STEELE

High Accuracy Machine Tools

UNIQUE DIAMOND BAND SAW CUTS FUSED QUARTZ GLASS, SILICON GLASS, STONE & CERAMIC MATERIALS WITH EASE.

CNC DIAMOND BAND SAW

MODELS 3618 / 3625 & 4222 / 4240 SERIES III & IV

STEELE HIGH ACCURACY MACHINE TOOLS

GENERAL INFORMATION

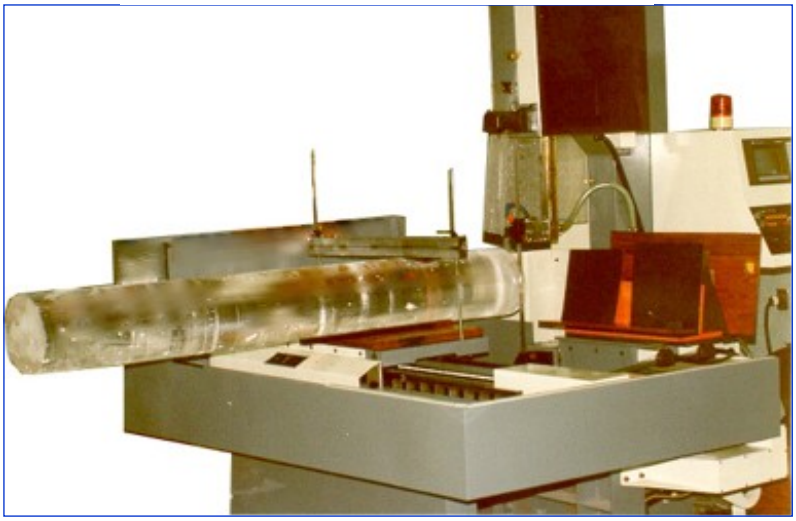
- *Steele Machine Tool, Inc. is a California Corporation. We have been building Diamond Band Saws, and other Machine Tools for cutting Fused Quartz Glass, Stone, and Ceramic Materials for more than thirty years.*
- *Steele Diamond Band Saws have been sold in Europe, Asia, and throughout the United States. A customer list is available on request.*
- *The Model 3618/3625 & 4222/4240 Series III & IV Saws are the only standard model machines we build. Series I & Series II Model Saws have been discontinued.*
- *Large & Special Size Saws are available on request.*
- *The price of the Steele Diamond Band Saw includes Sea Freight Delivery, Set Up, Installation, and Training.*
- *CE Certification is available for the Series IV Saws sold in Europe.*
- *Each Steele Diamond Band Saw includes a Limited One Year Warranty.*
- *The Fanuc CNC System currently includes a Limited Two Year Warranty.*
- *An Oil Base Coolant is required for use with the Steele Diamond Band Saw. Water Base Coolant Is not Acceptable.*
- *Our Diamond Plated Band Saw Blade is the best in the world. We can continue to supply it as needed. Other brands can be used at your discretion.*
- *Operation, Parts, & Programming Manuals are included with each machine.*
- *Additional Machines including CNC Core Drilling Machines, CNC Lathes, Centerless Grinders, and Grinding Spindles are custom built to order. Please provide your specific requirements when requesting a quotation.*

For Additional Information Please Visit Our Web-Site www.steelemachine.com

Steele Diamond Band Saws Allow The Operator Great Flexibility To Cut A Variety Of Different Shapes & Sizes Of Work Pieces.

A Series IV Model 4240 Saw Is Ready To Cut A Thin Slice Of Quartz Glass.

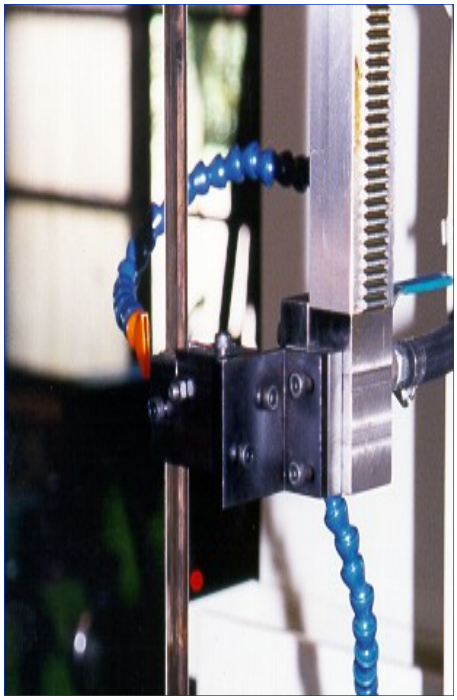
A Series II Model 3618 Saw Cutting A Slice Of 150 mm. Square Quartz Glass.



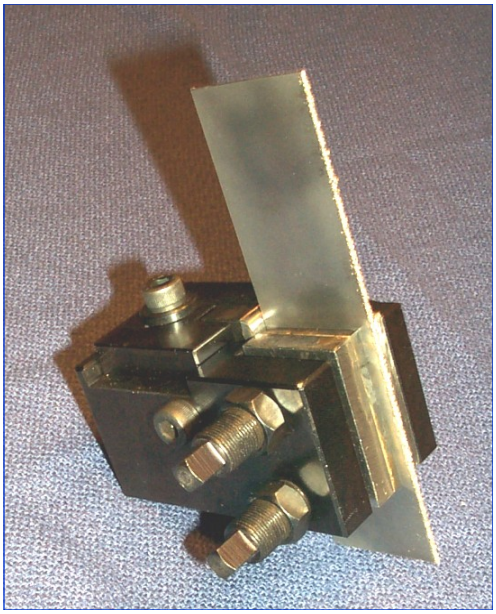
A Series II Model 3618 Saw Holds A 2 Meter Long By 300 mm. Dia. Piece Of Quartz Glass.

A Series III Model 4222 Saw With An Optional V-Block Tool Holder Holds A 400 mm. Dia. Piece Of Quartz Glass.

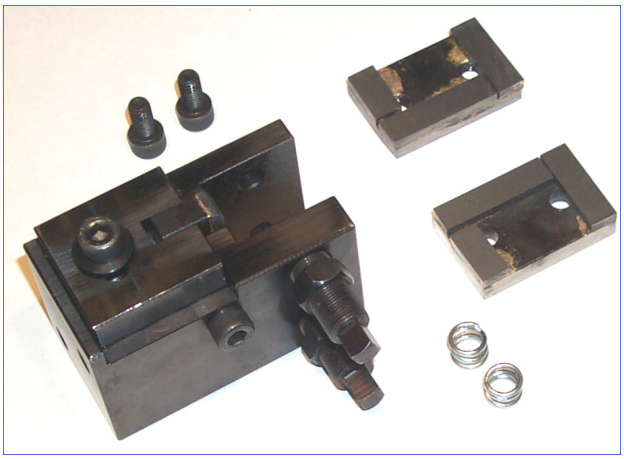
A Setup To Hold One Type Of Work Piece Can Quickly Be Changed To Hold A Different Shape Or Type of Material.



The Motorized Upper Guide Arm Holds The Upper Blade Guide Block In Place Just Over The Top Of The Work Piece. The Guide Arm Can Be Raised Or Lowered To Accept Different Size Work Pieces By A Push-Button Control Located On The Operator Panel.

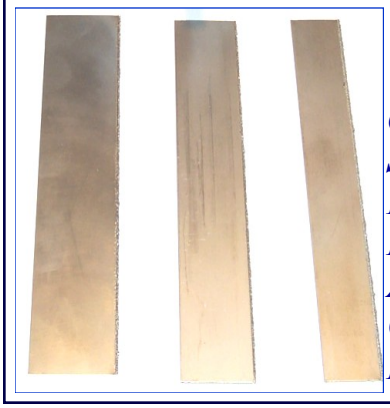


The Upper And Lower Guide Block Assemblies Are Inter-changeable, And Provide The Support Needed To Allow The Diamond Blade To Cut Smoothly, And Accurately Through The Work Piece.

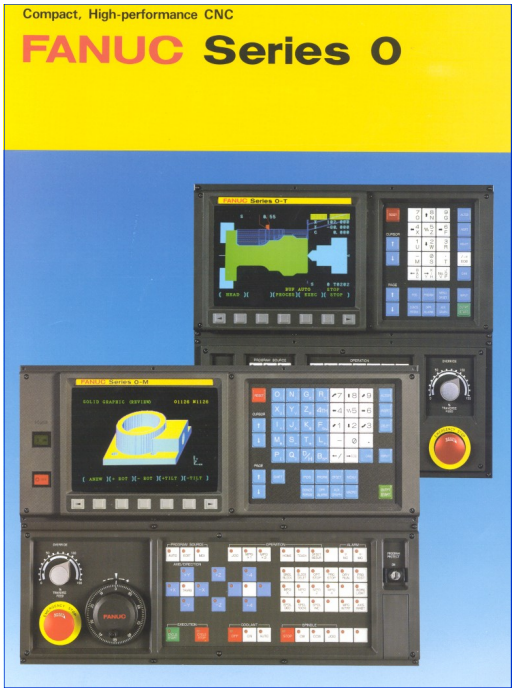


The Spring Loaded Carbide Guides Are easy To Adjust, And Easy To Replace When Worn Out.

The Hydraulic Tension Device Keeps The Diamond Band Saw Blade Tensioned Properly For Accurate Cuts Through Even The Toughest Materials.



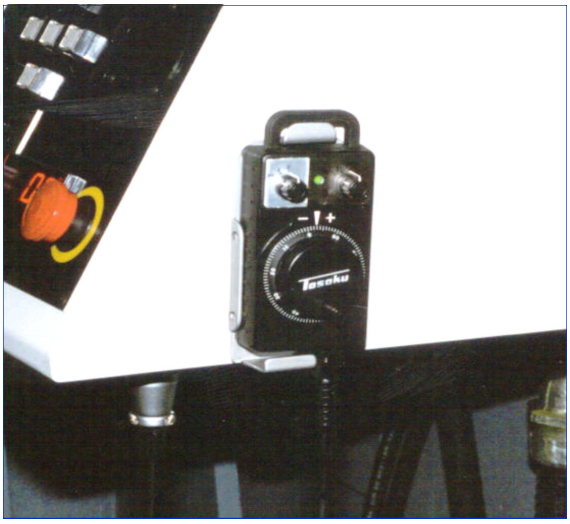
Our Diamond Plated Band Saw Blade Is Produced With A Very Durable Stainless Steel Backing. A Standard Blade Is 1-1/2" (38.1 mm) Width, By .040" (1.00 mm) Gage, By .075" (1.9 mm) Kerf, By 35/40 Grit, And Is Recommended For General Purpose Cutting Of Fused Quartz Glass, And Similar Materials. Blades Are Available In Different Widths And Grits For Different Applications. A Blade Can Last From 80 To 360 Hours Or Longer, And Can Be Changed As Needed In 10 Minutes.



All Steele Series III Diamond Band Saws Include A Fanuc Series "O" CNC Control System. The Main AC Spindle/Blade Drive Motor, And X & Z Axis AC Servo Feed Motors Are Also Supplied By Fanuc. Fanuc Service Is Available World Wide, And A Two Year Fanuc System Warranty Is Currently Included With Each Machine.

Every Fanuc System Can Be Programmed In Inch Or Metric Mode. Precision Tolerances Can Be Achieved By Programming A Minimum Incremental Input Of .0001" Inch Or .001 mm. The Machine Can Operate On Any 3 Phase Input Voltage Of 200 Volts Or More, And Either 50 Or 60 Hertz. The Multi Language Display Can be Set For English, French, Japanese, German, Chinese, Korean, Italian, Or Spanish.

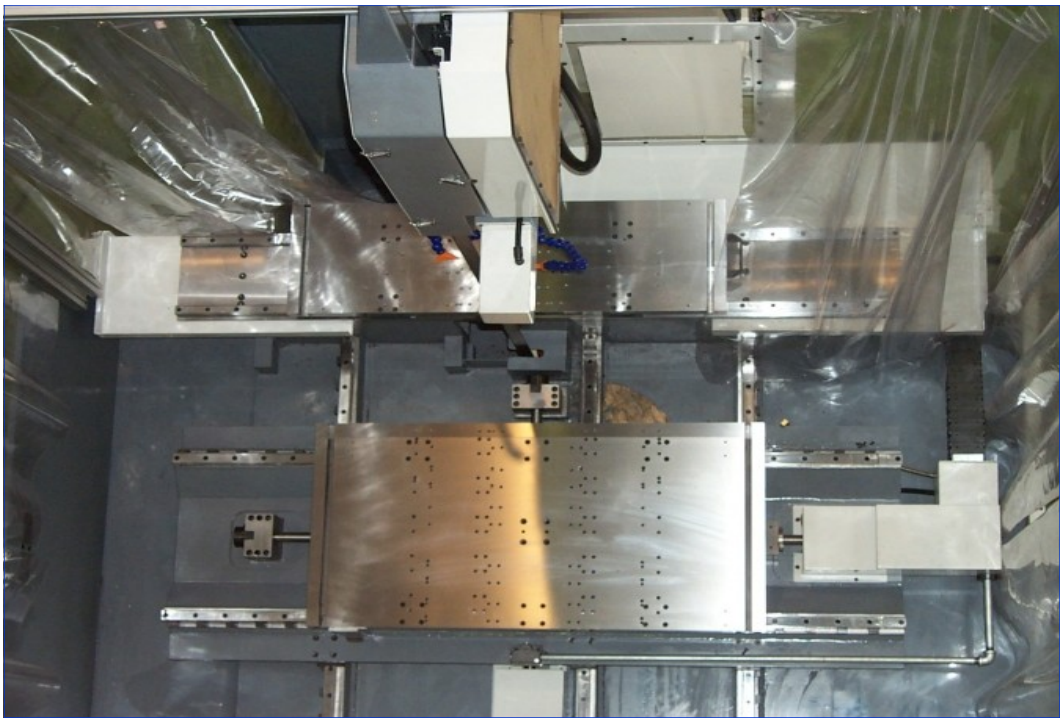
Program Input, And Operator Controls Are Easy To Learn, And easy To Use. The Operator Panel Includes Blade Speed, And Feed Rate Controls Which Allow The Operator To Manually Increase Or Decrease Feeds & Speeds As Needed .



A Portable Manual Pulse Generator Is Connected To A Long Flex Cord Allowing The Operator To Manually Position The Main Table From The Front Or Side Of The Machine. With This Device The Main Work Table Can Be Moved To Allow For Easy Loading Or Unloading Of The Work Piece. A Program Start/Finish Point Can Easily be Established By Manually Positioning The Part Near The Blade With This Device .

The Auxiliary Rear Support Table Moves In A 2-Axis Linear Motion, And Is Positioned Manually. The Auxiliary Rear Support Table Can Be Used In Conjunction With The Main Work Table To Support Large Work Pieces On Both Sides Of The Saw Blade. This Allows The Blade To Cut Completely Through The Work Piece While It's Securely Held In Place, And Helps To Eliminate Edge Break Out.

The Auxiliary Rear Support Table Can Also Be Set In A Fixed Position, And With An Angle Plate That Is Provided Catch Small Or Thin Parts. The Auxiliary Rear Support Table Is Drilled And Tapped Like The Main Work Table To Allow For Optional Bolt-On Tooling.



An Overhead View Of The Main Work Table Shows It's 2-Axis Capability, Is Controlled By Precision Ball Screws & AC Servo Motors. The Top Of The Table Is Drilled & Tapped To Accept Optional Bolt-On Tooling. The Main Work Table Is Often Used With A Simple Wood Top Plate Which Allows The Work Piece To Be Raised Above The Auxiliary Rear Support Table. A Small Or Thin Part Can Then be Cut, And Caught By A Part Catching Device That Is Mounted On The Auxiliary Rear Support Table.

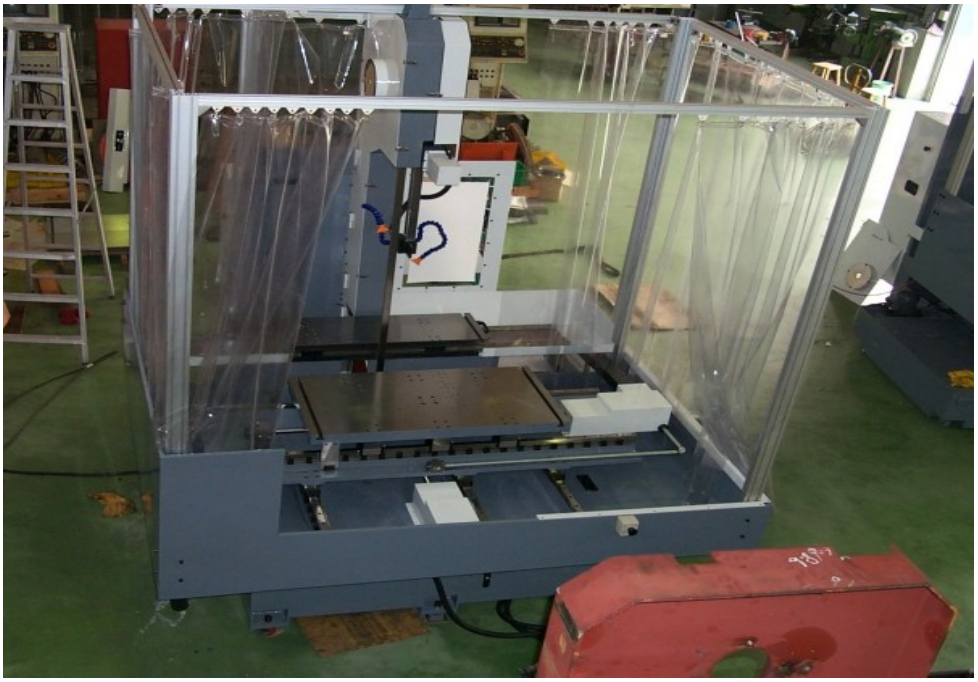
The Standard Coolant System Includes A Tank That Has Several Compartments. The Compartments Allow Sludge To Settle, And Help To Keep The Oil Base Coolant Clean.

The Coolant Tank Can Swivel Away From The Machine, And The Top Can Be Removed To Provide For Easy Manual Cleaning.

A Model 4240 Series IV Saw Is Shown With The Standard Coolant System & An Optional Aluminum Frame Used To Hold A Shower Curtain Coolant Deflector.

A Drip Tray Like The One Pictured Is Strongly Recommended But Not Provided With The Machine.

An Optional Shower Curtain Device Keeps Coolant Overspray Contained To The Machine Work Area.



The Model 7959 Can Cut 2 Meters in Length by 1-1/2 Meters in Height. Both The Optional Fully Enclosed Splash Guard & Microseparator Are Also Shown.

The Optional Microseparator Centrifuge Replaces The Standard Coolant System. The Unit Automatically Removes Sludge By Centrifugal Force Without The Use Of A Filter. A Sludge Block Can Be Manually Removed From The System Every Eight Hours, Or As Needed Without Stopping The Saw.

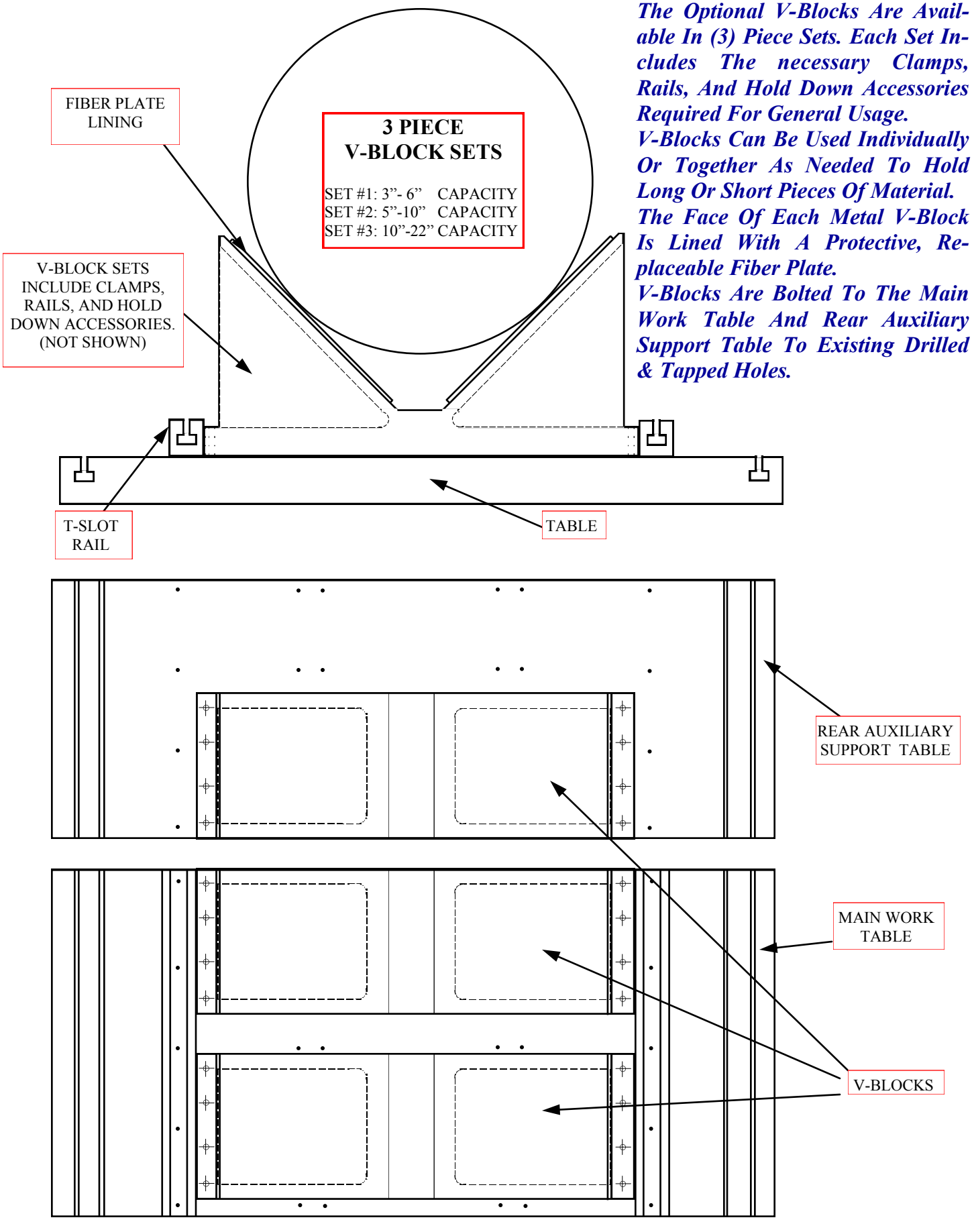
The Optional Microseparator Centrifuge System Continuously Provides Clean Coolant To The Diamond Blade & Work piece Allowing Continued High Performance & Maximum Work piece Finish.

The Optional V-Blocks Are Available In (3) Piece Sets. Each Set Includes The necessary Clamps, Rails, And Hold Down Accessories Required For General Usage.

V-Blocks Can Be Used Individually Or Together As Needed To Hold Long Or Short Pieces Of Material.

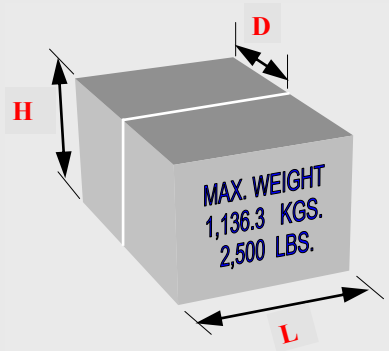
The Face Of Each Metal V-Block Is Lined With A Protective, Replaceable Fiber Plate.

V-Blocks Are Bolted To The Main Work Table And Rear Auxiliary Support Table To Existing Drilled & Tapped Holes.



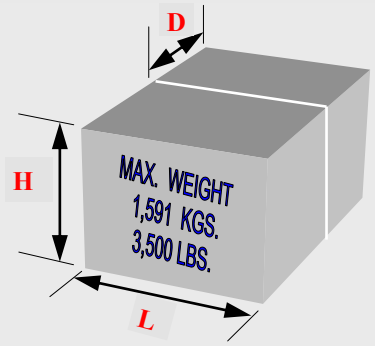
WORK HOLDING CAPACITY
MODEL 3618/3625

HEIGHT = 635 mm (25")
LENGTH = 915 mm (36")
DEPTH = 406 mm (16")
WEIGHT = 1,136 Kgs (2,500 Lbs)

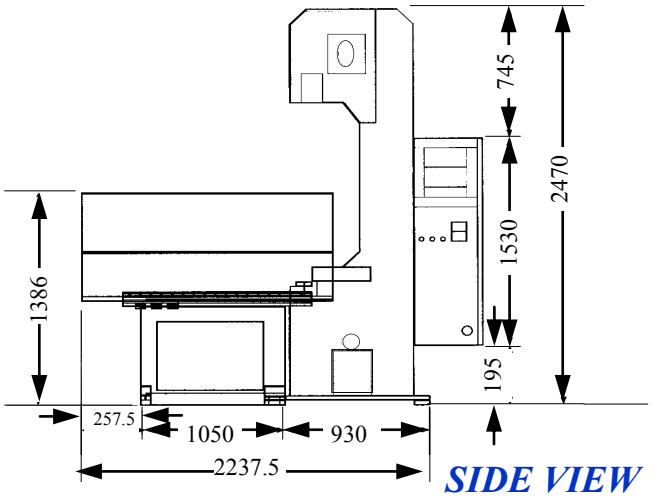


WORK HOLDING CAPACITY
MODEL 4222/4240

HEIGHT = 1016 mm (40")
LENGTH = 1066 mm (42")
DEPTH = 430 mm (17")
WEIGHT = 1,591 Kgs (3,500 Lbs)

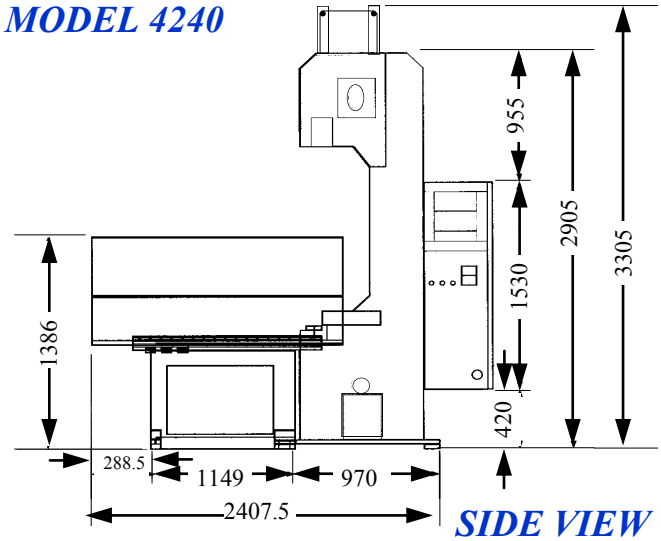


MODEL 3625



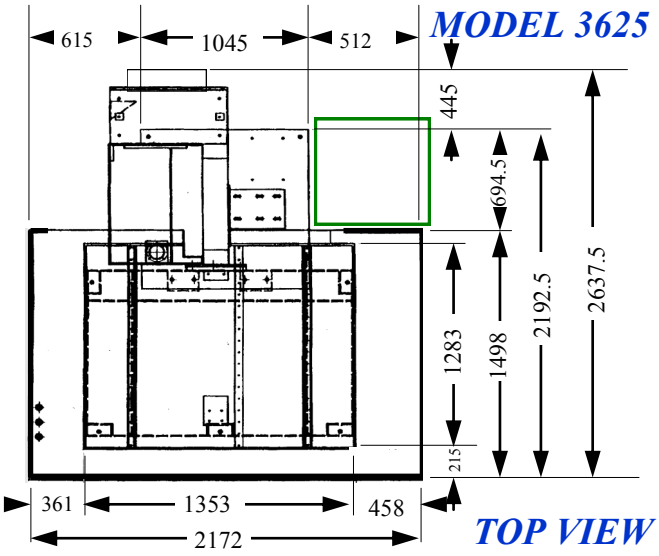
SIDE VIEW

MODEL 4240



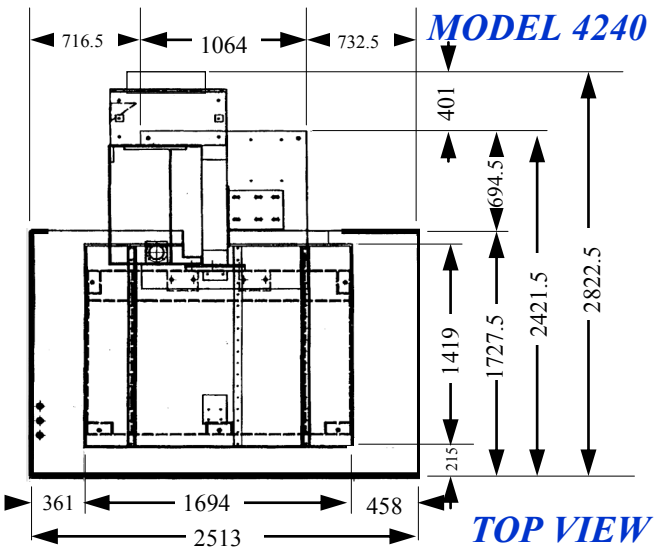
SIDE VIEW

MODEL 3625



TOP VIEW

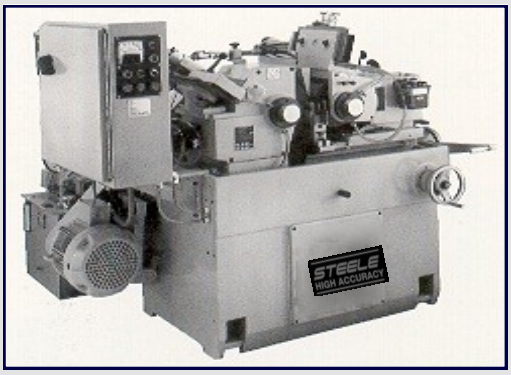
MODEL 4240



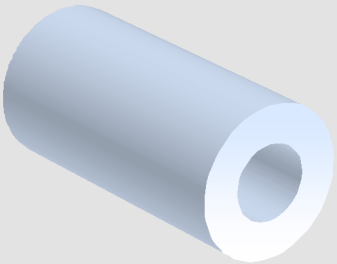
TOP VIEW

ADDITIONAL STEELE HIGH ACCURACY MACHINES

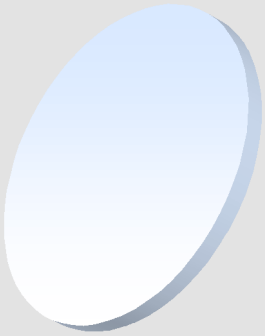
CNC LATHE WITH HIGH SPEED, PROGRAMMABLE, AIR PURGE GRINDING SPINDLE.

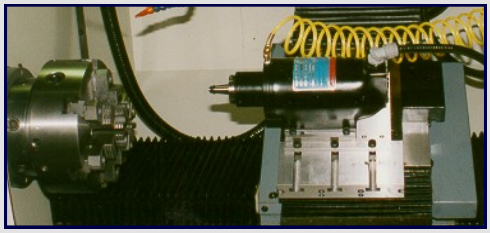


CENTERLESS GRINDER FOR GLASS OR CERAMIC RODS.

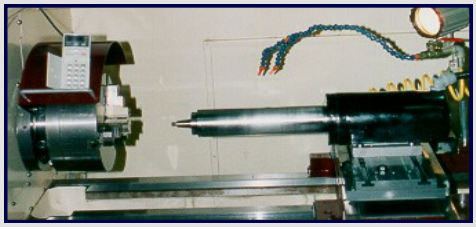


CNC CORE DRILLING MACHINE MODEL 7216





HIGH SPEED GRINDING SPINDLES FOR CERAMIC AND GLASS.



LONG NOSE MOTORIZED SPINDLE FOR I.D. GRINDING.

STEELE MACHINE TOOL INC.

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