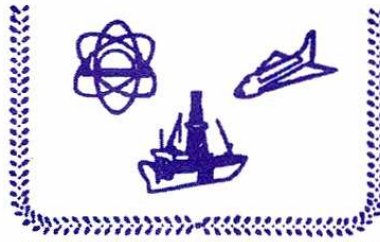




Quality Concepts



INSPECTION COMPANY, INC.



Quality Inspection Concepts, Inc.

Mechanical Testing & Non-Destructive Price List

May 25, 2010

7825 Hillmont Houston, Texas 77040
Phone: 713-690-2703 Fax: 713-460-8636

On the web at www.qualconcepts.com

Email inquires to services@qualconcepts.com

Servicing the Metal Working Industry in Houston since 1982

Accredited by the RvA

Certified by DAS 9001:2000

ANSI-RAB Accreditation

ASNT Level III on Site

7825 Hillmont St. Houston, TX 77040 PH: 713-690-2703 FAX: 713-460-8636
www.qualconcepts.com

Table of Contents

Tensile Testing	Page 2
Charpy Testing	Page 3
Hardness Testing	Page 4
Metallography	Page 5
Corrosion Testing	Page 5
Chemical Analysis	Page 6
Bend Testing	Page 6
Weld Procedure Qualification	Page 7
Weld Performance Qualification	Page 7
Heat Treatment	Page 8
Saw Cutting	Page 9
Pressure Testing	Page 10
Miscellaneous	Page 10
Non-Destructive Testing	Page 11
NDT (cont.)	Page 12
Turn-Around	Page 13
Company Directory	Page 14

Tensile Testing

-Prices include Specimen Preparation, Testing & Reporting

-Tensile test includes Ultimate, Yield, % Elongation & Reduction of Area

Full Size .505 (a minimum of .75 in. OD. x 6.00 in. Lg. needed)

<i>Low Alloy & Carbon Steel</i>	<i>\$ 55.00</i>
<i>Stainless Steel</i>	<i>\$ 65.00</i>
<i>Super Alloys</i>	<i>\$ 85.00</i>

Sub size .350, .250 & Threaded .160 (a minimum of .50 in.OD x 3.00 in.lg needed)

<i>Low Alloy & Carbon Steel</i>	<i>\$ 58.00</i>
<i>Stainless Steel</i>	<i>\$ 70.00</i>
<i>Super Alloy</i>	<i>\$ 95.00</i>

Elevated Temperature Tensile ***\$150.00***

<i>Proof Load</i>	<i>\$ 65.00</i>
<i>Shear Test</i>	<i>\$ 65.00</i>
<i>Stress Rupture ~ 100 Hrs.</i>	<i>\$475.00</i>
<i>Stress Rupture ~ 23 Hrs.</i>	<i>\$175.00</i>

Charpy Impact Testing

-Prices include Specimen Preparation, Testing & Reporting

-Charpy test includes Foot Lbs, Lateral Expansion & Percent Shear

Full Size Charpy's

(A minimum of 2.00 in. x 2.125 in. x .50 in. of material needed)

Ambient **\$ 72.00**

Ambient To 99F

Low Alloy & Carbon Steel **\$ 80.00**

Stainless Steel **\$100.00**

Super Alloys **\$110.00**

-100 To 320F

Low Alloy & Carbon Steel **\$ 95.00**

Stainless Steel **\$115.00**

Super Alloys **\$125.00**

Charpy Izod Ambient

Low Alloy & Carbon **\$100.00**

Stainless Steel **\$120.00**

Super Alloys **\$130.00**

Sub size Charpy's

(A minimum of 1.75 in. x 2.125 in. x thickness of material needed)

Hardness Testing

<i>4 Quadrant Hardness Survey- (36 Readings)</i>	<i>\$ 90.00</i>
<i>Single Quadrant Hardness (9 Readings)</i>	<i>\$ 75.00</i>
<i>Macro Hardness ^ˆ Digital Rockwell (3Readings)</i> <i>(Scales C, B, A, F & 15T, 30T, 45T)</i>	<i>\$ 8.00 *</i>
<i>Macro Hardness ^ˆ (Standard Weld Test 15 Readings)</i> <i>(Scales C, B, A, F)</i>	<i>\$ 45.00</i>
<i>Brinell hardness</i>	<i>\$ 8.00 *</i>
<i>Brinell or Rockwell Hardness in Field per Hour</i>	<i>\$ 60.00 **</i>
<i>Micro Hardness (To 10 Points)</i>	<i>\$ 90.00</i>
<i>Additional Points (each)</i>	<i>\$ 5.00</i>
<i>* Minimum Charge ^ˆ Hardness Testing performed not in Conjunction with additional testing</i>	<i>\$ 30.00</i>

***** Minimum field test charge of \$125.00 applies***

Metallography & Corrosion

- Includes microstructure preparation

<i>Grain Size</i>	<i>\$ 70.00</i>
<i>Micro cleanliness Method A & B (w/one photo)</i>	<i>\$ 98.00</i>
<i>Photomicrograph</i>	<i>\$ 98.00</i>
<i>Additional Photo Prints</i>	<i>\$ 17.50</i>
<i>Macro etch</i>	<i>\$ 75.00</i>
<i>Decarburization</i>	<i>\$65.00</i>
<i>Ferrite content</i>	<i>\$95.00</i>
<i>Case Depth</i>	<i>\$ 45.00</i>
<i>McQuaid EHN w/Heat Treatment</i>	<i>\$255.00</i>
<i>ASTM A262 [∞] (A) Oxalic Acid Etch Test</i>	<i>\$ 95.00</i>
<i>ASTM A262 [∞] (B) Ferric Sulfate-Sulfuric Acid Test-120 Hrs</i>	<i>\$275.00</i>
<i>ASTM A262 [∞] (C) Nitric Acid Test-240 Hrs</i>	<i>\$375.00</i>
<i>ASTM A262 [∞] (D) Nitric Hydrofluoric Acid Test-4 Hrs</i>	<i>\$275.00</i>
<i>ASTM A262 [∞] (E) Copper-Copper Sulfate-Sulfuric Acid Test [∞] 24 Hrs</i>	<i>\$275.00</i>
<i>ASTM A923 [∞] (A) Sodium Hydroxide Etch Test</i>	<i>\$95.00</i>
<i>ASTM A923 [∞] (B) Charpy Test for Structure Classification</i>	<i>\$95.00</i>
<i>ASTM A923 [∞] (C) Ferric Chloride Test</i>	<i>\$95.00</i>
<i>Metallurgical Consulting Hourly Rate</i>	<i>\$ 85.00</i>

Chemical Analysis
Full Chemistry (1st 8 Elements)

<i>Chemical analysis</i>	\$ 85.00
<i>Chemical Analysis Minimum Charge with no other testing</i>	\$ 45.00
<i>Tungsten Analysis</i>	\$ 45.00
<i>Columbium Analysis</i>	\$ 45.00
<i>Nitrogen Analysis</i>	\$ 45.00
<i>Oxygen Analysis</i>	\$ 45.00

Bend Testing Plate & Pipe
- Face, Side, Root

<i>Low Alloy & Carbon Steel</i>	\$ 55.00
<i>Stainless Steel</i>	\$ 65.00
<i>Super Alloys</i>	\$ 75.00
<i>Nick Break</i>	\$ 45.00
<i>Flattening Test</i>	\$ 45.00
<i>Coating Bend Test ASTM A446 & A875</i>	\$ 45.00

Weld Procedure Qualification

<i>Write Procedure</i>	\$ 125.00
<i>Two (2) Tensile Test with Etch</i>	\$ 120.00
<i>Four (4) Bend Test with Etch</i>	\$225.00
<i>Two Sets (2) Impacts with Etch</i>	\$225.00
<i>Welding Consulting Hour Rate</i>	\$ 75.00
<i>Visual Weld Inspection</i>	\$ 45.00
<i>Liquid Penetrant Weld Inspection</i>	\$ 45.00
<i>Ultrasonic Weld Inspection</i>	\$ 45.00
<i>Magnetic Particle Inspection</i>	\$ 45.00
<i>Radiography Weld Inspection</i>	POQ

Weld Performance Qualification

<i>Two (2) Bend Test with Etch</i>	\$ 125.00
<i>Write WPQ QW 484</i>	\$ 125.00

Heat Treatment

-Microprocessor controlled Atmosphere furnaces

-Heat-treat charts furnished on request.

<i>Normalize (1st Hour)</i>	\$ 28.00
<i>Additional hours</i>	\$ 17.50
<i>Temper (1st Hour)</i>	\$ 28.00
<i>Additional hours</i>	\$ 17.50
<i>PWHT per ASME Code (1st Hour)</i>	\$ 28.00
<i>Additional hours</i>	\$ 17.50
<i>Austenitize, Quench & Temper (Per Hour)</i>	\$ 28.00
<i>Additional hours</i>	\$ 17.50
<i>End Quench Hardenability (Jominy Bar)</i>	\$175.00
<i>Furnace Charts (each)</i>	\$ 25.00

Saw Cutting

Cutting Capacity:

From Wire to 20.00 in. OD

Specializing in Saw Cutting:

Inconel

Monel

Nickel Base Alloys

Stainless Steel

Astralloy

Becu

Elgaloy

Ferrallium

Hastalloy

Nitronic 60

Titanium

Waspalloy

A286

A453

B366

B619

C276

CD172

CF3M

CN7M

MP35N

5 Ni

13 Chrome

17-4

We offer saw cutting services for all Carbon and Alloy Materials with competitive pricing for all material types.

Delivery

Typically, an abrasive saw takes about half the time to saw cut a piece of material than a regular band saw. This includes all of the above materials. We specialize in the Super and Nickel Base Alloys.

Pressure Testing Capability to 65,000 PSI

<i>Hydrostatic Testing (Per Hour) In Our Facility (0-30,000 PSI)</i>	<i>\$ 45.00</i>
<i>Hydrostatic Testing (Per Hour) At Clients Facility (0-30,000 PSI)</i>	<i>\$ 45.00</i>
<i>Gas Pressure or Hydrostatic Testing Over 30,000 PSI</i>	<i>\$ POR</i>
<i>Pressure Recorders ~ 2 Pins 0-5,000 ~ 0-15,000 (Day)</i>	<i>\$ 75.00</i>
<i>Dead Weight Tester 0-10,000 (Day)</i>	<i>\$ 75.00</i>
<i>Gage Calibration 0-10,000 PSI</i>	<i>\$ POR</i>

Miscellaneous

<i>Exam per AMS 2300 or 2301</i>	<i>\$ 95.00</i>
<i>Heat Treat per AMS 2300 or 2301</i>	<i>\$ 50.00</i>

Non-Destructive Testing

Liquid Penetrant Testing

Small parts \$15.00 /ea. or \$70.00 minimum charge

Threaded couplings: (each)

2 in. ~ 3 in. OD	\$ 4.50
4 in. ~ 5 in. OD	\$ 5.50
6 in. ~ 7 in. OD	\$ 6.50
8 in. ~ 9 in. OD	\$ 7.50
10 in. ~ 11 in. OD	\$ 8.50

Acoustic Emission Testing

\$ POR

Ultrasonic Examination Of:

Plate to ASTM A578 Level I, II, & III:

.30 Per square foot (less than 1,000 sq. ft.)

.25 per square foot (more than 1,000 sq. ft.)

Bars to ASTM A388 and most customers' specifications:

First bar \$75.00; each additional bar \$25.00

(This is based on 20' Random Lengths)

Tubes:

0.00' -3.00' OD	\$ 2.35 Per Foot (over 58 ft)
>3.00' -5.00' OD	\$ 2.55 Per Foot (over 53 ft)
>5.00' -8.00' OD	\$ 2.85 Per Foot (over 48 ft)
>8.00' -12.00' OD	\$ 2.95 Per Foot (over 46 ft)
>12.00' OD	\$ 3.50 & Up (over 38 ft)
>18.00' OD	\$ 4.50 (over 30 ft)

Forgings:

Quoted Per Piece Price

(Minimum - \$135.00 for jobs performed in the Houston Area)

\$200.00 overtime

\$150.00 out of town

\$225.00 overtime + out of town

Magnetic Particle Testing:

Bar, Tube & Pipe - By OD Size:

<i>> 0.00" -3.00" OD</i>	<i>\$ 2.25 Per Foot (over 60 ft)</i>
<i>>3.00" -5.00" OD</i>	<i>\$ 2.50 Per Foot (over 54 ft)</i>
<i>>5.00" -8.00" OD</i>	<i>\$ 2.75 Per Foot (over 50 ft)</i>
<i>>8.00" -12.00" OD</i>	<i>\$ 3.25 Per Foot (over 42 ft)</i>
<i>>12.00" OD</i>	<i>\$ POR</i>

Forgings:

Quoted Per Piece Price

Turn Around

For most services listed, same day or 24 hour service applies.

Quality Concepts offers many laboratory services that are not listed in this schedule. The prices for such services will gladly be quoted on request.

Quality Concepts' Laboratory testing procedures are conducted within specifications such as API, ASTM, ASME, ANSI & Military Standards. Laboratory equipment is controlled within our Quality Manual, ASTM E74 and traceable to the National Bureau of Standards. Quality Concepts' letters and reports are for the exclusive use of our client to whom they are addressed. Our name may be used only with our prior written approval. Our letters and reports apply only to the sample tested and/or inspected and do not necessarily represent the quality of other similar or identical material.

COMPANY DIRECTORY

DAVID DOWN <u>DDown@qualconcepts.com</u>	<i>Owner / President ext. 105</i>
ROD MAGAR <u>rjmagar@qualconcepts.com</u>	<i>General Manager ext. 106</i>
<i>Abel Solis</i>	<i>Shop/Lab Super. ext. 103</i>
<i>Daniela</i> <u>daniela@qualconcepts.com</u>	<i>Staff ext. 104</i>