

Earthmoving 101

Company Wrench is a business with [12 locations](#) across the US and over twenty years' experience under its belt in demolition, construction, recycling, and of course, earthmoving equipment.

It's safe to say that we've sold, rented out, and serviced a *lot* of earthmoving machinery. So if you're looking for a general overview of earthmoving, you're in the right place.

In this blog post, we'll give you a good surface layer scoop on all things earthmoving — a 101 primer on earthmoving best practices and the kinds of equipment you can use to make it happen. When you're ready to dig deeper, check out our [FAQ](#). It's a great resource if you're looking for specific details on brands, manufacturers, or parts.

The basic principles of earthmoving

First off, let's start with the basic principles of how to perform an earthmoving project safely and efficiently.

- **Get your permits and insurance in order:** Whatever scale of earthmoving you're thinking about, you'll need to comply with all local building codes and ordinances. So be sure to do your due diligence. Another important step is insurance. Proper coverage doesn't just protect your personnel and equipment, it protects you from any liability.
- **Plan before you dig:** Any earthmoving project needs to be thoroughly planned out in advance, with clearly delineated work areas, a set schedule, and clear signposting of hazard areas to avoid. The rule of thumb here is if you're unsure of how to plan, [talk to an expert](#).
- **Make sure your equipment is sound:** If you own your earthmoving equipment, be sure you're aware of appropriate maintenance procedures for every item of machinery in your care. If you're renting, working with a firm like Company Wrench can give you peace of mind that your equipment has been professionally and thoroughly maintained.
- **Work with a qualified driver/operator:** Anyone operating heavy earthmoving equipment should be well trained and aware of the hazards.
- **Be safe:** Don't work tired. If anyone on the crew appears distracted or unaware of a hazard, be sure to speak up. Look out for yourself and your crew.

Equipment overview

For a complete inventory, head on over to our [equipment page](#), where you can sort by model year, make, category and location. In this section, we'll run you through the main equipment you'll use in a typical earthmoving project. This is by no means an exhaustive list.

Backhoe loaders

The workhorse of most earthmoving projects, [backhoe loaders](#) combine a backhoe, loader, and tractor into one piece of machinery. The tractor permits the operator to handle all kinds of terrain — a must if you're working on uneven ground. The front-attached loader effectively operates as a powerful scoop, effortlessly shifting large quantities of loose dirt or gravel. It can also be used to push dirt and smooth patches of land. The backhoe can be used to break up hard materials. It can also lift and drop heavy materials.

Excavators

[Excavators](#) are purpose-built to quickly move a lot of material — far more than you'll achieve with the more versatile yet smaller backhoe loader. Because a typical excavator can rotate 360 degrees, you have the option to move materials significant distances without having to move the excavator itself.

Company Wrench offers a wide variety of excavators for different earthmoving projects: [high reach](#), [high reach front](#), [long reach](#), [long reach front](#), [mini](#) and [stub front](#). At Company Wrench, one of the ways we separate ourselves from the company is our [customer service](#), and a big part of that is working to find innovative solutions. If you're unsure of what excavator is right for your project, we can help you make the right decision.

Crushing and screening equipment

In 2021, over 1.5 billion tons of stone was crushed in the US, [Pit & Quarry Magazine](#) reports. [Crushing and screening](#) refers to the critical process of converting big pieces of material into smaller pieces and then sorting them by size. Crushing makes it easier for your earthmoving crew to move earth from one location to another. Screening allows you to separate off material, an important factor when making construction materials.

Tracked Dump Trucks

Also known as crawler carriers, [tracked dump trucks](#) can haul dirt, rocks, and other materials in rough terrain that a conventional dump truck can not reach. When ground conditions are treacherously muddy or slippery, the versatility and low ground pressure of a tracked dump truck make it an essential piece of earthmoving equipment.

Earthmoving and Company Wrench

Earthmoving is just one aspect of what we do. But from the ground up, our company understands how vitally important it is to do earthmoving right. Equipment has to function perfectly, the people using it need to be trained and alert, and the company driving the process has to be as committed to a perfect outcome as you are.

That's why Company Wrench can be a great asset in your next earthmoving endeavor. Our [core values](#) of honesty, commitment to success, teamwork, and customer service will help you pave the way for a great result.