

KOMATSU

TIMES



Times

Quarterly News Magazine for Construction Equipment Users — Volume 4 N°1

Keeping
Brussels
on the rails

Rotating arm for
wheeled
excavators

Cyprus
customer
profile

Introducing the
new Dash 7
excavators



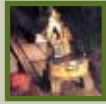
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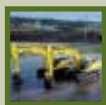
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Over the past sixteen years, and particularly in the last decade, Komatsu has made profound commitments and massive investments in Europe, resulting in substantial expansion and growth across all of the region.

Komatsu first began its European operations in 1967, importing machines from Japan. In 1985, the company built an excavator factory in England. 1989 saw the purchase of a major wheel loader manufacturer in Germany. This was followed by the acquisition of a well-established utility equipment manufacturer in Italy in 1991, and then the purchase of a major German mining equipment manufacturer in 1996. Following each of these acquisitions, the mission has been to transfer proven Japanese skills, expertise and manufacturing systems to each facility and to design and build European machines that are tailored to precise European needs.

Expert teams from Japan brought Komatsu's engineering standards and manufacturing techniques to each of these factories. Working closely with European managers and engineers, each transition took place, steadily expanding and building state-of-the-art manufacturing systems and products.

Today, irrespective of where they're built, each Komatsu machine has Komatsu's renowned standards of strength and durability, quality assurance, appearance, and competitive class performance. Over 90% of all Komatsu machines sold in Europe, are now made in Europe. So does it really matter which factory builds which machine? The answer is clearly "no". Every machine is truly a Komatsu, through and through.



A handwritten signature in blue ink, consisting of a stylized 'D' and 'S' followed by a horizontal line.

Dirk Stukkens - General Manager Marketing Development

[Fleet of Komatsu machines help build major works in Middle East]

Cyprus



— by Achilleas Karakannas —

Joannou & Paraskevaides International Contractors (J&P) are a large Komatsu customer in Nicosia, Cyprus. They have a long history of using Komatsu machines to help them build massive international projects. Working with the Komatsu distributor in Cyprus, Alexander Dimitriou & Sons, and distributors in other countries, they maintain a large fleet of Komatsu machines across a broad geographic region.

The Joannou and Paraskevaides Group is a privately-owned international construction company. They specialise in the design and construction of prestigious buildings, airport complexes, pipelines, tank farms, infrastructure networks, petrochemical complexes, oil and gas pipelines, terminals, firefighting systems,

major hotels and resorts, office and industrial buildings, bridges, highways, tunnels, dams and irrigation. They have a strong, enduring presence in most countries in the Gulf, as well as in Europe, Africa, Asia and North America. The company's annual turnover is in the order of US\$ 800 million and its workforce exceeds 15,000 people.

J&P has been a Komatsu customer since 1973. The first machine that they purchased was a D355A-1 bulldozer. After twenty-nine years and about fifty thousand hours of running time, this machine is still in use. J&P have added since then a large number of Komatsu machines to their fleet. Most of these machines are mid-sized to large, and include wheel loaders, motor graders, crawler excavators and bulldozers.

As many of J&P's projects are built outside Cyprus, they transfer their fleet of machines to their project sites. During the time that these machines are off the island of Cyprus, Komatsu service centers in the countries and regions where the works are being executed take over the responsibility for Komatsu



Purchased in 1973, this D355A-1 is still operating in the United Arab Emirates

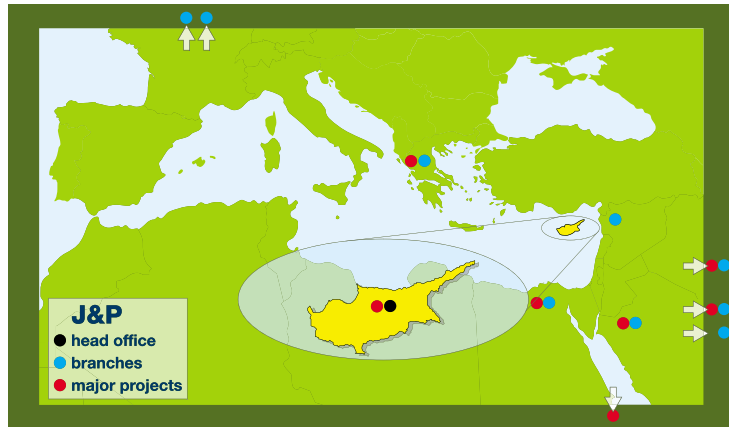
WA500-3 wheel loader working in a quarry in Cyprus



service. J&P also maintain service facilities and parts stores wherever they operate. Alexander Dimitriou & Sons Ltd. provide the backup technical support for J&P's machines on the island of Cyprus.

As a company policy, J&P specifies the use of genuine Komatsu parts. This is in the interest of gaining the longest possible life from each machine. In fact, they have machines that are still in use after 40,000 - 50,000 hours. This illustrates the value of proper service combined with factory-authorised parts. Many of their machines are used up to the end of their useful life.

Several of J&P's projects are at remote site locations and in extreme climatic condi-



tions. Only a few brands of machines can stand up to these unique challenges. J&P's Komatsu fleet ensures optimal productivity with minimum downtime.

Alexander Dimitriou & Sons, became J&P's Komatsu sales and services supplier in 1997 when they joined the Komatsu team. The company was formed in 1922. It is still run by the original family founders. Today, it's the leading Cyprus company in the sales

and service of a broad range of agricultural, industrial, materials handling and marine products. Their 57 employees provide full service, spare parts and sales support for Komatsu products. Service and parts facilities are located in 4 main centres in Cyprus, all are manned by fully-trained, experienced staff.

J&P's operations in Cyprus, backed by Alexander Dimitriou & Sons' services and Komatsu machines and parts, make a partnership that helps build some of the world's most significant installations. It's a testimony to the professionalism of these three companies, individually and collectively.

Alexander Dimitriou's head office in Nicosia →



↓ D375A bulldozer operating in Cyprus



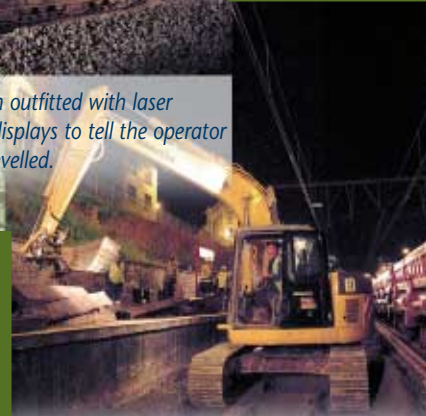
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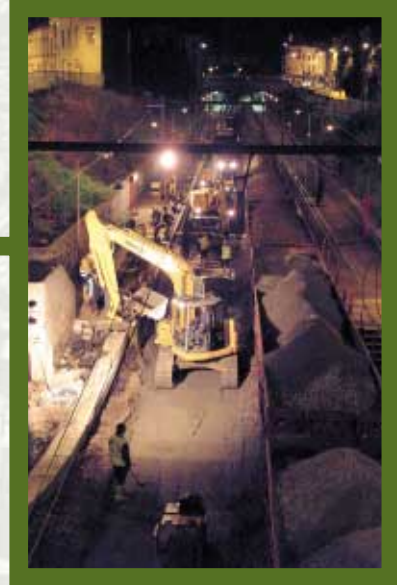
The PC128 tucks in and works comfortably under overhead wires that could easily be damaged by contact.



The D41 bulldozer is custom outfitted with laser sensors and a pair of front displays to tell the operator when the path is perfectly levelled.

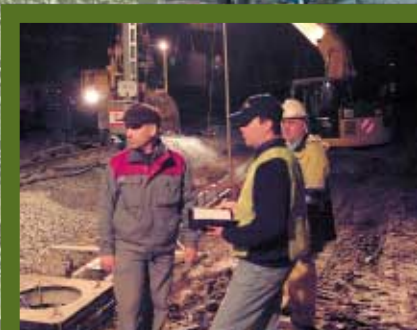


The PC128 off-loads coarse gravel from a rail car for use as the top layer that will support the new concrete sleepers.



Positioned directly next to a passenger platform on its left, the PC128 is able to swing freely, without any worry of making contact damage.

The PW150 waits for late night when it will again go into action.



Three Komatsu machines have been performing some special tasks under demanding circumstances in and around Brussels. They're helping replace old railway tracks and sleepers to keep Belgium's national railway system modern, safe and efficient. One of the Komatsu machines is a PW150 wheeled excavator. Another is a PC128US short-tail crawler excavator that can rotate its upper structure within the area of its own tracks. The other is a D41 eleven-tonne compact bulldozer that's custom outfitted with a laser sensor system that helps the operator doze perfectly level.

The company Immo Fisc won a contract with Belgium's national railway company to assist in upgrading and replacing rail tracks and sleepers, including the stabiliser and coarse gravel beneath. In the process, the old wooden sleepers are being replaced by

e rails

[Komatsu night crawlers help keep Brussels on the rails]

— Marc Blondeel —

sleepers made of cast concrete, guaranteeing longer life.

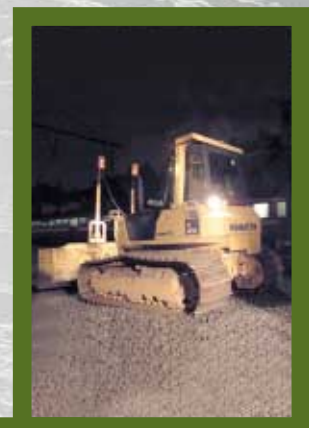
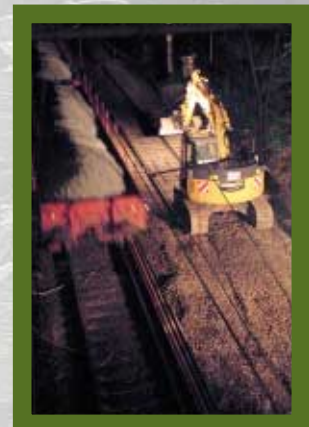
The process begins with a work crew removing rails and sleepers. The wheeled PW150 pulls the old wooden sleepers from the ground for them. Then, it removes the upper layer of gravel as well as the stabiliser underneath. Thick sheet plastic is then laid, sealing the area to prevent water from rising from beneath. Following along at the same time, the PC128 crawler excavator places a new foundation of stabiliser which is then compacted. Then, it places a new layer of coarse gravel, which is then levelled by the D41 bulldozer. Finally, the new concrete sleepers are positioned, more coarse gravel is added around and between them, and the tracks are replaced and secured.

One of the challenges is that most of the work has to be done at night. A crew of about thirty men and the machines do much of the work overnight, whilst the trains have stopped running. They work straight through until the early morning, finishing just before the trains start again. And the trains are able to run that morning on the tracks that have been replaced only hours earlier.

Another challenge is the confined work space. The close overhead wires, lamp posts and station platforms call for the services of a crawler excavator that's powerful, low, and has an exceptionally small swing radius. The PC128US is ideal. It moves along, able to swing without touching (and damaging) the environment around it. Rated at 13 tonnes, the PC128 is the largest and heaviest machine that can be used for this work, as the ground conditions also create a special challenge. The ground in the Brussels area is not stable enough to support high ground pressures.

And an environmental challenge is that the work is being done in urban, residential neighbourhoods. All three Komatsu machines are ideal, because they all operate so quietly.

These works show off some of Komatsu's greater strengths: depth and specialised versatility of machines, custom options outfitting, and quiet operations. You're unlikely to ever see these works in action, but the trains in Belgium run safer and smoother, thanks to Komatsu's night crawlers.



PW 150

[Unlimited 360 degree rotation]



— by Uwe Pausch —

Wheeled excavators are one of the most popular construction machines in Germany. They can handle all type of jobs, using their flexible booms and wide offering of attachments for a broad range of works including road and canal construction, demolition, gardening... and more.

With their mobility, swing system and off-set boom, wheeled excavators are very versatile. However; in certain conditions they have limits. Komatsu offers a unique system to overcome some limits: the endless rotating arm. It's a piece of work equipment that decisively extends the range of possible job applications on the model PW150-ES.

Siegfried Hildebrand, sales manager at Komatsu dealer Kiesel Baumaschinen in Geisingen, has sold thirty excavators equipped with these rotating arms. The majority of his customers are in the canal

and road construction business. They must interchange their attachments (excavating buckets, adjustable ditch cleaning buckets, grapples, small hydraulic breakers, screen buckets) regularly.

The endless rotating arm is perfect for canal construction, when the excavator has to dig around obstacles that are in confined spaces. The operator only has to push a button on the right hand joystick to rotate the attachment to any desired position. For road construction work, the rotating arm is perfect for building pavement. The excavator can handle material without swinging the upper structure, thereby posing no danger to passing road traffic in adjacent lanes.

Digging slopes is also very easy with the rotating arm because the operator can move the bucket blade to any position on the x-, y- or z-axis. Endless rotating arms,

combined with the hydraulic quick couplers, give Komatsu mobile excavators optimal flexibility.

Komatsu offers three models wheeled excavators - PW130-ES (15 tonnes/78 kW), PW150-ES (17tonnes/80 kW) and PW170-ES (18.4tonnes/91 kW). A wide range of combinations of equipment is offered with them, such as mono or two-piece boom and various arms. For the PW150ES-6, three conventional arms (2.1m, 2.5 m and 3 m long) are available, as well as the 2.6 m rotating arm. This Komatsu-developed arm is about 400 kg heavier than a standard arm, but enables a broad range of applications without limits to the third circuit for the hammer.

Without doubt, Komatsu wheeled excavators outfitted with rotating arms deliver smart solutions that get around some tough problems, with great precision.



The mobile excavator distributes concrete on a traffic island. The rotating arm follows the complex contour of the traffic island, and the operator doesn't have to move the machine.





Complex slopes finished in one operation thanks to the rotating arm and swing bucket.

— Spectacular European launch for the new Dash 5 wheel loaders

— by Sevil Bal —

Berlin Launch

Berlin, 25 October 2001: The launch of the new Dash-5 series wheel loaders was a big success. More than forty international journalists and distributors attended from almost all European countries, plus Morocco, Tunisia and Australia. All German dealers were also present, joined by Mr Komamura, the President of Komatsu Europe International.



[BERLIN LAUNCH]

► When developing the launch, a creative strategy was used to build a truly memorable image for the new wheel loaders. Guests were invited, teased by the slogan "New stars are born". During the product launch, the concept of "Five-Star Loaders" was linked to the new series' five main sales features. Five dynamic video segments were integrated with one main video where the new machine was shown in full action.

The event was staged in a historical tent with mirrored walls and columns, and with a big stage for the show. The tent stood in the attractive center of Berlin, close to the Potsdamer Place and Brandenburg Gate. After a pleasant, warm cocktail reception, the evening's program began. Mr Gerhard Lehnen, President of Komatsu Hanomag, welcomed everyone with

his opening speech. This was immediately followed, by a special program, where many famous artists showed their works, and short video segments presented the new Five-Star Loaders' main features in five steps, without yet revealing the actual machine. This built up a great tension before the machine's unveiling. Then suddenly, the lights switched off, the curtains opened, dancers came from all corners onto the stage, and with high-energy music and a spectacular light show and special effects, the new wheel loader was shown.

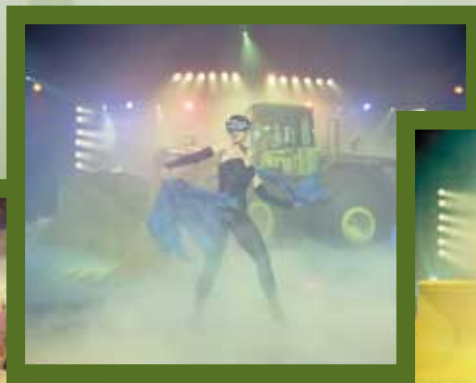
Ms Sevil Bal, the manager responsible for marketing, and Mr Uwe Herber, the product planning manager, explained the new Five-Star Loaders' development strategy to the guests. Another action video followed.

Next, Mr Goeksel Guener, General Manager for Sales and Marketing, made a motivating speech. He invited all of the guests to the stage for a close look at the machine and an interactive session with the sales and marketing team.

Enthusiastic, positive feedback and thanks has been received from all participants, especially from the international press. Komatsu's new "Five Star Loaders" have been launched, and they're certain to receive intensive international press coverage over the coming months. This will be backed by distributor promotions and sales activities. All in all, it was a very ambitious, successful and spectacular product launch!



Pleasant atmosphere in the historical mirror tent



Machine show



Machine presented by Sevil Bal (Marketing Manager) and Uwe Herber (Manager Product Planning)

Leipzig

— A Komatsu 'longfront' PC340 helps make Leipzig even more beautiful —

— by Bernard Vogel —

A former 21,000 m³ downtown office building, near Leipzig's marketplace, was demolished to make space for new market arcades. Harry Gerhard and his 50-man crew were responsible for the demolition. His company has ten Komatsu machines, including mid-size hydraulic excavators, a wheeled excavator, a wheel loader and a few mini excavators. When he needs a machine that he doesn't own, he rents one. For this demolition project, he rented a 'longfront' PC340LCD-6 from the company F&R Voigt Schornstein- und Industrieabbruch.

The building to be demolished was six stories high, plus an additional floor on the rooftop. To give the PC340 better access, a 6-metre ramp was built up as a platform for it. Demolition first began by tearing down the building's core. Then, three operators tore down the outer concrete sections. Four Komatsu machines; two crawler excavators, a wheeled excavator and a wheel loader sorted the broken material and loaded it onto lorries.

The longfront demolition model PC340 is one of the most powerful machines in its class. This one was equipped with a three-piece super-long demolition boom/arm, a 173kW engine and an extended, 4.95 metre longcrawler undercarriage. Its long reach of 11 metres and working height of 20.5 metres made it an ideal match to meet the challenge that was at hand.

Perfect control of the PC340's operations was done, thanks to Komatsu's unique HydraMind hydraulic system with its five operating modes. This system facilitates smooth, powerful operations and precise, combined movements.

Komatsu demolition excavators have a reputation for bringing down buildings quickly, with finesse, and this operation in Leipzig was no exception!



Working on a 6 m ramp, the longfront PC340-6 could reach the top of the building



Komatsu crawler excavators, wheeled excavator and a wheel loader sorted material and loaded lorries



The demolition machine's quick coupler allows the mounting of a range of demolition processors and shears



Parts

KVX

— Komatsu introduces heavy duty demo buckets

— Dirk Verstraeten —

Komatsu is now concentrating on the final link in the power chain: wear parts. They deliver optimal performance where it matters most; at the front of the bucket where they crush and penetrate the rock face. A poorly-chosen bucket tooth system can spoil an excavators' or wheel loaders' performance. On the contrary, a properly-chosen tooth system can yield the best combination of wear parts cost and machine performance. Low-cost wear parts don't necessarily save costs. In fact, it's not unusual for cheap parts to break and cause significant consequential damage to material treatment plants.

Komatsu has been developing ideal systems to yield highest-level digging performance. Proven methods of quality and performance improvement have been used at two of Komatsu's recently-acquired wear part companies: KVX and Hensley.

KVX products are designed to provide an ideal combination of wear resistance in abrasive and tough conditions. KVX's unique products, with their 600 Brinell hardness, are able to guarantee exceptionally-low bucket operating costs. And they're compatible with Komatsu equipment, as well as other brands of machines.

Customers who wish to try out a KVX-equipped heavy duty bucket in their own extreme operating conditions can arrange a demonstration with their local Komatsu dealer. These demonstrations are limited in time, and at the end of the try-out period, customers are offered the heavy duty demo bucket at favourable conditions.

Heavy duty buckets with hard wear teeth are yet another way that Komatsu is delivering total machine productivity that's tailored to each customer's machines and needs.



The KVX System

KVX

Lower cost per ton
Komatsu KVX has developed a unique system of reversible teeth and wear plates that fit any machine. An efficient system for the entrepreneur who always aims for the optimal solution, and the more abrasive the conditions, the greater the benefits. There are 3 main reasons for the impressive performance:

Reversible teeth and wear plates
When the teeth and wear plates have worn out on one side, you just turn them around and start on the other side!

A bolt-on system that really lasts
KVX conical-neck, high performance bolts are tightly torqued into a threaded plate. They have a grip like steel and withstand the toughest terrain. Just ask any of our users.

500 - 600 brinell Sagitta Steel
At Komatsu KVX, we harden our steel after processing the material. From 120 years experience we achieve the optimal combination of hardness and abrasion resistance. It lasts longer!

KVX - Your Competitive Edge

- Longer lifetime
- Better penetration
- Improved loading capacity
- Less downtime
- Eliminates bucket front welding and repair
- Greater operator comfort
- Fewer spare buckets
- Lighter buckets
- Lower fuel consumption
- Less wear on tracks
- Simpler and surer maintenance

Which all leads to increased efficiency and better total economy.

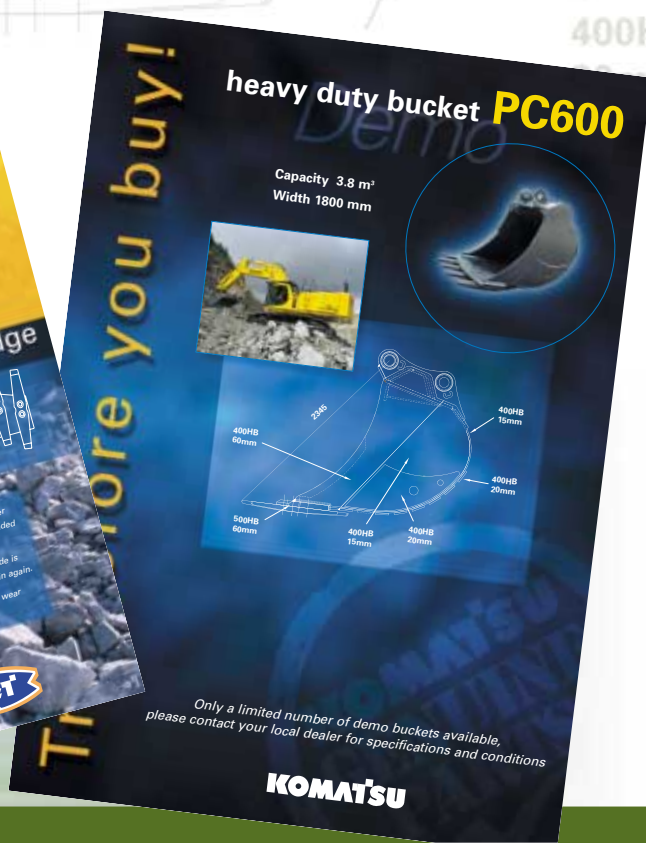
PC600-1M60

Self sharpening teeth please better penetration throughout their extended life.

Reversible teeth - When one side is worn down, just turn and begin again.

Sagitta Steel for exceptional wear resistance.

KOMATSU **GET**



heavy duty bucket PC600

Capacity 3.8 m³
Width 1800 mm

400HB 15mm
400HB 20mm
400HB 15mm
400HB 20mm
500HB 60mm
400HB 15mm
400HB 20mm

3300

more you buy!

Only a limited number of demo buckets available, please contact your local dealer for specifications and conditions

KOMATSU

New crawler excavator

— *Komatsu launches new, state-of-the-art Dash 7 crawler excavators*

— by Marc Engels and Tom Raes —

Komatsu has launched a new series of crawler excavators that are certain to raise several industry benchmarks for productivity, serviceability and operator comfort. These new machines are rugged, productive, and all-European. The first models to be introduced are the PC210 (21 tonnes), PC290 (29 tonnes) and PC340 (34 tonnes). They replace the former Dash 6 models. All improvement references in this report compare the new Dash 7 machines to their former Dash 6 predecessors. Additional new Dash 7 models will be introduced over the course of the coming year.

The new machines have an increase in bucket force, for example; up to 22% for the PC340 (with short arm and super-short arm). Maximum digging heights have been extended for longer

demolition reaches. Lifting capacities and 'production per litre of fuel' have also been increased. Improvements in the engine design have yielded greater hydraulic power with improved fuel efficiency.

The inner cab space is now 14% larger, offering an exceptionally-roomy work environment. The pressurised, tightly-sealed cab adds substantially to operator comfort, especially in dusty environments. In the heating or cooling mode, when fresh air is drawn in, internal cab pressure is greater than outside pressure, repelling dust entry. And to create an environment to help the operator's concentration, noise levels and cab vibrations have been further reduced.

Now matching the PC210 and PC290, the PC340's replacement intervals for

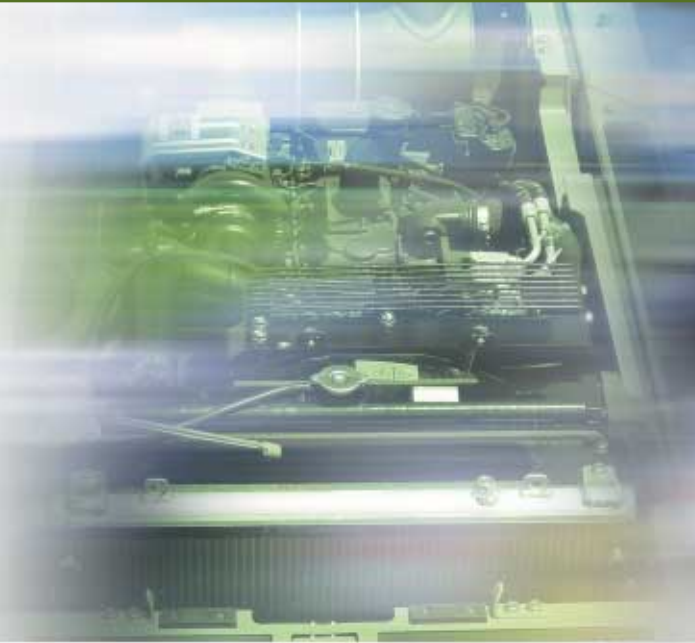
engine oil and oil filters have been extended from 250 hours to 500 hours. Hydraulic oil filter replacement has been extended from 500 hours to 1000 hours. A new separator removes any water from the fuel. Most work equipment bushing lubrication intervals have been extended from 100 hours to 500 hours.

The low-emissions engines meet Eurostage II standards, with increased power and productivity. The 'Economy' operating mode offers attractive fuel savings, quieter operations (superb for night and urban operations) and lowered NOX emissions. Engine, swing and hydraulic operation noise have been reduced. End-life recycling has been improved with easier-to-recycle materials and material-coded symbols. ▶



400HB
15mm

400HB
20mm



▶ Anticipating the possible need for additional hydraulic circuits, each Dash 7's work equipment is standard-equipped with a pre-configured HCU-prepared system. This consists of welded, pre-painted brackets that allow for the installation of HCU lines. This is supported by pre-configured, pre-painted upgrade kits (with tubes and hoses) that can be optionally ordered and installed on-site at any time. This gives greater flexibility to modify machines

to meet unforeseen needs more quickly, and at a lower cost.

All in all, the new Dash 7 machines add up to many substantial new milestones in excavator design. So watch for the new dash 7 excavators. They'll change people's perceptions of what excavators can do.



DASH 7

— The Dash 7's new, EMMS on-board hydraulics control and monitoring system

The new, multiple function EMMS (Equipment Management Monitoring System) is an industry first for earth moving machines. It's an on-board, state-of-the-art system for mechanical and electrical diagnostics, operator productivity control and maintenance management.

The EMMS system memorises daily machine operating data for effective troubleshooting. It monitors and dis-

plays operating conditions such as engine oil, cooling water and fuel levels, engine water temperature, engine oil pressure, battery charging level and air filter clogging. This data can be downloaded to assist maintenance management.

The system's "Maintenance Indicator" function alerts when oil and filters need to be replaced, ensuring that replacements don't exceed scheduled intervals.

The EMMS 'real time monitoring system' displays up to four different operating parameters, giving the service mechanic a total systems overview for faster troubleshooting. This lets the mechanic take the Dash 7 through its paces, simultaneously viewing operating data such as hydraulic pressure and engine RPMs to identify abnormalities, or to confirm that the machine is running to spec.





The new 5-Star Loaders

The new series 5 wheel loaders: the perfect combination of performance, comfort and economy in operation. With a level of driver comfort in the spacious cab never before experienced, tremendous traction and extremely low fuel consumption. On top of all this, it's quiet as a whisper in operation, absolutely easy to maintain and incredibly productive, with semi-automatic loading function. The expression "wheel loader" needs redefining for the Komatsu 5-star loaders!

The new WA470-5, the first series 5 model, is available for you immediately.
Speak to your Komatsu dealer right now!

The **5** Star Loaders

KOMATSU
www.KomatsuEurope.com