



MTEC Mechanical Testing Services

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Metallurgical Testing Facility

Price List

Effective Date: February 1, 2006

ISO 9001-2000

***Meeting and Exceeding Our Customers' Expectations
Since 1984!***

<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TEMP.</u>	<u>COST</u>
Tensiles (Round)			
Tensile Low Alloy		Ambient	\$40.00
Tensile Martensitic SS		Ambient	\$45.00
Tensile Austenitic SS		Ambient	\$50.00
Tensile Nickel Base		Ambient	\$60.00
Tensile (Reduced Section)			
RST Low Alloy	<1.5" THK	Ambient	\$45.00
	>1.5" THK	Ambient	\$50.00
RST Martensitic SS	<1.0" THK	Ambient	\$50.00
	1.0" - 1.5" THK	Ambient	\$58.00
	1.5" - 2" THK	Ambient	\$65.00
RST Austenitic SS	<1.0" THK	Ambient	\$55.00
	1.0" - 1.5" THK	Ambient	\$63.00
	1.5" - 2" THK	Ambient	\$71.00
RST Nickel Base	<1.0" THK	Ambient	\$65.00
	1.0" - 1.5" THK	Ambient	\$75.00
	1.5" - 2.0" THK	Ambient	\$85.00
Tensile (Wire)			
Wire Tensile All materials		Ambient	\$45.00
Tensile (Ring)			
Ring Tensile All materials		Ambient	\$45.00
Tensile (Elevated)			
Tensile Low Alloy		Elevated	\$80.00
Tensile Martensitic SS		Elevated	\$85.00
Tensile Austenitic SS		Elevated	\$90.00
Tensile Nickel Base		Elevated	\$95.00
Charpy V Notch - 10X10MM			
CVN Low Alloy		RT to -100°F	\$70.00
		-101°F to -320°F	\$90.00
CVN Martensitic SS		RT to -100°F	\$75.00
		-101°F to -320°F	\$95.00
CVN Austenitic SS		RT to -100°F	\$95.00
		-101°F to -320°F	\$110.00
CVN Nickel Base		RT to -100°F	\$140.00

<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TEMP.</u>	<u>COST</u>
		-101°F to -320°F	\$160.00
Charpy V Notch - Sub-Size		Add \$10	
IZOD			
IZOD Low Alloy/ Martensitic		RT	\$90.00
IZOD Nickel Base		RT	\$160.00
Bend Test			
Face/ Root/ Side Bend Low Alloy	< 1.0" THK		\$30.00
Side Bend Low Alloy	1.0" - 1.5"		\$33.00
Face/ Root/ Side Bend Martensitic SS	< 1.0" THK		\$30.00
Side Bend Martensitic	1.0" - 1.5"		\$33.00
Face/ Root/ Side Bend Austenitic SS	< 1.0" THK		\$35.00
Side Bend Austenitic	1.0" - 1.5"		\$40.00
Nickel Base Plate	< 1.0" THK		\$50.00
Nickel Base Plate	1.0" - 1.5" THK		\$55.00
Nickel Break Test			\$35.00
Fatigue Test			
Fatigue Machine ONLY			\$80.00
Testing Load Control- Room Temp.	0 - 12 HRS		\$95.00
	12 - 24 HRS		\$180.00
Over 24 Hours Add \$8.00 Per Hour			
Testing Strain Control- Room Temp.	0 - 12 HRS		\$120.00
	12 - 24 HRS		\$190.00
Over 24 Hours Add \$8.50 Per Hour			
Rotating Beam Fatigue- Room temp.	0 - 12 HRS		\$85.00
	12 - 24 HRS		\$130.00
Over 24 Hours Add \$6.00 Per Hour			
Stress Rupture & Creep			
Machine Only Smooth S/R			\$50.00
Machine Only Combination S/R			\$90.00
Machine Only Creep Test			\$90.00
Testing			
Stress Rupture	0 - 30 HRS		\$45.00
Stress Rupture	30.1 - 50 HRS		\$55.00
Stress Rupture (+.75/hr)	50.1 - 100 HRS		\$55.00
Stress Rupture (+.66/hr)	100.1 - 500 HRS		\$93.00
Stress Rupture (+.56/hr)	500.1 - Duration		\$357.00
Creep	0 - 100 HRS		\$62.00
	100 HRS +		CALL

<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TEMP.</u>	<u>COST</u>
Fracture Tests			
Compact Tension E399, RT to +32	B = .5 - 1.00" each		\$300.00
	B = 1.00" - 1.5" each		\$350.00
	B = 1.5" - 2.0"		\$400.00
Below +32, per set			\$100.00
Drop Weight			
Drop - Weight, P3 Sample (each)			\$65.00
Hardness			
Brinell Hardness (Tensile Blank)			\$6.00
Brinell In-Field King Hardness			Call
Rockwell Hardness (Tensile Blank)			\$8.00
Macrohardness Survey Weld Test To 15 Readings			\$50.00
Each Additional Set Of Three Readings			\$6.00
HV10 Sample Preparation Per Reading			\$40.00 \$3.50
HK Sample Preparation Per Reading			\$40.00 \$3.50
Case Depth Sample Preparation Per Reading			\$40.00 \$3.50
Four Quadrant Hardness	Up To 8" O.D. Over 8" O.D.		\$65.00 \$95.00
Single Quadrant Hardness			\$40.00
Jominy			
Jominy, End Quench & Test			\$130.00
Metallography			
Determine Decarb Depth			\$50.00
Ferrite by Instrument			\$85.00
Point Count /E562			\$135.00
Free Ferrite			\$50.00
Ferrite by Point Count			Call
Grain Size			\$50.00
Determination Grain Size	McQuaid EHN		\$100.00
Microcleanliness ASTM E 45	Method A		\$70.00
	Method B		\$70.00
	Both A & B		\$100.00
Each Picture Of Cleanliness			\$15.00
Photomicrograph only			\$50.00
Each Additional Picture			\$15.00
Determine Percentage Martensite			\$50.00
Determine Grain Direction			\$50.00
Mount Metallographic Sample Only			\$45.00
Macro, Prepare & Polish			\$45.00
Macro Prepare, Polish & Examination			\$55.00

<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TEMP.</u>	<u>COST</u>
Macro Prep, Polish, exam- opposing face			\$105.00
Microstructure			\$50.00
Macro Etch			Call
Field Metallurgical Replication- FMR			Call
Failure Analysis			Call
Chemical Analysis			
Chemical Analysis	Low Alloy		\$70.00
	Other		\$80.00
	Brass - Wet		\$110.00
Chemistry 1 Element With Testing			\$20.00
Chemistry 1 Element with no testing			\$30.00
Chemical Analysis	Wet Each Element		\$40.00
Chemistry	Hydrogen Only		\$105.00
	Nitrogen Only		\$60.00
	Oxygen Only		\$75.00
Chemistry Material ID	Low Alloy		\$70.00
	Aluminum		\$75.00
Melt Material For Button			\$15.00
Corrosion Testing			
Oxalic Acid Tech Test ASTM A262	Practice A		\$80.00
Ferric Sulfate-Sulfuric Acid ASTM A262	Practice B		\$185.00
Nitric Acid Test ASTM A262	Practice C		\$235.00
Copper-Copper Sulfate ASTM A262	Practice E	24 hours	\$135.00
	Practice F	120 hours	\$220.00
Corrosion Test ASTM G28	Method A	24 hours	\$175.00
	Method A	120 hours	\$260.00
Corrosion Test ASTM G48	Method A, B		\$135.00
	Method C		\$165.00
	Method D		\$175.00
Corrosion Test ASTM A923	Method A		\$80.00
	Method C		\$135.00
Sensitization At 1292 Degrees F	.5/hrs w/q		\$75.00
Hydrogen-Induced Cracking Set Of 3			\$1,150.00
Heat Treat			
Normalize first hour			\$40.00
Each Additional Hour			\$15.00
Austenitize First Hour			\$40.00
Each Additional Hour			\$15.00
Temper First Hour			\$40.00
Each Additional Hour			\$15.00
Set Up Post Weld Heat Treat			\$40.00
Normalize Up To 1800 F, 1st Hour			\$15.00
10 Day Step Cooling Post Weld			\$675.00
Heat Treat			

<u>DESCRIPTION</u>	<u>SIZE</u>	<u>TEMP.</u>	<u>COST</u>
Non Destructive Testing			
Ultrasonic Testing In House Only	(Per Hour		\$50.00
Liquid Penetrant Inspection In House	(Per Hour		\$50.00
Magnetic Particle Inspection In House	(Per Hour)		\$50.00
Magnetic Cleanliness Step Down Specm			<u>\$160.00</u>
Shear Testing			
Shear Testing	Fixtures Furnished		\$35.00
Flattening Test			
Flattening Test Up To 10 inch O.D.			\$40.00
Proof Load			
Proof Load, 10 Second Hold (Nuts)	0-60,000LBS		\$35.00
	60-120,000		\$40.00
	120,000-		\$45.00
Minimum Charge			\$25.00
Sawing per Hour	> 6"		\$30.00
Witness		Call	
Overtime			2X
Weekends			2X
Discounts (payment terms met)	monthly > \$10,000		5.00%
	monthly > \$20,000		<u>10.00%</u>