



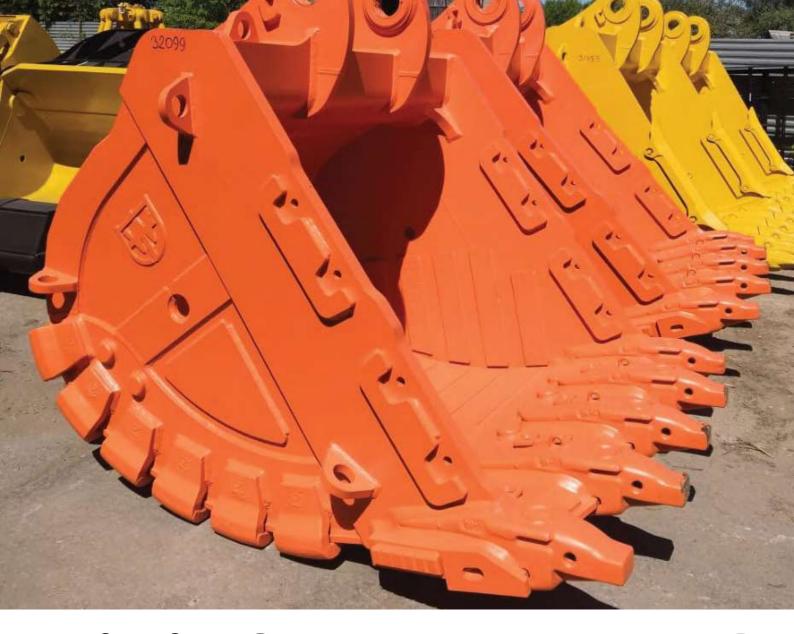
# **BUCKETS**

Boost productivity with a stronger, more durable Bucket on your machine. Designed & built to suit your needs.

"Guaranteed quality & full backup support"

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# Digging for a new Rock Bucket?

#### YOU'LL NEED A TOUGH, RELIABLE WEST-TRAK BUCKET TO GET THE JOB DONE

We're experts at designing & building high quality, heavy-duty Rock & Bulk Buckets that survive the toughest quarry & mining environments in the world.

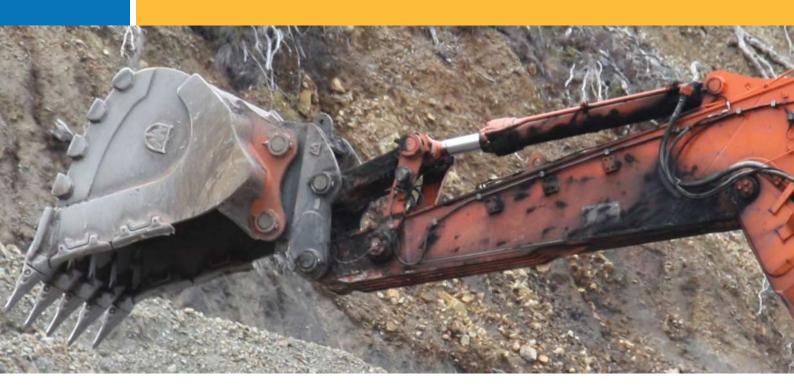
Our Buckets are manufactured from the highest quality structural & abrasion resistant wear steels, providing unrivalled strength & durability.

Productivity & performance is a key part of our design process to ensure you get the best Bucket for your needs, with good penetration & fill factor, structural integrity, safe & reliable G.E.T systems and a solid wear protection package.

Our expertise in big Bucket engineering for more than 20 years, gives you the confidence we know what works best. You'll get proven, tried and trusted Bucket advice you can rely on.

On-going back-up support is part of the West-Trak Bucket solution. All replacement wear parts are readily available ex-stock, for fast delivery to keep your machine in action. Regular bucket assessments can be carried out onsite to ensure optimum performance and customer satisfaction.

Maximise your productivity today with a West-Trak Bucket on your Excavators and Loaders. Available for 30 - 200 tonne size machines.



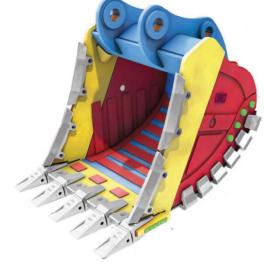
## Get more bang for your buck

BOOST PRODUCTIVITY WITH A STRONGER, MORE DURABLE ROCK BUCKET ON THE

**BUSINESS END OF YOUR MACHINE** 

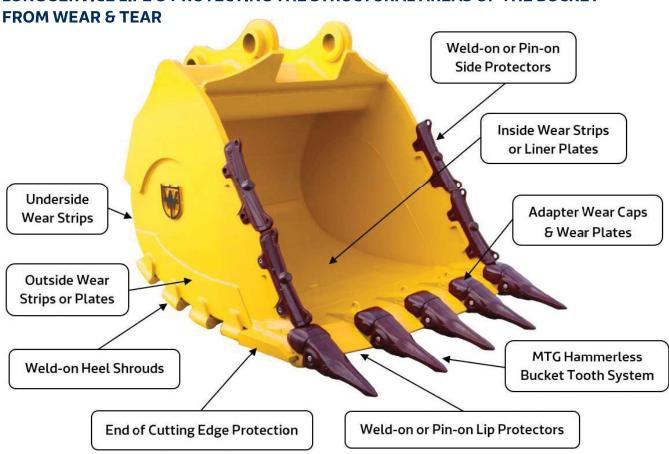
Built from High Tensile & Abrasion Resistant steels for maximum strength and wear life

- Improved design and performance benefits to enhance your machines productivity
- Fully Hammerless G.E.T wear protection system for ultimate safety and reliability
- Guaranteed quality and full back up support with replacement wear parts in stock
- Buckets are available to suit any brand of Excavator or Loader from 30-200 tonne size
- Medium or High Tensile, high strength steel is used on the top bridge, skin & lip areas
- G360-G450 Abrasion Resistant wear steel is used on the bucket sides, lip & wear strips
- G500 Abrasion Resistant wear steel is used for wear strips & wear protection plates





THE BUCKET WEAR PROTECTION PACKAGE IS FUNDAMENTAL FOR ACHIEVING LONG SERVICE LIFE & PROTECTING THE STRUCTURAL AREAS OF THE BUCKET









## What makes a good Bucket?

ITS IMPORTANT TO KNOW THE KEY FEATURES & BENEFITS OF A GOOD BUCKET TO MAXIMISE YOUR MACHINE PRODUCTIVITY & BUCKET SERVICE LIFE

**CAPACITY:** Choose a bucket with the most capacity possible to suit your Truck size and digging application. You'll increase your extraction capacity with more material in every scoop, also reducing cycle times & fuel burn.

A stepped spade edge and using Lip & Side Protectors will also help to add extra capacity to your Bucket.





**PENETRATION:** You need the right shape cutting edge & correct tooth configuration, size & style to maximise your Buckets penetration.

A spade shape Cutting Edge with the centre teeth set forward, combined with the MTG hammerless & self-sharpening tooth system, will enhance your digging power significantly. A narrow bucket will also improve penetration.



right areas for structural toughness & wear resistance. All Bucket designs are FEA stress tested to eliminate any weak areas prior to production &

ensure reliable performance. Weld preps, welding procedures & heat treatment are also important quality factors for achieving good structural strength and durability.

**G.E.T & WEAR PACKAGE:** Get a safe & reliable tooth system on your Bucket. The MTG Hammerless StarMet system guarantees no loss of teeth, fast & safe change overs and the longest wear rates.

A good Rock Bucket needs a full wear package inside & outside to protect it from wear & tear. Wear is the main cause of cracks and failure of the Bucket parts & structure, so it's important to keep your asset armoured up.





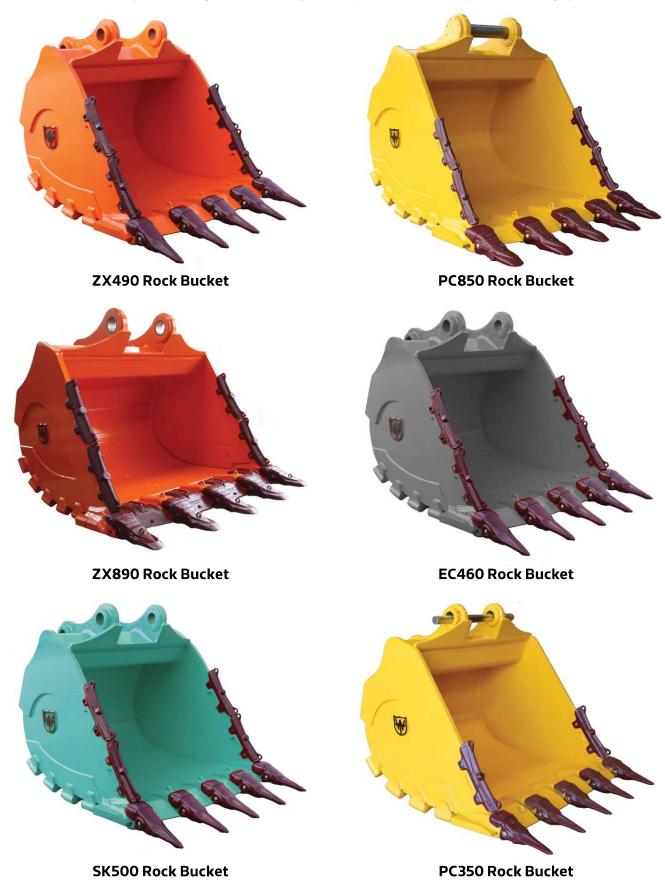
BACK UP & SUPPORT: You'll need a fast. reliable supplier for your replacement wear parts, who can supply from stock & provide trusted advice when things go wrong. West-Trak stand by what we sell & provide exceptional service & support to keep your machines moving.

All West-Trak Buckets have a 12 month/2000hour structural warranty cover for your peace of mind. See our terms & conditions for more details.

Choose a West-Trak Bucket today & get these benefits! Call 0800 654 323 to discuss your needs now

### **EXCAVATOR ROCK BUCKET GALLERY**

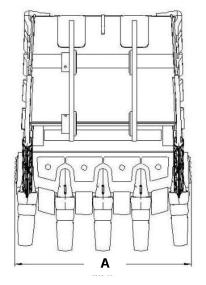
A range of heavy-duty Rock Buckets are available for all makes & models of Excavators from 30-200 tonne size. (Note: images shown may not represent the final product design)

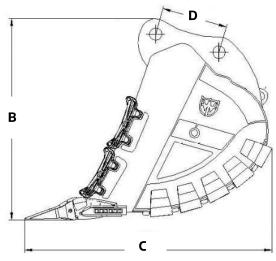


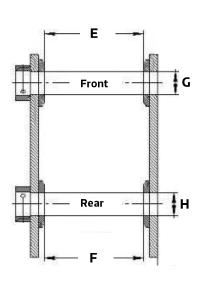
## **EXCAVATOR ROCK BUCKET SIZES**

Excavator Size		24-30 tonne	33-40 tonne	45-55 tonne	60-75 tonne	80-90 tonne
Bucket Capacity (heaped)		1.4m3	1.7m3	2.1m3	3.5m3	4.3m3
Bucket Width	Α	1310mm	1470mm	1590mm	2050mm	2150mm
Bucket Height	В	1533mm	1637mm	1755mm	2059mm	2223mm
Bucket Depth	С	1580mm	1958mm	2156mm	2471mm	2600mm
Pin Centres	D	475mm	585mm	575mm	700mm	700mm
Dipper Width (Front)	Е	410mm	418mm	472mm	525mm	555mm
Power Link Width (Rear)	F	410mm	418mm	472mm	525mm	555mm
Front Pin Diameter	G	90mm	100mm	110mm	130mm	140mm
Rear Pin Diameter	H	90mm	100mm	110mm	120mm	130mm
Cutting Edge Thickness		45mm	50mm	60mm	80mm	80mm
Cutting Edge Shape		Straight	Single Step	Single Step	Single Step	Single Step
Bushes Fitted?		No	Yes	Yes	Yes	Yes
Mounting Pins Fitted?		Yes (2x Mild Steel)	Yes (2x Mild Steel)	Yes (2x Mild Steel)	No	No
Heel Shrouds Fitted?		Yes	Yes	Yes	Yes	Yes
Wear Strips Inside?		Yes	Yes	Yes	Yes	Yes
Wear Strips Outside?		Yes	Yes	Yes	Yes	Yes
Bucket Teeth (MTG Starmet)		MA40 (5x)	MA50 (5x)	MA60 (5x)	MA120 (5x)	MA120 (5x)
Side Protectors (MTG Pin on)		4MY30U480 (1x per side)	4MY40U480 (1x per side)	4MY40U480 (2x per side)	4MY50U600 (2x per side)	4MY50U600 (2x per side)
Lip Protectors		Weld on	Weld on	Weld on	MTG Pin on or Weld on	MTG Pin on or Weld on
Bucket Weight (With G.E.T on)		1600kgs	2200kgs	2800kgs	4600kgs	5400kgs

Buckets can be modified to fit any machine, make or model. Larger Bucket sizes are available on request.







### **EXCAVATOR BULK BUCKET GALLERY**

A range of Bulk Handling Buckets are available for all makes & models of excavators from 30-90 tonne size. Options with Teeth or Bolt-on Cutting edges fitted. (Note: images shown may not represent the final product design)



**ZX490 Bulk Bucket** 



SH350 Bulk Bucket



PC450 Bulk Bucket



**ZX520 Bulk Bucket** 



**ZX870** Bulk Bucket



EC380 Bulk Bucket

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### WHEEL LOADER BUCKET GALLERY

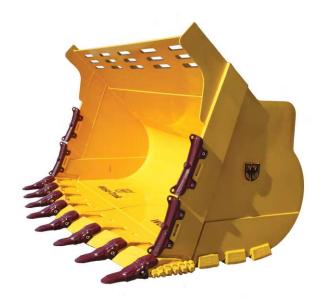
A range of Standard & heavy duty Rock Buckets are available for all makes & models of Wheel Loaders. Options with Teeth or Bolt-on Cutting Edges fitted. (Note: images shown may not represent the final product design)



**WA470 Standard Bucket** 



**WA600 Rock Bucket** 



**WA500 Rock Bucket** 



**ZW550 Rock Bucket** 



## **QUALITY ASSURANCE**

Bucket quality & structural strength depends not only on the materials and components used, but also on the correct bucket manufacturing processes. The through hardened & high tensile steels used for bucket manufacturing are very sensitive to the welding process. The key points of a proper welding process includes:

- Proper preheating & welding temperature controls
- Correct post heating to relieve residual stresses in the steel & welds
- Slow, controlled cooling techniques
- Proper weld preps on the joining areas
- Correct welding wire & weld application techniques
- Correct weld finishing in high stress areas

Proper welding temperature control is very important for retention of wear-resisting properties of the steel and strength of the welds. The main reasons that cause loss of wear-resistant properties in the steel & cracks in the weld joints, propagating into the welded material include;

- Welding of cold, not pre-heated steel
- Fast cooling of the steel in the weld joint area
- Violation of recommended welding procedures
- Incorrect weld preps on the joining areas
- Incorrect or no weld toe finishing

To avoid such situations when welding high tensile, wear-resistant steels, it is necessary to observe the following rules:

- Pre-heat welding area to optimal work temperatures, considering the steel grade and thickness (check the temperature with a tempilstik or pyrometer)
- Maintain the recommended optimum temperature in the weld pool when welding different material integrated in the bucket
- Arrange enclosed warm zone in the welding space to avoid draughts and low ambient air temperatures causing shock cooling of metal in the weld joint area
- Use of thick welding blankets to allow slow cooling after welding

The steel welding process is very arduous, because it is difficult to control the welding temperature. It is necessary to heat the steel, to control the process, and to check the result practically at the same time. All welders should be qualified and have proper certificates permitting them to work with the different steel grades.









## **QUALITY ASSURANCE**

#### Relieving residual stresses in the metal

The bucket is a complex welded structure made from materials having different thickness, different chemical composition, and physical properties. The more welding operations that are performed, the more stressed the finished product is and the higher probability of cracking in the metal and weld joints. Below are some important tips to ensure.

- Correct welding sequence, direction and termination of weld joints to minimize residual stresses
- Mandatory relieving of residual stresses in the weld joints and in the weld adjacent zones through heat treatment after welding, machining of the weld toe, peening with a pneumatic needle gun, and shot blasting

#### Welding materials and equipment

The quality of weld joints depends largely on advanced equipment and welding materials used. Welding shall be performed with a high quality wire (e.g. ESAB) in an atmosphere of shielding gas (argon 82% and carbon dioxide 18%). Welding performed with such equipment and using properly selected welding materials and conditions will significantly improve the weld joint quality and benefits as below:

- Better filling of the weld
- Lower porosity and non-metallic inclusions
- Provision of high surface tension and minimum stresses in the weld
- Higher stability of the welding process
- No crater forming on completion of the weld
- Smaller heat-affected zone so there is little workpiece deformation, if any at all

#### Warranty

All buckets are covered by a 12 month/2000 hour structural warranty - refer to our manufactured product terms and conditions for more details.

