



FRACTUM

The World Leader in Breaking



FRACTUM

When breakage is business

World leader in breaking



As a global industry leader, we work to deliver hammers of consistently high quality and reliable service to customers around the world. We advance the profitability of those we serve through our unwavering focus on continuous improvement and innovation.

Fractum is the world leader in breaking and is the innovator of the biggest, most powerful hammers in the world. They are capable of delivering up to 400,000 joule per stroke or more – an energy level that is 15 to 30 times more potent than the biggest hydraulic hammer on the planet.





Customer driven innovation

We offer several versions of Fractum Hammers with a wide range of models for quarry, mining, demolition and steel mill applications and settings. Because our sole focus is serving these industries, we know what our users need.

We design our equipment to perform safely, without failure, wherever and whenever necessary.



■
*Can be mounted on
the stick.*

■ ■
*Can be mounted on
the boom.*

QUARRY & MINING

Breaking boulders of more than 200 tonnes



Problems with oversized rocks are a problem no more for quarry and mine operators thanks to Fractum breaker. Our Fractum breaker can be put to work wherever the rock has been transported. But why bring the rock to a new site when it's easy to move the Fractum breaker to the primary blasting area? Not only that, but you can trust it to operate safely close to other machines, and no more broken windows in the future either.

Fractum breakers can handle any size of boulder so you can keep your crusher system free from oversized rock pieces. In most cases, Fractum breaker can break the material to the point that no further process will be necessary.

The bigger the boulder, the greater the capacity

Fractum works fast, even with big boulders. In fact, the bigger the boulders are, the greater the capacity it has because it effectively crushes large boulders with just a few strokes. Fractum works so fast that the only thing slowing your operations down might be getting the material removed fast enough.

Fractum is hard on hard rocks

In general, the harder the rock, the easier they are to crush for Fractum. The reason for this apparent paradox is that Fractum applies so much energy, without actually penetrating the rock that it simply breaks. Much like glass, hard rock is brittle and crumbles easily.

There's another benefit to Fractum machine's non-penetrating principle: it saves operating costs because wear and tear is minimised – and it keeps the need for repairs and spare parts to a minimum.

STEEL MILL SERVICES

Break iron, slag and steel – anytime, anywhere



Fractum breaker is engineered to break what needs to be broken as early in the process as needed.

Why is this important?

Our study of steel mill service contractors confirmed that 50% of the total cost for recycling slag, iron, steel, etc. comes from internal transportation. Moving big skulls, buttons and pig iron lumps is expensive – and also leads to wear and tear on heavy equipment. These aren't problems with Fractum breakers.



Prevent bottlenecks with Fractum machine

You can bring it to the material that needs to be processed, instead of the other way around. Then let Fractum do the job at the dump site to speed up the process using less equipment. It can handle many of your biggest, skull and slag parts. Its capacity is higher, too. And because you reduce the amount of heavy equipment needed, your maintenance and repair costs will be lower, too!

Empty slag pots with ease

Let Fractum make controlled knock at the slag pot and solve your emptying problems forever. This way, you can release the skull without damaging the pot or ladle. Noise is dramatically reduced. You can even break the skull when it is red-hot to increase the cooling rate and make the material easier to remove. Your throughput in your slag area will be increased many times.

Pig iron pools

When you use Fractum breaker combined with an optimized work flow, you can speed up pig iron pool processes.

Divide and conquer skulls

Fractum makes it easier to clear away skulls from slag yards. It breaks them up into manageable slag and steel pieces that are easier to handle and process. Or use it on converter skulls, allowing it to apply high impact, precision hits. Fractum has successfully processed skulls weighing more than 100 tonnes. Fractum can work close to other machines like magnets when loading the trucks.

DEMOLITION

Record breaking demolition performance



Concrete breaking can be tedious and time consuming. This is where Fractum makes a difference when it comes to breaking up slabs, floors, roads, runways, bunkers, large foundations and other demolition jobs.

Fractum machines break up concrete into minute particles, making the process of separating concrete from steel reinforcement easy. The need for jaw crushing is minimized, too because it makes it far easier for the excavator to separate most of the iron from concrete.

40 m³ per hour or more

Fractum has successfully processed more than 40 m³ per hour for customers, helping them to improve productivity and keep operational costs low. Because it is engineered with a proprietary combination of alloys and laminates, the hammerhead can withstand the tremendous power brought to play. And there are virtually no vibrations transferred to the excavator machinery, which means longer wear life for any equipment involved.

Operator-friendly operation

Fractum deploys technologies that are familiar to operators and engineers. So it is easy to work with, and easy to maintain. Fractum provides training as well as a proven preventative maintenance program to keep uptime as high as possible.



Fractum Technology



Fractum's proprietary technology enables safe, precise and cost effective hammer duties by integrating innovative controlled drop ball technology with a rugged hammerhead for precision impact every time.

Fractum's unique technology increases reliability, safety, precision and performance. It delivers rugged, problem-free performance, time after time. It minimizes vibration to assure a longer lifetime of the excavator. And it makes it possible to operate close to people and other equipment because the impact is contained inside the tube. It is by far the safest hammer on the market.

15 - 30 times higher energy level

The Fractum machine delivers up to 400,000 joule per stroke – with a hammerhead impact frequency up to 10 strokes per minute. And it delivers this unprecedented performance without problems like vibration, the risk of flying fragments or the cost of conventional equipment. The operational costs are considerably lower than hydraulic hammers, and the load on the excavator is about 50% of that typically generated by hydraulic hammers.

Fractum breakers are precisely matched to our customers' needs for excellent performance and durability in a wide range of applications.

They are the ideal choice for quarry and mining, steel mill and demolition applications.

The models	Model 80	Model 100	Model 200	Model 400
Energy level J	80.000	100.000	200.000	400.000
Energy level (ft. lbs)	(59.000)	(73.756)	(147.512)	(259.025)
Weight t	4.0	5.1	10.0	14.5
Weight (lbs)	(8.818)	(11.243)	(22.046)	(31.967)
Hyd. pressure needed bar	270	270	270	290
Hyd. pressure needed (psi)	(3.916)	(3.916)	(3.916)	(4.206)
Hyd. flow needed l/min	200	200	370	600
Hyd. flow needed (gal/min - US)	(52.8)	(52.8)	(97.7)	(158.5)
Min excavator size - stick mounted 1) t	17 - 23	30 - 35	45 - 60	65 - 70
Min excavator size - stick mounted 1)(lbs)	(50.706-59.524)	(66.138-77.161)	(99.208-132.277)	(143.300-154.323)
Min excavator size - boom mounted 1) t	20 - 23	25 - 27	35 - 40	55 - 60
Min excavator size - boom mounted 1)(lbs)	(44.092-50.706)	(55.115-59.524)	(77.161-88.185)	(121.254-132.277)

1) depends on the application, use of counter weight, boom length etc.

**Reliability.
Performance.
Quality.**

Our products are designed to be simple and safe to use so you can attain the best performance in minimal time. At Fractum, we draw from years of experience to achieve this level of robust simplicity with high-power performance. It's why more companies are finding Fractum breaker indispensable to the productivity and profitability of their business.

Global Franchise

Fractum Breakers are available direct from us and through global dealer networks. With headquarters located in Switzerland, almost all of our sales are from international customers.

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