

**2023
EDITION**

PREP TOOL GUIDE

CUTTING | BEVELING | FACING

ESCO CATALOG

Meet the leader in tube and pipe facing, beveling, and cutting solutions.

AXXAIR SAWS

Portable, Consistence, and Precise cutting solutions for Tube & Pipe applications.

T+C TOOLS

Reliable. Portable. Efficient. T+C Tools are the ultimate solution for clean squared faced on stainless steel tube.

417-485-4575

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WELCOME TO MIT



JEFF MORGAN

CEO & FOUNDER

Dear Readers,

Thank you for downloading our ebook! We appreciate your support and hope you find the information valuable.

Our team strives to provide you with the latest trends, techniques, and technology related to industrial welding.

Thank you again for choosing Morgan Industrial Technology as your source for orbital welding knowledge.

Best regards,

A handwritten signature in black ink that reads "Jeff Morgan". The signature is written in a cursive, flowing style.



About Us

Morgan Industrial Technology was established in 2005 with the simple mission of being a single-source provider for companies needing orbital welding, facing, cutting, and beveling tools for tube and pipe applications.

Located in Ozark, MO MIT is positioned to support customers in a variety of industries across the United States. With over 25 years of experience Morgan Industrial Technology is the most trusted name in orbital welding supplies, sales, service, and training. From AMI and Magnatech orbital welding machines to Axxair orbital cutters, and ESCO flange and facing tools Morgan Industrial has the solutions to deliver precision on every job site.

At Morgan Industrial Technology, we believe conversation is essential to providing the best possible service and solutions, which we strive to do every day, for every customer. Our high standards and unparalleled service make us the only orbital welding and cutting specialist with the equipment and technical expertise to solve your unique challenges.

THE ESCO LINE

INDUSTRY LEADING PREP TOOLS

“Beveling is the key to efficient plant outages, unlocking the potential for smooth transitions, reduced downtime, and a safer working environment.”

ESCO Wart Millhog

The Wart Millhog is the industry leading beveling tool. Designed to bevel pipes ranging from 0.75" I.D. - 4.5" O.D. and reduce outage times.

Full Setup

Including

Facing Bits

Rental Options Available



ESCO BEVELING & CUTTING TOOLS

WWW.ESCOTOOLS.COM



FACING AND BEVELING TOOLS



Ground Millhog

The Millhogs critical width dimension is only 1.5" wide for accessing single tubes in a boiler wall, and can be equipped with a membrane removal head for removing membranes from boiler tubes from .875" - 1.250" O.D. The available automatic air activated clamping system instantly clamps and releases the beveling tool to and from the tube I.D., reducing cycle time between end preps and increasing production.

Rental Options Available



Mongoose Millhog

The Mongoose Millhog is a compact portable beveling solution measuring 2.250". The compact and portable design make it ideal for accessing single tubes in a boiler waterwall. The Mongoose incorporates a patented clamp release mechanism that maintains clamp integrity, unlike some beveling tools that require a hammer to release the clamps from the tube I.D. It can also be equipped with a membrane removal head.

Rental Options Available



Tube Weasel

The Tube Weasel is only 2.625" wide making it ideal for accessing single tubes in a boiler waterwall (Dutchman). The rugged gear drive is driven by a 2/3 hp motor for efficient shop and field use. The Tube Weasel incorporates an easy-to-use clamping system that is self-centering and maintains clamp integrity. This compact beveling tool can be powered by interchangeable pneumatic, electric, or battery motors.

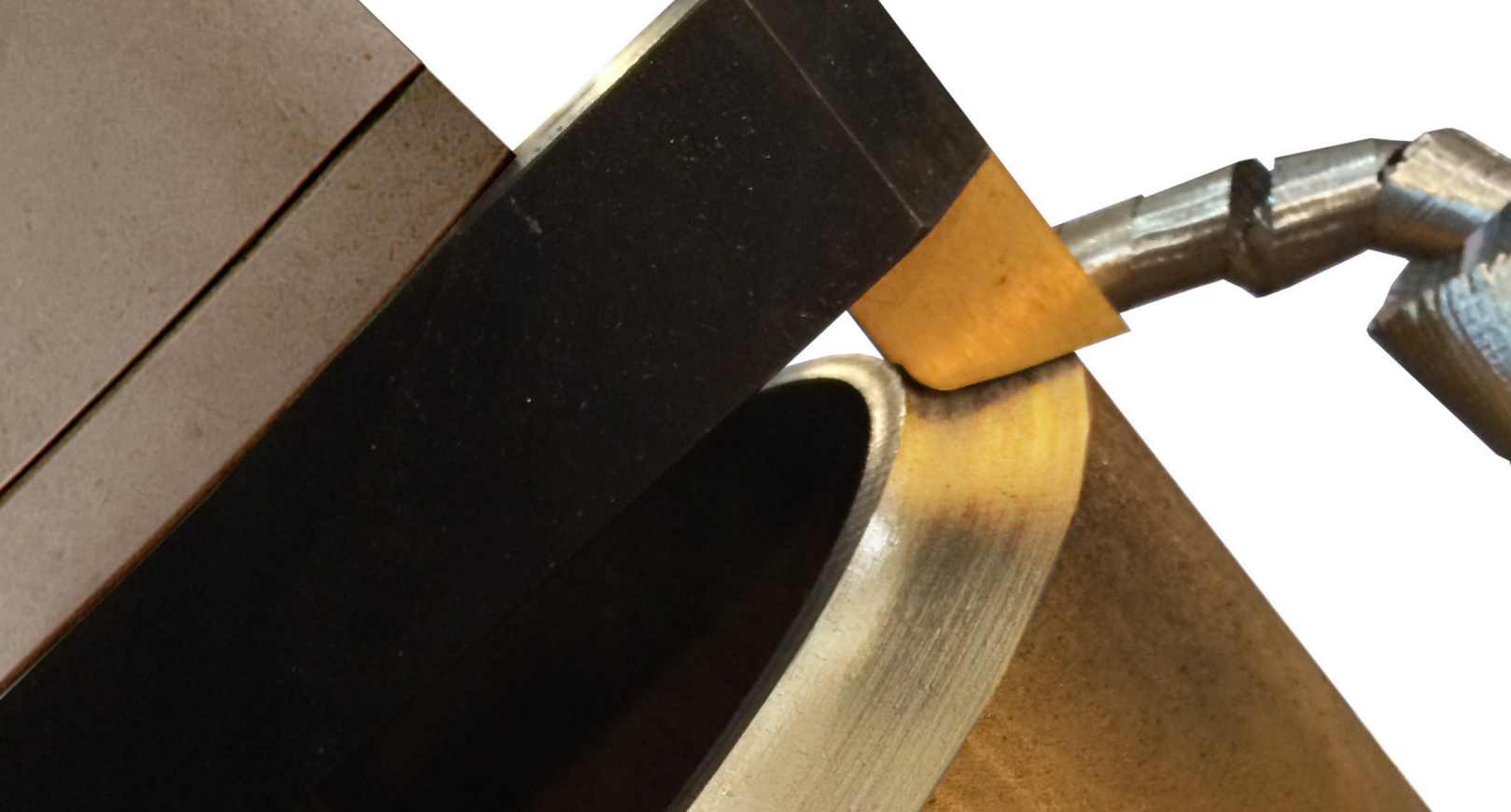
Rental Options Available



Wart Millhog

The Wart Millhog I.D. Clamping beveling tool is ideal for end prepping all boiler tube and pipe metal. The 2.625" width and 1.25 hp motor make this portable tool perfect as an all in one beveling, facing, and boring tool. The Wart Millhog can be equipped with a pneumatic, electric, or battery powered motor and uses the EscoLock blade locking system that securely holds the cutter blades to the blade head.

Rental Options Available



The J Prep Quick Guide

When using an orbital welding machine, the J Bevel (also known as a U joint) is utilized as it gives the operator a clean, consistent and easily penetrated root. This due to the J prep being around 1/2 of the wall of pipe. This joint geometry brings the root face out.

All the Millhog line of ESCO tools can achieve the J bevel with a land. Picking the appropriate ESCO tool is solely based on the OD and Wall Thickness of the pipe you are prepping and welding.

A J Prep consists of a making a 25° cut into a work piece while providing a Radius of 1/32" from the land. You start by inserting the clamping ribs into the workpiece I.D. and positioning the cutter head 2 inches beyond the end of the pipe.

The cutter head head will then align into the pipe as it is ratched into place and the operator will turn on the motor. Slowly begin applying even and consistent pressure to the workpiece as the bit rotates around the pipe removing material. Once you achieve the desired prep, reverse the direction on the ratchet and slowly reverse the bit away from the workpiece. Learn more in our ESCO prep video here!



FACING AND BEVELING TOOLS



Prepzilla

The Prepzilla is Millhog is ESCO Tools most versatile portable beveling tool. With optional 2HP pneumatic and 1800 watt electric motors and tough gear reduction, the Prepzilla creates the perfect marriage of speed and torque. 8 Sets of clamp ribs and pads achieve an I.D Clamping range of 1.575" to 8.625" O.D.

Rental Options Available



COHOG Clamping Shell

Designed by ESCO to simultaneously cut and bevel heavy wall pipe without having to switch out machines. The COHOG Clamping Shell boasts a machined 7075 aluminum alloy shell and is hard coated for maximum strength and durability. simultaneously cut and face 2" - 24" tube and pipe.

Rental Options Available



C-Hog

ESCO's C-Shaped pipe and tube beveler attaches to the O.D. using a large solid clamp, allowing the tool's cutting blade to get under the material, pull a thick chip, and end prep the hardest alloys while minimizing chatter and vibration. Blades are secured by the EscoLock wedge style blade locking system.

Rental Options Available



Fin Millhog

This tool uses a series of rotating cutting blades to mill and bevel the end of the tube or pipe, creating a smooth, consistent surface that is ideal for welding. The Fin Millhog is a versatile tool that can be used in a variety of industries, including power generation, petrochemical, and aerospace.

Rental Options Available

TUBE FACING TOOLS

PERFECT THE ART OF THE FIT UP

“Perfect Welds Don't Happen On Accident. The Prep That Goes Into Making A Weld Is Vital To The Structure & Integrity Of The End Result.”

FM-25 SS Tube Facer

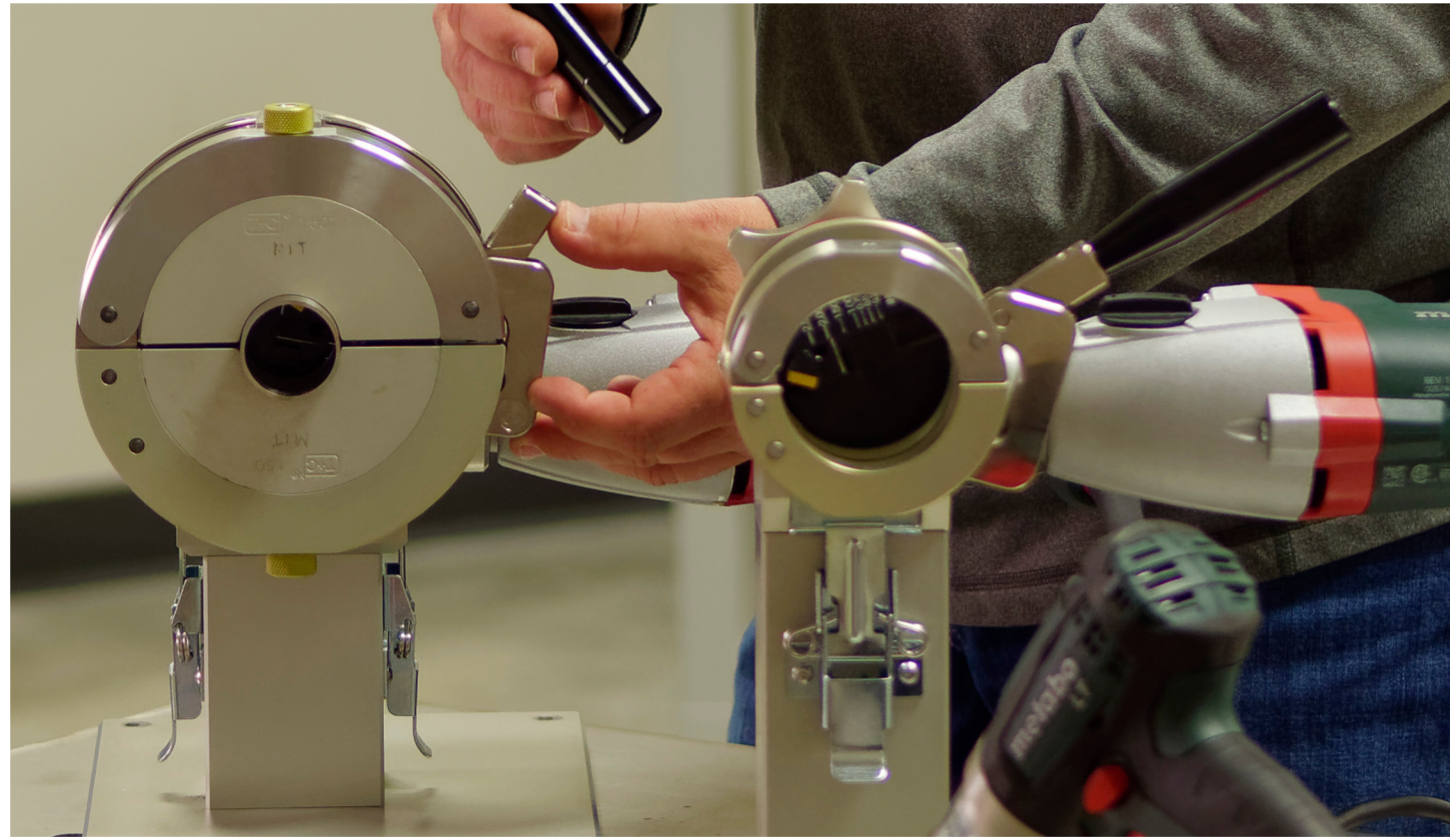
This power house tubing facing tool is available as either a portable battery-operated unit or as a standard electric powered unit.

Full Setup

Including

Facing Bits

Rental Options Available

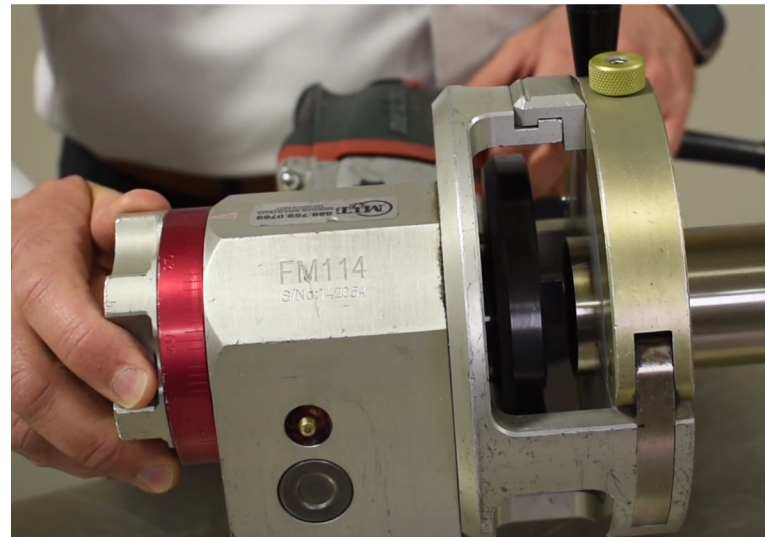


PRECISION FIT UPS CUTTING TOOLS

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The overlooked necessity

The basic need for a facing tool is to square up stainless steel tube or pipe ends. A tube facer rotates 360 degrees around the tube or pipe end while shaving or “squaring” it of any burrs or imperfection after being cut. Using this step after an orbital saw or saw vise makes fit-up easy, accurate, and repeatable.



FACING AND BEVELING TOOLS



FM Micro Facing Tool

ESCO's C-Shaped pipe and tube beveler attaches to the O.D. using a large solid clamp, allowing the tool's cutting blade to get under the material, pull a thick chip, and end prep the hardest alloys while minimizing chatter and vibration. Blades are secured by the EscoLock wedge style blade locking system.

Rental Options Available



FM 25 SS Tube Facing Tool

Designed by ESCO to simultaneously cut and bevel heavy wall pipe without having to switch out machines. The COHOG Clamping Shell boasts a machined 7075 aluminum alloy shell and is hard coated for maximum strength and durability. simultaneously cut and face 2" - 24" tube and pipe.

Rental Options Available



FM - 63 Tube Facing Tool

This tool uses a series of rotating cutting blades to mill and bevel the end of the tube or pipe, creating a smooth, consistent surface that is ideal for welding. The Fin Millhog is a versatile tool that can be used in a variety of industries, including power generation, petrochemical, and aerospace.

Rental Options Available

FLANGE FACING

RESURFACE LIKE THE PROS



THE FLANGE HOG 110

When it comes to pipefitting and welding, one of the most critical tasks is achieving accurate and consistent bevels on flanges. The beveling process is essential for ensuring proper alignment and joining of pipes, and a poorly executed bevel can lead to leaks, equipment failure, and even safety hazards. To achieve optimal results, pipefitters and welders need a reliable and efficient tool that can handle a variety of materials and work in tight spaces.

The 110 uses a high-speed cutting tool that is capable of producing a smooth, accurate finish on even the most challenging of flange surfaces. This means that technicians can achieve a tight seal between flanges, which is crucial in preventing leaks and ensuring safe and efficient operation of industrial systems. Investing in the Flange Hog 110, companies can improve their efficiency, reduce downtime, and increase the safety and reliability of their industrial systems.

FACING AND BEVELING TOOLS



FM Micro Facing Tool

The FM-114 tube facing tool can be used on stainless steel, carbon steel, titanium, and most nickel-based alloys.

Like all other T+C equipment, the FM-114 has graduated micro-feed advancement for controlled material removal.

Rental Options Available



ESCO Flange Hog 110

This manual flange facing machine is rugged and compact flange face reconditioning tool designed to quickly restore rusty, scarred, or worn flange gasket seats to a like-new condition. The easy operation makes it perfect for re-facing raised-face and flat-faced flanges in a variety of settings.

Rental Options Available

FACING BITS

MIT stocks facing bits for T+C, EH Wachs, and GF stainless steel facing tools. Our durable, long-lasting bits square tube and pipe ends in preparation for welding. They create a weld-ready prep by removing burrs and other imperfections to produce a smooth, clean fit-up.

Our T+C facing bits are double-sided, meaning you get twice the cuts at the same quality. Bits come in packs of ten but can be sold individually. Contact a representative to discuss our options.



CUTTING SOLUTIONS

CLEAN CUTS FROM AXXAIR

“When it comes to pipe fit-ups, precision and accuracy are critical to ensure a seamless and efficient welding process.

CC122 ORBITAL CUTTER

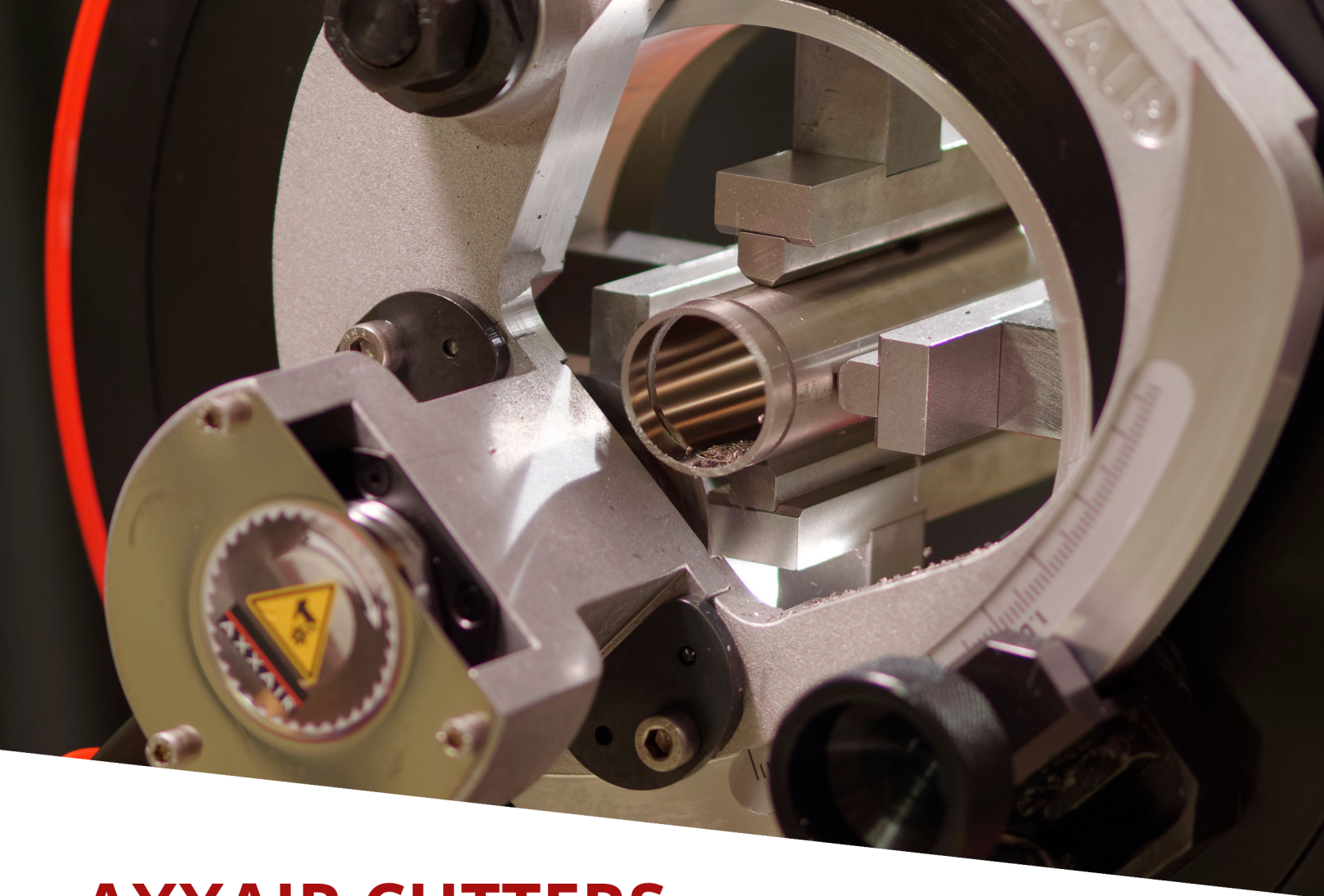
Lightweight, Portable and Easy To Use. The CC122 from AXXAIR is every pipefitters dream machine. Quick cut from .197" all the way to 4.5" O.D.

Full Setup

Including

Oversized Blades

Rental Options Available



AXXAIR CUTTERS

VS BANDSAWS

When it comes to pipe fit-ups, precision and accuracy are critical to ensure a seamless and efficient welding process. While bandsaws have traditionally been a go-to tool for cutting and beveling pipes, they have some limitations that can impact the quality of the fit-up. That's where orbital saws from Axxair come in - these innovative tools offer several advantages over bandsaws when it comes to pipe fit-ups.

One key advantage of using an orbital saw is its ability to make precise and consistent cuts, regardless of the pipe's material or size. Unlike bandsaws, which can produce uneven cuts and leave behind burrs, orbital saws produce clean and smooth cuts, making it easier to achieve a tight and accurate fit-up. This precision also translates into better weld quality and reduced rework, resulting in faster turnaround times and lower costs.



ORBITAL CUTTING SOLUTIONS



AXXAIR CC122

The CC122 uses a cold cutting process that produces clean and burr-free cuts, ensuring a high-quality finish. The machine is compact and easy to use, making it an ideal choice for both small-scale and large-scale industrial applications. The CC122 is ideal for cutting tube <1" - 4.5" and thicknesses ranging from .035" - .540" stainless steel.

Rental Options Available



AXXAIR CC172

The Axxair CC172 is a portable and versatile pipe cutting and beveling machine that is designed to provide precise cuts and bevels on pipes and tubes. The machine is easy to use and can be quickly set up on a job site, making it ideal for both small-scale and large-scale industrial applications. The CC172 is ideal for cutting tube 1" - 6.25" and thicknesses ranging from .035" - .540" stainless steel.

Rental Options Available

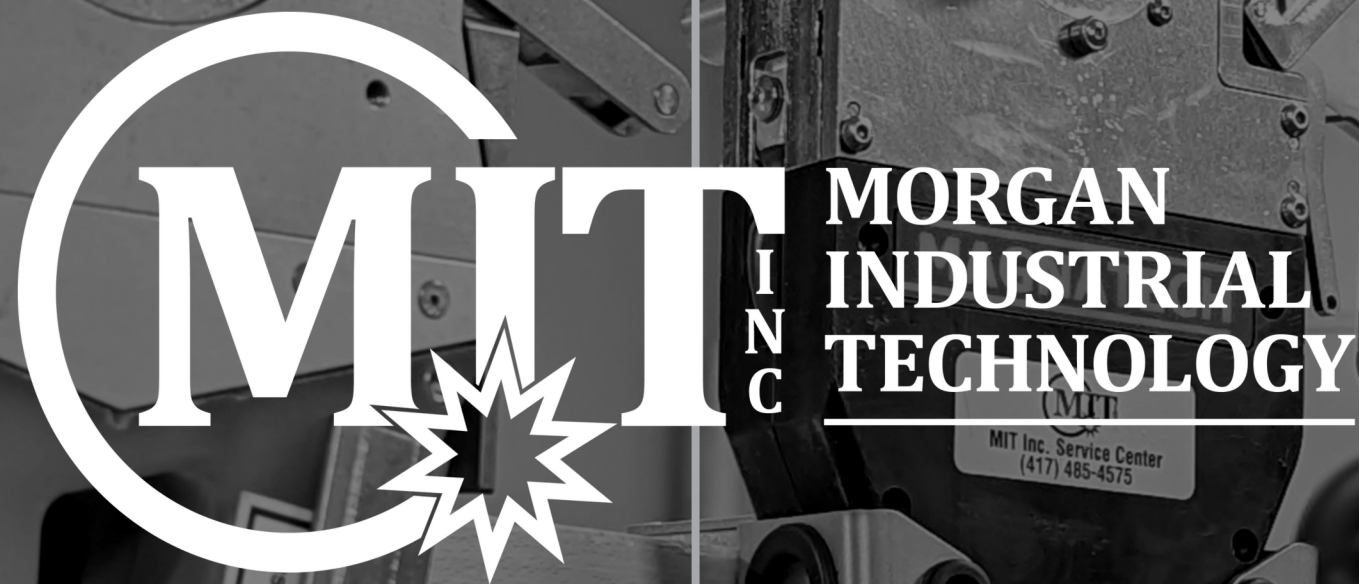


CCPS21 Support Legs

Create a stable workstation in minutes with the CCPS21. The storage box, located on the back, is perfect for storing accessories or consumables.

All three legs come off the stand to make for easy storage and transportation. Simply mount the top plate into place and bolt on. The back leg can be bolted to the ground for added safety and stability.

Rental Options Available



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INDUSTRIAL
TECHNOLOGY

THE ORBITAL WELDING SPECIALISTS

SALES

RENTAL

TRAINING

SERVICE





PREP TOOL EQUIPMENT CATALOG

Morgan Industrial Technology is the Single
Source Supplier For Orbital Welding Equipment.
We Are The Orbital Welding Specialists

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