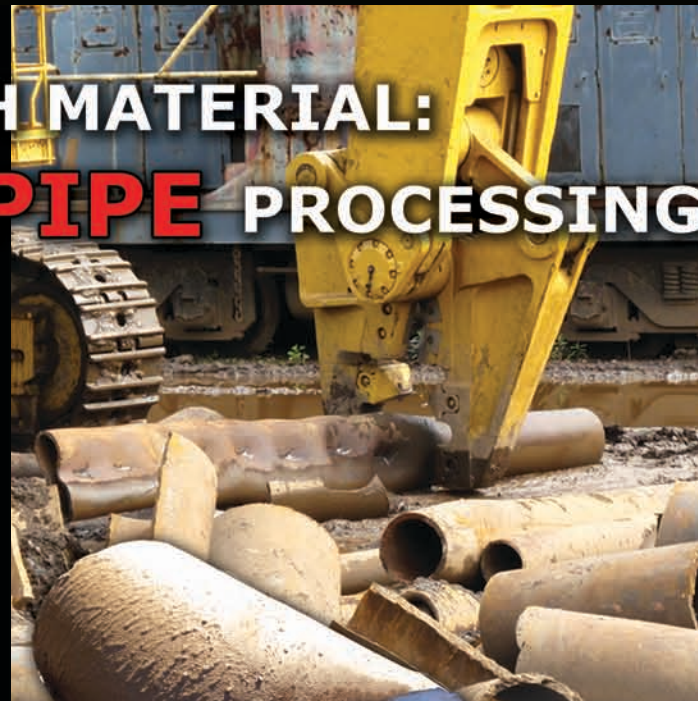


TAKING ON TOUGH MATERIAL: WELL DRILL PIPE PROCESSING



Well drill pipe processed with the Allied-Gator MT™ Series Multi-Tool

Anyone in the scrap recycling industry will agree: well drill pipe is tough stuff. Manufactured in a variety of grades with a vast range of size and material specifications, this material has infamously presented processing challenges to scrap recyclers. Find out how the patented Allied-Gator MT™ Series Multi-Tool is adding efficiency and profitability to this historically daunting task.

Well drill pipe may not be a material that most recyclers come across often, but for those recyclers who have encountered it, they know it is certainly not a scrap material to be taken lightly. In fact, shearing this tough material is at the top of the list of heavy-duty processing applications.

This high-value, high-strength material will challenge and even defeat most dedicated shears available. Recyclers who have attempted to process this material with dedicated shears have quickly learned that they are extremely limited in the grades of well drill pipe they can cut, and that traditional shear designs are very vulnerable to damage from this tough pipe. The Allied-Gator MT™ Series Multi-Tool, however, has the one-of-a-kind combination of power, versatility and durability to tackle well drill pipe processing with maximum effectiveness on a continual basis.

Because well drill pipe is manufactured for a variety of different applications, scrap product will vary in case diameter, material hardness and composition, and pipe wall thickness. For example, carbon steel pipe is produced in many different forms, such as seamless, electric resistance welded and continuous weld pipe. These pipe segments can vary greatly in their grades and specifications, with diameters up to 24 inches, wall

thicknesses up to 1 inch, and yield strengths ranging from 40,000 to 180,000+ psi. These strength levels determine whether a pipe will shear or shatter under force.

This vast range of material characteristics results in multiple challenges to recyclers who need to process well drill pipe profitably with a hydraulic attachment. First, some well drill pipe is not conducive to shearing due to its excessive material hardness. This hardened material does not give up easily, and when it does, it shatters like harden bar stock or railroad rail. Therefore, processing these grades of well drill pipe requires an extremely powerful tool other than a conventional shear.

Some pipe grades are composed of middle-of-the-road, shearable materials. These pipes do not shatter, and are usually very hard on the shear and its wear components. Many industry professionals describe this grade range of well drill pipe as "springy." Mike Ramun, sales and marketing representative for Allied-Gator, emphasizes this idea. "Most grades of this pipe resist shearing and crushing forces much differently than any other material. I've been around a processed pile of well drill pipe that sounded like a bowl of Rice Krispies, popping and crackling, with the sheared pieces trying to regain their original shape." With this caliber of material,

it is imperative that the shear being utilized is exceptionally powerful and incredibly durable in order to withstand the punishment that this well drill pipe dishes out.

This material variance makes the well drill pipe even more complex as a shearable material. By utilizing the Allied-Gator MT Series Multi-Tool, however, this challenge has been overcome with a unique 3-step process.

Step One: Cracking the Case

By utilizing the patented MT Quick-Change™ Cracker/Crusher Jaw Set, the machine operator applies the closing force of the tool to specific areas along each piece of well drill pipe. If the material is extremely hard and falls near the top of the yield strength spectrum, the pipe will shatter upon impact. When this is the case, the well drill pipe recycling process for this grade range is complete after each pipe has been squeezed.

Step Two: The Crushing Blow

Many of the well drill pipe grades that are not hard enough to crack will be crushed flat by the tremendous closing force of the MT Series Multi-Tool with its Cracker/Crusher jaw set. Through the development of this processing method, industry professionals have discovered that well drill pipe grades within this range can be sheared with nearly half the effort if they are first crushed flat during Step One.

In effect, the machine operator is preparing for the shearing process by severely weakening the structural integrity of the remaining well drill pipe.

Step Three: Cut Off for Good

Once a pile of flattened pipe has accumulated, the operator switches the MT from its Cracker/Crusher configuration to its Shear configuration. This procedure can be performed in less than 20 minutes due to the versatility of Allied-Gator's patented Quick-Change Jaw Set Technology. Back in the excavator cab, the operator can then easily process the remaining well drill pipe into any length specified. In its flattened state, the well drill pipe can be processed with tremendous efficiency and speed while greatly minimizing the wear and tear on the shear jaw and its components.

According to Mike Ramun, "This is an extremely innovative method and the most profitable approach to processing heavy well drill pipe. We're excited that our advancements in attachment technology have led to this new process, and continue to look forward to the doors of opportunity this opens for our customers." The MT Series Multi-Tool uniquely provides users with the extreme power, versatility and durability that is essential to continual material processing applications of this magnitude. Well drill pipe material is no match for the Allied-Gator MT Series Multi-Tool. ■



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STEP 1



STEP 2



STEP 3

