

Stress Analysis

Good Measurement.... Pays!

INTERTECHNOLOGY

**Strain Gauge Application Services and
Custom Load Cell/Force Transducer Design**





INTRODUCTION

Intertechnology; established in 1968 with a commitment to serve our clients with the best in measuring and testing technologies. Over the past 35 years we have gained an enviable reputation for our excellence in strain gauge bonding and custom force transducer design. The wide range of strain gauge installations are reflected by our broad customer base, such as: Automotive, Aerospace, Construction, Power Generation, Mining, Defense, Steel Mills, Bioengineering and many more.

Over the years and through-out Canada, we have trained hundreds in our formal and informal strain gauge workshops, including special training at customer locations.

STRAIN GAUGING SERVICE

With our depth of knowledge and 35 years of experience of installing strain gauges, we know how to be cost effective.

Our laboratory includes various equipment, instruments and accessories to ensure a high quality job; including ovens for curing of adhesives, microscopes for accurate examination of gauge installation for transducers.

With our vast experience, we appreciate the difficulties encountered in nasty field or industrial environments; Let us be your helping hands!

STRAIN GAUGE INSTRUMENTATION RENTAL

For those that don't require our labour and experience, but need additional instrumentation, consider renting our strain gauge instrumentation.

- Manual Strain Indicator P-3500
- Manual Switch & Balance Unit SB-10
- Strain Gauge Installation Tester
- Stress Analysis Data Acquisition Systems, System 4000, System 5000, System 6000
- System 2100

PRACTICAL STRAIN GAUGE APPLICATION WORKSHOP TRAINING

The program is designed to prepare the participant in the successful bonding of foil strain gauges. The short 2 day "hands-on workshop" is suitable for the first time applicant as well as those who desire refreshment training.

The workshops are limited to 10-12 students to ensure personal attention. Although the program has a set routine, attendees are invited to discuss their specific needs and concerns.

The training touches on some strain gauge theory to provide the student with a broader appreciation of strain measurements and the instruments that are typically required to provide successful results.

CUSTOM LOAD CELL/FORCE TRANSDUCERS

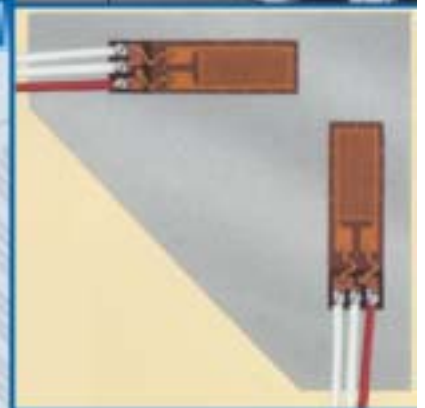
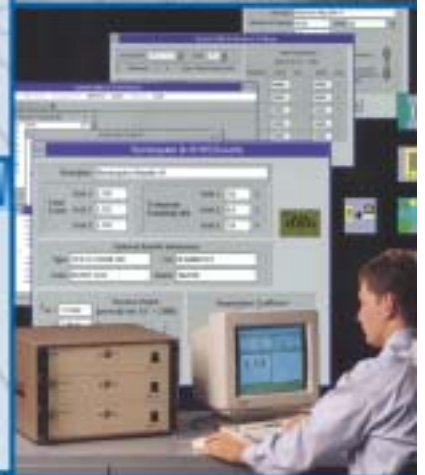
Intertechnology can design and manufacture a custom-built load cell/force transducer unit to fulfill your unique application. Our experience covers; single-axis to tri-axis force measurements, with applications in hostile environments.

RESIDUAL STRESS & STRESS ANALYSIS

Residual Stresses arise in most structures as a result of manufacturing and operational procedures. They must, therefore, be taken into account when assessing structural integrity. This is particularly so when assessing the potential defects. The service is offered both in-house and on-site.

Customers are always aiming to increase the life of their machinery and at the same time, reduce the amount of raw material used. By carrying out this continuous development, designers will need confirmation/field test validation on newly developed machines, vehicle or parts to ensure that they have built-in enough fatigue life to ensure safety and reliability over a period of time.

Strain gauging only takes a few days and once connected to the data logger and commissioned, data is collected as required. When the process of data collection is completed, a report is produced outlining events that have taken place, parts used and tables of results. All necessary certificates can be supplied for traceability purposes.



GLOBAL PRODUCTS FROM WORLD LEADERS

Our Strategic Supply Partners Are:

**VISHAY
MEASUREMENTS
GROUP**

MTS

Lebow Products

Honeywell

CSZ
Cincinnati Sub-Zero

GP:50

**dp DATA PHYSICS
CORPORATION**

**TEDEAth
HUNTLEIGH**

ASHCROFT

Data Track

**TRANS-TEK
INCORPORATED**

Entran

UNIPULSE

STRAINSEPT

*fatigue
dynamics inc.*

KAMAN

Morehouse

**Ectron
CORPORATION**

Capacitec

NLS NON-LINEAR SYSTEMS

**Quality Products Dependable Performance...
From R&D Test Lab to the Production Floor**

Strain Gauges/Instrumentation

Single Channel Static to Dynamic
Data Acquisition Analysis

Pressure Transducers/Transmitters

Static to Dynamic Sensing

Vibration

Sensing, Instrumentation, Acquisition, Analysis

Position/Displacement Transducers

Non-Contact, Contact, Gauging, Linear,
Rotary, Angle

Load Cells/Torque Transducers

Indicators, Controllers, Signal Conditioners,
Batching Systems

Environmental Chambers/Simulation

Bench Top to Walk-In Units

MTS Physical Testing Systems

Tensile, Compression, Fatigue, Durability, Simulation

CANADA'S MAJOR DISTRIBUTOR FOR TESTING AND MEASUREMENT SOLUTIONS

SENSORS TRANSDUCERS SIGNAL CONDITIONERS DIGITAL INDICATORS DATA ACQUISITION

INTERTECHNOLOGY

1 Scarsdale Road, Don Mills, Ontario, M3B 2R2

Fax: 416-445-1170, Toronto Area: 416-445-5500

Toll Free: 1-800-465-1600

Montreal: 514-333-0930 Ottawa: 613-723-1828 Winnipeg: 204-895-2037 Calgary: 403-254-0095 Vancouver: 604-270-9538