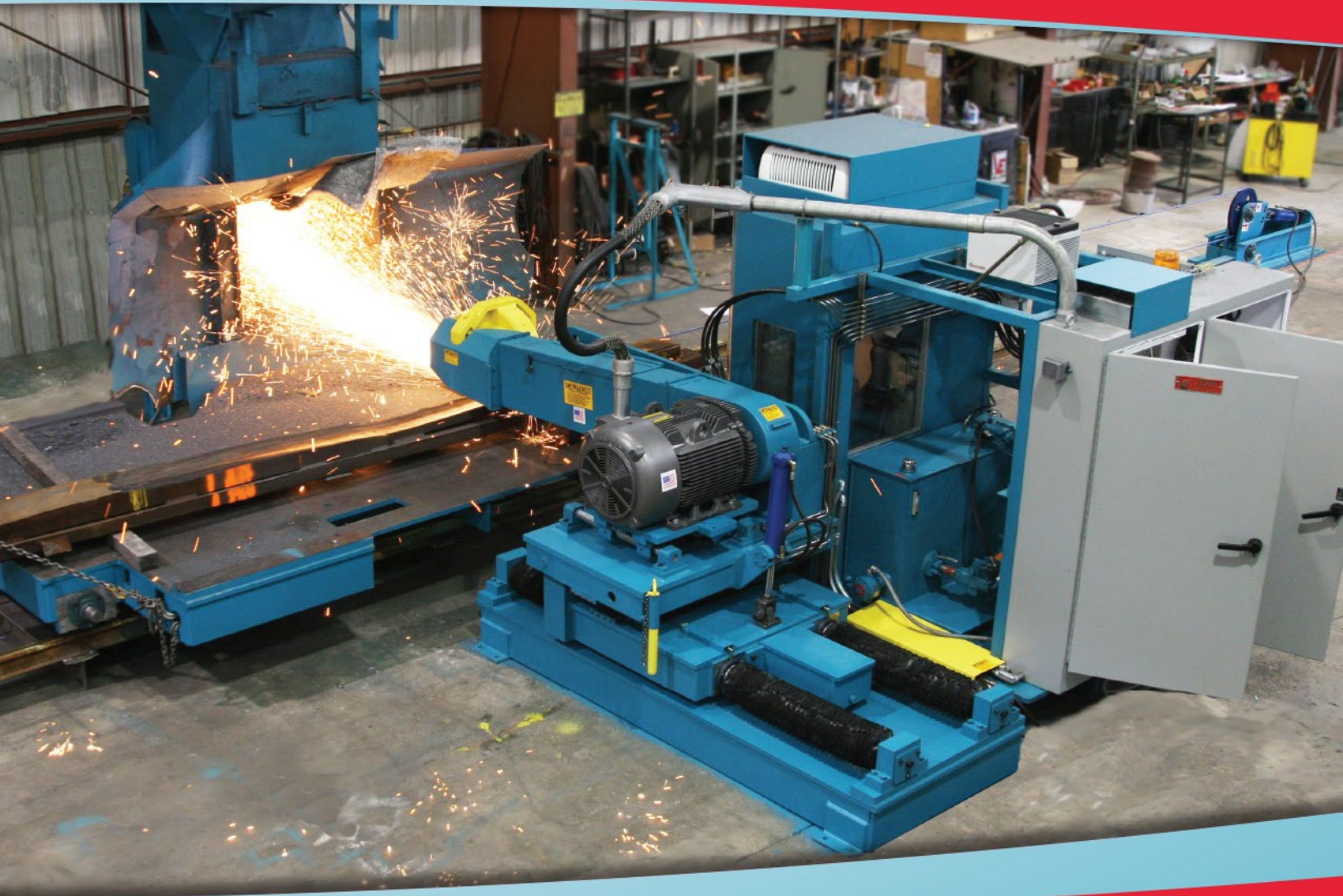


MID-WEST MACHINE™

MODEL 6040S STATIONARY GRINDER



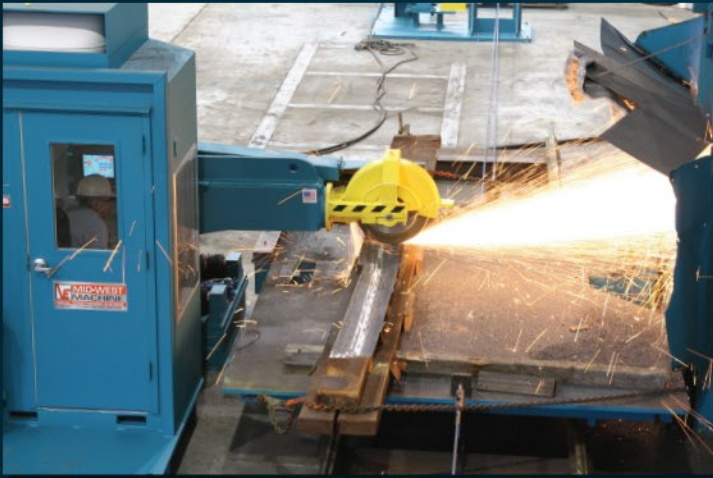
STATIONARY METAL CONDITIONING GRINDER

Additional material handling equipment such as rounds rotators, slab & square billet manipulators, and other options also available.

Mid-West Machine™

Model 6040S Stationary Metal Conditioning Grinder

Stationary systems are ideally suited to high production within a specific size range. These machines are designed to grind billets, blooms, slabs, or rounds and are readily adapted to automated material handling equipment or in-line inspection systems. More rigid quality standards, yield improvement and ease of pollution control have all contributed to the economic justification of grinding versus scarfing as the major conditioning method for "zero-defect" steel production. Solid state controls, automatic travel systems, constant depth of cut control and ease of operation with a minimum of down time make Mid-West the logical choice for your conditioning requirements.



The Mid-West Cab and Controls

Specifically designed for ease of operation, **Mid-West Machine™** grinders feature outstanding visibility of the work area from the operator's cab. The control joysticks for the operation of the grinder head and material handling equipment are located in the armrests of the completely cushioned, industrial quality, fully adjustable seat.

The touch screen, color HMI and data terminal displays, monitors and controls all operating sequences. The HMI also provides information and diagnostics for the electrical and hydraulic systems. An additional option includes the ability to transmit production reports to other locations as determined by the customer.

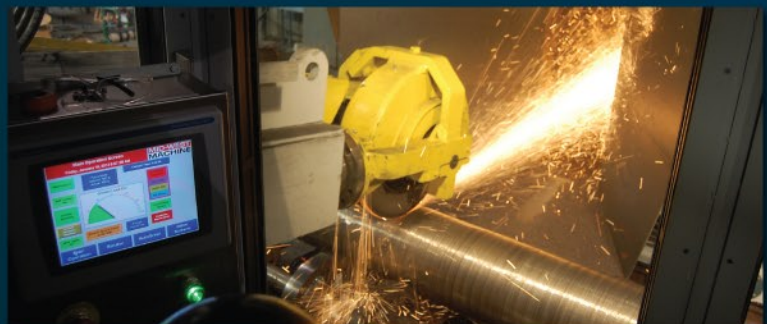
The speed of manipulator car travel and the down pressure can be adjusted "on the fly". The Mid-West controls are very responsive, minimizing metal loss. The latest controls also provide faster conditioning times resulting in higher throughput.

The electrical panels and hydraulic system components are arranged for easy functional checks with all components readily accessible for maintenance personnel.

These features, combined with a complete line of manipulator and rotator cars, loading and unloading devices, slab turners, conveyors and other material handling equipment make **Mid-West Machine™** equipment the most versatile metal conditioning systems available today.

Features

- Carriage and boom for vertical & horizontal grinder travel across material
- Wheel oriented 90° or 45° from long axis of material
- Grinder equipped with 150 or 200 HP for maximum metal removal
- Grinder equipped with a Dead Shaft or Live Shaft Spindle
- Grinding Wheel oscillation available with the Dead Shaft spindle
- Utilize industry standard 25 in (635 mm) conditioning wheels
- Close proximity, environmentally controlled Cab
- Automatic load control
- Automatic index
- Safety drop off
- Centralized lube points
- Complete electrical and hydraulics
- Fully assembled and tested in Vulcan Engineering Co. facility





Additional Equipment Options

Accumulating walking beam loading and unloading equipment is available to alleviate the wait for cranes or forklifts to directly load/unload the car (typically a major cause of lost time). This equipment automatically moves material pieces from the beam load position to the car load position on the walking beam.

The equipment will index additional pieces until the load table is full. When the operator is ready for a new piece to grind the car is moved to the car load position and the walking beam places the material on the car.

As long as there is at least one piece on the load table, the accumulating walking beam will move it forward so there will not be a delay when the grinder operator is ready for the next piece. The unloading accumulating walking beam works in reverse, making sure there is always a space for auto unloading of the car. Cars are generally driven with a two cable system using a high horsepower motor and Vector drive allowing speeds from 4 inches per minute to 200 feet per minute. Cars can also be axle driven using a vector drive and car mounted gear box where space is restricted.

Rounds Rotator Car: These are typically the multiple-wheel type, with hardened split rotator wheels keyed on line shafts and split style bearings supporting the line shafts for ease of maintenance. The line shafts can be driven with hydraulic motors or electric motors. The rounds rotator car can be equipped with "Easy Downs" to provide protection to the rotator wheels and drive shafts, recommended when loading equipment and procedures may allow the material to "drop" on the rotator. Also available is a rounds rotator with adjustable centers for support of ingots with a wide range of diameters. The adjustment is operated from the cab controls.

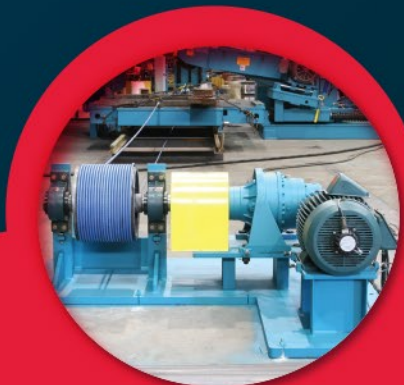
Square Billet and Slab Manipulator Cars: These manipulators are also available for use with the Model 6040 Metal Conditioning Grinders. The use of these manipulators allows the operator to position the material for grinding all sides and corners of from the cab controls.

Swarf Collection Booth: positioned parallel to the grinder for better dust collection.

Specifications

Grinder Head Stroke	Horizontal – 60 in (1524 mm)	Vertical – 40 in (1016 mm)
Grinding Wheel Force	500-2000 lbs (227-907 kg)	
Grinding Wheel Speed	Titanium – 12,500 SFPM at 24 in (63 m/s at 610mm)	13,000 SFPM at 25 in (66 m/s at 635 mm)
	Steel Alloys – 16,500 SFPM at 24 in (84 m/s at 610 mm)	17,200 SFPM at 25 in (87 m/s at 635 mm)
Grinding Wheel Drive	150 HP (112 kW) Standard	200 HP (150 kW) Optional

*Features and options subject to change without notice



Scan the Code

Use your smart phone and scan this QR code to find out more info on the **Mid-West Machine™ Model 6040S!**



METAL CONDITIONING

Mid-West Machine™ offers several models and types of metal conditioning grinders to fit your needs.



Overhead Grinder



Ingot End Grinder



Traveling Grinders

For more information, images and videos on **Mid-West Machine™** Grinders and Equipment visit our website.

<http://www.vulcangroup.com/mid-west>