

A Revolution in Rock Excavation



The Xcentric Ripper is an excavator attachment developed with the latest advances in excavation and demolition systems in mind.

It meets the highest standards. It was patented by Grado Cero Sistemas, a trailblazer in the industry. Trough it's design, an outstanding performance can be achieved, allowing more efficient work.

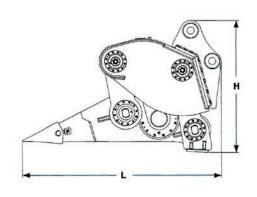
Made completely of wear-resistant steel, this attachment device is almost maintenance free, less noisy than any other excavation tool, can be used under water without any damage risk and be adapted to countless work sites. Thanks to it's uncomplicated mechanical design, which has no pricey components, the maintenance cost are very low and down times are ignorable.



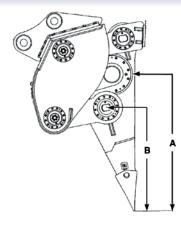
Standard specifications

Item	Model	XR 10	XR 15	XR 20	XR 30	XR 40
Hydraulic excavator	tons	7 - 10	11 - 16	18 - 24	24 - 30	32 - 40
Mass of ripper (incl. top bracket)	kg	930	1700	2500	3300	4200
Mass of ripper (less top bracket)	kg	829	1550	2200	2800	3600
Hydraulic working pressure	MPa	15 - 18	16 - 19	18 - 20	22 - 24	22 - 24
Hydraulic return pressure	MPa	0.6	0.6	0.6	0.6	0.6
Hydraulic oil flow	L/min	60	120	160	180	200
Case drain maximum pressure	MPa	0.4	0.4	0.4	0.4	0.4
Frequency	1/min	1500	1400	1400	1300	1200
Dimensions L x W x H	cm	168x45x90	220x66x130	240x78x175	280x85x160	310x90x184
Dimension A	cm	102	140	165	179.1	200
Dimension B	cm	76	105	130	139.1	155
Accumulator pressure	MPa	0.6	0.5	0.5	0.5	0.5

Item	Model	XR 50	XR 60	XR 80	XR 120-3M	XR 120-4M
Hydraulic excavator	tons	42 - 55	55 - 70	70 - 100	100 - 150	100 - 150
Mass of ripper (incl. top bracket)	kg	5600	7000	10500	13000	13000
Mass of ripper (less top bracket)	kg	5000	5700	8700	11000	11000
Hydraulic working pressure	MPa	26 - 28	26 - 28	30 - 32	30 - 32	22 - 24
Hydraulic return pressure	MPa	0.6	0.6	0.6	0.6	0.6
Hydraulic oil flow	L/min	250	280	380	500	600
Case drain maximum pressure	MPa	0.4	0.4	0.4	0.4	0.4
Frequency	1/min	1000	1000	1000	1000	1000
Dimensions L x W x H	cm	320x90x190	345x110x217	380x132x230	400x132x282	400x132x282
Dimension A	cm	210	226	240	243	243
Dimension B	cm	165	176	180	180	180
Accumulator pressure	MPa	0.4	0.25	0.6	0.6	0.6







A full range for hydraulic excavators from 8 tons up to 150 tons



- The **XR10** is suitable for demolition works, where noise is an issue. Also for excavation, trenching or recycling plants it can be a perfect solution.
- The **XR15** is perfect in excavation and demolition in urban areas. Also for trenching, recycling plants, works underwater or in mud.
- The **XR20** turns your medium size excavator into a high performace machine. You will use it in excavation and demolition. Also for trenching, recycling and working in permafrost is applicable with very high performance.
- The **XR30** is indispensable for excavation and demolition, low noise and high performance makes it a leader. The perfect tool for all types of applications.
- The **XR40** becomes the protagonist of the work site. In quarrying work excellent results are achieved with production volumes up to **120 m3** per hour. In trenching is unrivaled.
- The **XR50** is specially designed for high-volume production in quarries and infrastructure works. Production volumes are reached over **150 m3** per hour in limestone and other types of fractured rock. Also for trenching and recycling.
- The **XR60** is designed for high-volume production in quarries and infrastructure works (> **175 m3/hr**). Normally applied in areas, where drilling and blasting with explosives is not permitted for safety or environmental reasons. Also suitable for demolition, mining, etc.
- The XR80 meets or exceeds conventional equipment for high production in quarries and infrastructure projects, where drilling and blasting are no longer allowed or are simply more expensive. It can achieve production volumes of more than 200 m3 per hour in fractured rock types. Very suitable for marine excavation in large dredging projects.
- The **XR120** is our biggest Series Production model. It is currently the largest serial attachment manufactured worldwide for quarrying. Production volumes up to **250 m3** per hour can be achieved. Ideal for mining, which brings great value and versatility to large tonnage excavators. Very appropriate for extracting marine works in dredging projects with adverse conditions.

Xcentric Ripper Benefits

- ✓ 3 to 5 times higher production
- Minimum noise levels
- ✓ Minimum maintenance
- ✓ No daily lubrication required
- Minimum wear parts consumption
- ✓ Long life components and materials
- ✓ Less fuel consumption per produced m3/ton

- ✓ Less emission per produced m3/ton
- ✓ Environmental protection (Bio Lubricants)
- Economical alternative for "Drilling and Blasting"
- Marine/underwater operation
- Easy operation
- ✓ Increased operators comfort

How it started...

Grado Cero Group has manufacturing plants for the production of heavy duty excavator buckets and patented Go Max quick couplers. At the same time one of their divisions are performing large rock excavation and trenching projects in the North of Spain. Thanks to this unique combination, they were able to invent and develop a completely new attachment to excecute these difficult projects much faster and much more efficient. In the beginning of 2009 the first prototypes started to work for the first practical tests in all kind of different rock conditions. Non stop and intense working from that moment on, in all types of rock, has resulted in a 100% reliable, efficient and maintenancefree attachment: the Xcentric® Ripper.

Economical and financial demands in the market are always pushing for increased performance and production output in rock excavation and demoltion. At the same time clients are asking for lower

maintenance costs, less down time and better warranty conditions. In 2009 Grado Cero has developed a revolutionary attachment: the Xcentric® Ripper to do excavation and demolition in less time, for lower cost and with a minimum of noise. The Xcentric® Ripper is developed with a patented "Impact Energy Accumulation Technology", which makes

it in 80% of the job applications more productive than any Hydraulic Breaker available on the market.



In even 70% of the job applications a 2 to 5 times higher production can be achieved. The Xcentric® Ripper's closed energy chamber cannot be influenced or damaged from the outside by dust, water, dirt or what so ever. This means that it can work without any problem in the most severe conditions in tunnels, foundations, muddy and wet places.

Even all kinds of work underwater in for example harbours, canals

Even all kinds of work underwater in for example harbours, canals and open sea can be done without making any special expensive and complicated preparations. This is where and why the Xcentric® Ripper saves so drastically the high expensive maintenance and repair cost, that normally appear in such working circumstances.



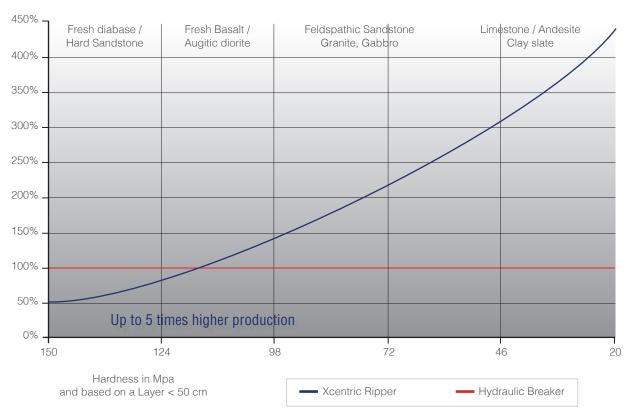


Comparison with Hydraulic Breaker

The Xcentric ® Ripper widely exceeds the hydraulic hammer production in 80% of job applications. In up to 70% of the job applications, a 2 to 5 times higher production can be achieved.

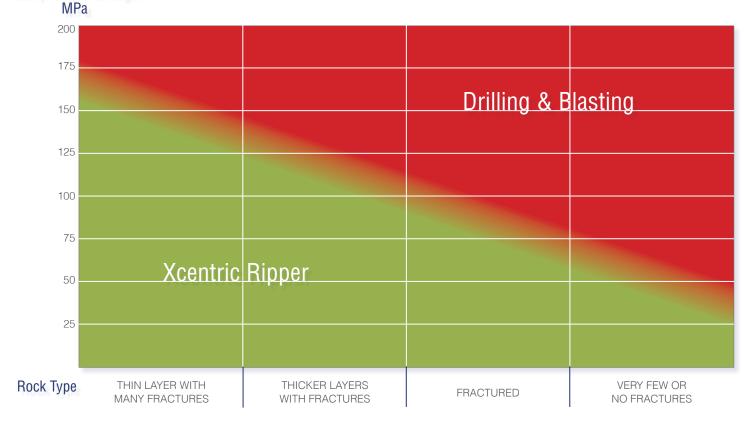
Available in sizes larger than any current range of hammers and also on demand Giant units can be supplied.

Comparison chart



Feasibility Xcentric Ripper in Rock

Rock Hardness Compressive Strength



Alternative for "Drilling and Blasting"

In quarries with a limited volume of production or where drilling and blasting is not longer permitted for environmental or safety reasons, the Xcentric Ripper is the only real way to get reasonable production costs.



After Sales Service and Training

A quick spare part delivery can be of great importance to be able to complete a tough excavation or demolition job in time. To make the troubleshooting easier we have user friendly and detailed manuals. On request, tailor made spare parts packages for your new Xcentric Ripper can be assembled. Our distributors participate continuous in comprehensive training programs to be able to give the best possible service all over the world.

To start working with the Xcentric Ripper is easy, but experience and practice will still make a big difference. Find out how to get the best out of your Xcentric Ripper, how to get the job done as fast as possible, how to handle and maintain your investment! Get in touch with your nearest Xcentric Ripper dealer or contact us directly for more information.

OFFICIAL DEALER

QUALIFIED SERVICE

QUALIFIED USER



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www.xcentricripper.eu www.youtube.com/xcentricripper

Xcentric-Ripper Benelux BV is the sole Benelux importer for Xcentric® Ripper. Contact us for more information and dealer addresses.