

**MELFRED**  
**BORZALL**

YOUR GUIDE TO  
**SUCCESSFUL HDD**  
**OPERATIONS**

*Expert tips on how to run a smooth operation  
and improve your HDD productivity.*



**Success in the HDD business is about more than boring a stable hole and completing a successful pullback. It's about running your entire HDD operation like a well-oiled machine. The right crews. The right equipment. On time, under budget. You can see that all the pieces are falling into place when you spend less time putting out fires and more time getting pipe in the ground.**

## **WHAT YOU GET IN THIS GUIDE**

In our decades as HDD tooling experts, we've seen it all. Drillers whose businesses continue to grow...and drillers who run their operations into the ground. We've put together this quick guide to share how you can make your HDD business function more smoothly, improve your productivity, and create lasting success.



# HOW TO RUN A SMOOTH OPERATION



## ASSEMBLE THE RIGHT CREW—AND KEEP THEM

Your equipment is only as useful as the people who operate it. Mixing and matching crews with various levels of experience and different personality types can slow down a job. Hire teams of experienced drill rig operators and locators who either come as a pair or have been proven to work well together. When a drill operator and a locator work together regularly, they end up developing their own communication and production rhythm that helps you drill further faster.



## BUILD UP YOUR TOOLSHED

It's tempting to stick to the OEM tools that come with your rig but filling out your toolshed with bits, reamers and other condition-specific parts will save you time, frustration and expense down the line. Acquire high quality directional drill products as you undertake different projects in various conditions. As you're bidding jobs, pay attention to the materials you're likely to run into underground and invest in tools that have been proven to handle those conditions. Buying quality and maintaining your parts correctly will shave time off your jobs and save you in the long run.



## GET TO KNOW YOUR DISTRIBUTOR

Don't turn to your distributor only when you need a new part. Your local distributor is a wealth of knowledge and wants to share it with you. They love getting to know you and hearing about your challenges and successes. Speak to your HDD distributor contact frequently about the types of jobs you do and the products you use. Give them feedback and suggestions. Ask for their advice. Often, your distributor can provide you with cost-effective solutions to get the job done faster than you expected. Don't be shy. Capitalize on their experience because they know what works.



## GET YOUR HDD TOOLS MANUFACTURER TO MAKE PARTS FOR YOU

Sometimes the right tool for the job doesn't exist...yet. That's where your friendly HDD tooling experts come in handy. While OEMs provide a range of parts and accessories, manufacturers of directional drilling products can take your idea, add their expertise, and output a custom backreamer or other tool designed specifically to handle the conditions of your job. Just like distributors like to get to know drillers, manufacturers of directional drill products (like Melfred Borzall) love to see how tools stand up to tough real-life drilling conditions and get feedback from the crews who use them daily. If you have a challenging situation that you're not sure your current tools can handle, don't hesitate to develop a relationship with a manufacturer who can help.



## STANDARDIZE YOUR TOOLING WITH CUSTOM CONNECTORS

There's nothing worse than getting out to your job site and discovering that the threads on your tools don't match those on your rig. Tooling manufacturers like Melfred can supply you with—or design and produce—a complete set of adapters that ensure all your parts connect. Not only will you gain efficiencies in productivity but you'll get more mileage out of your entire equipment shed because you can use any tool on any rig.



# HOW TO IMPROVE YOUR HDD PRODUCTIVITY

Productivity on the job is about more than just choosing the right HDD tools. It's about looking at the job from all angles to make sure you're prepared to tackle anything that might slow down your drilling progress. During our decades of experience, we have seen lots of ways drillers can make minor adjustments to achieve maximum productivity. Here are 8 ways you can improve your HDD productivity (and increase your profits).



## GET ORGANIZED

Before your job begins, make a comprehensive list of every piece of equipment you'll need, down to the nuts and bolts. We've seen drillers shut down work for hours because they tried to hook up their backreamer and realized they were missing the adapter to connect to the swivel. Don't let this happen to you.



## SWEAT THE SMALL STUFF

Double check that all the thread types on all connecting parts match before heading to the job site. Review the website or catalogue from your HDD manufacturer when ordering new parts to make sure they'll work. Also, be sure you have every hand tool required to assemble the parts.



## GET THE RIGHT TOOLS FOR THE JOB

Not only do you need to make sure you have all the tools for your job, you must be sure that they're the correct tools for the ground you'll be in. Speak with your HDD manufacturer about your ground conditions and drill rig to make sure you have the best size and type of tools for the job.



## DO A DRY RUN ASSEMBLY

Assemble all your parts and accessories one time before hauling everything out to the site. Look closely at thread and bolt patterns, torque requirements, and any other minor specifications that could grind production to a halt. If you're missing a part or need an adapter, it's better to discover it before the job begins than on day 1 at the site.



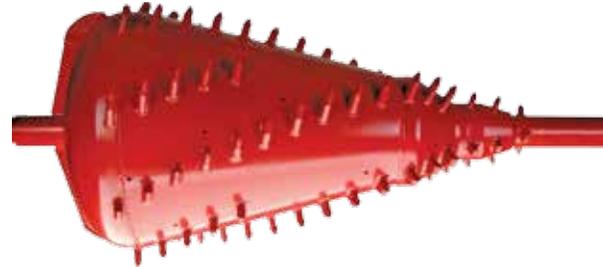


## INSPECT YOUR TOOLS CLOSELY

The impact of drilling puts stress on the small parts of tools and after one job wraps up, it's easy to store your equipment and forget about the damage. Take a close look at all your tools, paying close attention to the parts that connect, swivel, rub and chew.

- *Are threads worn down?*
- *Are cutters missing on the bit?*
- *Have the bearings seized up on the swivel?*

Little things like this can stop you in your tracks. Replace any parts that are worn or look questionable before beginning your job.



## WALK THE JOB BEFORE YOU DRILL

Visiting the drill site when bidding a job is not enough. Tour the site a week or so before drilling to get a clearer sense of the conditions. Take notes on ground conditions and survey the profile of your bore path, looking for drastic elevation changes or barriers that your locator and drill operator will need to be aware of. Knowing what to expect will ensure that you have the right HDD tools and equipment on hand and help you draft the best game plan for your crew.



## DECIDE HOW TO STEP UP YOUR HOLE SIZE

Think about the number of drill passes you'll need to take to get from your pilot hole to the ultimate finished hole, especially when drilling big holes (18" or greater). Drilling big holes the right way requires swapping out drill heads and using additional equipment, so plan your steps carefully to make sure you have everything you will need.



## DON'T LET DRILL FLUID MANAGEMENT SLOW YOU DOWN

Talk to your HDD manufacturer about the size of equipment you will be using for pilot boring and backreaming and let them calculate how much fluid you should have for your job, including extra. During drilling, pay attention to the best times to refill and dispose of your fluid, using natural breaks in drilling to refill tanks that might not be completely empty and swap out disposal tanker trucks, though the first might not be completely full.

Underground drilling is a tough job and every project has its own surprises. But by planning ahead and checking all the boxes before you get started, you can save yourself from unnecessary headaches, lost time and emergency spending.

## TALK TO THE EXPERTS

*HDD drilling involves lots of moving parts, and we're not just talking about your rig. We are committed to helping directional drillers be productive and profitable. Contact our knowledgeable staff to get answers to all your HDD tooling questions and get the right tools for the job...the first time.*

Call **800-558-7500**

Visit **[melfredborzall.com](http://melfredborzall.com)**



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