EXECUTIVE OFFICES - PITTSBURGH, PA.

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ST. LOUIS  BOSTON  MONTREAL  LOS ANGELES  TORONTO
BUFFALO  SAN FRANCISCO  MILWAUKEE  NEW ORLEANS
SEATTLE  BIRMINGHAM  DALLAS  HOUSTON

EUROPEAN COUNTRIES

An International FACT FINDING INSTITUTION

EXHIBITING AT

A CENTURY of PROGRESS

Hall of Home Planning and Industrial Arts

CHICAGO

THE EXPOSITION TYPIFIES THE PROGRESS AND APPLICATION OF SCIENCE . . . .

PITTSBURGH TESTING LABORATORIES OFFERS A MEANS FOR THE PRACTICAL APPLICATION OF SCIENCE TO THE PROBLEMS OF ITS CLIENTS
PTL SERVICE TO INDUSTRY

The Pittsburgh Testing Laboratory maintains laboratories, branches or personnel in centers of industry in the United States and abroad.

PTL Service falls within five basic divisions:
1. Industrial Research  
2. Chemical  
3. Physical  
4. Inspection  
5. National Weld Testing Bureau

Each of these divisions is equipped with the trained personnel and adequate apparatus necessary to properly execute the work entrusted to it.

The careful, thorough and intelligent performance of this work is the foundation upon which this institution stands.

This is our Service to Industry

INDUSTRIAL RESEARCH DIVISION:

Within our booth and elsewhere at the Exposition, PTL engineers are conducting tests and demonstrating actual services performed by this division for:

- Clinton Carpet Company  
  Chicago, Ill.
- Federal Enameling & Stamping Co.  
  Pittsburgh, Pa.
- General Household Utilities Company  
  Chicago, Ill.
- The Hoover Company  
  North Canton, Ohio
- The Howell Company  
  Geneva, Ill.
- Keystone Steel & Wire Company  
  Peoria, Ill.
- O'Brien Varnish Company  
  South Bend, Ind.

This division concerns itself primarily with such of its clients' problems as:

(a) PRODUCT IMPROVEMENT AND DEVELOPMENT  
(b) SALES PROMOTION AND ADVERTISING  
(c) NEW MARKETING PLANS  
(d) SPECIAL INVESTIGATIONS

PRODUCT IMPROVEMENT and DEVELOPMENT:

Recognizing the growing need by industrial concerns large and small for research facilities which would not become a drain upon capital investment or overhead charges, Pittsburgh Testing Laboratory has developed two types of such service:

1. Research to be conducted by PTL's staff, using PTL's Laboratory and facilities.
2. Research to be conducted by the Client's representative under the direction and counsel of PTL's staff, using PTL's facilities.

These two types of PTL research service have been definitely inaugurated to fit an obvious industrial need and represent the answer to the question, "How can I obtain adequate Research facilities at a cost which I can afford?"

SALES PROMOTION and ADVERTISING:

"Defensive Selling"—defending the claims made by the manufacturer and salesman for the product and its application against the natural skepticism of the purchaser—has become tremendously expensive in time, effort and money. Supplying a sales organization with proper training and effective working tools has become a difficult problem.

PTL Service has been effectively utilized in the past, and is being increasingly called upon by an ever-growing clientele, for assistance in proving value of clients' merchandise and certifying as to its quality and performance.

NEW MARKETING PLANS:

PTL as an independent Fact-Finding Institution is in position to secure for its clients, information regarding the need and efficiency of contemplated and current products; the available markets for same; and to develop interesting and unusual methods of launching marketing campaigns.

SPECIAL INVESTIGATIONS:

In every business special problems arise requiring the services of engineer, chemist, metallurgist, geologist or others of technical training and ability.

The staff of the Pittsburgh Testing Laboratory is organized to handle and solve such problems.

PTL Service has been used in the preparation of information for patent application—testimony in patent litigation—investigations and testimony based upon same, in legal procedure—examination of raw material or ore deposits—technical advice upon proposed industrial processes—investigations into causes of failure in construction—or similar matters requiring the application of scientific knowledge.

The Pittsburgh Testing Laboratory thus affords a unique and unusual scope of service founded upon 50 years of sincere devotion by its personnel to the interesting, varied and vital problems of Industry.
CHEMICAL DIVISION:

The Pittsburgh Testing Laboratory maintains large and complete commercial chemical laboratories where staffs of trained chemists and competent analysts handle coal, coke, dyes, foods, water, tar, paints, soaps, fabrics and innumerable other commodities and products.

PHYSICAL DIVISION:

Physical tests and special investigations of all kinds are conducted both in the laboratory and the field. The broad scope of this phase of PTL Service is illustrated by the following partial but representative list of products tested:

<table>
<thead>
<tr>
<th>Abrasives</th>
<th>Drills</th>
<th>Paper</th>
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</thead>
<tbody>
<tr>
<td>Alloys</td>
<td>Electrical Apparatus</td>
<td>Rubber Goods</td>
</tr>
<tr>
<td>Belting (Leather or Fabric)</td>
<td>Engines</td>
<td>Refractories</td>
</tr>
<tr>
<td>Bearings</td>
<td>Flooring</td>
<td>Recording Apparatus</td>
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<tr>
<td>Bushings</td>
<td>Furniture</td>
<td>Springs</td>
</tr>
<tr>
<td>Brick</td>
<td>Gaskets</td>
<td>Sand</td>
</tr>
<tr>
<td>Building Materials</td>
<td>Gypsum Products</td>
<td>Stone</td>
</tr>
<tr>
<td>Castings</td>
<td>Instruments</td>
<td>Saws</td>
</tr>
<tr>
<td>Conduit</td>
<td>Insulating Materials</td>
<td>Tools</td>
</tr>
<tr>
<td>Concrete</td>
<td>(Heat or Sound)</td>
<td>Tubular Products</td>
</tr>
<tr>
<td>Cement</td>
<td>Linoleum</td>
<td>Ventilators</td>
</tr>
<tr>
<td>Cranes</td>
<td>Machinery</td>
<td>Valves</td>
</tr>
<tr>
<td>Derricks</td>
<td>Metals</td>
<td>Wire Cloth</td>
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<tr>
<td>Chain</td>
<td>Packing</td>
<td>Wire Fencing</td>
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<tr>
<td></td>
<td>Pipe and Fittings</td>
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INSPECTION DIVISION:

**Buildings and Bridges:**

Many of the nation's most prominent bridges and structures, both of steel and concrete, have been PTL inspected. Such inspection involves mill, shop or field inspection of structural steel, cement, aggregate and reinforcing steel testing; control of concrete mixing and placing, and tests of concrete cylinders and cores; load tests upon finished structures and examination of failures.

**Railroad Equipment:**

Rails, track fastenings, turnouts and crossings, cross ties, locomotives, cars and repair parts are some of the many items which PTL inspects for the railroads. Other major items handled by this division include:

**Tubular Products:**

**Roads and Pavements:**

**Power Plants:**

**Preserved Lumber:**

NATIONAL WELD TESTING BUREAU:

This division has been organized to meet the needs of Industry in connection with a nation-wide service to handle testing requirements for welding processes and welds made by individuals in the shop and field.

Inspection of welded structures and products is also a function of this division, as well as special welding problems.