



KOMATSU

**GENUINE
BUCKET**



WE CREATE
YOUR FUTURE



WE ARE THE
BUCKET EXPERTS

WE CONSTANTLY IMPROVE OUR PRODUCTS FOR YOUR SATISFACTION

WE HAVE OPTIMIZED THE BUCKET FOR YOUR OPERATION

WE SET THE RIGHT COURSE FOR YOUR FUTURE

Komatsu Germany is the Komatsu manufacturing plant for ultra-large hydraulic mining excavators. We convince with 110 years of experience and quality made in Germany. The combination of Japanese and German values, for example engineering and safety superiority as well as manufacturing accuracy, are the unique selling points of our machines.

The Komatsu brand is a worldwide synonym for high quality, achieved through continuous product development, innovation and reliability. We strive to be the technology leader and to give a promising future to our customers.

As a global OEM, we know that you face challenges every day that affect how your planning and how you develop your business. That is why we are driven by the constant pursuit of increasing the efficiency of your mine.



KOMATSU BUCKET

Komatsu genuine buckets are specifically optimized to the attachment kinematic of our machines. Therefore our buckets provide the following advantages over third-party buckets: highest performance, tear-out and break-out forces. Full digging performance at lowest possible working pressures resulting in a longer lifetime of hydraulic components (pumps, cylinders, valve blocks) and long-lasting steel structure.

Bucket size and weight are optimized to the given material density resulting in guaranteed machine stability under all defined operational conditions. Customized wear packages and adapted bucket sizes according to customer's requirements, always in line with allowed specifications.

04 BUCKET

12 TEETH SYSTEM

14 WEAR PACKAGE

18 MANUFACTURING

22 COMPANY





FITS TO ALL

MINING APPLICATIONS



OUR BUCKETS GUARANTEE MAXIMUM DIGGING PERFORMANCE

DURABILITY IN EXTREME APPLICATIONS

The original Komatsu bucket stands for quality, reliability and efficiency. The bucket is precisely adapted to the machine. Customization and individual solutions are the key words. Factory-made components complete the picture. Boom and stick are welded inside and outside for the highest structural strength. Every weld is checked by an ultrasonic and magnetic particle inspection to make sure that the durability will be met.

The investment in design, manufacturing and quality control of such critical structures ensures a long life and reduced ownership costs under the toughest conditions. This results in short bucket fill times, unachieved applications of penetration forces and possible bucket fills of over 100%.

We differentiate between „Front Shovel“ or „Backhoe“ applications. Which is suitable for which purpose? Which wear package do I need for my application? See the next pages.

KOMATSU

KOMATSU



ENGINEERING QUALITY DIRECTLY FROM KOMATSU

HIGHEST PERFORMANCE
TEAR-OUT AND BREAK-OUT FORCES

FULL DIGGING PERFORMANCE AT LOWEST
POSSIBLE WORKING PRESSURES

BUCKET SIZE AND WEIGHT OPTIMIZED
TO GIVEN MATERIAL DENSITY

CUSTOMIZED WEAR PACKAGES AND ADAPTED BUCKET SIZES
ACCORDING TO CUSTOMER'S REQUIREMENTS



THE BUCKET IS

ADAPTED TO THE

SYSTEM OF THE MACHINE



UNRIVALLED IN

TERMS OF QUALITY

KOMATSU



WITH KOMATSU BUCKETS WE WILL EXCEED YOUR EXPECTATIONS

FRONT SHOVEL APPLICATIONS

The front shovel application is the most popular application for hydraulic mining shovels. The powerful parallel geometry attachment with an optimal bucket shape offers the customer the advantage of consistently high productivity. A single-side and double-side truck loading with short cycle times can be achieved. Generally, the high digging forces give effective productivity from all positions of the excavator. The best machines are required for an efficient front shovel application.

The filling method varies depending on the area of application. A single-side loading and double-side loading is possible, which allows a good view of the working area. This optimise the use of haul trucks and shovel. The double-side loading enables the optimum use of haul trucks and shovel. Continuous loading with a minimal truck spotting time ensures high productivity. A good view of the working area is guaranteed. Additionally, our Kom Vision system helps the operator in terms of safety. A further advantage is the automatic bucket angle control and horizontal crowd at the face for improved digging action.

KOMATSU



WITH OUR BUCKETS YOU ARE EQUIPPED TO DEAL WITH ALL SITUATIONS

BACKHOE APPLICATIONS

Lower-loading is the standard loading method for backhoe application. This is the most efficient and highly productive application. Excellent control of bucket fills and truck loads, so trucks can be loaded with a short truck spotting and cycle time. This will increase your productivity.

Top-level-loading is used when conditions do not allow the truck to be on a lower level. This is a very productive method for using a crawler machine to dig in water.

Split-bench application is used if the excavator is to work on a higher bench than the attachments normal cutting depth. The bench is normally split. The material is cut down and then loaded into a lower level truck, with the lower third progressively removed. Benches of up to 15 meters are possible with this backhoe method.

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WE ENHANCED THE
DESIGN OF THE BUCKET
FOR YOUR ADVANTAGE



KOMATSU

FRONT SHOVEL OPTIONS

We have developed a variety of special bucket sizes for the front shovel application that have been specially tailored to our machines and the kinematic. The bucket size of the PC3000 ranges from 12-16 m³, the PC4000 from 13.5 to 29 m³, the PC5500 from 19 to 32 m³, the PC7000 from 34 to 38 m³ and the PC8000 from 28 to 42 m³.

	PC3000	PC4000	PC5500	PC7000	PC8000
12	■				
13,5		■			
14	■				
15	■	■			
16	■				
17		■			
19		■	■		
20		■			
20,5		■			
21			■		
22		■			
23		■			
24		■	■		
26		■	■		
28			■		■
29		■	■		
32			■		
33					■
34				■	
36				■	■
38				■	■
40					■
42					■

*The bucket options are subject to change

BACKHOE OPTIONS

As you can see from the previous pages, the Backhoe bucket is different depending on the field of application. We have adapted the bucket sizes. The bucket size of the PC3000 ranges from 10-16.5 m³, the PC4000 from 11 to 36 m³, the PC5500 from 19 to 38 m³, the PC7000 from 34 to 38 m³ and the PC8000 from 34 to 42 m³.

	PC3000	PC4000	PC5500	PC7000	PC8000
10	■				
11		■			
12	■				
15	■	■			
16.5	■				
18		■			
19		■	■		
19.7		■			
22		■			
23			■		
24		■			
25		■			
26		■	■		
29		■	■		
34			■	■	■
36		■	■	■	
38			■	■	
42					■

*The bucket options are subject to change

You can find the standard sizes in our product brochure. Smaller bucket sizes are particularly suitable for heavy materials, larger bucket sizes for lighter materials. This allows the bucket to be adapted to the field of application. On request, our application engineers and specialists from our engineering department would be pleased to develop further customized solutions and offer you support and advice.

HENSLEY TEETH SYSTEM

Komatsu and Hensley. This has been a success story about a strong collaboration in the mining business for decades. The Komatsu quality promise places the highest demands on our suppliers. Hensley teeth systems are built to meet the production demands and safety needs. All components are developed in a strong partnership and adapted to the machine. The system is designed for a maximized payload and improved cycle times.

The Hensley teeth system is a patented hammerless tooth system that delivers strength, durability, performance and productivity in operations. The teeth are built to the highest standards to grant an extreme durability. The parts are heat-treated to meet critical specifications for strength and durability.

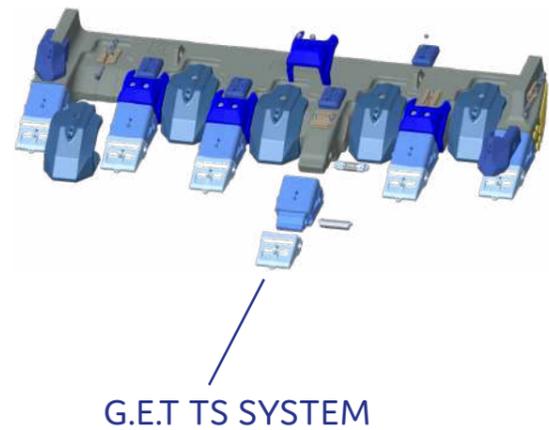
The teeth system can be split into a modular system, consisting of lip shrouds, Hensley cast lips and bolt wear caps as well as wing shrouds. This modular system enables improved protection and a simplified maintenance of the parts.

On the next page you will find a detailed overview of the recommended teeth systems for your excavator in backhoe and front shovel configuration.

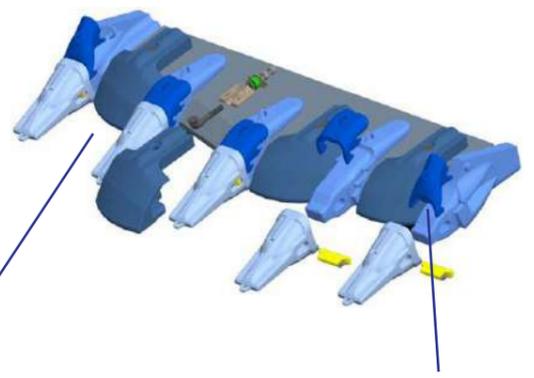


FRONT SHOVEL TEETH

BACKHOE TEETH



G.E.T TS SYSTEM



LIP SHROUDS

WING SHROUDS

FRONT SHOVEL TEETH SYSTEM

Type	Bucket	Teeth System	Cutting Height	Face Height
PC3000	16 m ³	6 x Hensley XS 252	8.0 meters	12.0 meters
PC4000	22 m ³	5 x Hensley TS 922	10.0 meters	14.0 meters
PC5500	29 m ³	6 x Hensley TS 1122	11.0 meters	15.0 meters
PC7000	36 m ³	6 x Hensley TS 1222	11.0 meters	16.0 meters
PC8000	42 m ³	6 x Hensley TS 1222	11.5 meters	16.0 meters

BACKHOE TEETH SYSTEM

Type	Bucket	Teeth System	Digging Depth	Digging Reach
PC3000	15 m ³	5 x Hensley XS 252	7.9 meters	16.2 meters
PC4000	22 m ³	6 x Hensley XS 342	8.0 meters	17.5 meters
PC5500	29 m ³	5 x Hensley TS 1122	8.3 meters	19.8 meters
PC7000	36 m ³	6 x Hensley TS 1122	8.6 meters	20.5 meters
PC8000	42 m ³	6 x Hensley TS 1222	8.0 meters	20.7 meters

WE ENHANCE
YOUR OPERATION

WEAR

PACKAGES



WE HAVE DEVELOPED THE PERFECT WEAR PACKAGE FOR YOUR NEEDS

THE OPTIMAL FIT

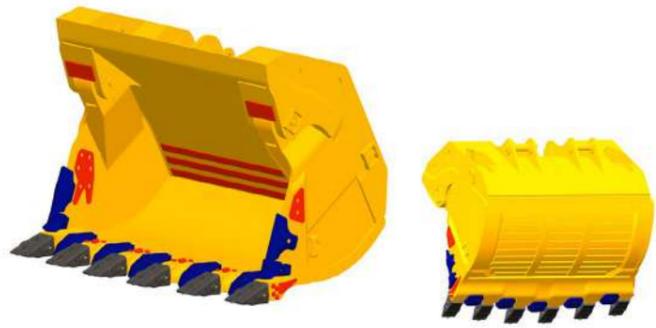
In order to prevent wear we can offer you three different wear packages in the front shovel as well as in the backhoe configuration.

The Komatsu CI team will help you to find the perfect wear package for your needs. Based on the findings an improved Wear Package (WP) will be designed with regard to the maximum bucket capacity and weight in order to remain within the machine limits. This improves the machine safety and productivity.

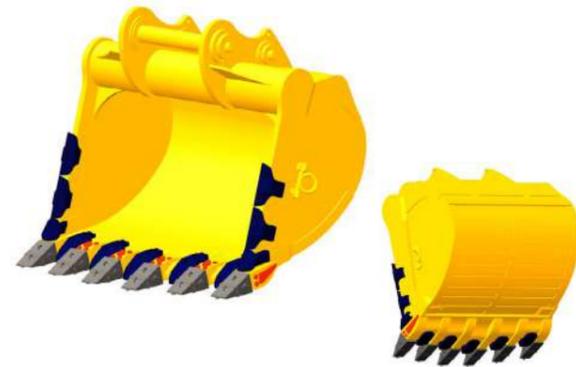
Often local modifications are made to optimize the bucket with regard to the wear packages, but these involve certain risks: a loss in machine stability and slow machine performance due to extra added weight, steel structure problems due to improper welding, reduction of lifetime of steel structure and hydraulic components or even a loss of warranty in the worst case. We are happy to support you with selecting the right size, weight and wear package for your application to avoid any risks.

FRONT SHOVEL

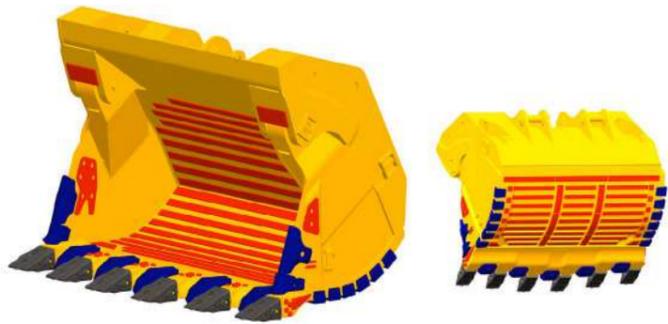
BACKHOE



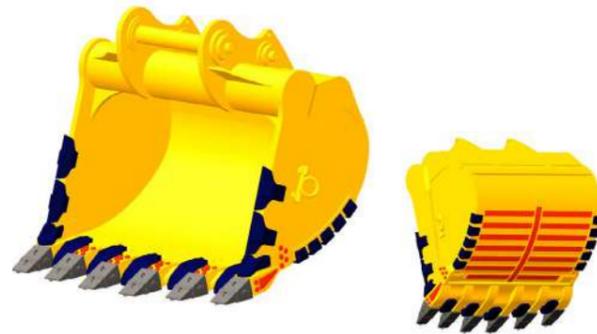
LIGHT



LIGHT



STANDARD



STANDARD



HEAVY DUTY



HEAVY DUTY

CHOOSE YOUR

OPTIMAL WEAR PACKAGE



QUALITY YOU CAN

RELY ON

KOMATSU

KOMATSU



HIGHEST STANDARDS



OPTIMIZED FOR THE APPLICATION



QUALITY CONTROLS

UNPARALLELED QUALITY

Our quality is based on a high manufacturing depth. We don't procure buckets externally. That is why we can monitor every production step carefully. The Komatsu buckets are produced in the factory to ensure the quality of the process. We can rightly say that we trust our products. Consequently, Komatsu rewards the strict use of OEM buckets by providing extended warranties on structural components as well as on the integral parts of the hydraulic system.

OPTIMIZED SYSTEM

Original Komatsu buckets are engineered, developed and built as part of a sophisticated overall system. They represent an integral part of our machines and significantly influence the efficiency of the attachment kinematic. Our engineers have carefully developed the optimum shape and dimensions in conjunction with the respective attachment geometry to reach the highest possible penetration forces while keeping the working pressures at our hydraulic cylinders well below the allowed maximum pressures.

PROCESS CHECKS

All our products are checked in terms of quality. We encourage you to rely on our advanced technology and want to emphasize our great confidence in the reliability and longevity of our machines and components by offering attractive conditions as loyalty incentives to you as our valued customer. Among other things, we use ultrasonic procedures to ensure that our products meet our highest standards.

KOMATSU

110 YEARS
OF VALUES AND
EXPERIENCE

WE ARE
DÜSSELDORF

OUR MOTIVATION IS TO KEEP THE RAW MATERIALS SUPPLY RUNNING

WE ARE PROUD TO HAVE BEEN BASED IN DÜSSELDORF FOR DECADES

OUR TRADITIONS AND VALUES

Komatsu Germany GmbH is a proud member of the Komatsu Group, one of the largest manufacturers of mining and construction equipment worldwide. In Düsseldorf we are specialized in hydraulic mining excavators.

Today we manufacture five types of hydraulic excavators of between 254 - 773 tons and bucket volumes of up to 42 cubic meters in either front shovel or backhoe configuration. Since many of our excavators are used in the most inhospitable regions in the world, with extreme temperatures and under the harshest conditions, we are above all focused on providing quality and reliability.

Nearly 90% of the units we sold in the last 35 years have been supplied to repeat customers. That fact shows our superior quality in manufacturing and service. The oldest currently operating unit with the most working hours is an excavator of the former PC4000 type, which has worked nearly 156,000 hours, that means the equivalent of more than 25 years of continuous service 24/7/365.

KOMATSU

OUR MILESTONES IN DÜSSELDORF

Since the 1930s we have been a production plant in Düsseldorf Benrath. Since then, we have continuously set milestones, year after year. Thanks to the excellent infrastructure and the proximity to the port and airport, we can ship every item in record time. We have been proud to be a part of Düsseldorf for almost 80 years. Since 1980 we have manufactured more than 1,050 excavators, more than 70% of which are still in operation.

In 2017 we opened the „Technical Center“ office building. The Technical Center is a landmark in Düsseldorf Benrath and includes attractive leisure programs and an open-space working area. The great atmosphere results in unrivaled customer service.

We train apprentices, offer further education to our trainees and our employees to develop their knowledge and to keep up to date with the latest state-of-the-art technologies. We live the legendary „SLQDC“ philosophy through all processes and departments to strive to build the best excavator for our customer's mine.

Please note that the features stated in this brochure are maybe not available for all products. Materials and specifications are subject to change without notice.

KOMATSU

**KOMATSU GERMANY
MINING DIVISION**

KOMATSU-MINING.DE

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