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#### A FASSI GRU publication

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## The story that you write is that of the FACTS

"It's a huge mistake to think that a story should necessarily consist of something written: it may well consist of something built, and churches, houses, bridges and amphitheatres can tell their stories with the clarity of a printed book, if you have the eyes to see them". So wrote the famous historical scholar Eileen Power in the last century. And who are we to contradict her, even though different perspectives can help us to have a broader view of the bigger picture.

For this reason, in this magazine we have tried to recreate with words a journey, that since 1965 has brought us into the world of cranes and that, after fifty years, sees us as recognised leaders on an international scale. This is a special edition of Without Compromise, in which we have included some significant features of our company's story. It is a way to organise the memories, events and key moments that have paved the way to this anniversary. As well as reading about the anniversary of Fassi and our love of the crane, in this magazine you will also find a central insert that you can take out and keep: inside this are our "Best Projects", the crane models that have marked an era, demonstrated innovative changes, and that have allowed us to evolve towards new, competitive stratagems.

But, most importantly, you will find in this issue the words of Franco Fassi, his courageous choice, his pioneering and entrepreneurial spirit, and the depth of his soul, devoted to a great idea that was born in a small village in the Bergamo valleys of Northern Italy.

However, as Eileen Power said, the "story" is also the story of something visible, that you can observe and touch. The story leaps out from the written pages and becomes evidence of the reality that belongs to us and sets us apart. Our cranes are there to be seen and to show everyone what we really are. We have produced 150,000 of them since those early days back in 1965, which are now distributed in every corner of the world. They now undertake work in increasingly different, detailed and complex situations, because our story can be told in all the languages of the world.

ALBINO



# The Origins of Our HISTORY

Half a century of life told by Franco Fassi, the founder of a company synonymous with determination, innovation and courage

#### The Fassi **DREAM**

In 1965 the first Fassi crane was created, as was the passion for a world that still sees the company as a global leader today. All thanks to the initiative and the dream of Franco Fassi







It all started with a strong conviction. And with courage. Because defending an idea when it is still just a dream requires all of a boy's enthusiasm and energy. So, like all enthusiastic young people, Franco Fassi wanted to try to fulfil his dream and turn his passion for cranes into a job, into a company which was able to look ahead, beyond borders and beyond the market to find ever-new possibilities. The history of Fassi has deep roots: the old records bear the date of establishment of the very first Fassi Giacomo company in 1946 and in that very transport company, Franco Fassi began to take his first steps into the world of work by helping his family.

#### Your father's company was established in 1946 but it already existed before this time and during the war years. It has been more than 70 years since then, so what memories does Franco Fassi have of that time?

Those were difficult years that I will never forget, even though the memories filtered by time make everything seem obviously more respectable and human. I remember, for example, that in front of our workshop there was a group of German soldiers of the Wehrmacht and we had to get the firewood that was the fuel for the gas generators on their vehicles. The fuel for the gas generators arrived from the

forests in our mountains. And the partisans sought shelter in those woods. So, in addition to working for the civilian population and the Germans, we had the chance to bring food and supplies to the men of the Resistance. It was the life of the times, where people could not be divided into good or bad; they were simply people, faces and situations. When the memories come back to me, many extraordinary images emerge from the past.

The war passed and then came the so-called "years of reconstruction". The Fassi Giacomo company grew and began to handle the production of trucks and, at the same time, his passion for the world of mechanics and motors increased. Perhaps it was then that the "vision" was born that would drive him in later years...

Probably yes. I often travelled to Milan to specialise in truck fitting techniques, to learn about the latest developments in mechanics and to touch the engines that were my passion. I also tried to follow the new legislation more closely that was introduced at the time for the production of dumpers. I remember I went to Rome for an important meeting between the major operators in the sector and the Ministry. It was on that occasion that I met an importer in Italy of cranes that came from Sweden. We talked and agreed to distribute

some of those cranes in our area. In fact, the meeting changed my life, because I had the chance to see and touch those products and realise that we could manufacture them. I wanted to try a new way forward.

# This new road had to be taken out of necessity, also because in the mid-sixties the construction industry was in crisis. How did you approach that first big hurdle?

The housing crisis of the mid-sixties had forced us to restructure the job market. Even the staff, who only a short time before had reached over one hundred employees, was drastically reduced to a dozen skilled men. So I decided to change course. I wanted to try out an adventure in the world of cranes. I knew that there were some risks involved, but I was convinced of my ideas and, in addition to truck fitting, I got involved in the production of cranes.

#### This new route would be called Fassi Gru, right?

Exactly. The first manufacturing was

in 1965, the year in which everything changed and it is perhaps due to this that we trace our actual origins to that point in time. Because this 50-year anniversary at FASSI does not celebrate the birth of the company, but the birth of our passion for cranes. At the beginning it was really a great adventure, as we had clear ideas and a certain mechanical expertise, but we had to learn properly how cranes worked. We definitely learned quickly. Only the first prototype was not manufactured correctly: it broke during the first lifting test. But we got to work and in a short time we managed to make the right adjustments. The cranes of that first period, when compared to the current Fassi cranes, were certainly elementary and also a bit too heavy. But all in all they worked as expected. The first order arrived through a carrier in the area and then the name began to spread quickly, even outside our region.

#### What made you choose the colour red for your cranes?

It was a strategic choice to differentiate ourselves from competitors

that were almost always yellow or orange. We were happy with the result and moved forward. It was a distinctive colour and communicated a sense of security.

#### What were the first cranes called?

In that period our cranes were called "M1", "M2", "M3" and only then we replaced the "M" for "Model" with the "F" that obviously meant "Fassi". We grew very fast. After three years we had already produced and sold about 150 units and we already had some contracts abroad in France and Spain. In Italy, in that period, we specialised in the field of logistics for scrap, where we built a discrete market.

#### In these hectic years that were also full of satisfaction, what was your role?

Every day I lived two different lives. I carried on as the businessman always looking for new clients and then I returned to the workshop to work. Then, unlike those who were only sellers, I really knew how to convey the characteristics of cranes



Albino 1943, Mr Franco Fassi (the first boy from the left) 13 years old

"After three years we had already produced and sold about 150 units and we already had some contracts abroad in France and Spain. We have always remained faithful to our history. We have grown, we have always accepted new challenges, we haven't stopped, nor have we ever ceased to strive for improvements."





and explain the operation in every detail. In fact, I often took care personally of the assistance and the repairs. In one way or another, I was always on the front line.

### One of the features of Fassi is its multisectorality. When and how did exploration begin into areas other than construction?

After the first experience I realised that our cranes were a little too heavy for approaching other areas, so I tried to understand better how our competitors operated in order to improve our production system. Gradually, we worked to optimise costs, choosing some specialist suppliers for components rather than producing everything in-house. In addition, we made our models lighter even if it was not easy, given that some patents of the time prevented us from taking advantage of the solutions that would certainly have been more effective. In any case, we managed to grow more and more.

## During the 80s, Fassi prevailed strongly in the Italian market, gradually approaching international markets. How did you deal with the process of internationalisation?

We built a complex network in many foreign countries, and we worked hard to develop increasingly reliable products. Therefore, when at the beginning of the 90's our currency became devalued, we had an ace up our sleeve and we took control of the situation. Those were intense years be-

cause I often had to move abroad to establish new agreements or strengthen relationships with our partners. I remember many trips, many cities and different cultures, but in every part of the world I always found people who believed in me. We grew together.

#### Faced with a changing world and an evergrowing demand for excellence, how and to what extent have you taken the path of innovation?

It was during that period that our design system also changed, gradually shifting from technical drawings processed by hand by designers to CAD systems for technical drawing. It was an extraordinary step that also imposed a change of generation between our engineers and gave us a further innovative push. I recall an anecdote related to that period. Towards the middle of the 90's there was an American company that wanted to buy Fassi. Their president came to visit us and our plants. During his visit, observing in amazement the significant investment made at the time, he asked me how many people from the management had evaluated and decided on those structural development measures. I replied: "Just me". It was amusing to see his expression: he did not understand how one person could take such important decisions totally independently. Of course Fassi did not change allegiance.

Fassi is always a step ahead in the market,



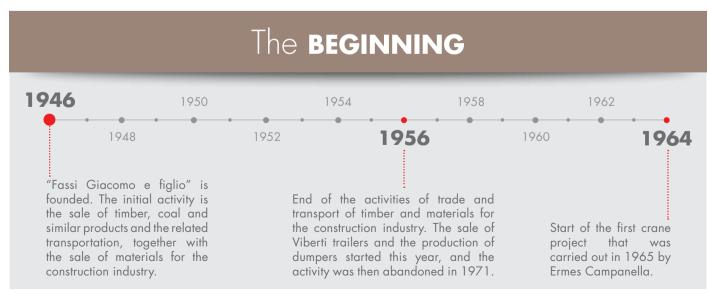
#### mostly thanks to a past history made up of challenges that have been overcome and a lot of determination. How much of that past is still present in Fassi?

The era in which we developed our roots and laid the foundations of our values and our identity. I would like to say a couple of things about this identity issue. We have always remained faithful to our history. We have grown, we have always accepted new challenges, we haven't stopped, nor

have we ever ceased to strive for improvements. But we have always maintained the same identity. We have always been Fassi, with our style, our identity, our product and our way of being present in markets around the world.

#### 50 years of history, 50 years of cranes. Which is the most beautiful crane?

I like the last one, but the most beautiful crane is always the one yet to be built.





# ALWAYS AHEAD

Identity and innovation toward a new way of value sharing. Interview with the CEO Giovanni Fassi

THINK LOCAL, ACT LOCAL, BE GLOBAL

The Fassi Group is a leading player in over 60 countries throughout the world. Its strength is the sum of specific identities, each of which is rooted in its territory of origin, but projected to the international challenges and able to work in a structured and customised way in a particular market.



a small town in northern Italy, and even today, while we operate in all countries of the world, our head office is still in the same place where everything started. But the perspective is not purely geographical".

There are deeper aspects to consider because harmony and coherence can go hand in hand with evolution and change. Wheat grows if its roots thrive within a fertile ground. If the climate offers the optimal conditions, if the surrounding environment is favourable. But this is not enough, because when looking at a beautiful golden field nobody thinks of the farmer, who has worked the hard soil, sown the seeds, checked the plants during the winter, battled with weeds and longed for the black clouds on the horizon. There is a time for everything. A time for sowing and a time for harvest.

"The principles with which my father started his new entrepreneurial adventure in the world of cranes back in 1965 are still the same ones that rule the global enterprise of today – continues Giovanni Fassi -. An enterprise that operates in the new millennium with the same values as our origins: quality, innovation, consistency, safety and internationality. All the excellence of a brand that has found a place right at the centre of tens of thousands of operators in every part of the world".

Thanks to these solid foundations Fassi has been able to develop its identity, looking with confidence towards distant horizons, thanks to a continuous search for improvement and a strong drive for innovation that has always been its hallmark. "We have never settled and we have always moved forwards with the courage of pioneers and with the eyes of explorers".

Today the crane is a product that is very complex, requiring a large amount of research and careful attention to every detail, for each solution, for every possible variable.

Fassi takes great satisfaction in its 50-year history. But there is also a great responsibility. Many things have changed in the wake of technological progress, the development of materials and the innovative thrust. The world has changed, as well as the economies that govern the markets that Fassi operate in. Also changed is the society, interactions, cultural dynamics and obviously also people. Fassi have moved forward and will continue to do so while remaining steadfast to its origins.

"Our history – says the CEO Giovanni Fassi - was born in



"The principles with which my father started his new entrepreneurial adventure in the world of cranes back in 1965 are still the same ones that rule the global enterprise of today"

"During our evolutionary process with the product, in recent years we have tried to broaden our horizons. Fassi has become the engine of a much larger group on an international scale. This expansion into new categories of products could seemingly appear to be a contradiction with our identity. Instead, we have been consistent in that we have worked along the route traced by our values".

Fassi has always invested in the field of lifting and in the world of technology equipment for industrial vehicles and has combined different companies according to a specific common thread. "We have chosen partners who, like us, have shared the principles of leadership, innovation and excellence. We have made investments together to strengthen our goal, not to change it".

Within the framework of Fassi's field

of reference there is a very clear strategy: the company has gone from a commercial internationalisation approach to a vision of strategic internationalisation. But that is not all. "In recent years - says Giovanni Fassi there have been times when we have seen that a brand operating on the international stage needs to be able to think on a global strategy, though paying attention to the implementation on a territorial scale and considering the typical features of each individual market. The synthesis of all of this was clear: "Think Global, Act Local". But today, our vision has gone beyond this horizon. Inverting, strengthening and upgrading it. You could say that our approach is "Think Local, Act Local, Be Global".

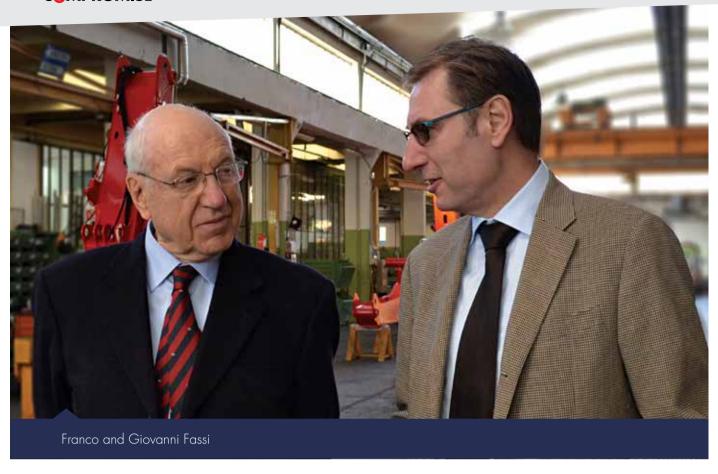
Today Fassi Group is the sum of specific identities that operate in contexts that are equally specific but capable,

as a whole, of creating a single big picture. The Group does not speak the same language, does not have just one flag, or just one DNA. Each brand has its distinctive features, its heart, its soul; its identity created in the region of origin (Think Local). But every brand is present in the international context and this occurs not only with the help of our branch offices. but also through partnerships with our dealers, who characteristically reinforce our ability to be present in a particular market in a structured and customised way (Act Local). Nonetheless, the brand – due to overall coordination based on shared values and a diversified presence in over 60 countries - has a single profile, that of a large international group (Be Glo-

"This allows us today to be a leading player on the world stage, ready to offer new business opportunities to our own sales network. We are encouraging the growth of our network and increasing the satisfaction of our end-clients, who are able to find a single corporate contact in their area who is able to offer the solution to numerous requirements related to lifting







and industrial vehicles".

Fassi Group is continually working to build a future where identify itself with a multi-product, multiservice and multi-market offering.

It is a future that is already present and where the company positions itself with a concept of an international group with an incredible network of distribution and strong territorial specifics. In the context of this network, the role of Fassi is to combine management and coordination, safeguarding both our individual identity and all other autonomies, appreciating the specific differences that are whole assets at the disposal of the markets "We believe that all this is something completely different from the simple win-win logic. It does not mean simply to build a situation in which the various parts benefit from one another.

We believe that we are working to completely overcome this approach towards a concept that is, in our opinion, the most important: value sharing. We intend to share the essence of our values with the entire network. Each of us is part of a complex mechanism where the parts are integrated into the whole. The client must also deeply understand the true essence of this value because we are constantly at their side in this journey". "We are beside the client, we are working for them". The result of this cohesive system is an

energy that empowers our journey into the future. In the origins of its history, the Fassi corporation that we celebrate today, was the passion of an entrepreneur in love with an idea. A man who was alone, with the courage of his convictions and the entire world to be explored. "Today, on the other hand, in the pages of our history



we decisively write a word that is certainly not new to us, but one that we believe in more and more every day: "Sharing". Sharing in continuity, in development and in value".

#### Fassi, a **MULTIDIMENSIONAL** group

Composed of seven international corporate leaders in the fields of lifting, forestry, the fitting of industrial vehicles for the recycling and training, it is present in over 60 countries in the world, providing technologies and products of excellence that focus

on innovation, quality and safety. A group that is rooted in Europe but that operates on a global scale, ready to seize the many opportunities of the market and offer solutions that meet the evolution of the needs of its clients. Fassi Gru, Cranab Ab,

Marrel Vimek, Slagkraft, Bracke and Cenpi Formazione represent a single player that operates within the framework of the specific identity, ensuring a widespread sales and service network at an international level.





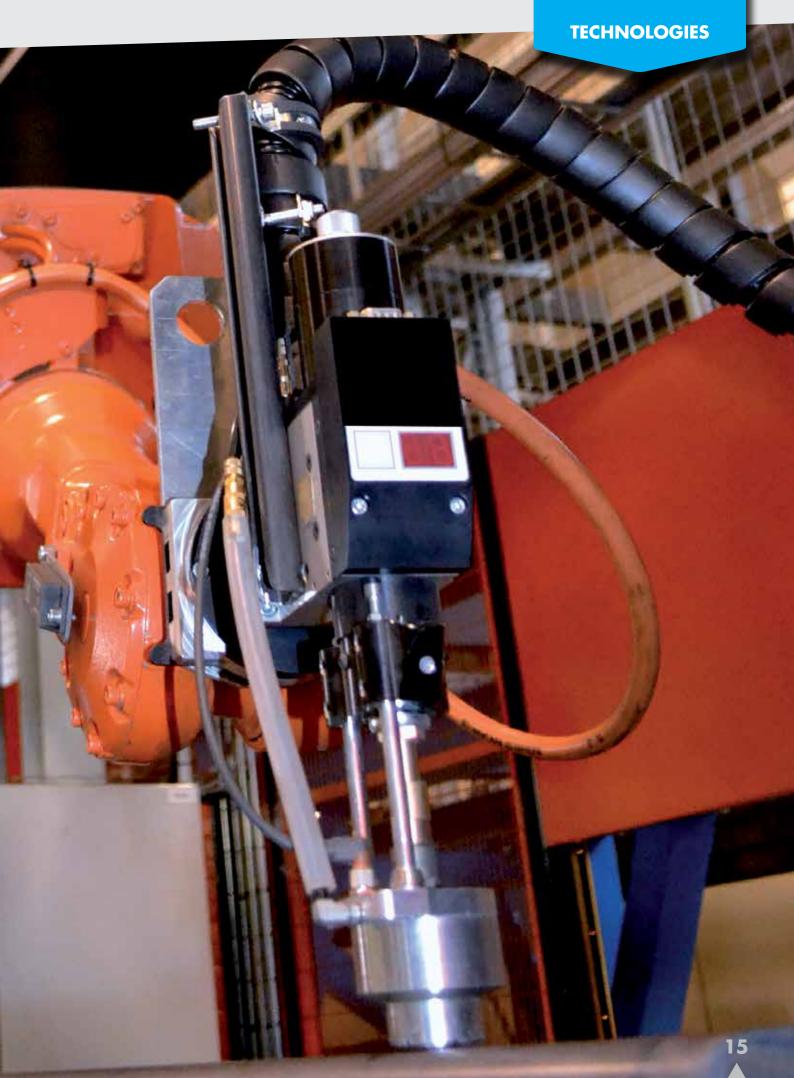
















Innovation in Fassi is a common thread that binds ideas, design, production and product, which has allowed the company to build its own recognised knowhow around the world.

An innovation that is based on people to finally materialise in the production process, technologies and crane models leaving Fassi plants throughout its 50 years of history: cranes which are up to 90 percent made within

the company, often anticipating technologies and solutions which are then embraced by the market as a whole. The birth of each machine or component involves a long process of innovation, many passages that involve machinery and the latest technology, inspection, testing and skills.

A crane can be created as a result of market input due to new needs (performance or certain types of work) or as a result of the company's desire to develop a specific model that is innovative for the market; an "entrepreneurial spirit" ahead of its time that has led to the creation of true products of reference, even for the competition. In fact, each crane conceals within a world of technology, ranging from electronic systems to hydraulic functions to mechanical solutions, which become an added value on the innovation front because they have been studied and designed directly by Fassi.

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#### From project to product

A highly trained and specialised team is involved in the study and design phase. The tools made available are so-called highend tools, from proprietary software of analysis, developed with the collaboration of researchers and university students, highly evolved CAD systems for design and simulation such as Catia. From theory and the "virtual" stage, the next step is the drafting of the drawings and the achievement of three physical prototypes: one on which fatigue resistance tests are performed, the second on which process and production equipment checks are carried out, and the last one for the machine fitting and the verification of operational tests.







#### Steel

In the construction of cranes, steel is a crucial element on a structural level, in order to reach the required performance with total safety and reliability. We use special steels and in particular sheets with a high elastic limit with guaranteed features certified by the manufacturer. With respect to normal carbon steel, highresistance steels allow us to reduce the weight of the crane, with real benefits in terms of load capacity of the vehicle and also fuel saving. Micro alloyed steels with a very high elastic limit deliver outstanding performance against structural yield and permanent deformation, since they have the ability to return to their original dimensions once no longer bearing a load. Regarding the choices that are the most distinctive traits of the production cycle, Fassi highlights the high-resistance steels and steel and cast iron castings with regards to bases and columns.





#### Fatigue resistance test

The first of the prototypes from Fassi is intended for the hard work of the fatigue resistance test. Fassi has been performing this type of testing on their products since 1980. During these tests Fassi simulates exactly the operating conditions that the crane will face and the coherence of the design is verified with a minimum of 200 thousand load cycles. This allows designers to specifically evaluate the compliance of the crane with the design data: firstly depending on the effects of the concentration, stresses, forms, number of cycles and the statistical curve of the loads; secondly depending on factors such as static resistance, average stress, residual stresses of welding, thickness of the metal sheet, the operating temperatures and the frequency of the loads. At the end of the test, the crane is completely disassembled and the integrity of the single component is assessed by involving, as well as the research and development team, other business units such as the department of industrialisation, the technological lab and quality control. After receiving the go-ahead following the checks on the first prototype, we start with the tests on the second one that is brought to the outside for the verification of all load conditions: elastic deformity and maximum vertical loads.

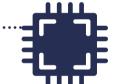




#### **Automation**

One of the key concepts that in recent years has characterised the industrial strategic vision of Fassi cranes has been to build a system consisting of a highly automated condition, specialised for different products. The idea has been to create a sort of "crane district" in which the automation of the manufacturing plants is a constant dimension to make the Fassi Group more competitive and able to offer Italian production that is technologically advanced to compete on the international scene. Automation has therefore been a choice that has allowed us at Fassi to respond to the challenges imposed by globalisation, allowing for the entire development of the crane sector in Italy. The adoption and implementation of this philosophy contributes to free energies and productive resources, and the achievement of key objectives to compete in the market.





#### **Electronic systems**

Electronics became part of the history of Fassi in the mid 90's with the objective of creating something more and giving added value to the offer. The company has taken its first steps in this new world, inspired by technologies and targets that they were outlining especially in different sectors. In particular, it has invested in the revolution of the onboard electronics for the crane, causing it to become the brain of the crane, a decisive progress to achieve high performance, precise movements, total control and safety. The electronic solutions installed on Fassi cranes base their effectiveness on the synergy between the machine control and the control of dynamics. The data from the complex sensor networks are conveyed to the IMC and ADC units and they also move back and forth between them. The control panel chooses how to develop the movements of the crane in an optimal way and identify any safety-related problems and, when necessary, also knows how to auto-control itself, based on the load and movement. In fact, the cranes manage to prevent and control high-risk situations in a fully automated way. The operator is able to have real-time control of the operations performed by the crane, on the display of the radio control or on the screen of the control unit onboard the vehicle, thanks to the efficiency of the electronic system of the machine.







#### **Painting**

For Fassi, painting is not only a necessary step in the process, but a real added value and an important part of its production quality. The choice of the correct painting cycle has been developed with the first chemical group in the world. A painting that becomes the guarantee of results thanks to well-defined processes and specially created tests, such as the exposure test to saline mist, which reproduces conditions of potentially extreme corrosion.





#### **Customisations**

Fassi has gone above and beyond the concept of customisation to provide something more: the "ideal" crane, conceived and executed based on the client's specific needs. This is possible thanks to virtually infinite synergies between models, versions, configurations and accessories: more than 120 models available in multiple versions, from micro

cranes to large cranes of more than 150 t/m. There are over 30,000 configurations that can be formulated on the basis of the needs and expectations of the user. The international growth of the company has led to an increase in requests for customisations: every country has its market and we change the required crane types accordingly.





# Projects that have made HISTORY

In 50 years 150,000 cranes have come from the Fassi establishments, which have entered in the history of the industry thanks to their innovative value and their ability to anticipate the market needs

#### The **CRANES**

From the first Model 30, a rearmounted hydraulic crane, to the latest F1950RAL, the ultimate expression of Fassi power. All the projects that have shaped the history of the company and much more



The extraordinary nature, innovation and uniqueness of Fassi are values set in stone in each crane produced in the company. 150,000 cranes produced in 50 years, from that first model 30 to F1950RAL, the maximum expression of power and innovation. Throughout this time, thousands of projects have been created, designed and processed, with the resulting cranes entering the history of the lifting sector due to their innovative features and their ability to constantly anticipate the times and the needs of the market.

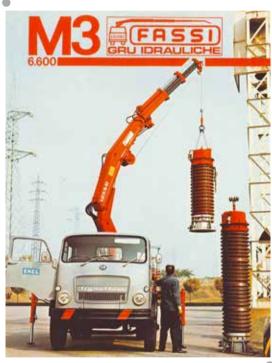
### **1965** Model 30



The first crane. Franco entrusts to engineer Ermen Campanella the task of designing the first crane model: a rear-mounted Fassi hydraulic crane.

#### ► 1969 Model M3

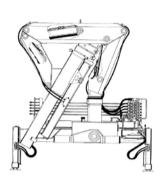


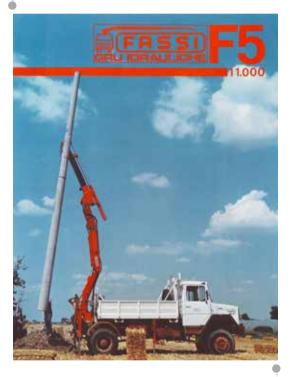


The M3, having existed for 12 years, is one of the cranes with the greatest demand which has a long standing presence in the market. It has been used for both loading and scrap services (in 1983, the first specific scrap product was born: crane MR3).



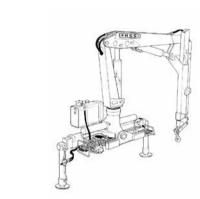
#### 1975 Model F5

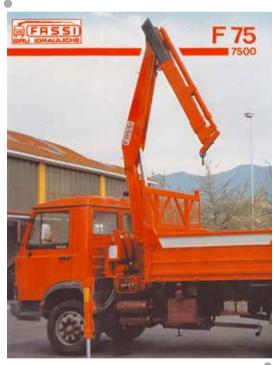




The F5 was created to satisfy the need of a crane made to move bulky loads (working especially next to a column). It was the first crane with 3 booms, designed to meet the specific needs of a specific type of clientele: road haulers, prefabricated material carriers and pilers. Triple articulation for handling bigger loads, with greater accuracy and safety. A unique crane with features offered only by Fassi at the time.

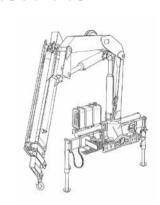
#### 1984 Model F75





It has replaced model M3. In the history of the Fassi crane it is the biggest seller. This is the first model designed without the constraint of the Hiab patent. This crane included for the first time the use of a cast iron base, while for all the previous ones we used compound steel. It was conceived for Fassi by designer Mr. Agazzi.

**1986**Model F145





Model that adopts the patented Hiab system and that goes alongside model F145, positioning itself in the immediately higher segment as regards lifting capacity. Replaces models M5 and F5. The crane has a base made of cast steel, designed by Engineer Mr. Guidetti from the competitor company PM.

#### 1990 Model F750





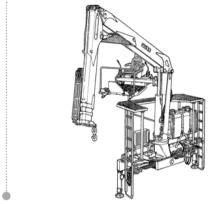
One of the first cranes with a fifth wheel base. The F750 is the first maxi crane with a double rod-and-fork: a technical solution that allows us to increase the outreach of the crane, ensuring constant performance in every lifting angle of the booms. The other new feature lies in the series allocation of remote controls and the remote control on the crane. It is a versatile machine; one of the largest cranes on the market at the time. Based on this model, in later years, several other models were created. It is the ancestor of the Fassi "heavy-duty" models, with a fifth wheel system.







#### 1993 SE Series





In the 90's, Fassi cranes arrive in the United States through Fascan. And it is precisely for the US construction market that the SE range has been designed. Thanks to booms longer than normal and the hydraulic extension on both boom, these cranes are ideal for lifting prefabricated structures and placing them overground with maximum precision and total safety: from prefabricated made of drywall to other materials with preset sizes and shapes, generally intended for equipped walls and facilities for drywall construction.

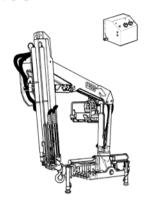
#### 1994 Model F460





The first crane with 8 hydraulic booms, the F460, arrives on the market, equipped with a foldable hydraulic extension. This type of crane is perfect for the mounting of prefabricated elements, industrial buildings and industrial removals.

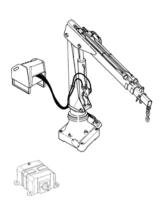
#### 1996 S Series





S Series is a range designed especially for the German market, born to emphasise the Fassi philosophy that aims to satisfy the requirements of each specific market by developing special series.

#### ► 1998 Micro Series





Fassi introduces the Micro Range on the market: lighter cranes, with a reach between 1 and 12 tonnes per square metre that allow us to have the Fassi quality level also on commercial vehicles.



#### **2002** Model F1500AXP





F1500AXP arrives on the market, a crane with a large reach, the expression of advanced technological solutions developed by Fassi. Ideal for more challenging lifting (from 105.8 to 113.3 t/m), it is able to cope with large volumes of work with greater competitive productivity compared to "exceptional lifting" solutions.

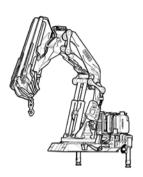
## **2007** T Series





Fassi introduces the new T Series: cranes particularly suitable for fitting on tow trucks for road rescue and car removal, matched with specific accessories for lifting vehicles.

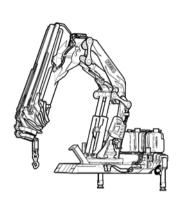
#### **2011** Model F1950RA





The largest crane hits the market, the ultimate expression of the Fassi power. This crane is distinguished by its ability to combine exceptional lifting performance with a machine body that limits structural obstacles as much as possible and aims at limiting tare weight.

### **2013**Model F1950RAL





The crane with the highest performance of those produced by Fassi hits the market: thanks to the extensions of the secondary boom it can achieve an outreach of 41 metres without manual operation; with the manual operation it can reach 50 metres, for a lifting capacity of 137.6 t/m.

# FASSI







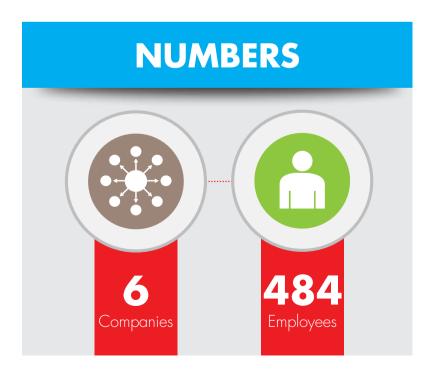


The history of Fassi is first and foremost a story made up of people. Men and women that entered into the company each with their own professional skills and expertise, with the objective to grow with the company, in Italy and in the world.

Over the years, the company's staff has increased in parallel with the growth of Fassi at an international level. In Italy alone there are 6 companies and 13 plants so as to be able to produce internally 90 percent of the over 120 models of cranes produced to date. The company is structured to cover the entire production cycle, from the metal sheet to the finished crane, without forgetting of course the after-sales service that is essential to Fassi.

The study and design phase includes a group of forty people who collect elements and ideas. The development of the product specification involves the commercial department and subsequently the technical direction that translates everything into technical specifications, and then to numbers, and more precise information in order to work on strategic projects.

From numbers we move on to the virtual reality of the 3D simulation for both performance and design. After verifying the results with the demands of the commercial department, the simulation becomes a design and the ball passes to the production department organised in component production workshops, facilities for assembly, the final testing of cranes and a centralised logistics centre that manages and automates the storage of cranes and parts. This goes together with the various steps and work of the Quality Lab: a team consisting



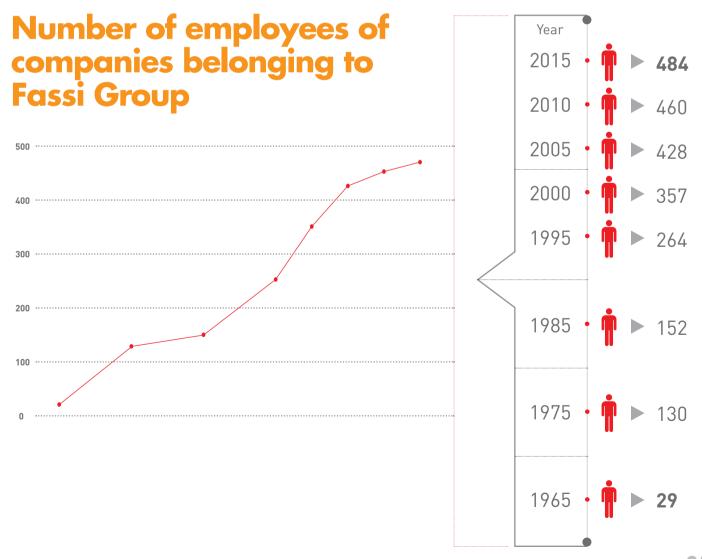




of 15 people who have the task of checking the components in transit and the entire production process through ad hoc testing, verification and certification.

After finishing and delivering the crane to the dealer or end customer, the work of Fassi is not finished. A central role is

covered by the after-sales support that takes place in the dozens of authorised workshops in Italy and throughout the world, which are able to deal competently with the various technical support requirements.





# All the stages in the FASSI history

From 1965 to today, the company has travelled a path punctuated with successes, innovations and major milestones

#### MILESTONES

From the first crane to the internationalisation of Fassi, passing through the most important partnerships and collaborations in the world. The dates and the steps that have made the company a leader in the lifting industry and a true example of innovation





# 1960 / 70

These are the years of the beginning of Fassi cranes on the market: from the first crane Model 30 to the unforgettable M1. Years of work, of discovery and of the first approach to the world with the arrival of Fassi in French and English market and the first sales in Asia. The company expands its borders in terms of innovation: Ocima and Carmo born, the first one was the core of highly specialized products and the other was the core of medium-light cranes.



#### The first crane

The factory in Albino was the place where the first Fassi brand hydraulic crane - model 30 - was created.

#### Model M1

The first classic model is created: M1, which will remain in production until 1983.

#### Going south

Start of the collaboration with the dealer Martelli from Naples (Italy).

#### 1000 cranes

Milestone of the first 1000 cranes produced.



#### **New cranes**

The range of Fassi cranes is enriched with two other models.

#### Fassi in France

Diami of Pontoise imports the first Fassi cranes to France. Over the years, Diami becomes the official importer for all of France.





#### Carmo is born

Carmo is born, specialising in the production of light-duty cranes, carpentry and mechanical processes.

#### 500 cranes a year

Exceeding the limit of 500 cranes produced in a year.

1973

1975

#### New Carmo

The new Carmo site is established in Nembro.

1977

1978

1974

1976

1

#### In Asia

First cranes sold in Hong Kong, Asia

#### OCIMA is born

The birth of this company, based in Almè in the province of Bergamo, has marked the gradual growth of the company through establishing a number of highly specialised production facilities.





"Fassi Giacomo e figlio" is transformed into O.ME.FA. S.p.A.

#### **New Fassi**

Year of foundation of Fassi Gru Idrauliche S.p.A.

#### Fassi UK

1979

The first Fassi Autocrane Ltd subsidiary is born in the UK.



## 1980

The production of Fassi reached 10 thousand cranes, after 15 years since its founding. The 80s were the years of the new technologies, of prestigious collaborations and of the first orders from the military sector. New and important technologies will lead Fassi to higher levels of specialization in the world: innovation of the fifth wheel, the first fatigue resistance tests, the first steel casting and the use of CATIA software.



#### **Meeting Amalfi**

The Fassi world sales network is founded at Amalfi.

#### Medium-small cranes

Start of the assembling of medium-small cranes in Carmo.



#### The innovation of the fifth wheel

With the launch in 1982 of the F10, a model that two years later developed into the F340, Fassi leads the market of heavy cranes thanks to the innovation of continuous rotation on a fifth wheel.



#### Collaboration with Ferrari cranes

Start of the collaboration with Ferrari cranes that ends in 1988, for the design and production of small-range cranes.

### Fassi revolutionises the wallboard market

The F10SE crane is born, the first one for the wallboard US market.

1980

1982

1984

1981

## 10thousand cranes

Milestone of the first 10,000 cranes produced.

1983

#### **Castings**

The first steel castings are born: column base and shaft.





#### **Fatigue resistance tests**

The fatigue resistance tests become a new and further fundamental step within the production of each crane. Each model undergoes fatigue resistance tests with the aim of ensuring and achieving quality without compromise.



#### Socage-Fassi Group

The Socage-Fassi Group is set up with the ambitious project of forming the first Italian group specialising in equipment for overground work.

1986

1988

1985

1987

1989

#### Napoleon folding

Start of the first crane project with the "Napoleon" folding, following the expiry of the HIAB patent.



#### Fassi for the UN

In 1987, Volvo chooses Fassi Cranes for an important provision of means for the armed forces of Belgium, intended for use within the UN.

#### Military certification

Fassi obtained military quality certification AQAP4 ISO, required for weapon shipments.

#### Catia, the new frontier of design

Fassi introduces Catia in its labs, one of the most innovative design and simulation softwares that allows the conducting of 3D simulations of several stages of the life of the product.

#### Fassi buys Carpenteria C. S.

Fassi buys the "Carpenteria C. S." workshop, which specialises in welding in general. The company, headquartered in the province of Reggio Emilia, is now a leader in its sector.





Fassi is increasingly global. The company expand its borders in Germany and in the United Arab Emirates. The company reached the record of producing 40.000 cranes since its start of operations. The 90s sanction innovation as the core of a company that has more desire to grow in the world. An innovation that will focus increasingly on electronic systems and control electronics.

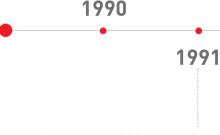


#### 25 years of Fassi

A meeting in Sicily is carried out in order to celebrate the 25th anniversary of the company.

#### Over two thousand cranes produced

For the first time the production of the company exceeds 2000 cranes.



#### More and more rapid booms for increasingly extended outreaches

In 1991, with the introduction on F300 of hexagonal arms and independent extension rams to replace coaxial telescopic rams, Fassi creates the conditions for increasing the number of booms of its crane.



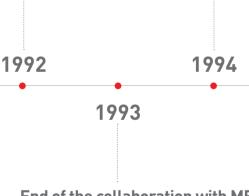
#### **Devaluation** of the Lira

Thanks to the widespread commercial network of Fassi, the devaluation of the Italian Lira amounting to around 20% granted the company an increase in competitiveness at the international level.



#### Moment limiter

The moment limiter is born as a result of the need that emerged in the French market to make the cranes safer. The new technology works in synergy with other innovative devices continuously developed by Fassi.



#### End of the collaboration with MEC

Fassi concludes its business collaboration with Meccanidraulica Torino, which in 1987 created the trademark Fassi MEC, therefore ending the company's presence in the scrap market.



#### Carmo expands

Carmo in Nembro grows: the production area doubles with the addition of 6 thousand square metres of new production space to meet the growing demand for small and mediumsized cranes.

#### ISO 9001 certification

Fassi Gru S.p.A., Omefa S.p.A. and Carmo S.r.l. gain ISO 9001 certification, evidence of their strong focus on quality.

#### 40 thousand cranes since 1965

During this year, the company reached the record of producing 40,000 cranes since its start of operations.

1996

1998

1995

1997

1999



#### production exceeds 3500 cranes

For the first time the company's production exceeds 3500 cranes in a year.

3500 cranes produced

# 

**Electronic system** 

Begins the development of

the first project of the control

system electronic FX000.

#### **Contract for the United Arab Emirates**

Fassi wins the contract of the Abu Dhabi Army with a supply of 667 cranes on Tatra vehicles for the United Arab Emirates.

#### Fassi in the German market

Fassi decides to enter the German market. In 1995, it opens a new company, Fassi Ladekrane.





In the new millennium Fassi opens definitely its gates to the world and the company increase the leadership in its sector. A recognition by the US Army and the participation in the construction of the Freedom Power confirm the global nature of Fassi and the company's ability to meet the needs of various markets. The visibility of the company is growing; these are the years of the first sponsorships in Italian football championship major league.



#### New control electronics

Fassi starts to sell the first cranes with the new FX system (Fassi Electronic Control System) to control the load.

2000

#### **UHSS**

Ultra high strength steel (UHSS) is used for the construction of important structural components of Fassi cranes.



#### Fassi Gru S.p.A.

The corporate name of Fassi Gru Idrauliche S.p.A. becomes Fassi Gru S.p.A.

2002

2004

2001

2003



#### Ciesse

Ciesse is set up. The company from Reggio Emilia annually manages about 8 thousand tonnes of fabricated sheet metal, with 62 thousand carpentry components produced and 10 thousand different codes managed.



#### Fassi for the Freedom Tower

Fassi has taken part in the construction of the Freedom Tower to commemorate the 2,986 victims of September 11, 2001, by providing two cranes and movement able to transform Ground Zero into a non-stop mobile site.

#### Certification for Ocima

Company Ocima S.r.l. obtains ISO

9001 certification.

2006 2008

2005

2007

2009

Intellimech

chatronics framework.

Omefa grows

Fassi enters into Intellimech, a con-

sortium of companies aimed at inter-

disciplinary research within the me-

Omefa of Albino expands its facilities to Comenduno with a new production line dedicated to the models in the range of medium-duty Fassi cranes.

#### 40 years of Fassi

To celebrate the 40th anniversary of the company, a meeting is organised on a cruise ship.

#### The US Army gives an award to Fassi

Fassi is among the 10 winners for innovation for the US Army.

#### Crane sponsoring the Serie A, the Italian premier league

Fassi for the first time is an official sponsor in the Italian football Serie A with AC Milan. Inter and Genoa.



Fassi innovation takes to the field with Cl

0

#### Fassi sells Socage

Fassi sells Socage company from Modena.

#### Fassi in F1

Fassi obtains an important provision with the F1100AXP.26 for the production of the F1 paddock.





#### New welding system

Start of operations of the new Carmo welding system (FMS).

#### **SmartApp**

Fassi is the first company in the lifting sector to match the intelligent use of articulated cranes with the use of latestgeneration smartphones with the Fassi SmartApp.





## Fassi Magazine in Arabic

First issue of Fassi magazine "Without Compromise" in Arabic.

2010

2012

2014

2011

2013

#### **FSC**

Introduction of the FSC system, the Fassi Stability Control, which automatically limits the crane operation when not all the necessary conditions are there to ensure the stability of the vehicle

#### Fassi invests in Marrel and Cranab

Fassi invests for the first time in two companies outside the Italian borders and in different industries: Marrel in France and Cranab in Sweden, a leader in the forestry sector.

#### Sponsor for the SBK

Given the international nature of the brand, Fassi decides to advertise the Super Bike (SBK) world championship, becoming an official sponsor in all stages worldwide.

## 2010

These are the years of challenges won and of the achievement of 150 thousand cranes produced in 50 years of history; Fassi invests in two foreign companies that operate in different areas: Marrel in France and Cranab in Sweden. The company continues to invest in innovation and introduces the Fassi Stability Control.



Fassi + Omefa







Logistics Center Fassi

#### 2015

#### 150 thousand cranes

Fassi reaches the record of 150 thousand cranes produced in its 50 years of history.





Ciesse



Carmo



Ocima



Carmo\_2





# A truly INTERNATION company

Fassi is present in over 60 countries around the world through its distributors and dealers



IATIONAL An INTER company

Fassi speaks many different languages and operates throughout the world, as it is a dynamic and flexible company, able to understand and satisfy different markets and sectors









Fassi Group in the world

#### Italian **DEALERS**

**ALBERTO CHELUCCI S.R.L. (Lucca)**Distributor in Tuscany since 1988

**ARCADIPANE S.R.L (Genova)** Distributor in Liguria since 1989

**BACHETTI S.R.L.** (Ascoli Piceno) Distributor in Marche and Abruzzo since 1988

**BINI S.N.C. (Bologna)** Distributor in Emilia-Romagna since 1991

**BRICCOLANI S.R.L. (Forli)**Distributor in Emilia-Romagna since 1968

**FASSI GRU FIRENZE S.R.L. (Firenze)** Distributor in Tuscany dal 1989

FASSI GRU MILANO S.R.L. (Milano) Distributor in Lombardy since 2007

FASSI GRU S.P.A., Branch in Torino Distributor in Piedmont since 1967

FRIULGRU S.N.C. (Udine)
Distributor in Friuli-Venezia Giulia since 2006

**GERAX S.R.L. (Bolzano)**Distributor in Trentino-South Tyrol since 2000

**GRUCAR S.R.L. (Bergamo)**Distributor in Lombardy since 1975

MAIN GRU S.R.L. (Cagliari) Distributor in Sardinia since 1970

MAZZOLENI ARMANDO & C S.N.C. (Piacenza) Distributor in Lombardy and Emilia-Romagna since 2004

**OFFICINE CARRA S.R.L. (Lecce)** Distributor in Apulia since 1984

**OFFICINE DI BELLO S.R.L. (Potenza)** Distributor in Basilicata since 2004

**OMAT S.R.L. (Arezzo)**Distributor in Tuscany and Umbria since 1989

OMC GRU S.R.L. (Vicenza) Distributor in Veneto'since 1988

ORMET S.P.A. (Treviso) Distributor in Veneto since 1991

**RGM COMMERCIALE S.R.L.** (Rimini) Distributor in Emilia-Romagna since 2012

**SOL GRU MARTELLI & C. S.R.L. (Napoli)** Distributor in Campania since 1969

**SPECIAL CRANE S.R.L. (Catania)** Distributor in Sicily since 1988

**TECNOGRU FASSI S.R.L. (Modena)**Distributor in Lombardy and Emilia-Romagna since 2007

#### International **DEALERS**

AL HOURIAH NATIONAL COMPANY LLC (HYDROLINE)

Distributor in Oman since 2012

**ARSIS CO LTD.**Distributor in Greece since 1999

Distributor in Iceland since 1991

**BARKI.EHF** 

**BENNES MARREL MAROC** Distributor in Morocco since 2014

**BRITEX INDUSTRIE - TECHNIK GMBH** Distributor in Belarus since 2008

**CARROCERIAS CHAMA C.A.**Distributor in Venezuela since 2002

**COWDIN S.A.**Distributor in Argentina since 2015

**CRANE TECHNOLOGY LLC**Distributor in Russia since 2008

DE JONG IJMUIDEN I .B.V. Distributor in the Netherlands since 1983

**EUROBODY HYDRAULICS SRL** Distributor in Romania since 2013

**EUROGRU S.A. DE C.V.**Distributor in Mexico, El Salvador, Costa Rica, Panama, Guatemala, Belize, Honduras and Nicaragua since 1996



**EVERLIFT SLOVAKIA, S.R.O.** 

Distributor in Slovakia since 2003

**EVERLIFT SPOL. S.R.O.** 

Distributor in Czech Republic since 1995

FASCAN INTERNATIONAL, INC.

Distributor in the United States and in Puerto Rico since 1992

**FASSI.BE SA/NV** 

Distributor in Belgium since 2006

**FASSI CHILE S.A.** 

Distributor in Chile and Peru since 1998

**FASSI FRANCE** 

Distributor in France since 1978

**FASSI KRANER APS** 

Distributor in Denmark, Greenland and in the Faeroe Islands since 1991

**FASSI LADEKRANE GMBH** 

Distributor in Germany since 1996

FASSI PORTUGAL, LDA.

Distributor in Portugal since 2007

**FASSI SCHWEIZ AG** 

Distributor in Switzerland since 1973

**FASSI SVERIGE AB** 

Distributor in Sweden since 1995

**FASSI (U.K.) LTD.**Distributor for U.K. since 1980

GIF MODUL COMMERCIAL AND SUPPLYING LTD. Distributor in Hungary since 2000

Distributor in Finland since 1996

**HEWEA SP.ZOO** 

Distributor in Poland since 1997

HIDRAVLIK SERVIS D.O.O.

Distributor in Slovenia since 2001 **K.D.M. ENGINEERING AND CRANES LTD** 

**KOGLER KRANTECHNIK GMBH** Distributor in Austria since 1993

MANGER LTDA.

Distributor in Uruguay since 1999

**METAL WORK CO.**Distributor in Saudi Arabia since 2001

**NASSER BIN KHALED & SONS WILL** Distributor in Qatar since 2015

**NORD-KRAN A/S** 

Distributor in Norway since 1981

**PARTEC UKRAINE LLC** 

Distributor in Ukraine since 2012

PLANT & Co. Ltd

Distributor in Hong Kong, Macau and China since 1981

PRECISION MACHINERIES L.L.C.

Distributor in United Arab Emirates since 1995

RASIM OTOMOTIV INS.TUR.GIDA SAN.LTD.STI. Distributor in Turkey since 2007

**600 CRANES AUSTRALASIA PTY LIMITED**Distributor in Australia, Papua New Guinea,
New Zealand and in the Pacific Islands since 1999

**600SA HOLDINGS (PTY) LTD.**Distributor in South Africa, Zimbabwe, Angola, Mozambique, Lesotho, Swaziland, Botswana and Namibia since 1985

STRONGCO LIMITED PARTNERSHIP STRONGCO CRANE GROUP

Distributor in Canada since 1983

SUN-PACIFIC EQUIPMENTS PTE LTD and SUN-PACIFIC THAILAND

Distributor in Singapore, Malaysia, Philippines, Indonesia, Vietnam, Thailand and Brunei since 1996

TRACTORS ENGINEERING INDUSTRIES

Distributor in Egypt since 1993

TRANSGRUAS CIAL, SL

Distributor in Spain since 1978

**VIC EQUIPEMENTS SARL** Distributor in Algeria since 2009

