

STATEMENT OF QUALIFICATIONS

VA:W

PROFESSIONAL MECHANICAL ENGINEERING

STATEMENT

VA:W is a Mechanical Engineering consulting firm whose name stands for "Value Added by Werner." The consultant services offered are concisely stated by that phrase: to offer value added to a specific endeavor through engineering with specialties in mechanical engineering in several sub-disciplines outlined below. The consulting services specialize in interfacing with other engineering and project management disciplines working on the concept that a team will produce results in excess of the sum of individual contributions.

CAPABILITIES

- DESIGN — theoretical to final product
- ANALYSIS - thermal, stress, mass flow, kinematics
 - R&D ~ Process, equipment, systems
 - MARKETING ~ analysis, presentation
 - PRESENTATION
 - NEGOTIATION
 - CLIENT/ENDOR RELATIONS
 - INSTRUCTION

RELEVANT EXPERIENCE

THERMODYNAMIC MODELING

Developed a thermodynamic model called the Virtual Energy Audit that replicates steam and chiller processes in Excel for the purposes of plant optimization, plant operations alteration, systems planning, equipment modifications, and training

University of Washington, Seattle, WA
Seattle Steam Company, Seattle, WA
Roseburg Forest Products, Dillard, OR
University of Arkansas, Fayetteville, AR
Plum Creek manufacturing, Columbia Falls, MT

PROCESS DESIGN

- **Pulp & Paper**
 - Pulp preparation equipment, No. 12 paper machine,
 - Longview Fibre Bleach plant scrubber,
 - Boise Cascade Wallula
 - Non-Condensable Gas Collection, Potlatch Northwest
 - Process piping, several plants
- **Petrochemical**
 - Tank farm fire protection design. Western Fuel Oil
 - Hydrotreater up-grade. Texaco
 - Riyadh refinery utility systems

- **Power plant**
Wastewater Plant Off-sites piping and spray dryer, TUGCO Monticello Station
Condensate Recovery System, PSNM San Juan Station
Flue Gas Desulfurization operation, Southern Company, Sneads Power Plant
- **Steam system**
Boeing Company Etch and Alodine Tank line
Riyadh Refinery Utility System

PRODUCT DESIGN

- Weldments
Ferrous and non-ferrous
Commercial and military
- Composite product
Fiber reinforced layups
Plastic design and specification
- Machined product
Part design and system assembly
Close tolerance design

PROJECT DEVELOPMENT

- New concept
Steam Pasteurization System, Frigoscandia US
CT121 Flue Gas Desulfurization, Chiyoda International Corp.
Freezer Defrost Systems, Frigoscandia Equipment US
- New firm capability
Process Safety Management, Ebasco Environmental Corp.
Liaison Engineering, Steam Pasteurization System, Frigoscandia Equipment US
Chemical Hazards Analysis, Chemhaz

FACILITY DESIGN

- Architectural
Site evaluation and arrangement
Facility Evaluation
Client interface and representation
- Structural
- Environmental
HVAC
Acoustical
Chemical Hazards Analysis (UBC & UPC)
- Project Management

ENVIRONMENTAL ANALYSIS AND DESIGN

- Acoustical
Environmental noise projection/evaluation, Boeing Frederickson Site
Assessment and Remediation, Boise Cascade, Steilacoom
Worker noise evaluation: several sawmills, factories, and jobsites
- Environmental Assessment
Technology Assessment, Effluent Treatment Plant, Hanford Site
Assessment, Fernald Site
Pollution Prevention planning
- Remedial Design and Implementation
Effluent Treatment Plant, Hanford
Effluent Holding Basins, Fernald
Hanford Tank SY 101 Multiple Treatment Probe

PROJECT MANAGEMENT

Plant management

CT121 Flue Gas Desulfurization, Southern Co. Sneads Power Plant, Sneads, FL

Project Management

Condensate Recovery System, PSNM, San Juan Station Tank

Fire Safety Evaluation, Western Fuel Oil, San Padre, CA

Petroleum Product Transfer Pump, Western Fuel Oil, San Padre, CA

FIELD ACTIVITIES

Survey activities

Process System analysis and field measurements

Equipment survey

Facility survey

Start-up inspection and activation

Commissioning

Process systems

Facility occupation Marketing

TESTING

Material testing – metallic and non-metallic

Process systems (chemical, mechanical, controls)

Acoustical (environmental, in-plant, equipment, compliance)

System set-up and operations

DOCUMENTATION

Test reports

Proposals and solicitations

Environmental Reports and Evaluations

RESOURCES

PERSONNEL

V. Alan Werner. P.E., F.NSPE, P.Eng., PMP Principal

Registered P.E.: Washington, California, Florida, and British Columbia

Education: BSME, Oregon State University
Graduate ME, Seattle University
Aeronautical Engineering, University of Washington
Project Management, University of Washington Extension

COMPUTER

Virtuosity with Microsoft *Word*, Microsoft *Excel*, *AutoCAD*, *Project*, Aldus *Pagemaker*.
Familiarity with *Caesar II*, *Access* and *Filemaker Pro*

RELEVANT ACTIVITIES

- Ski Patrol — leadership, team relations, public relations, first aid, crisis management
- Professional Societies – ASME, NSPE, PMI: inter-discipline contacts, organizational experience, program development, leadership
- RSCDS - Teaching

OFFICE

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