



MTIwelding.com

## PREVENTIVE MAINTENANCE PACKAGE (PMP) FOR ROTARY FRICTION WELDERS

Well maintained equipment lasts longer and is less expensive to operate. A MTI PMP tailored to meet your needs reduces unexpected downtimes, keeps your machine at an optimum performance level, and is upgradeable at any time.

### AN OUNCE OF PREVENTION...

You've invested a lot in your friction welder, and it is a critical part of your production process. To keep your machine — and your production line — up and running, an ounce of prevention today can prevent lengthy downtime later.

If not routinely maintained, your friction welding machine, which is a complex, highly depended upon piece of capital equipment, becomes extremely expensive to repair and possibly dangerous to operate. The repair cost plus lost revenue can cripple production and threaten your operation. A neglected machine, pushed beyond its limits without the benefits of a healthy maintenance check, can lead to extended downtime and lost revenue.

That's why MTI offers custom tailored Preventative Maintenance Packages (PMP) that can alleviate such worries while meeting your needs for scheduling, production, and peace of mind.

Our three basic PMP offerings will get you started with preventative care through:

- Quick Response
- Remote Assistance
- Inspect & Repair
- Scheduled Visits
- Oil Sampling
- Service That Trains
- Discounted Parts & Service
- System Health Report

While we stand behind the quality of our machines and parts, sometimes things happen. Expect the unexpected with a MTI PMP designed especially for you.

### — AT A GLANCE —

#### PMP COMPARISONS

GOLD	SILVER	BRONZE
<p><b>SILVER</b> and <b>BRONZE</b> packages plus:</p> <ul style="list-style-type: none"> <li>• mWeld program evaluation, including any possible improvements.</li> <li>• Check machine ways, spindle, fixtures, and acceleration/deceleration times for possible adjustments.</li> <li>• Record results as benchmark against future comparisons.</li> </ul>	<p><b>BRONZE</b> package plus:</p> <ul style="list-style-type: none"> <li>• Hydraulic manual pressure settings adjusted upon customer's approval and per print.</li> <li>• All fault logs evaluated.</li> <li>• Recommend, and perform if needed, corrections to existing malfunctions.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete inspection for damaged, worn, leaking, and exposed machine components.</li> <li>• Oil analysis and hours-based filter change.</li> <li>• All operational functions and positions checked.</li> <li>• All machine guarding and safety features checked.</li> <li>• Comprehensive health status report, including recommendations how to maintain machine's optimum performance.</li> </ul>

### QUICK RESPONSE

MTI provides customers time-zoned contact numbers for direct service and an Out-of-Hours contact cell phone number for speedy responses. Our 24- or 36-hour response times depend on the PMP selected.

### REMOTE ASSISTANCE

The MTI Remote Assistance (MRA) package prolongs the life of your capital investment.



The absence of on-site troubleshooting personnel on-site can be remedied through MRA, a remote viewing tool used to observe weld, test cycle, and fault logic data files in real time.

With MRA, we give you an added safeguard against unscheduled downtime.

### INSPECT & REPAIR

Scheduled visits include a complete check of auxiliary equipment in use. The resulting MTI report will contain recommendations on how to keep your auxiliary equipment healthy and operational. MTI's comprehensive machine checks and findings can be used for many standards representing machine quality up-keep. Also, laser alignments or secondary device calibration can be accomplished.

### SCHEDULED VISITS

MTI Preventative Maintenance (PM) service visits are coordinated with your production times and plant shutdowns to minimize disruption to parts production. PMP visits are cost effective, combats production down-times, and are essential for prolonging the life of your capital investment.



# The Right Package for Your Operation

Activity	Preventative Maintenance Packages (PMP) <sup>o</sup>			Description
	Gold	Silver	Bronze	
Spare Parts	15%	10%	10%	Discount on parts only.
Machine Part Replacement	15%	10%	10%	Discount on damaged machine parts only.
Emergency Service	10%	10%	10%	Discounts apply to PMP subscribers only.
Re-Laser Alignment <sup>oo</sup>	10%	5%	0%	Discount on laser hourly rate.
Instrument Calibration (RPM/PSI) <sup>oo</sup>	15%	10%	10%	Using MTI calibrated equipment — Discount on hourly rate only.
MTI Remote Access (MRA)	Included	50%	25%	Discount - additional cost.
One Visit/Year				See Bronze package description.
Two Visits/Year				See Silver package description.
Three Visits /Year				See Gold package description.
Number of Days/On-site Visit	3	3	2	Days of On-site visits may be nonconsecutive.
36 hr Response Time <sup>Δ</sup>				Out-of-warranty Response Times
24 hr Response Time <sup>Δ</sup>				Out-of-warranty Response Times
Oil Sampling & Reporting				Report generated by testing facility.
On-site Training	15%	10%	10%	Discount

## PMP Descriptions

<b>Bronze</b>	<ul style="list-style-type: none"> <li>• Complete walk around inspection for damaged items, worn details, leaks, damaged hoses, exposed wires, damaged cables.</li> <li>• All filters changed depending on running hours and oil analysis which can determine possible component failure (pumps, spindle bearing, etc.). Oil not supplied by MTI, but will assist removing and replenishing, if needed.</li> <li>• Check all manual/automatic operational functions and positions.</li> <li>• Check machine guarding, safety circuit, and any safety deficiencies.</li> <li>• A complete health report of findings, corrections, and recommendations is included.</li> </ul>
<b>Silver</b>	<p>Includes Bronze package plus...</p> <ul style="list-style-type: none"> <li>• Check hydraulic manual pressure settings per print. Will change settings with customer's approval only.</li> <li>• Evaluate machine, weld, and fault logs to determine if any malfunctions exist. Make recommendations to the customer and adjustments, if needed.</li> </ul>
<b>Gold</b>	<p>Includes Silver and Bronze packages plus...</p> <ul style="list-style-type: none"> <li>• Evaluate weld program settings, suggest possible improvements.</li> <li>• Check machine way flatness and parallelism adequacies.<sup>†</sup></li> <li>• Check spindle nose run-out.<sup>†</sup></li> <li>• Check spindle-to-fixture alignment relationship.<sup>†</sup></li> <li>• Check spindle acceleration and deceleration time, adjust if needed. Bench mark for future comparisons.</li> </ul>

<sup>o</sup>Package cost does not include transportation and lodging.

<sup>Δ</sup>In accordance with the applicable package Response Times, the MTI contact process follows:

- Day 1) An email or telephone response
- Day 2) A submitted Customer Plan
- Day 3) Service Engineer is dispatched to site

[MTIwwservice@mtiwelding.com](mailto:MTIwwservice@mtiwelding.com)

<sup>†</sup>Corrective action may require laser alignment; determined at scheduled visit.

<sup>oo</sup>Optional – nonstandard PMP item, requires MTI quote.

<sup>†</sup>Requires MTI Remote Access (MRA) installation.



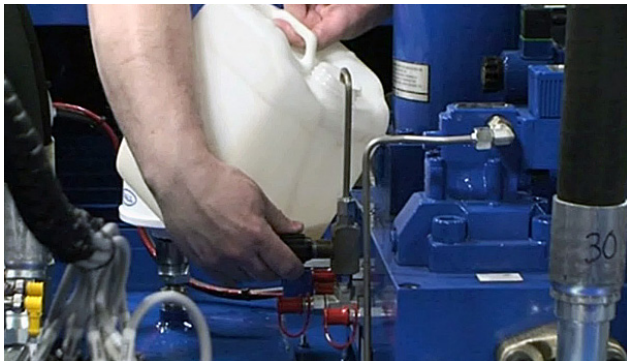
**Manufacturing Technology, Inc.**

Worldwide Service & Support

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## OIL SAMPLING



Oil samples will be taken during each scheduled visit then sent to one of MTI's recommended laboratories for analysis. The resulting data will be recorded by MTI as part of a complete report, including laboratory data, that will be sent to you.

## SERVICE THAT TRAINS



When major maintenance or minor tweaks are necessary, our expert service technicians do more than fix-it-and-forget-it. We'll train you.

MTI offers training programs tailored to meet your requirements, ranging from operator use, controls training, and machine process improvements. Training programs are instructor-lead, includes a complete set of training material for each attendee, and hands-on lessons where practical. MTI's on-site technicians can utilize their "open" time to refresh Operators on techniques, setups, review routine maintenance items, and machine control files. With a PMP you will receive a discount on training.

Contact your MTI Worldwide Service representative for more information on how we can assist you directly or remotely with a tailored Predictive Maintenance (PM) program and MTI Remote Access (MRA) package that will extend the life of your capital equipment and bring you the peace of mind you've earned.

## DISCOUNTED PARTS & SERVICE



Preventive Maintenance Package (PMP) participants receive pricing discounts on replacement and spare parts, when ordered within their selected plan's term. Contact MTI for additional discounts, including instrument calibration, re-laser alignment, emergency service, and MRA.



*Group or one-on-one, MTI techs get it done.  
We train so you can maintain.*

## SYSTEM HEALTH REPORT

The lasting value of a preventative maintenance program is in the health report you receive after every scheduled visit. MTI Worldwide Service technicians complete a 20-point system check that details their findings, the work they performed, results from any testing conducted, and any recommendations to keep your machine performing at its optimum.

## CONTACT MTI SERVICE

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## WORLDWIDE SERVICE & SUPPORT

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Peace of mind is complete confidence, knowing you have the finest machine in the world, backed by the finest support at all times. It's knowing that obstacles to keeping your machine operating at optimal performance will be met with a quick, sure-handed response.

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*Brings it all together!*

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