



Editorial NEW MEETING AT INTERMAT

Firstly and above all are the company's new products. It is worth mentioning that AUSA is attending Intermat 2006 with many new machines, some of them having been launched very recently, such as the new dumpers and backhoe loaders, not to mention other successful machines and various product ranges, such as multiservice or new forklifts. These new features have never before been exhibited at this competition.

Also, some of AUSA's best-kept secrets will be revealed here: quality management and innovation management, two of the company's mainstays and the main reasons why it has held onto leading positions in an industry such as this, i.e. in a state of continuous change and evolution. AUSA's goodwill in these two fields places it among the most internationally well-known companies in the construction, public works and mining machinery and equipment industry.

Lastly, AUSA would also like to make the most of this meeting of professionals at Intermat to thank the market for its support and trust throughout the company's history and to announce its 50th anniversary, which will be commemorated during 2006 through various activities.

In view of an event as commercially significant as Intermat, the most important trade fair in France and one of the main fairs in Europe, in this article AUSA would like to take the opportunity to share with visitors and clients part of its business culture and some of its best recent achievements and results.

New AUSA'S NEW MACHINES

AUSA is presenting new features in all of its product lines at this Intermat 2006. Some machines have only been launched recently, such as dumpers and backhoe loaders, while other machines are being exhibited for the first time at Intermat. Indeed, over these past three years, which is how often this trade fair is held in France, AUSA has revamped and broadened its entire range of machinery.

The following are some of the most interesting new features:



D 600 APG Dumper

This is a compact machine that can transport a load of up to 6,000 kilograms and incorporates a front-end or rotary unloading system, depending on the version. Its four-wheel drive makes moving over rough terrain easier. Its articulated chassis provides outstanding manoeuvrability and keeps the four wheels in constant contact with the ground. The machine is fitted with a four-cylinder Kubota V3300T engine. This model comes with transmission by torque converter.

There is a complete set of standard features including anti-vandal security system and rotating, folding headlights. A high level of driver safety and comfort has been achieved by incorporating a standard ROPS rollover protective structure, which in this version can be folded away, seatbelt, audible reverse warning system and ergonomic seating. This is not to mention its modern design, extreme comfort and ergonomics –there is a joystick to facilitate load manoeuvring-, and easy access for engine maintenance.

Other features worth mentioning are the low noise level and high engine power due to the fitted turbo. This articulated dumper range includes the following models: D 300 AMG, D 350 AHG, D 400 AHG and D 700 AP.

D 350 AHG Dumper

This four-wheel drive has a load capacity of 3,500 kg and incorporates a 108° rotary hydraulic unloading system. Its articulated chassis provides excellent manoeuvrability and keeps the four wheels in constant contact with the ground, providing an outer turning radius of 4.68 m. It is fitted with a four-cylinder, 2,600 r.p.m. Kubota V2403 diesel engine. The machine comes with a full set of standard features, including an ROPS roll-over protective system, rotating, folding headlights, ergonomic seating and abundant security measures, such as an anti-vandal security system, seatbelt and audible reverse warning system. Standardised lights are offered as an option.

D 201 RMG Dumper



This four-wheel drive weighing 1,800 kilograms has a load capacity of 2,000 kilograms. The loading system is front-end, self-loading with a 180 l swivel-mounted shovel. It is fitted with a four-cylinder, 25.6 Kw KUBOTA V1505 diesel engine. It has two-speed hydrostatic transmission with an electric reverse gear in the joystick. This dumper truck can travel up 42% slopes carrying a full load. Optional accessories include an FOPS roof, a second seat or teeth on the shovel.

C 150 H and C 350 H Forklifts

These forklift models have many qualities worth mentioning. AUSA has successfully combined advanced technology and



safety with revolutionary aesthetics and a modular design. These two forklift models are compact, rough-terrain and with hydrostatic transmission. The C 150 H has a load capacity of up to 1,500 kg, while the larger model, the C 350 H, goes up to 3,500 kg. There is a wide range of masts measuring from 2.6 to 4

metres in the case of the C 150 H and from 3.3 m, which is the standard, to 6.8 m in the case of the C 350 H.

The robust chassis, along with the four-wheel drive (which can be disconnected in the C 150 H and is fixed in the C 350 H) facilitate manoeuvring and access to more complicated areas. As regards the engine, the small forklift is fitted with a Kubota V1505-E2B engine and the larger forklift with a V3300 engine, both four-cylinder diesel engines. The turning radius is 4,000 and 4,500 mm respectively in the case of the four-wheel-drive forklifts.

There is a complete set of standard features consisting of an open cab (although semi-closed and closed, heated cabs are optional), ergonomic seating with suspension, seatbelt, joystick, rotating headlight and audible reverse warning system. The C 350 H forklift also incorporates side shift.

AUSA's forklift range includes the following models: C 200 H, C 250 H (all in version 4x2 and 4x4), C 400 H, C 500 H and C 600 H.

M 150 M Multiservice

This robust, four-wheel-drive multiservice vehicle has a load capacity of 1,500 kg. It is fitted with a three-cylinder KUBOTA D1105 diesel engine and mechanical transmission with five forward gears and 1 reverse gear. The front suspension system employs hydraulic springs and shock absorbers while the rear system uses helical springs.

The machine comes with a full set of standard features: closed, heated cab, rotating headlight, rear-view mirrors and many safety elements: three-point seatbelt, robust, built-in bumpers that not only protect the whole machine but the front thermoformed area, headrests, and an audible reverse warning system. Another element worth mentioning is the high-visibility cab. It is available in two forms, with a dumper-type box and incorporating a container trailer with a container.

This vehicle extends the Multiservice range which used to consist of the M 250 M and M 250 H models with a load capacity of 2,500 kg.

Task 50

This is known for being an easy-to-drive vehicle, with a load capacity of 500 kg and maximum speed of 60 km/h. It uses a 400 cc, four-stroke ROTAX BOMBARDIER petrol engine.

Since it is a rough-terrain vehicle, the machine has a high drive capacity and a disconnecting 4x2 and 4x4 transmission. The approach and departure angles are 80° and 72° respectively and it is able to travel up 45% slopes carrying a full load.

Task 50 has been adapted to operate in diverse sectors, providing customised solutions to each one of them. It is

currently used as a police patrol car, for extinguishing fires, in the agricultural sector, for mountain or beach rescue operations, or for city or golf-course maintenance.

Mustang 2026 and 2041 Skid steer loaders

These are Mustang's most compact loaders with a surprising digging power of 1,270 kilograms. The 2026 model has a load capacity of 476 kg, while the larger model can take up to 614 kg. Depending on the tyres installed, they can vary from 1,219 to 1,473 mm, which allows them to access all kinds of work sites that other machines are simply unable to reach. Both models have a direct-injection Yanmar diesel engine, 27 Kw for the 2026 model and 34 Kw for the 2041. This, combined with the use of flat-plate couplers, give it sufficient power to operate any kind of accessory. The ROPS/FOPS cab provides a safe and protected working area, which tips back to allow access for maintenance purposes. The cab is fully equipped and includes heating and antifreeze systems, inside roof light, sliding side windows and a seat with suspension.

Mustang 2012 Skid steer loaders

This model has a load capacity of up to 375 kg and an operating weight of 1,290 kg. It is fitted with a 21 cv engine and provides a hydraulic flow of 37 l/min. Its maximum lifting height is 2,4 m and the measurements including the shovel are the smallest in the Mustang miniloader range: 1.8 tall, 1.07 wide and 2.5 m long.

MH 25 and MH 35 Miniexcavators

These are medium-sized miniexcavator, weighing 2,660 and 3,230 kg respectively. The MH 25 model uses a 24,1 cv engine, while the MH35 model includes 3 cv more.

The shovel power ranges from 24,6 and 30,1 Kn (the larger model), with a digging depth of 2.61 and 3.13 metres respectively. The maximum height is 4.38 for the MH 25 model and 5 metres for the MH 35 model.

RC 5 Backhoe Loader

These two recently-launched backhoe loaders are fitted with top-of-the-range equipment. The RC 5 model uses a John Deere Diesel engine and its backhoe operates via mechanical levers. It respects the environment, is low-consumption and incorporates a joystick-operated, power-assisted hydraulic drive.

These machines are particularly useful on public work sites, although they are being used increasingly in civil works due to their multipurpose tools. The different-width shovels, forks and 4x1 spade that the backhoe loaders can incorporate make them suitable for a wide variety of jobs.

RC 3 Backhoe Loader

The RC 3 model has a shovel capacity of 1,1m³ and width of 2.28 m. Its maximum digging depth is 4.6 m in the retracted position and 5.8 m in the extended position, with a shovel turn angle of 200°. The loader has an unloading angle of 45° and a maximum unloading height of 2.74 m. The cab is fitted with ROPS, tinted safety glass with complete visibility, two doors with rear and side windows and side opening as well as front and rear windscreen wipers.





Company

AUSA ECOSITE: environmental innovation



In Spain, more than one ton of waste from construction activities is generated per habitant per year, of which only 5% is recycled. This is in stark contrast to the 87% of waste from construction activities that is being recycled in Belgium, Holland and Denmark, while Germany recycles 20% and France 15%.

Therefore, the Government is increasingly clamping down in this subject area and new legislation gives priority to the use of natural resources and waste generation. It has been proven that one of the first steps towards drastically reducing the

environmental impact from this activity is by separating waste at source. Aware of this, AUSA has developed methods that are more committed to environmental criteria in the construction industry, by launching a new service: **AUSA ECOSITE**, aimed at solving the waste management problem in building works. EcoSite is in a highly advanced stage of implementation and is a service provided to construction companies to persuade them to sort waste at source. The service includes a preliminary study on the amount of waste produced, hiring the best waste managers, giving priority to recycling, providing specialized containers to facilitate waste sorting at source, and regular training of workers to ensure that the whole process is carried out properly.

EcoSite is already implementing its Waste Management Plan in the construction of the high-speed train station in Tarragona, as well as in other works. The results of the pilot tests have been spectacular, since by using this system it has been possible to sort 90% of the waste generated on site.

INNOVATING TO GROW



At AUSA, innovation is part of the company's business culture and has been a constant feature from the outset, since this is one of the most advanced Spanish companies in its sector in terms of innovation. This is shown clearly by the product trend graph over the past fifty years, marked by radical

innovations that this company has launched onto the market, which last year dedicated 4.5% of sales to R&D&i investments.

In this company, innovation is considered to be a competitive advantage, apart from being an internal process in a constant state of evolution. This is also confirmed by the many prizes received in this field. Recent awards include the Premio a la Innovación Tecnológica 2004 (Prize for Technological Innovation) by the Generalitat of Catalunya, the V Premios a las Mejores Innovaciones Tecnológicas (Five Prizes for the Best Technological Innovations) at the 33rd Barcelona International Motor Show 2005, and the Premio a la Innovación Tecnológica (Prize for Technological Innovation) at the SMOPYC trade fair in Zaragoza the same year.

In AUSA innovation is not limited to design, product development or introducing new technologies, materials or processes, it analyses the implementation of the innovation process itself.

This is done through the Innovation Management Department, focused on Idea Generation. The latter is an advanced business management tool that is proving to be highly efficient in extracting an organisation's potential for innovation and keeping this at optimum levels.

Since it was set in motion, this initiative has yielded excellent results, such as the launch of 5 new products a year over the past 3 years. Two of these are new business areas: AUSA SERVICE, an innovative customer service that guarantees optimum and comprehensive after-sales support, and AUSA ECOSITE, a waste management service targeted at construction companies and currently at an advanced stage of implementation.

How to manage innovation

Ensuring innovation culture in all of the company's areas is the main task of the Innovation Management Department. The latter, which depends on the Corporate Development Area, is in direct contact with the company's decision-making bodies. In this area, there is also a New Concepts department which creates radical concepts for new products.

All of the phases of the innovation process are led and coordinated from Innovation Management: idea generation and capturing, and the evaluation, selection, analysis and presentation of the latter to the company's decision making bodies to later launch them onto the market.

Working methods involve people management, which is a main factor in any innovation process, and techniques cover varying aspects such as creativity, encouraging communication, continuous motivation and participative spirit, among other useful qualities for promoting innovative activities.

Also, different communication actions are carried out from this Department, such as a section dedicated to Innovation in each edition of the internal *A-tracción* magazine, and several internal marketing campaigns.

One of the most recent and successful initiatives is the setting up of the SEDNA (Sed de Novedades AUSA) Innovation Website. This is an Intranet aimed at employees in which they can consult documentation about fostering creativity, as well as a list of all AUSA's Innovation actions, news and results. The website also features an interactive, two-way communication area, in which users can send new proposals and ideas, and the company can set different challenges.

TOTAL QUALITY: A STRATEGIC OBJECTIVE

No machine leaves AUSA's factories without undergoing a functional test. This fact, which seems so obvious, clearly illustrates the complicated workings of a Quality System focused on preventing faults and which aims to provide customers the highest level of quality on the market.

At AUSA, an Integrated Quality, Environmental and Occupational Health and Safety Management System has been implemented and certified for many years (with the ISO 9001 certificate since 1997 and UNE-EN ISO 14001 since 2002). However, the company wants to go beyond requirements and customer expectations. Therefore, it is working actively on improving the System and progress is being made towards Total Quality and Excellence, in what could be defined as an ongoing, never-ending improvement process.

This progress is possible because at AUSA Quality is classified as a strategic concept, it is integrated and extended to all levels of the organisation, and it is an obligatory point of reference for any activity, decision or process in the company and its surroundings.

In practice, the role that quality plays in the company's corporate strategy can also be reflected in the existing Business Plan, which includes Total Quality and QCDDM as key concepts to be followed over the next three years. QCDDM (quality, cost, delivery, development and management) is already one of the company's distinctive tools, a standard used in all departments which, by continuously evaluating these five concepts, makes quality present in all of the company's processes and decisions.

By the same token, and following the Total Quality philosophy, in which the customer is the most important link of the production chain, AUSA has set itself various strategic objectives for this year, aimed at studying the systems in more depth in order to measure customer satisfaction.

Therefore, the external customer satisfaction surveys conducted over the last three years are joined by another tool: a self-assessment process undertaken by measuring a set of internal quality indicators: complaints, prompt deliveries and other related parameters. This gives an idea about which actions to take to achieve the desired level of customer satisfaction.

This tool has a dual-purpose: increasing the participation of all departments in terms of the quality objective and the concept of ongoing improvement.

Good practice and good results

To make progress in the field of Total Quality, the integration of the human team with the quality policy and commitment and collaboration from suppliers, distributors and customers are essential.

To achieve this, AUSA sets overall and area quality improvement objectives. Work is performed in teams, by projects and with matrix structures. Regular meetings are held to monitor the level of quality in the market, with the active participation of several departments: Quality, R&D, Manufacturing, Purchasing, etc.

At the same time, each department has their own quality objectives in each one of these fields. This is not to mention the 26 people who work in the Quality Area, including After-Sales, Customer Quality, UAP Quality, Supplier Quality and the Integrated Quality and Environment System, which ensure that the System works properly and that the results are excellent.

This work and the analysis of some variables such as quality levels, audit statistics, fault analysis, etc. have resulted in significant improvements, both in terms of the product and the market. More recently, one could mention the reduction, by half over the past two years, of guarantee costs, of the number of guarantee parts received per machine sold and of the number of rejected supplier parts from manufacturing lines.

Last, but not least, AUSA regularly undertakes a "Customer Satisfaction Study", which provides the level of product and service satisfaction, as compared to other rival trademarks. The results are highly rewarding, since they establish actions that will allow the company to evolve.

AUSA CELEBRATES ITS 50TH ANNIVERSARY

Diversification, internationalisation and outsourcing are modern concepts but which AUSA used for its business management half a century ago, when it began its activity led by three entrepreneurs from Catalonia in 1956. Always ahead of its time, Automóviles Utilitarios S.A. was founded as a car factory and launched its first innovation onto the market: the symbolic and popular PTV, the first microcar to come from Spain, and which turned AUSA into a reference point all over Spain. Five years later, in 1961, its founders changed their course and directed their efforts towards manufacturing industrial vehicles such as dumpers and forklift trucks. These made their debut with the launch of another radical innovation: the first dumper. Fifty years on, AUSA is currently the world's leading manufacturer of dumpers up to 7T, rough-terrain forklift trucks up to 6T, multiservice vehicles and concrete mixers up to 1 m³.

Over these years, AUSA has become one of the country's most dynamic and enterprising companies, making continuous progress and becoming a model for good business practice by making the following a constant feature of its management: innovating, being one step ahead and knowing how to create needs in the market.

A brief look at the company's history shows how, decade after decade, AUSA has continued to grow and contribute new ideas to the machinery sector, such as the first compact dumper in the 1960s or the world's first compact, rough-terrain forklift truck which was

launched at the end of that same decade. In the 1970s, AUSA entered a period of expansion, moving to new facilities in a modern industrial estate and later opening its first subsidiary abroad, in France. That move to expand was a true investment in the future, allowing the company to reorganise its production and to face up to and overcome the oil crisis of that same period.

The 1980s saw subsidiaries open successively in Madrid and the UK. There were several innovative product launches, such as the first multiservice vehicles and the 4x4 concrete mixer.

Only in the last three years has AUSA revamped its entire machinery range and has launched important new products onto the market. The first international subsidiaries have been joined by others, such as Germany, USA and China. AUSA currently has 340 employees, is present in 70 countries and works with 225 distributors all around the world. In the space of ten years it has managed to multiply its turnover by five, offer four product ranges and diversify its activity by tackling other business areas.

With all of this under its belt and in its prime as a business organisation, AUSA is celebrating its 50 years of existence by looking to the future, satisfied in the knowledge that it has remained faithful to the objectives set and with a firm resolve to continue growing and collaborating in the development of a sector in which it has long been the absolute leader.

