



SHALMET

A Carpenter Company

QUALITY PROGRAM INFORMATION BROCHURE (8/08)



Approved By: _____

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SHALMET CORPORATION
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I. Introduction

Mission Statement

Be the low cost provider of coil and bar finishing services in our chosen markets.

Vision

Be recognized as the preferred specialty alloys bar and coil long products finishing conversion source in North America and to expand our market reach.

Products and Markets

Shalmet Corporation is a processor that typically converts customer owned ferrous and non-ferrous black wire, wire rod and bar into “bright” product. The specialty metals we process include stainless steels, tool and alloy steel, high temperature alloys, electronic and magnetic alloys, aluminum, titanium and other non-ferrous alloys, and special purpose metals. Processing includes coil-to-coil, coil-to-bar, bar, ingot and billet products, and conversion of bar forms into hollows and multi-diameter products.

The products that Shalmet converts for our customers have been used by a wide variety of industries, including aerospace, motor vehicles and equipment, electrical and electronic equipment, general industrial equipment, chemical and petroleum processing, power generation and distribution, metal working equipment, consumer durables, instruments and controls, housing and construction.

Employees

Shalmet’s Pennsylvania facility employs approximately 194 and Shalmet Ohio employs approximately 49. Listed below is a breakdown of the approximate number of employees in each functional area:

Department

Production/Maintenance/Inspection	216
Administration/Finance/ Human Resources/Information Services, etc.	11
Quality Assurance	5
Engineering	2
Sales & Marketing	1
Logistics	5
Purchasing/Inventory	3

Manufacturing Facilities

Shalmet has been in the metals conversion business since 1969. Presently, Shalmet production operations are at the following locations:

116 Pinedale Industrial Road
Orwigsburg, PA 17691
570-366-1414
Fax #: 570-366-9209

164 Freedom Court
Elyria, OH 44034
440-324-3190
Fax #: 440-324-6975

The Orwigsburg, Pennsylvania location is both subsidiary headquarters and a manufacturing facility of approximately 135,000 sq. ft. The Ohio facility is 55,000 sq. ft. Both facilities are non-union shops.

Quality and Productivity

Shalmet is dedicated to achieving a level of quality for its products second to that of no other specialty metals processor. In striving for this objective, we know there is only one standard that counts in judging quality--how well we anticipate and satisfy the needs of our customers.

Shalmet has an industry-wide reputation for high quality and productivity, and the company continually engages in identifying ways to differentiate itself from competitors.

We recognize that our customers demand high quality, cost effective processing in order to improve and maintain their own competitive positions. There are several key activities at Shalmet that address customer needs. One of these is our Operational Excellence philosophy. Our objective is to cost effectively improve the quality and scope of processing services, add value to our customers, improve our on-time delivery performance, and create a safe work environment for our employees.

We continuously communicate and reinforce this philosophy with all Shalmet employees. Project priorities have been developed, reporting and measuring systems incorporated, and on-going awareness programs implemented.

II. Quality Administration

Quality Control/Improvement Organization

Shalmet is organized on a functional basis. Quality Control and Improvement is administered by people in Manufacturing, Quality, Sales & Marketing, Engineering, Maintenance, Logistics, Human Resources, Purchasing and Finance.

Management Officials

The Quality Organization at Shalmet is headed by the following people:

A. J. Zdravecki	Managing Director
M. W. Zinn	Manager – Operations
W. J. Hertneky	Senior Employee Relations Specialist
R. N. Bretz	Manager – Safety Officer, RPS & Equipment Mod
C. L. Heydt	Manager – Maintenance, Machining & Engineering
R. L. Kramer	Manager – Bar & Hollow Bar Processing
J. J. Tarconish	Manager – Maintenance
R. A. Shappell	Controller
H. P. O'Donnell	Manager – Elyria Operations
D. K. Hoffman	Supervisor – NDE & Quality Management Systems
M. E. Naftzinger	Supervisor – Coil & Bar Processing

Refer to attached organization chart.

Manuals and Standard Quality Procedures

Shalmet's Quality Management System applies to all product quality control and improvement activities. The Quality System is designed to be consistent with Carpenter's Quality Program requirements. Shalmet's Standard Operating Procedures provide descriptions for the following Quality Management System Elements:

- Quality Administration
- Order Entry (Manufacturing Quality Planning)
- Identification and Marking
- Manufacturing Control
- Process Control and Continuous Improvement
- Purchased Material and Services
- Inspection
- Testing
- Nonconforming Product
- Product Release Systems
- Document Control
- Control of Equipment (Calibration)
- Records
- Education and Training
- Audits
- Control of Special Processes

Personnel Responsibility and Authority

Shalmet's Quality Management System describes the quality organization and defines the responsibility and authority for product quality assigned to the various personnel who comprise the Quality Organization. This responsibility and authority is sufficient and well-defined to enable quality personnel to withhold nonconforming material and to resolve quality problems effectively.

The primary responsibility of establishing quality levels, as well as developing and implementing a quality system to assure that those levels are attained, lies with the Shalmet Quality Department.

Deliberate Malpractice

Shalmet has been involved in a deliberate malpractice prevention program which makes all employees aware of the meaning and potential consequences of deliberate malpractice, fraud, and falsification and helps to eliminate the potential for its occurrence.

Our deliberate malpractice prevention program also includes educating every employee regarding their responsibilities concerning the following Federal Regulations:

10CFR21

Title 18, Chapter 47

"Reporting of Defects and Noncompliance"

"Fraud and False Statements"

Registrations

Shalmet Corporation has been granted registry of its Quality Management System to the requirements of ISO 9001-2000, excluding Section 7.3 (certificate attached).

III. Order Entry (Manufacturing Quality Planning)

Design, Specification, and Process Controls

Representatives of Manufacturing, Customer Services and Quality work collectively to interpret customer requirements into mill manufacturing instructions.

IV. Identification and Marking

Material Identification

Material identity is maintained throughout the manufacturing process by appropriate methods. The Manufacturing Department is responsible for maintaining the necessary identification of all incoming and outgoing products when the work is under their jurisdiction. When there is any question concerning identification, all operations for the material in question cease until proper identification is established.

Alloy Verification

Potential mixed product situations are detected through routine alloy identity testing and employee alertness to discrepancies in piece count and weight, and differences in working characteristics.

V. Manufacturing Control

Manufacturing process sheets and work orders accompany material during processing and specify the detail processing instructions, testing, and inspection procedures to be followed during the manufacturing process.

As material is processed, records of each operation are reported in scheduling and capacity planning systems.

In-process inspections are pre-planned to be compatible with manufacturing operations. When necessary, Quality Department personnel assist Manufacturing in the use of statistical tools, such as sampling plans or control charts. Many processes contain measurement systems, which automatically capture data and calculate statistical indices that are used to quantify process and product quality.

Care is also taken to maintain identity of stored material. Controls and procedures are in use to assure good commercial packaging. The Shipping Department checks that material is properly packaged before it leaves the plant. Manufacturing work cards and process sheets list special packaging and shipping instructions when required.

VI. Process Control and Continuous Improvement

Process Control

Statistical Process Control (SPC), Lean Manufacturing, Six-Sigma, FMEA's, OEE and other techniques are a critical part of Shalmet's initiative. By using these techniques, we can closely monitor, control, and improve the process to reduce the variability of the product produced, and collect data to provide information used for problem-solving and improvement efforts.

VII. Purchased Material and Services

Purchased Materials

The Purchasing Department maintains purchasing information and a list of approved suppliers.

VIII. Inspection

Operator and Inspection personnel are responsible for assuring that material conforms to dimensional, visual, non-destructive testing, and mechanical testing requirements. For quality decisions, particularly when material is nonconforming, operator and inspection personnel receive instructions from the Quality Department.

Inspection procedures are available at work stations appropriate for the product being inspected. Employee-owned inspection instruments are not used for determining rejection/acceptance of material. Inspection reports are traceable to the person performing the operation.

IX. Testing

Various types of tests are performed in accordance with customer purchase order requirements or internal requirements. A Mechanical Testing laboratory exists at the Orwigsburg facility. This laboratory is under the jurisdiction of the Quality Department.

X. Nonconforming Product

Material found to be suspect and/or nonconforming at any stage in the manufacturing process, is segregated and identified. Such nonconforming material is held until disposition is determined.

If the material is scrapped, it is identified as scrap and sent to the appropriate scrap location as directed by the customer. If it is determined that the material can be reworked, it is sent back to the stage in production where reworking is to begin. After the reworking operation(s), the material is again subjected to inspection.

In referring nonconforming material to customers, a non-conformance report is issued that indicates the amount and description of material referred, the reason for referral, the disposition, and any corrective action initiated by the appropriate Manufacturing or Quality Department personnel.

Corrective Action/Preventive Action

Manufacturing and Quality Department Personnel discuss and initiate investigation into the cause of defective conditions.

Quality, Manufacturing and other involved department managers or supervisors charged with material non-conformities are responsible for corrective/preventive action implementation by using the appropriate disciplined problem-solving methods and mistake-proofing concepts. Where appropriate, plans are also considered for similar processes/products as part of the preventative action program.

XI. Product Release Systems

A Quality Assurance release function establishes, as a regular step in the manufacturing of each order, a system of mandatory checking to ensure that all required product evaluation has been completed in compliance with all customer and Shalmet requirements.

XII. Document Control

A documented system exists for incorporating order changes into the manufacturing process sequence. Order change information is retained in Shalmet's production order files.

XIII. Control of Equipment

Procedures are in effect to control and calibrate measurement, inspection, and test equipment. Calibration takes place at periodic intervals specified for each type of instrument. Instruments are recalled for calibration when due. Some calibrations are subcontracted, others are performed in-house. Records of calibrations are kept on file in Quality or the operating department that has jurisdiction over the instruments. Measurement, inspection, and test equipment used to verify compliance with internal, specification, and customer order requirements is labeled with calibration status stickers and permanently marked with identification traceable to calibration records. Defective instruments are removed from use until they can be repaired or re-calibrated. Calibration is against certified measurement standards that have known relationships to NIST or other national standard bodies where such standards exist.

In the event an out-of-calibration situation is revealed for an instrument, Shalmet has the capability of determining what orders were evaluated by the instrument subsequent to the last acceptable calibration check and prior to an out-of-calibration situation.

XIV. Records

A Shalmet Standard Operating Procedure describes in detail the standard record retention policy. Records are made available for on-site review.

Records may be disposed of upon completion of the retention period. Disposition instructions are not requested from the customer upon completion of the retention period.

XV. Education and Training

The Human Resource Department assists employees at all levels identifying, acquiring, and applying knowledge, skills, and abilities to fulfill performance requirements. Human Resources works with managers and employees to identify performance objectives and design and implement training programs to meet those objectives.

XVI. Audits

Shalmet's Quality Department is responsible for administering internal audits of all operating departments to ensure that quality control systems employed by specific departments are adequate, understood, in use, and in compliance with the current Quality Management System requirements. A checklist is completed and filed in the Quality Department audit files, along with any applicable audit finding and corrective action reports. All elements of Shalmet's Quality Management System are audited by Carpenter's Quality Department at a minimum of once a year. A program is established to assure corrective action is taken to resolve and prevent recurrence of deficiencies found during this audit.

XVII. Control of Special Process

NDT

Shalmet controls and administers the training, examinations, and either qualification or certification of NDT personnel through established procedures.

Training, examination, and control of records of personnel involved in Ultrasonic (Contact and Immersion) and Eddy Current (EC) are administered by Shalmet's NDT Level III.

Vice President –Manufacturing
Operations

Managing Director
Shalmet Corporation

Manager – Operations

Supervisor – NDE & Quality Mgmt

Manager – Maintenance, Machining
& Engineering

Senior Employee Relations
Specialist

Controller

Manager – Safety Officer, RPS &
Equipment Mod

