

PowerGrit® Pipe Cutting Chain

Utilized by public and private water and wastewater departments worldwide, this patented technology exclusively from ICS is designed to cut a variety of materials from ductile iron to plastic pipe. Featuring a brazed layer diamond coating on our FORCE4 platform, this chain makes your job safer, faster and easier.

Product Benefits

- Increased Safety
- Operator Control
- Reduced Excavation
- Better Access
- Versatility

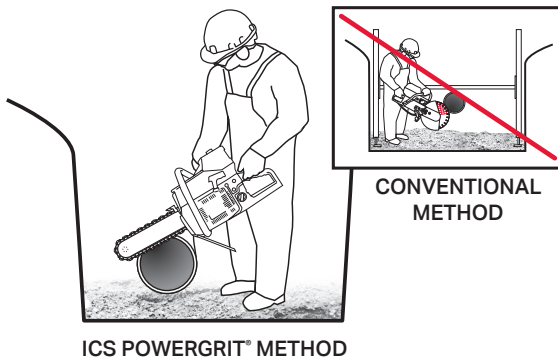
Cuts these materials

- Ductile Iron Pipe
- Cast Iron Pipe
- PVC Pipe
- HDPE Pipe
- Insituform Pipe Lining
- Asbestos* Concrete Pipe

Underground Pipe Cutting

Change the Way the Job Gets Done!

PowerGrit technology allows access to the entire cut from one position, which not only reduces the amount of excavation required, but also dramatically reduces the difficulty of the job.



Brazed Diamond Layer

ICS patent pending



** Asbestos is a hazardous material, known to cause serious respiratory diseases. Cutting into asbestos can release asbestos fibers into the air. Always research and follow the correct safety procedures, including applicable national and state or provisional occupational health and safety regulations, and protect yourself and those around you from asbestos-related disease. Always arrange for the material to be removed safely by a qualified person. ICS is not responsible for exposure to asbestos caused by use of this product.*



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Why consider an alternative to the current methods for cutting ductile iron pipe?

Safety, time and money. The most widely used method for cutting ductile iron pipe now is the gas powered "cut-off saw" with a circular abrasive or diamond blade. Maneuvering a circular blade around the outside of a pipe to complete a cut requires a large area be excavated to accommodate the saw and operator. The need to cut all the way around the outside of the pipe may require use of the saw in a non-ergonomic position, which can be very difficult and unsafe.

How fast will a PowerGrit pipe cutting saw chain cut?

Depending on the saw and other factors, including pipe wall thickness, hardness, operator experience and others, a PowerGrit chain can cut through a 10" (25 cm) ductile iron pipe in as little as 3 to 5 minutes.

How long will a PowerGrit pipe cutting saw chain last?

PowerGrit chains can last as long as 20 to 40 cuts through 10" (25 cm) ductile iron pipe.

Note: The number of cuts will vary depending on many factors, including pipe diameter, pipe wall thickness and/or hardness, position of the pipe in the trench, factors related to the saw, operator experience and more. PowerGrit Chains being run on hydraulic powered saws may get as much as 30% more chain life than on gas powered saws, depending on conditions. Cutting into materials surrounding the pipe can reduce chain life, as can inadequate water supply to the saw.

What kind of saw do I need to use PowerGrit pipe cutting saw chain?

PowerGrit pipe cutting saw chain cannot run on a traditional or regular chain saw. This is due to the amount of horsepower required, the requirement for water to be pumped through the bar, and the other components required to run PowerGrit chain including FORCE4® guidebars and sprockets. ICS offers two systems that meet these requirements; the 94 cc gas powered 695F4/PG, and the hydraulically powered 880F4/PG.

What is the largest pipe diameter that can be cut?

When cutting free-hand without use of the pipe clamp, there is no limit to the diameter of pipe that can be cut. If the pipe diameter is larger than the cutting length of the bar, it must be cut from two sides. Pipe clamp is available for the 880PG hydraulic saw only

Does the chain require water?

ICS recommends approximately two gallons per minute (8 liters) of water at 20 psi (1.4 bar) of water pressure. This can be supplied by a common home or building faucet, an on-site water truck or mobile tank. A small tank with a DC electric motor attached can be purchased inexpensively for the back of a pickup or ATV.

Does the chain require water lubrication if there is already water in the pipe or trench?

Yes. The chain is lubricated and cooled with water through the guidebar which is the only way to ensure adequate surface cooling.

Is it okay to cut with the tip of the bar in the dirt?

Cutting with the tip of the bar in dirt will significantly increase chain stretch, increase cut times and reduce chain life. Further, the operator should always try to avoid cutting in the dirt or beyond the visible cutting area due to the possibility of making contact with other buried utilities and obstructions.

When cutting pipe in the ground, will the bar and chain become pinched during cutting?

Before cutting, make sure the pipe is in a safe condition to be cut by ensuring support of the work piece in such a way that the cut remains open during the cutting operation and when the cut is finished.

Can I cut a pipe full of water under pressure?

Yes, PowerGrit offers the distinct advantage of being able to make a cut through a pipe full of water and under pressure. The chain technology maintains a high cut speed, whereas competitive methods require the pipe to drain and pressure be relieved before continuing with cut.



Diamond Tools and Equipment

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