NONDESTRUCTIVE TESTING EQUIPMENT M.P.I. WET HORIZONTAL BENCH MODELS WHM-3000, WHM-3400, & WHM-3600



The WHM-3000, WHM-3400 and WHM-3600 are 3000 AMP AC/HWDC full featured bench style M.P.I. wet horizontal. Designed for surface and subsurface flaw detection and demagnetization in small to medium size parts.

BENCH FEATURES:

- •Mag. Push button Hip Bar Head Stock air cylinder footswitch •Air pressure regulator •Tail Stock with lock •12"(30cm) ID 5 turn coil on rail rollers
- •6x6"(15x15cm) Head-Tail stock contact area •Replaceable copper pads
- •Replaceable lead plates •Head-Tail stock "V" groove supports
- •Front and Back hardwood grills •Stainless steel tank Water or oil bath compatible
- •Bath agitator and circulation pump with ON-OFF switch •Hand hose bath applicator
- •Gloss black panels on silver cabinet.

ELECTRONIC FEATURES:

•Eye level control box •Digital LED output current AC/DC meter with hold •Infinitely variable current control •Quick Break •Switchable AC or DC output with LED indicators •Switchable Coil and Direct current direction with LED indicators •Automatic Demag switch • Power ON-OFF switch •Internal 0.5 to 1.5 second Mag shot duration timer •Mag shot LED Indicator •Replaceable Electronic Control Box •Circuit Boards acrylic coated for protection.

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MODEL WHM-3000, WHM-3400, WHM-3600 SPECIFICATIONS:

1. MAX OUTPUT CURRENT AC/HWDC AMPS

Direct (inline) = 3400

Coil 12" (30cm) = 1400

16" (41cm) = 1000

2. DUTY CYCLE @ 3000 0.5 second ON 4 seconds OFF

@ 1500 0.5 second ON 2 seconds OFF

- 3. LINE INPUT = 230/460 VAC 50/60 single phase 100/50 amp
- 4. DEMAG = Slow decay 3-6 seconds
- 5. PART LENGTH MAX = WHM-3000 31" (80cm)

WHM-3400 - 42" (107cm)

WHM-3600 - 72"(183cm)

- 6. PART WEIGHT MAX = 200 lbs. (90kg)
- 7. NET WEIGHT = 595 lbs. (270kg)
- 8. CABINET DIMENSIONS =

Width

Control Box Height = 62" (158cm)

= 40" (102cm) Bench Height = 32" (81.3cm) Cabinet Length = WHM-3000 50" (153cm)

WHM-3400 60" (229cm)

WHM-3600 90" (229cm)

- 1" Stroke (25mm) 3 x Head Pressure 9. HEAD STOCK AIR CYLINDER =
- 10. AIR SUPPLY = Dry filtered 50-150 PSI (3.4-10.4 kg/cm) 1/4" Industrial Connector
- 11. TANK CAPACITY = 10 Gal. Min. 40 Gal. Max.

OPTIONS

Hood enclosure = Features black nylon with Velcro closures, flip back design, large work space with Light and Fan box.

Dimensions:

Hood Length = WHM-3000 53" (135cm)

WHM-3400 65" (165cm)

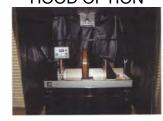
WHM-3600 93" (236cm)

Width = 63" (160cm) Height = 82" (208cm) Weight = 40 lbs. (18 kg)

OPTIONS

- 1) 16" (41cm) 5 turn AC/DC rail mounted coil
- 2) Full Guarded Footswitch
- 3) Low output current alarm shot duration
- 4) Panel mounted variable shot duration
- 5) Different input line voltage

HOOD OPTION



CONTROL BOX OPTION (3 & 4)





NONDESTRUCTIVE TESTING EQUIPMENT Gould Bass Magne-Tech Model 1560



FFATURES/BENEFITS

- Meets Military & Industry Specifications
- More output per unit weight & size
- 6,000 amp HWDC and AC
- Infinitely variable current control
- Digital ammeter with hold feature
- Fast, effective automatic AC demagnetization
- Thermal overload protection
- Rugged duty cycle
- Ideal for overall magnetization applications
- Simple to operate
- All controls recessed for damage control
- I deal for localized prod and cable use
- Remote control feature operation available
- Storage well on top for cables and materials
- Convenient 115V outlet

The Gould-Bass line of Magne-Tech® mobile magnetic particle inspection units are ruggedly constructed for long, maintenance free service. The advanced solid state circuitry greatly reduces the size and weight of the 1560 model.

The Model 1560 weighs only 550 pounds, producing excellent output per unit weight. This unit can be easily rolled around on their 8-inch heavy duty swivel casters, or can be maneuvered with a forklift. The Model 1560 is equipped with four lifting rings for overhead crane transport.

Remote Option

A special remote-control unit is available for use with the Model 1560. It provides control of the magnetizing and demagnetizing current from a convenient hand-held unit. A remote On-Off switch on the front panel of the machine provides for quick selection of local or remote-controlled operation.

Key Applications for Magne-Tech® Mobiles:

These self-contained, mobile unites can be moved or rolled anywhere in shop, foundry, refinery, petrochemical plant or manufacturing facilities to detect surface and near surface cracks by the MPI method.

The Magne-Tech® Model 1560 provides 6,000 amperes of alternating or half-wave direct current. Both localized and overall magnetization can be employed when inspecting diverse magnetic materials. The demagnetizing process is as simple as pushing a button with cables in place.

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Simple to Operate

All operating controls and indicators are located on the recessed front panel. The easily read ammeter shows magnetizing current in either AC or half-wave DC operating modes. The AC mode minimizes background interference, permitting high sensitivity, speed, and accuracy of surface defect identification. The DC mode provides increased magnetic field penetration for detection of near surface discontinuities. A current adjustment control permits precise adjustment of the magnetizing current. The ammeter is protected against damage from rough handling, and all units are protected against overheating.

Available Models				
Model Number	1560			
Part Number	N520565001			
Magnetizing Current	AC or HWDC			
Max Output HWDC	6000 Amps			
AC	6000 Amps			
	Push button			
Demagnetization	Auto AC			
Infinitely Variable Current Control	Standard			
Duty Cycle	Heavy Duty			
Digital Ammeter with Hold Feature	Standard			
Thermal Overload Protection	Standard			
Advanced Circuitry with Modular Plug-in Electronics	Standard			
Recessed Front Panel	Standard			
Remote Control Feature	Option			
Storage Well	Standard			
Dimensions	32" x 25" X 42"			
Weight	550 lbs.			
Electrical	230/460/60/1			
Line Amp Draw	250 amp			

ACCESSORIES AND MATERIALS

Gould-Bass Company offers a complete line of process control instrumentation and related accessories, such as field strength indicators, clamps, connectors, prods, sprayers, and powder applicators.

All materials necessary for magnetic particle inspection are also available, including dry powders and materials for fluid suspension.

SPECIFICATION COMPLIANCE

ASTM E1444 & E-709 ASME Section III (Latest Rev.) Navships 250-1500 Mil-STD-271 (Latest Rev.)

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^{*} Meets other Mil & Industry Standards. Contact Gould-Bass for details.



Gould Bass Magne-Tech® Retro Pak™



FEATURES/BENEFITS

- Replace Inadequate Power Packs
- Replace Outdated Power Packs
- Upgrade to State of the Art Circuitry
- Add Multidirectional Capability
- Add AC or DC Mag Capability
- Add AC or HWDC Demag Capability
- Eliminates Costly Downtime for Repairs
- Full Manufacturer's Warranty
- Better Than a "Patchwork Rebuild"
- Includes Infinitely Variable Current Controls
- New Master Control Panel
- Eliminates Large Amp Increments at Low End
- Ideal as Stand Alone/Stationary Power Pak

Magne-Tech® Retro Pakstm are supplied as stand alone units. They are intended for use as replacements for outdated, worn out, inadequate power packs where the tank and frame unit is still serviceable.

The Retro Pak is ideal for use as a stand alone power pack for use with cables and prods and can be fitted with optional casters for ease of mobility.

Magne-Tech® Retro Paks™ enable the user to upgrade, replace or extend the life of wet horizontal magnetic bench units. All Retro Paks have a complete, independent control console which can be mounted, as show, or be placed anywhere within the length of the flexible conduit supplied.

A noteworthy features that a conventional magnetic bench can be converted to a MULTI-MAG® multidirectional unit at a minimal cost.



Available Models							
Model Number	3004R	3005R	3009R	3009R-01	3009R-10	3053R	3068R
Catalog Number	8	N520738001	N520735001	N520736001	N520737001	N520740001	N520741001
Conventional	4000 AC			6000 AC		4000 AC	5000 AC
Maximum	5000 FWDC	6000 FWDC	6000 FWDC	6000 FWDC	10,000 FWDC	4000 HWDC	5000 HWDC
Current						5000 FWDC	6000 FWDC
Multi-Mag						2000 AC	3000 AC
Maximum	N/A	N/A	N/A	N/A	N/A	2000 HWDC	5000 HWDC
Current							
AC Demag Ramp	Standard	N/A	N/A	Standard	N/A	Standard	Standard
DC Demag	N/A	N/A	Standard	Standard	Standard	N/A	Standard
Infinitely Variable	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Current Control							
Digital Ammeter	Standard	Standard	Standard	Standard	Standard	Standard	Standard
with Hold Feature							
Induction Fixtures	N/A	N/A	N/A	N/A	N/A	Available	Available

ACCESSORIES AND MATERIALS

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Gould Bass Magne-Tech® 3509 Models



FEATURES/BENEFITS

- AC and FWDC magnetizing currents
- Infinitely variable current control
- Digital Ammeter with Hold Feature
- Secondary Solid State Controls
- Silicon Rectifiers
- Reversing DC demag on all models
- AC demag on -01 models
- Quick Break Feature Standard on All Systems
- Thermal Overload Protection
- Current Assurance Indicator
- Heavy Duty Head/Tailstock Rails
- Electronic plug-in control modules
- Maximum ampere output up to 6,000 AC, 10,000 FWDC (see table for details)
- Unique agitation system maintains bath strength to within 3% of theoretical level Stainless steel tank

The Gould-Bass Magne-Tech® systems feature the most advanced circuitry in the industry providing ease of operation, assured safety for test parts, increased test speeds, and maximum repeatability and dependability of tests.

The 3509 models are available in 6000 & 10,000 amperes. They offer FWDC variations with built-in reversing DC push-button demagnetization. Various bench lengths are available.

The 3509-01 models offer magnetizing output in both 6000 Amps AC and 6000 Amps FWDC. Demagnetization is both AC and reversing DC. Various bench lengths are available.



Available Models					
Model Number	3509	3509-10	3509-01	1/10/3509	
	3509 - 54"	3509-10 - 54"	3509-01 - N/A	3509-01-10 - N/A	
	3509A - 100"	3509A-10 - 100"	3509A-01 - 100"	3509A-01-10 - 100"	
Head/Tailstock Opening	3509B - 144"	3509B-10 - 144"	3509B-01 - 144"	3509B-01-10 - 144"	
			6000 AC	6000 AC	
Maximum Magnetizing Current	6000 FWDC	10,000 FWDC	6000 FWDC	10,000 FWDC	
			AC	AC	
Demagnetization	Reversing DC	Reversing DC	Reversing DC	Reversing DC	
	230 V or 460V	230 V or 460 V	230 V or 460 V	230 V or 460 V	
Standard Voltage	50-60 Hz / 3 Phase				
12" Rail Mounted Moveable Coil	Standard	Standard	Standard	Standard	
16", 20", 25", 30" Coil Sizes	Optional	Optional	Optional	Optional	
Infinitely Variable Current					
Control	Standard	Standard	Standard	Standard	
Digital Ammeter with Hold					
Feature	Standard	Standard	Standard	Standard	
Quick Break	Standard	Standard	Standard	Standard	
Current Assurance Indicator	Standard	Standard	Standard	Standard	
Heavy Duty Head/Tail Stock					
with crank	Standard	Standard	Standard	Standard	
Hip/Push Bar for Mag Shot	Standard	Standard	Standard	Standard	
Footswitch Headstock Activation	Standard	Standard	Standard	Standard	
Stainless Steel Tank	Standard	Standard	Standard	Standard	
Front/Rear Hardwood Grilles	Standard	Standard	Standard	Standard	
Recirculation / Agitation					
System	Standard	Standard	Standard	Standard	
Blacklight Hood with Fan &					
Light Console	Optional	Optional	Optional	Optional	
Steady Rests	Optional	Optional	Optional	Optional	
Rotating Head/Tailstocks	Optional	Optional	Optional	Optional	
Overall Dimensions	3509 -L = 78"	3509-10 -L = 78"	3509-01 -L = N/A	3509-01-10 -L = N/A	
L = Length	3509A - L=124"	3509A-10 - L=124"	3509A-01 - L=124"	3509A-01-10 - L=124"	
W = Width	3509B - L=168"	3509B-10 - L=168"	3509B-01 - L=168"	3509B-01-10 - L=168"	
H = Working Height	W=30", H=42"	W=30", H=42"	W=30", H=42"	W=30", H=42"	
Nominal Line Amp Draw					
230V/460V-60 Hz.	220/110	440/220	220/110	440/220	

ACCESSORIES AND MATERIALS

Gould-Bass Company offers a complete line of process control instrumentation and related accessories, such as field strength indicators, clamps, connectors, prods, sprayers, and powder applicators.

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Gould Bass Magne-Tech Multi-Mag Models



FEATURES/BENEFITS

- Magnetizes in 1, 2 or 3 directions
- Individually controllable outputs
- Infinitely variable current control
- Adjustable shot timer
- Three magnetizing currents available: AC, HWDC, FWDC
- Two modes available Multi-mag® and conventional
- Demagnetization auto AC and/or reversing DC
- Electronic plug-in control modules
- Thermal overload protection
- Digital ammeters with hold feature
- Maximum ampere output up to 6,000 amperes
- Unique agitation system maintains bath strength to within 3% of theoretical level
- Stainless steel tank
- "Quick Break" incorporated in all machines
- Auto-flood / auto sequencing (optional)
- Centralized control panel provides operator ergonomics
- Powered conveyor with inspection booth (optional

The Gould-Bass Multi-Mag® systems provide outstanding defect detection and provide major time and cost savings over conventional magnetic testing methods. By providing for magnetization of the part in multiple directions in one firing sequence, virtually all defects can be revealed without having to process the part with a separate head shot and coil shot, which is the case with conventional magnetization techniques.

In the multidirectional (Multi-Mag®) mode, each power pack delivers current to the test part, with switching occurring at 0.003-second intervals. During a 0.5-second shot, some 90 directional switches will be made, that is, thirty in each direction occurring over the full 0.5-second. Thus the system appears to provide simultaneous magnetization while separating the application of field in al three directions. Current flows for a duration of 0.000 to 0.009 second based on the current control setting, and will repeat itself every 0.009 second for the full duration of the magnetizing shot. This switching sequence occurs in all three of the power packs on an individual basis. The multidirectional magnetization mode can be carried out with the choice of alternating current (AC), half-wave direct current (HWDC), or full-wave direct current (FWDC).



Available Models						
Model Number	3453	3553	3553A	3568	3568A	
Part Number	N520628001	N520622001	N520629001	N520630001	N520631001	
Head/Tailstock Opening	36"	54"	100"	54"	100"	
with Induction fixtures	24"	42"	88"	42"	80"	
Two Phase Multi-Mag	2 Directional	2 Directional	2 Directional			
Contacts & 12" Coil	Standard	Standard	Standard			
Induction Fixture	Optional	Optional	Optional	N/A	N/A	
Max Magnetizing Current Conventional	4000 AC	4000 AC	4000 AC	5000 AC	5000 AC	
	5000 HWDC	5000 HWDC	5000 HWDC	5000 HWDC	5000 HWDC	
	5000 FWDC	5000 FWDC	5000 FWDC	6000 FWDC	6000 FWDC	
Multi-Mag						
5	4000 AC	4000 AC	4000 AC	5000 AC	5000 AC	
	5000 HWDC	5000 HWDC	5000 HWDC	5000 HWDC	5000 HWDC	
				6000 FWDC	6000 FWDC	
Demagnetization	Auto AC	Auto AC	Auto AC	AC / REV DC	AC / REV DC	
12" Rail Mounted Moveable Coil	Standard	Standard	Standard	Standard	Standard	
16", 20", 25", 30" Coil Sizes	Optional	Optional	Optional	Optional	Optional	
Induction Fixtures	Optional	Optional	Optional	Standard	Standard	
Infinitely Variable Current Control	Two	Two	Two	Three	Three	
Digital Ammeters with Hold Feature	Two	Two	Two	Three	Three	
Quick Break	Standard	Standard	Standard	Standard	Standard	
Current Assurance Indicator	Standard	Standard	Standard	Standard	Standard	
	N/A					
Heavy Duty Head/Tail Stock with crank	Push & Lock	Standard	Standard	Standard	Standard	
Motorized Tailstock	N/A	N/A	Optional	N/A	Optional	
Hip/Push Bar for Mag Shot	Standard	Standard	Standard	Standard	Standard	
Footswitch Headstock Activation	Standard	Standard	Standard	Standard	Standard	
Stainless Steel Tank	Standard	Standard	Standard	Standard	Standard	
Front/Rear Hardwood Grilles	Standard	Standard	Standard	Standard	Standard	
Recirculation / Agitation System	Standard	Standard	Standard	Standard	Standard	
Auto Flood / Auto Sequencing						
Selectable Programs	Optional	Optional	Optional	Optional	Optional	
Blacklight Hood with Fan &						
Light Console	Optional	Optional	Optional	Optional	Optional	
Powered Conveyor Inspection Booth	Optional	Optional	Optional	Optional	Optional	

ACCESSORIES AND MATERIALS

Gould-Bass Company offeres a complete line of process control instrumentation and related accessories, such as field strentgh indicators, clamps, connectors, prods, sprayers, and powder applicators.

All materials necessary for magnetic particle inspection are also available, including dry powders and materials for fluid suspension.

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