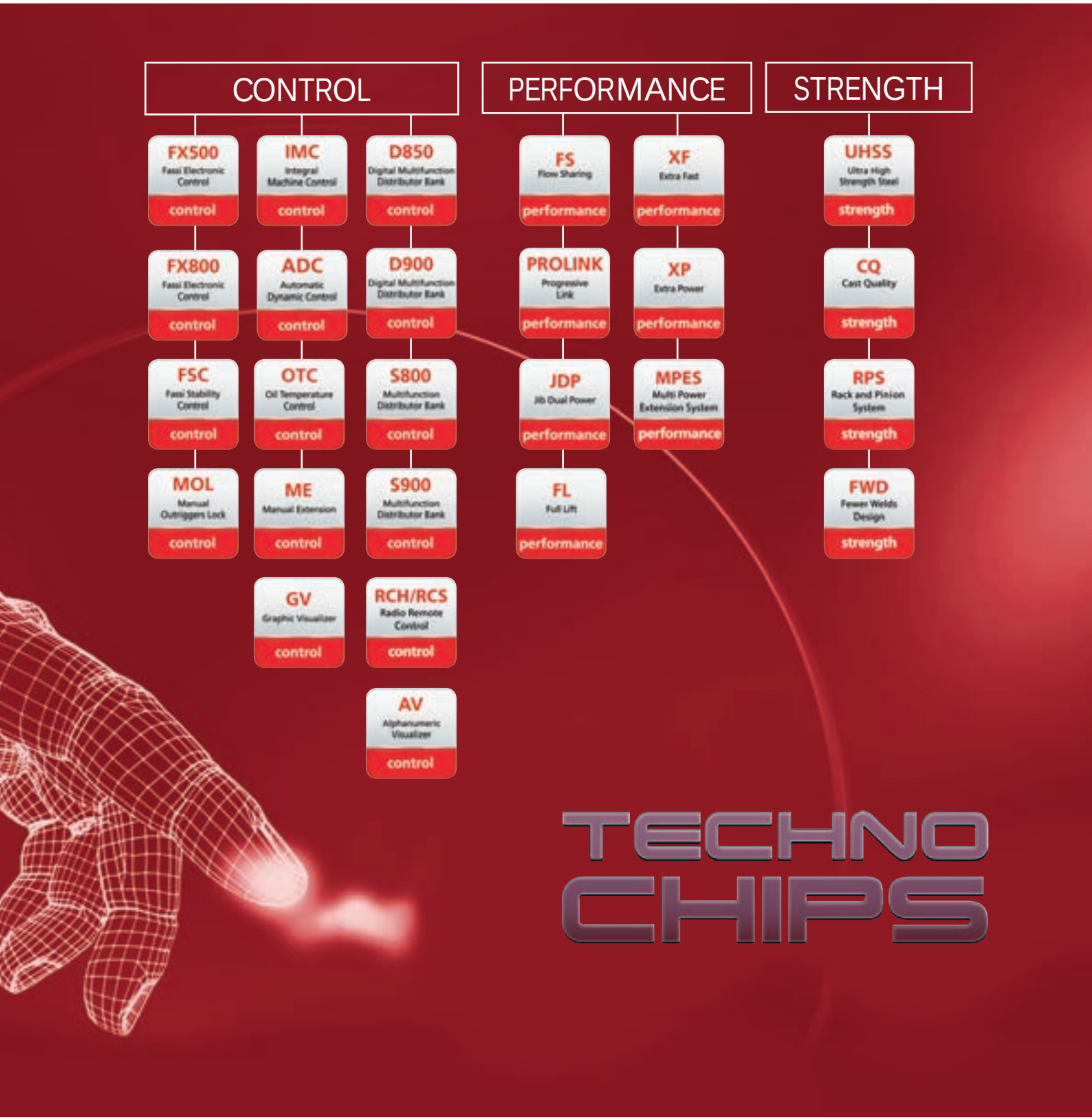


In 45 years of experience and innovation Fassi has developed and tested a number of technologies applied to the crane system in the mechanical, hydraulic and electronic fields. A value which represents the very identity of the crane.

To ensure the specific technological assets of each of the numerous crane models is immediately and easily recognizable, Fassi decided to gather the technical specifications by "Techno Chips", representing the practical applications of each technology in crane operation.

Each chip corresponds to an icon, a graphich image that immediately identifies the concept of technological plus characteristics linked to it. These icons are used in all technical and commercial Fassi documents, so that customers and users can immediately recognize the performance and operation of the crane in use. A choice identifying with the Fassi history of reliability and transparency that Fassi wants to address more and more to everybody, even outside the research laboratories, making it possible for those who use our cranes to be increasingly aware of the Fassi quality.

Rossano Ceresoli
R&D Manager


CONTROL
PERFORMANCE
STRENGTH
FX500
Fassi Electronic Control
control
IMC
Integral Machine Control
control
D850
Digital Multifunction Distributor Bank
control
FS
Flow Sharing
performance
XF
Extra Fast
performance
UHSS
Ultra High Strength Steel
strength
FX800
Fassi Electronic Control
control
ADC
Automatic Dynamic Control
control
D900
Digital Multifunction Distributor Bank
control
PROLINK
Progressive Link
performance
XP
Extra Power
performance
CQ
Cast Quality
strength
FSC
Fassi Stability Control
control
OTC
Oil Temperature Control
control
S800
Multifunction Distributor Bank
control
JDP
Jib Dual Power
performance
MPES
Multi Power Extension System
performance
RPS
Rack and Pinion System
strength
MOL
Manual Outriggers Lock
control
ME
Manual Extension
control
S900
Multifunction Distributor Bank
control
FL
Full Lift
performance
FWD
Fewer Welds Design
strength
GV
Graphic Visualizer
control
RCH/RCS
Radio Remote Control
control
AV
Alphanumeric Visualizer
control
TECHNO
CHIPS

“Techno Chips” for cranes control

FX500 - Fassi Electronic Control

A system that electronically controls the load conditions of the crane, of the hydraulic and manual extensions and of the winch, manages the lifting moment with the possibility to activate different work sectors, in relation to the stability condition of the vehicle/crane unit. In addition, it transmits and records the working data.

FX800 - Fassi Electronic Control

A system that electronically controls the load conditions of the crane, of the hydraulic and manual extensions and of the winch, with technical and functional characteristics suited to specific crane models, especially those designed to provide high or very high operational performance, even in the most difficult and stressful working conditions. Moreover it manages the lifting moment with the possibility to activate different work sectors, in relation to the stability condition of the vehicle/crane unit.

MOL
Manual Outriggers Lock
control

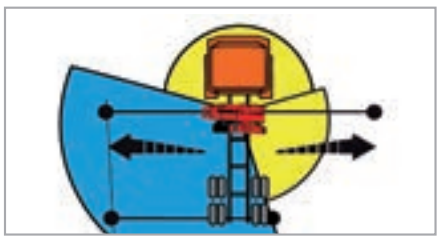
MOL - Manual Outriggers Lock

A security system that detects the engagement of the safety latch of the primarily locking pin of side manually extendable outrigger supports. Easy to be linked to the height check system of the crane, at rest in the transport position, it can be completed with a visualizer to be installed on the dashboard of the vehicle cab.

FSC
Fassi Stability Control
control

FSC - Fassi Stability Control

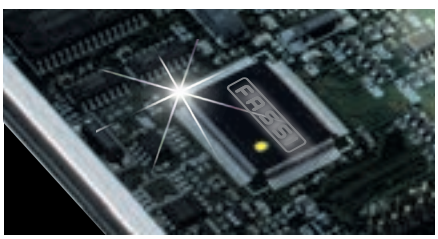
A Fassi system that continuously monitor and ensure the ideal crane working conditions versus the vehicle/crane stability, with automatic activation of the detecting devices in case of tilting risk based on the position of the lateral extension supports of the outriggers. The system is available in 3 versions: L (Low), M (Medium) and S (Super) characterized by different design and functionality to suite all possible configuration of all the different crane models.



IMC
Integral Machine Control
control

IMC - Integral Machine Control

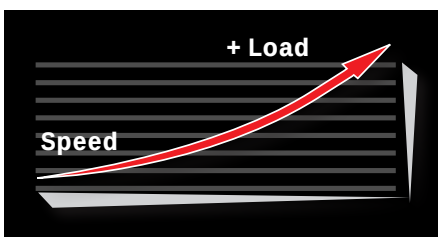
It is the digital brain of the Fassi cranes which, through sophisticated electronics, in addition to the crane control systems, manages the best operating conditions to ensure the optimal machine performance and control applicable to all the work conditions. It uses a Can bus communication system between the peripheral sensors.



ADC
Automatic Dynamic Control
control

ADC - Automatic Dynamic Control

A control system developed by Fassi automatically controlling the dynamics of all the crane functions maximizing the speed of movement depending on the handled load, allowing only controlled movements and minimizing the structural stress on both the crane and the frame/sub frame of the vehicle.



OTC
Oil Temperature Control
control

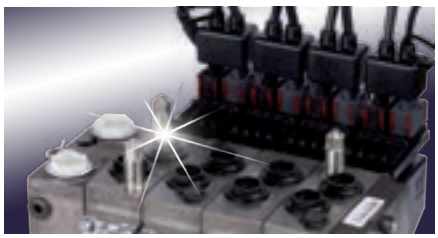
OTC - Oil Temperature Control

Temperature control device electronically controlled, thanks to the analogic temperature sensor fitted inside the oil cooler, is capable of maintaining an optimal temperature of the hydraulic system even in the most stressful condition of use. The temperature value is shown on the user control panel and radio control handle display.

“Techno Chips” for cranes control

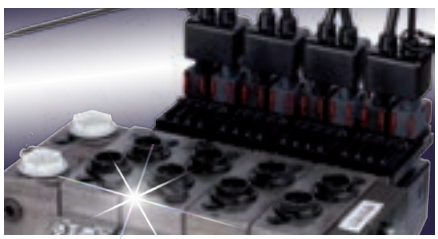
D850
Digital Multifunction Distributor Bank
control

D850 - Digital Multifunction Distributor Bank
Multifunction hydraulic distributor bank with digital anti-saturation system that manages the oil delivered by the pump proportionally among all the functions that require it, thereby ensuring a perfect multi-function and proportional operation.



D900
Digital Multifunction Distributor Bank
control

D900 - Digital Multifunction Distributor Bank
High performances multifunction compensated hydraulic distributor bank with digital anti-saturation system thereby ensuring a superlative multifunction and proportional operation. Coupled with the Fassi XF (Extra Fast) system, it guarantees an extraordinary fluidity and speed of action.



RCH/RCS
Radio Remote Control
control

RCH/RCS - Radio Remote Control
The new-generation digital radio remote control, exclusively compatible with the Fassi product, with wide graphic display to remotely control the functions of the crane, the vehicle and, optionally, the outriggers. It automatically researches the available frequency and allows for continuous interaction between operator and crane.

S800
Multifunction Distributor Bank
control

S800 - Multifunction Distributor Bank

Multifunction distributor bank ideal for the application on small-medium range cranes, with specific spools set up in relation with the characteristics of the crane functions.

S900
Multifunction Distributor Bank
control

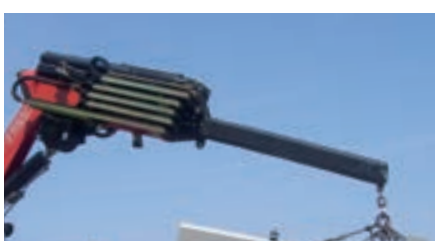
S900 - Multifunction Distributor Bank

High performances multifunction compensated distributor bank with very high “load-sensing” proportional multifunction ability; all crane functions are perfectly controlled, proportional and smooth. Ideal for the application on heavy range cranes.

ME
Manual Extension
control

ME - Manual Extension

Fassi designed, developed and patented system which, combined with the electronic systems FX500 and FX800, uses a dedicated software to decide whether the load applied to the manual extension can be lifted or not, with reference to the foreseen loads. The system also provides the evaluation of the applied load.



GV
Graphic Visualizer
control

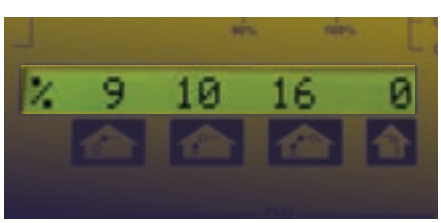
GV - Graphic Visualizer

It is an innovative user panel that conveys all information concerning the crane operational status in clear way to the graphic display. This is a perfect interface between the operator and the crane to monitor the components in operation and for selection and activation of the on-board system functions by means of intuitive icons selectable via a rotary switch.

AV
Alphanumeric Visualizer
control

AV - Alphanumeric Visualizer

It is an user panel that conveys all information concerning the crane operational status in clear and simple way to the operator. This is an ideal interface between the operator and the crane as its alphanumeric screen displays all the basic information necessary to monitor the functions of the crane.



“Techno Chips” for cranes performance

FS Flow Sharing performance

FS - Flow Sharing

A system that proportionally distributes the oil from the pump to all manoeuvres simultaneously. It allows the operation of more functions at the same time by distributing the available oil flow proportionally to the desired functions and at the desired speed guaranteeing the perfect multifunction ability of the hydraulic distributor.

JDP Jib Dual Power performance

JDP - Jib Dual Power

A Fassi system that provides a double level of lift capacity for the hydraulic jib, depending from the hydraulic reach of the crane in vertical condition, controlled by outer boom extensions, ensuring inimitable performances of the hydraulic jib.

FL Full Lift performance

FL - Full Lift

A system that allows you to select, based on operational needs, “FAST” (recycling valve activated) or “POWER” (recycling valve deactivated) while telescoping the booms. Selection is both via radio control thanks to the icon on the display or on the push button of the main control panel.

XF Extra Fast performance

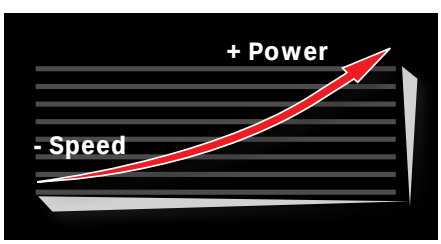
XF - Extra Fast

A Fassi system that, through dedicated pilot operated check valves in conjunction with the multifunction distributor, allows smoothly, precisely and sensitively movements with less oil heating and higher speeds of operation.

XP Extra Power performance

XP - Extra Power

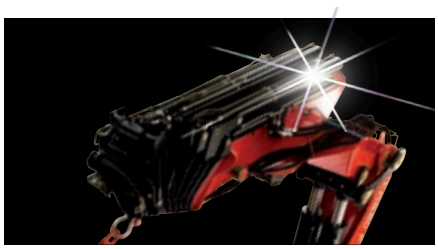
A Fassi system that activates an excess of power in the most difficult situations, precisely when it’s necessary, proportionally reducing the speed of the crane movements but, at the same time, increasing the lifting capacity.



MPES
Multi Power Extension System
performance

MPES - Multi Power Extension System

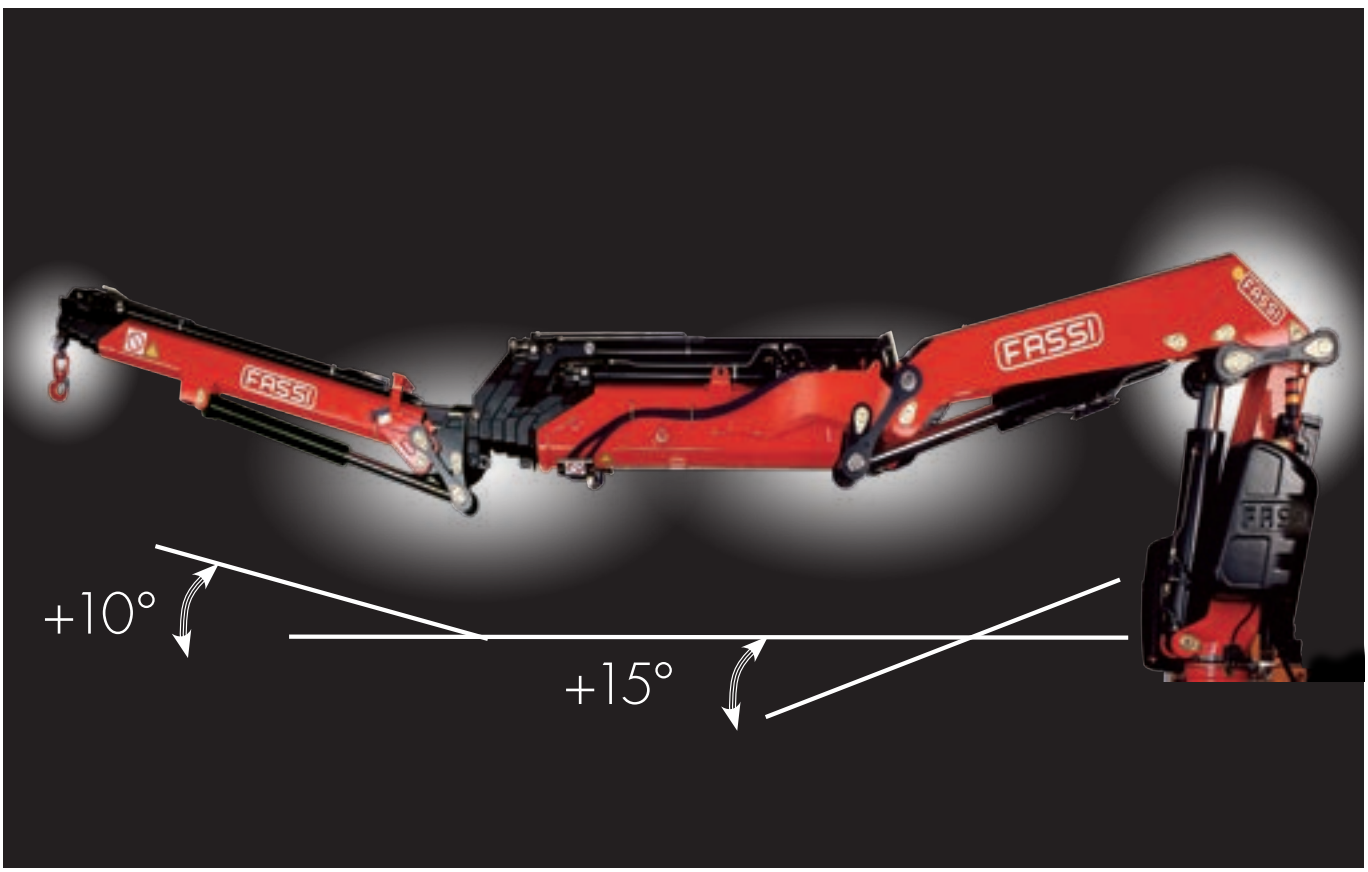
A Fassi system that guarantees an exceptional extension/retraction speed of the telescopic booms, built up by a set of equally powerful independent rams, linked in series connection and activated by a single control. Special independent fixing system of the extension rams to guarantee high vertical lifting performances.



PROLINK
Progressive Link
performance

PROLINK - Progressive Link

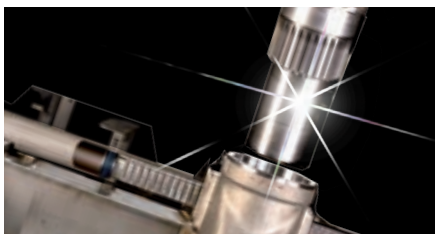
Exclusive Fassi system, built up by a longer outer lifting ram in conjunction with the linkage system, allowing to increase the working angle of the crane above the horizontal line from 10° to 15° according to the model, still maintaining in this configuration the nominal lifting performances. Prolink find application as well on the articulation ram of the jibs, with an increase of the working angle of the jib above the horizontal line from 10° to 20°.



“Techno Chips” for cranes strength

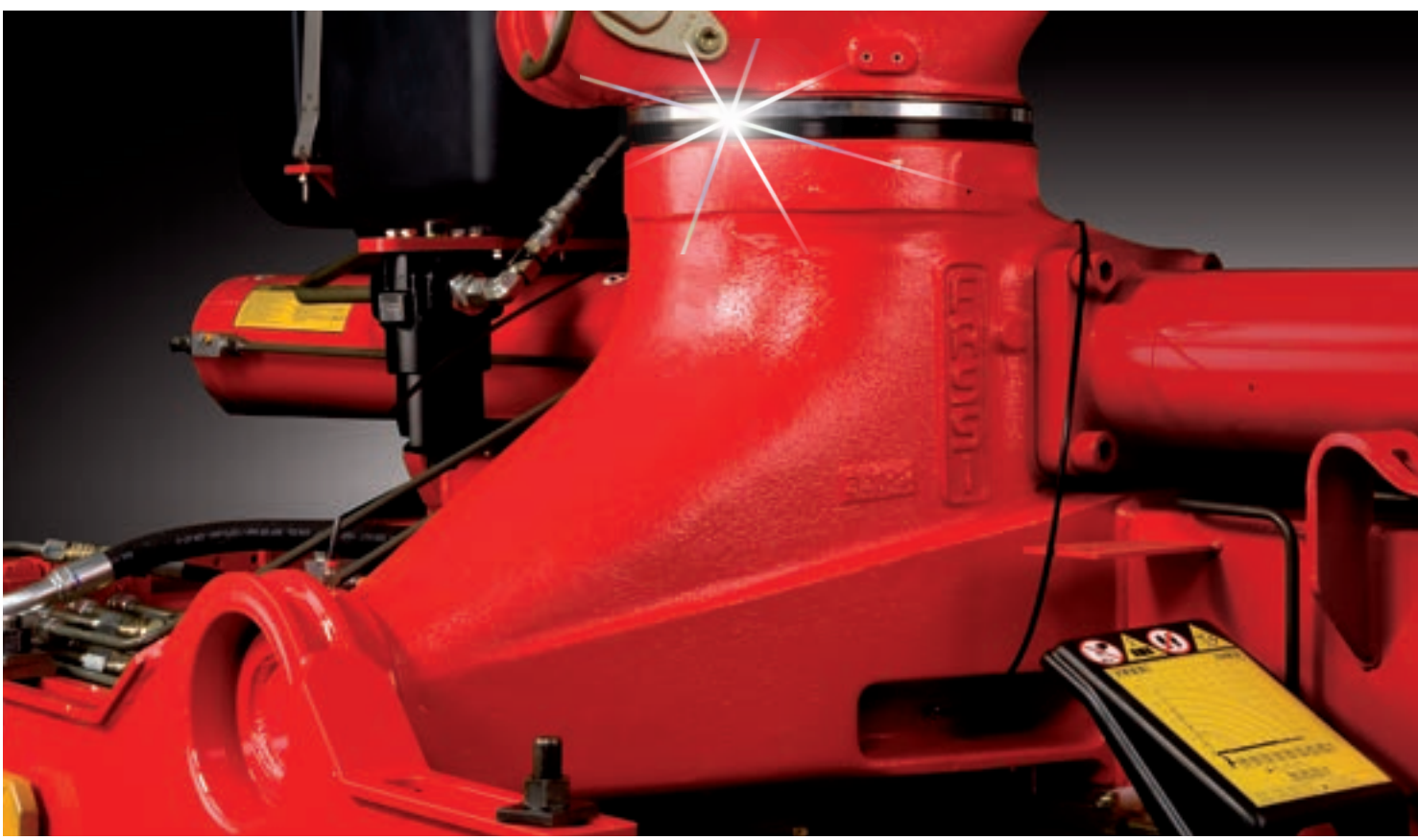
RPS
Rack and Pinion System
strength

RPS - Rack and Pinion System
Exclusive Fassi rack and pinion rotation system with gravity self centering rack guide shoe; no need of external adjustment. Low friction anti-seizure techno-polymer rotation top bush for an extra strong rotation power.



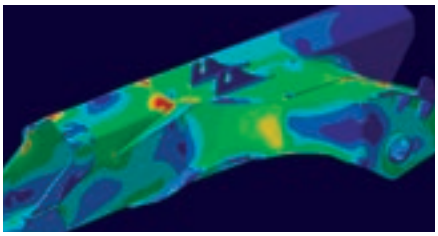
UHSS
Ultra High Strength Steel
strength

UHSS - Ultra High Strength Steel
Ultra high strength steel used for the construction of the Fassi structural components, with a high elastic limit, increases structural strength and resistance of the components and at the same time reduces the weight of the crane, to the benefit of the loading capacity of the vehicle which increases.



FWD - Fewer Welds Design

Fewer welded joints, the stronger the structure will be. Structural components made out of bended steel with a welded in lieu of four corners welded structures or monolithic structure likes those for the outer boom and sliding sections with one single welded side: balanced elasticity under load and ideal resistance to fatigue.



CQ - Cast Quality

Fassi use for more then 25 years cast components with high mechanical characteristics for various important structural components, such as the bottom section (pinion) and the head of the column, the column support, the heads of the ram rods and the cylinder bottoms, the connecting rods and other minor components.

Casting achievements:

- 90% reduction of wed joints when comparing the component to an equivalent welded structure.
- Optimization of the material use with ideal stress distribution within the same structure.
- Gain in terms of weight.
- Increased resistance to fatigue cycles.
- Attractive design.


FASSI
F390SE
FASSI

SE range

This range of Fassi cranes came to meet the need to place specific loads, such as gypsum drywall, quickly and as high as possible. The strengths of these Fassi cranes are those to be very strong at long reach and have an operating experience over 30 years.

Characteristics

- A main characteristic of these machines set-up is not to be foldable at rest. They are often used with a large fork and specifically set up for american trucks.
- The crane is equipped with a top seat, with a broad platform to allow the access.
- These machines are built with double circuit and twin hydraulic pump to speed the intensity of use. They have been designed specifically to perform the same heavy loads to carry high as possible.

For the maximum weight of the range, the F390SE

HYDRAULIC EQUIPMENT:
Hydraulic load limiter control unit
Danfoss PGV32 multifunction distributor bank
top seat control station

CHARACTERISTICS:
Double linkage system
rotation 430° with rack and pinion

For the cranes from F360SE to F250SE

HYDRAULIC EQUIPMENT:
Load limiter hydraulic control unit
Walvoil SD8 double segmented distributor bank top seat control station

CHARACTERISTICS:
rotation 420° with rack and pinion
not foldable behind cab

Other data

F390SE
LIFTING CAPACITY: up to 270868 lbs ft
MAX OUTREACH: up to 78’ 11”

F360SE
LIFTING CAPACITY: up to 215768 lbs ft
MAX OUTREACH: up to 59’ 2”

F330SE
LIFTING CAPACITY: up to 168485 lbs ft
MAX OUTREACH: up to 58’ 9”

F280SE
LIFTING CAPACITY: up to 186732 lbs ft
MAX OUTREACH: up to 50’ 3”

F250SE
LIFTING CAPACITY: up to 168485 lbs ft
MAX OUTREACH: up to 42’ 6”


FASSI
F390SE
PRO3uild
USDOT 1193526

SE range for USA building and construction industry applications

Following a typical day at work with the SE Fassi cranes reveals immediately their capacity to lift and position the gypsum drywall packs at high altitude with great precision and in complete safety.

Mounted on the unmistakable North American trucks, the SE Fassi cranes stand out immediately as the "hyperactive" part of the work, ready to spring into action. An impression of strength, to which certainly contributes their being equipped with longer arms and see them spread throughout the truck. When they start working, it is easy to understand the reasons for specific technological choices: their main task is indeed to take in the height and place there various types of homogeneous loads, first of all gypsum drywall packages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and other materials, however, with predefined dimensions and shapes. The images on these pages clearly show how the SE Fassi cranes can precisely locate these loads even inside the buildings. The comfort at work is enhanced by the use of seat with control panel and large platform for easy access to the station. The dual hydraulic circuit and variable pump can maintain a very intense pace of work, especially in case of repeated lifting of homogeneous loads reaching very high operating efficiencies. For this the SE range of Fassi cranes are, in North America, an essential technology component of many transport companies and of the construction industry.

The use of special forks facilitates and accelerates further the work of panels and pallets lifting, enabling to reach windows and openings in the building, placing with precision the materials where it would be almost impossible for other technologies

Fascan

Fascan International's roots go back to 1982 when Mr. Bernie J. Faloney Sr. (CEO of Contractors Machinery and Equipment, Ontario, Canada) took on a product line of articulated hydraulic cranes, manufactured by Fassi. Contractor's success with the Fassi articulated crane product line across Canada led to Fassi offering Mr. Faloney Sr. the opportunity to expand his operations to the United States. With the acceptance of the offer, Fascan International, Inc. was incorporated on May 15, 1992 in the State of Maryland. Fascan was initially headquartered in a 10,000 square foot distribution facility in Baltimore, Maryland. Fascan's success with the Fassi line has resulted in several moves for increased capacity within the greater Baltimore area. It is currently operating from a 55,000 square foot facility in Baltimore. Since 1992, Fascan has put over 4,500 Fassi cranes into service within the USA.


FASSI
F110XS

XS range for public works

These cranes are provided with an"EXTRA SPEED" feature set-up

Characteristics

- Extra Speed special set-up
- The machines are of the lifting medium range and always used with hydraulic accessories such as bucket and rotator, high pump flow and large distributor. The controls are used from a ground level as well as from a third stand up control station
- Weight particularly restrained
- Control unit FX500
- Hydrocontrol HC/D4 segmented distributor bank
- Rotation 390° with rack and pinion

Other characteristics

F150AXS
LIFTING CAPACITY: up to 11,7 tm
MAX OUTREACH: up to 8,30 m with jib

F130AXS
LIFTING CAPACITY: up to 10,5 tm
MAX OUTREACH: up to 8,30 m

F110AXS
LIFTING CAPACITY: up to 9,1 tm
MAX OUTREACH: up to 8,10 m with jib

F95AXS
LIFTING CAPACITY: up to 7,20 tm
MAX OUTREACH: up to 8,10 m

A special series called BTP is used primarily by French companies dealing with public works.
The work with the BTP Fassi cranes facilitates and speeds up the lifting activities, typical of companies dealing with public works, especially in the road repair field. The versatility, the low weight, the possibility of using buckets and other accessories, allow to reduce the response times and always operate safely. Equally interesting is the use in the environmental and waste disposal fields, in particular for the removal of recyclable materials from bells, rubbish bins and mini containers within ecological pitches or along the city streets.

Fassi cranes, to build 24/7, the Freedom Tower

The Fassi engineering system has developed a concept never experienced before in order to optimize time and cost of works on site.

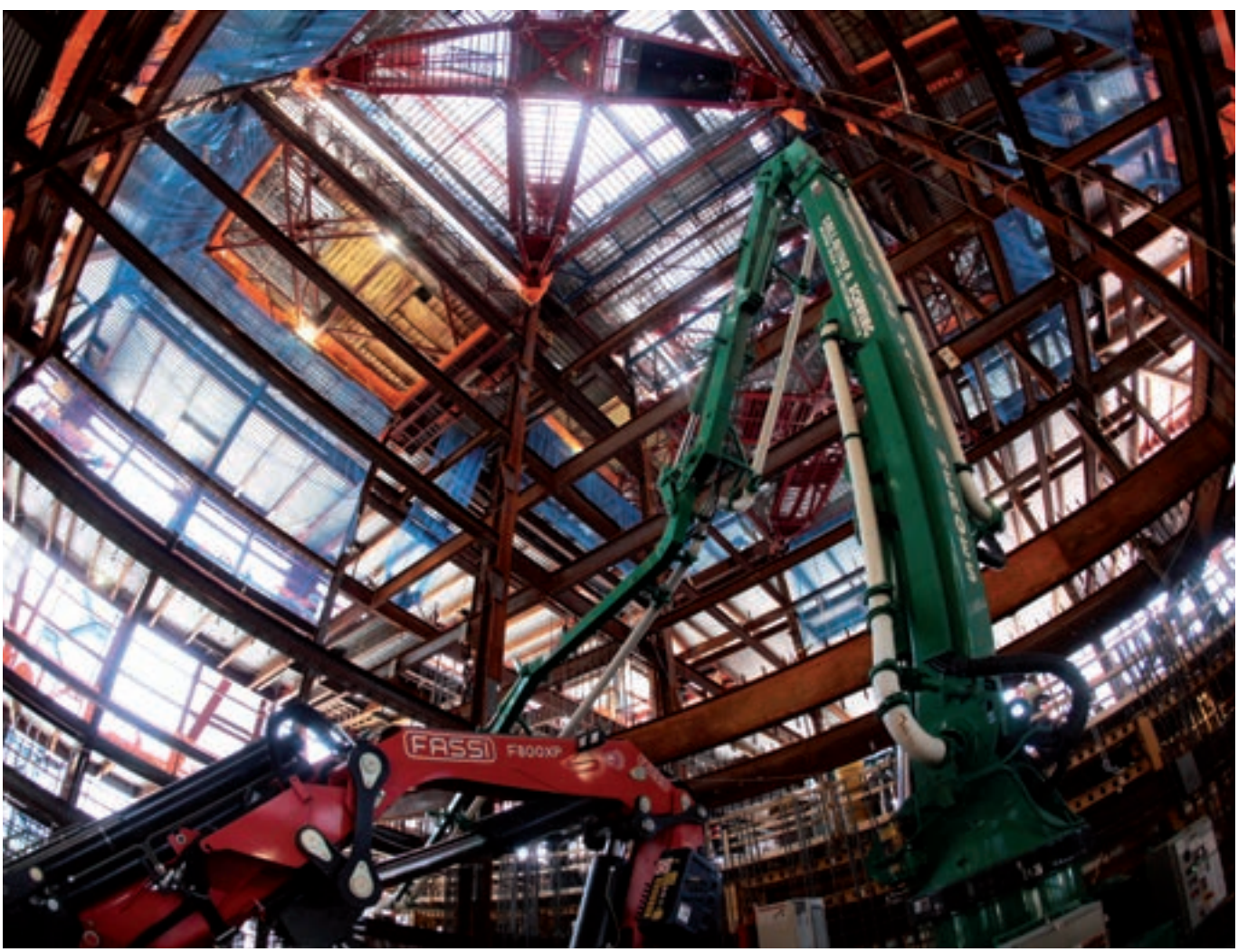
There are two Fassi in the reconstruction project of the great Freedom Tower that will remind to New York and the world the 2,986 victims of the terrorist attacks of 11th September 2001. The Fassi engineering system has solved a barrier that would have slowed down the works and, therefore, delivery times, by providing a two cranes and a handling system capable of transforming the Ground Zero on a non-stop mobile worksite.

The construction works project has been assigned to Collavino Construction Company, who faced a problem in the management of the available resources: a very tight timetable and a single large tower crane for each building, whose usage should have been shared between the transport needs, the reinforced concrete elements, and the needs of the steel erectors. Fassi's engineers have developed an innovative solution, never experienced before and which accounts for the high specialization achieved by the company. Fassi is also a world leader in high specialization, being able to develop products dedicated to niche applications and any kind of customer needs.

World Trade Center will be the first anti-terrorist skyscraper in the world. The original project by Libeskind was redesigned by David Childs of Lower Manhattan Development Corporation. The walls will be one meter thick and the structures will resist the highest possible temperatures. There will be 82 floors of which 69 destined to office spaces.

The key idea is to develop a mobile site that grows vertically in parallel with the construction of the skyscraper in which to use, besides the main crane that once or twice a day raises the bulk material in a single location, two lighter cranes to distribute the rest of the materials to the workers at the same floor. Two cranes mounted on a high support installed on a lifting platform.

An innovative application both technologically and executionally: the F800BXP cranes have enabled the manufacturing company not only to maintain the pace of work with the steel



erectors team, but also the distance from floor to floor, which foresees not only the right time for the concrete solidification, but time to elevate the floating forms on each floor.

The Ground Zero project

A tower of steel and titanium, 1776 feet tall will rise from the ashes of the World Trade Center and will be the first antiterrorist skyscraper in the world. The original project by Libeskind, chosen in 2003 as a master plan for the reconstruction of Ground Zero, foresees in addition to the spire a complex program that included the construction of a monument with waterfalls, an underground museum, a visitor center, a shop, a center of Special Transit and four spiral offices towers at the same height of the freedom tower.

The project was redesigned by David Childs of the Lower Manhattan Development Corporation to make the building more impervious to terrorist attacks and more like the Twin Towers. The walls will be one meter thick and structures will resist the highest temperatures possible. There will be 82 floors, of which 69 destined to office spaces.

Inside the tower, in addition to the large stairs of the emergency exits, there will be the special stairs for the fire brigade and the safest areas of refuge on each floor. The tower will also be equipped with special lifts and the ventilation system will be protected by biological and chemical filters. Atop the tower some gardens, a symbol of life and optimism. The cost will exceed one billion and half dollars. The Freedom Tower works deadline is scheduled for 2013, but already by 2011, at the tenth anniversary, a part of the memorial monument should be already finished.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-40°C. Fassi cranes work in extreme conditions

The Fassi cranes work smoothly even in extreme cold conditions, as evidenced by these pictures taken during the construction of the Chinese scientific research station “Kunlun Station” in Antarctica.

The efficiency of the cranes in difficult weather conditions is always an essential component to assess their technological quality. But when these conditions become extreme, almost “impossible”, the climate is transformed into a veritable open-air laboratory for testing the reliability of machines and systems. It’s the case of the construction site of China Konlun scientific station in Antarctica, which was completed in about a month’s work under temperatures that fell well below 40 degrees centigrade. The construction of the station has committed some Caterpillar vehicles and AGCO tractors equipped with Fassi cranes, specifically the F110A and F150A. The vehicles were provided by William Adams Pty Ltd, Caterpillar dealer for the Australian states of Victoria and Tasmania, a company specialised in the provision of tractors and machinery for worksite activities in polar conditions. The Fassi cranes were provided to Williams Adams, by “600 Cranes Australasia Pty Ltd”, Fassi dealer for Australia, PNG, New Zealand and the Pacific Islands. William Adams is based in Hobart, Tasmania, and serves international customers operating in Antarctica, mainly for the construction of scientific stations.

It ‘s the case of Kunlun station, located at 1220 km along the Antarctic coast in the area of Dome Argus (the highest point of Antarctica), which aims to fib, and then investigate ancient ice samples, natural exhibits that allow you to better understand cosmic evolution of the solar system and the eco-environmental changes of our planet. The Fassi cranes


FASSI
F110

were essential to carry out loading and unloading of various materials required for the construction of the station, and have also been active in recovery activities for the other vehicles, thus engaging a team of 28 people. Fassi cranes were often used twosome to lift large structures, including containers. The means employed in this yard, have again demonstrated their ability to operate in extreme environmental conditions, confirming the satisfaction voiced by customers around the world present in Antarctica with their research and infrastructure projects for polar areas.

600 CRANES AUSTRALASIA PTY LTD

600 Cranes Australasia Pty Ltd is dedicated to providing excellence in the Distribution, Sales, Service and Spare Parts of Loader/Vehicle Loading Cranes. Our network covers Australia, PNG, New Zealand and the Pacific Islands.
Our Company personnel has over 70 years of combined service to the Loader/ Vehicle Loading Crane Industry. We believe that our chosen products are extremely high standard manufactured and have the highest product support on the marketplace.
We strive to provide our customers with the best possible service for all makes and models of Vehicle Loading Cranes. Safety and compliance with standards and regulatory authorities are the highest purpose of our business practices.

Special cranes for railways

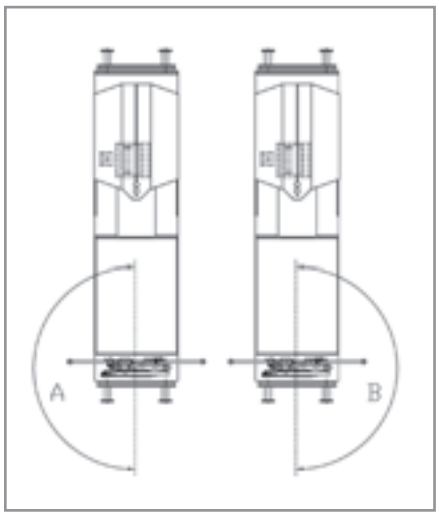
Due to their technical and performance quality, the Fassi cranes are also preferred for the rail applications as well: motorbogies, rail wagons and road-rail vehicles (truck with dual running system for both road and rail use). It is a significant witness the activity of company SVI S.p.A. specialized in the design, construction, marketing and servicing of vehicles and equipment dedicated to works on railway lines.

The use of hydraulic cranes on railway vehicles for the construction and maintenance of the infrastructure has led to a profound and positive evolution of this field's operational dynamics. Among the companies that have achieved innovation in this field stands the SVI S.p.A., which is responsible for the implementation of some of the brightest technological solutions. Together with Mauro Vannoni, one of the founders and owners of the company SVI S.p.A., we shall better try to understand what does it mean to use the potential of the hydraulic cranes in the railway field.

"We were among the pioneers in this field and we had to address and solve key problems of safe operations as: use a crane mounted on a rail vehicle between the tracks, catenaries and trains traffic. Our concept was to place the crane on

The Fassi railway cranes

Fassi has gained significant experience in the railway cranes field, based on the attention that the Fassi engineering department has been dedicating to the development of cranes for this specific application.
Appropriate arrangements were made to enable the installation of standard cranes, designed for trucks, on rail vehicles, without distorting the typology or prices with machines developed specifically to this purpose, as it may happen on the market.
Cranes operating on rail vehicles have to be equipped with additional safety devices for rotation and height limitation not required by cranes mounted on truck in order to be in compliance with the "operational safety" standard in presence of double-track lines or electric traction line commonly referred to as "catenary."
So devices with a removable key in a blocking position were introduced to define the geometric work areas where the crane can operate in full safety.
Such devices can be summarized as:
- Rotation limiter to define the angle of rotation around its vertical axis: Work area "A – B".
- height limiter to define the rotation angle of the main boom from the column.
The limitation systems are normally inactive and are activated by the operator with the specific controls. They were developed with redundant equipments to ensure a safe operation.



the appropriate movable base contrary to the frame of the vehicle, able to shift the crane 600 mm right or left so that during the crane's outreach there will be no interference with the catenary. In collaboration with Fassi we have developed adequate safety devices at the worksite of the rail infrastructure. Today, the quality and performance of Fassi cranes are part of the rail vehicles we offer to our customers, because they represent a good compromise between good performance and good quality at competitive prices.

Fassi Cranes are used for the construction and maintenance of railway infrastructure, both for the handling of materials, or means of aerial work using gravity baskets or auto leveling platforms. With these accessories our customers engage activities, specific to the TE (Electric Traction) yards, to bring operators to heights unreachable by unfoldable work bridges, making our machines extremely versatile. Particularly significant is the use of cranes with "JIB" hydraulic extension to reach heights and long distances with baskets or auto levelling platforms or to reach workstations on either side of the tracks such as bridges and viaducts, safely and with operating speed far superior to other operating systems. For this particular activity, often having to operate on double-track lines with a total stabilization of the machine according to the standards (four outriggers), we have developed a system that allows to fully extend the outriggers only parallel to the work place, while those on the opposite side are only lowered and not extended. This device allows secure stabilization of the vehicle without interfering with the space of the operative train track.

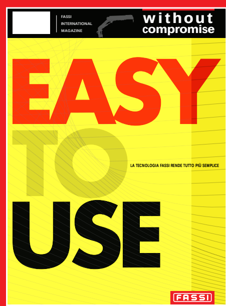
Our production is mainly aimed at vehicles used for the power lines maintenance works this activity playing an important role in the "transformation" of old electrified lines by introduction of new technologies needed for the new fast trains. The cranes with a winch carry out perfect lifting and placement of structural elements (lattice beams even of 5 ÷ 6 t) over the existing lines, with an accuracy typical of only the large mobile cranes, due to the fact that the manufactured goods are lifted and placed only with the winch. This particular operation is enhanced mainly in the railway stations area, where there are many tracks side by side and a reduced manoeuvring space. The collaboration with Fassi has been and is certainly strategic to the success of our national and international production. Currently we are present in most of the European countries and the Mediterranean area. We install the Fassi cranes on a wide range of rail vehicles, used by companies who work for public railway entities. Fassi crane performances play an important role in customers' satisfaction for our products: reliability in all operating conditions, even under harsh ambient, make Fassi products highly appreciated.

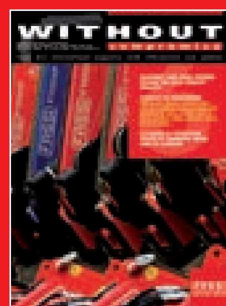
It is essential to perform efficiently during the limited time periods (commonly known as intervals) by the infrastructure managers to operate frequently between a train and another.

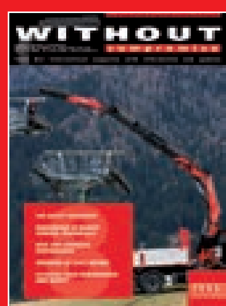
SVI SpA

Specializing in the design and construction of vehicles working on railways, tramways and metros, the company is among the most important Italian companies in the industry for the quality and versatility of its products. Particularly popular are the multipurpose motorbogies with Fassi loader cranes able to safely speed up the work on the lines. The company, managed and guided by two founding members, Mauro Vannoni and Ivano Sambuchi, has grown further in recent years engaging a new production facility specifically built to develop the research. Thus, there were acquired major new customers and orders throughout Europe, also due to the introduction of the Quality Management System ISO 9001/2000. In the near future, the SVI S.p.A. will connect directly to the railway lines due to a new production plant with "ad hoc rail siding", to also operate on major rail vehicles of which size doesn't allow transportation by road.

www.fassi.com







Bianchi Errepi Associati - Stampa: october 2010