

# STANDARD MOTOR PRODUCTS, INC.

1300 West Oak Street, P.O. Box 788, Independence, Kansas 67301 (620) 331-1000

# ANNUAL REVIEW DATE: 03/22/08 (N.KAHLER)

# **General Information:**

Standard Motor Products, Inc.Telephone: 718-392-020037-18 Northern Boulevard, Long Island City, NY 11101Fax: 718-729-4549					
Tax Identification No. 11-1362020SIC: 3964NAICS: 336322			DUNS: 00-131-5266		
Status of Ownership:	Status of Ownership: Public Corporation				
Facility:					
Standard Motor Products, Inc Independence (SMP-I)Telephone: 620-331-10001300 West Oak StreetTelephone: 620-331-1422Independence, KS 67301Fax: 620-331-1422					
Number of Production shifts: Two (2) Plant Size: 357,000 square feet					
Internal Programs:	Extensive 5-S Lean Manufacturing	SMED MP2	KAIZEN IMPACT		
Number of Employees:	Production - 305 Customer Service - 3 Quality - 10 Process Support - 9 Human Resources - 4 Administration - 8	Engineering - 15 Continuous Improvement - 3 Materials - 9 Assembly Support - 7 Sales and Marketing - 4			
Contacts:	Contact Person	Phone	E-Mail		
Sales/Customer Service Engineering/Quality Purchasing/Materials Production Assembly Fabrication/Facilities Continual Improvement General Manager/Account	Michelle Shaffer Jerry Alexander Ted Jones David Blex Frank Foster George James	620-331-1000 x 479 620-331-1000 x 479 620-331-1000 x 472 620-331-1000 x 421 620-331-1000 x 322 620-331-1000 x 527 620-331-1000 x 125	<ul> <li><u>mshaffer@smpsfa.com</u></li> <li><u>jalexander@smpcorp.com</u></li> <li><u>tjones@smpcorp.com</u></li> <li><u>dblex@smpcorp.com</u></li> <li><u>ffoster@smpcorp.com</u></li> <li><u>gjames@smpcorp.com</u></li> </ul>		

### Strengths

- Experience and name recognition with a broad range of automotive and non-automotive OE/OES customers.
- Tier 1 presence in marine, heavy truck, off-highway and recreational product design and manufacturing.
- Vertically integrated electronics and electro-mechanical business unit with product, process, quality and manufacturing engineering, materials management, customer service, financial, sales and manufacturing capabilities.
- Broad range of product and manufacturing process knowledge (electronic ignition controls, sensors, actuators, switches, solenoids, magnetic relays, PCV valves, electronic power switch).
- State-of-the-art CAD/CAE capabilities.
- Fully equipped tool and die shop for quick turn prototypes, samples and modifications.
- In-house design, fabrication, maintenance and modification capabilities for automatic test and manufacturing process equipment.
- In-house test and product qualification capabilities for most electrical, mechanical and environmental stress conditions.
- Other basic capabilities, within the corporation, than can be assembled to develop complex new products and manufacturing processes.
- Expandable state-of-the art electronics and electro-mechanical manufacturing operations.
- Vertical integration of manufacturing support operations (molding, plating, stamping, wiring harnesses) offers short-run, quick turn manufacturing capabilities.
- Open, unused manufacturing capacity and space available for new business.
- Flexible, cross trained, non-union workforce that allows movement of personnel across product lines to match demand.
- Track history of above average on-time delivery.

## **Products and Volumes:**

- Products produced: Automotive electro-mechanical, electrical and electronic products
- Standard Current Lead Time: 30 days
- Services Performed: Design, development, manufacture and delivery
- All order quantities (lot sizes) produced

# **Engineering Capabilities:**

SMP-I has the following product and manufacturing process design and development:

- Products manufactured at SMP-I are designed and developed by our in-house engineering staff.
- Manufacturing equipment and tooling and automatic test equipment as designed, programmed and fabricated by SMP-I engineering. We have our own tool room with tool design facilities and tool makers.
- We tool and manufacture some products designed by our original equipment and inter company customers.

SMP-I provides custom manufacturing of dedicated products for original equipment manufacturers, including the following types of industry applications:

- Industrial
- Heavy Duty
- Manufacturing
- Marine and Recreational
- Agriculture

Electronic design capabilities include:

- Analog and Digital Circuit Design
- Custom Integrated Circuit (A.S.I.C.) Design
- Circuit Design Simulation
- Embedded Microcontroller Design
- Embedded Software Development
- Printed Circuit Board Design and Layout
- Thick-film Network Design and Layout
- Automatic Test Equipment Design, Programming and Fabrication
- Automotive and Marine Product Qualification
- Manufacturing Process Controls and Equipment Design

Mechanical and electromechanical design capabilities include:

- Mechanical and Electromechanical Product Design
- Solid Modeling and Finite Element Analysis
- Product Packaging and Tooling Design
- Plastic Mold Tooling Design
- Automatic Test Equipment Fixture Design and Fabrication
- Manufacturing Process Machine and Tooling Design Fabrication
- Automotive and Marine Product Qualification
- Model Shop Prototyping

We use a computer based Cyber Metric Gauge Trak software recall and record keeping system for our gauges and testers. Transfer standards are sent to certified labs for calibration and used as in house standards for calibration. Calibration intervals vary as we use RP-1 calculation to set the intervals.

We have on site CAD/CAE/CASE tools and use the following:

- Networked Computer Systems
- OrCad Schematic Capture Circuit Design
- OrCad Layout Printed Circuit Board Layout
- OrCad PSpice and Cadence Electronic Circuit Simulation
- Pro Engineer, Solid Works, Microstation 3D Solid Modeling and Mechanical and Magnetic Design
- Mechanica and Cosmos Finite Element Analysis
- AutoCAD Two Dimensional Mechanical Design

Data transfer formats include:

SLDDRW	SLDPRT	SLDASM	STEP
PRT	DRW	ASM	DWG
DGN	IGES		

#### **Quality Management:**

SMP-I is ISO 9000/2000 and ISO14001 certified. Please see attached certificates. We routinely provide certifications and appropriate technical data with product shipments. We have the capability to provide any level of PPAP for our products. SMP-I is scheduled to become registered to TS16949:2002 by December 2008.

Assembly drawings, operator instructions and other aids are used to manufacture our products. Design and process FEMA's, process capability studies, control plans and statistical process controls are used in manufacturing where appropriate. All employees are required to attend new hire orientation. Upon placement within a department, employees then undergo an extensive, recorded training program specific to their job duties.

Customer complaints and returns for corrective action are processed through our internal Returned Goods Authorization (RGA) system. We have the capability to respond to customer complaints in the customer required format.

We routinely track customer service levels for on-time delivery, quality and count accuracy. We comply with current federal, state and local governmental, regulatory, safety and other requirements on restricted, toxic and hazardous materials, as well as environmental, electrical and electromagnetic considerations applicable to the country of manufacture and sale.

Testing is an integral part of design, development and production of products at SMP-I. Extensive qualification testing is performed to verify the design capabilities of manufactured products, including electrical and environmental reliability testing. Our engineering staff will work with you to design a qualification test plan that best suits your product, including:

- Full Electrical & Mechanical Performance Tests
- Electro Static Discharge (ESD) Tests
- Transient Waveform Tests
- Powered Device Temperature Cycling Tests
- Automotive In-Vehicle Tests
- Dynamometer Tests
- Vehicle Cold Chamber Testing
- Thermal Shock Tests
- Mechanical Shock and Vibration Tests
- Hot, Cold and Humidity Cycling Tests
- Water Submersion Tests
- Salt Fog
- Dust Chamber Tests
- Chemicals Resistance Tests

SMP-I has an on-site metrology lab and is also accredited by UL for specific electrical certifications. Certified testing facilities include:

- Fully Equipped Calibration Lab
- Fully Equipped Test Laboratory
- Environmental Chambers
- Humidity and Salt Spray Chambers
- Production Equivalent Automatic Testers
- Full SPC Capabilities
- SAE and ASTM Library of Standards

#### Manufacturing Capabilities:

- Injection, Compression and Transfer Plastic Molding
- Metal Stamping and Forming
- Zinc Plating with Clear or Yellow Dichromate and Copper and Brass Bright Dipping
- Powder Coat Painting
- Bobbin and Coil Winding
- Wire EDM
- Electro-Mechanical Assembly
- Die Making and Repair
- Mold Repair
- Prototyping
- Surface Mount Automatic Pick and Place
- Through Hole Auto Insertion
- Re-flow and Wave Soldering
- Computer Controlled Bed-of-Nails and Functional Testing

#### **Electronic Manufacturing Capabilities:**

- PC Board Assembly
  - Through-hole Auto Insertion
  - Double-sided SMD Pick and Place
  - Convection Re-flow and Wave Soldering
  - No-clean and Aqueous Cleaning
- In-circuit (Bed-of-Nails) Test
- Automatic Functional Test
- Automatic Functional Test

#### **Process Control:**

SMP-I utilizes the following process control systems:

- Statistical Process Control
- Process Routing
- Routing ID by Customer Number
- Tooling Controlled
- Special Handling
- In-Process Revision System

# Information Technology (IT) Capabilities:

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Primary Contact Person:	Carla Murray	620-331

#### ANSI-X12 - Documents

850-R – Purchase Order	8
856-S – Advance Ship Notice	8
857-S – ASN with Invoice	8
211-S – Bill of Lading	-
855-S – PO Acknowledgement	8
861-R – Receiving Advice	8
864-R - Text Message	8
820-R – Remittance Advice	8
996-R – File Transfer	8

Telephone	Extension
620-331-1000	437

- 830-R Planning Schedule
- 810-S Invoice
- 846-S Inventory Advice

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- 214-S Carrier Shipment Status
- 860-R PO Change Request
- 862-R Shipping Schedule
- 853-R Routing & Carrier Instructions
- 824-R Application Advice
- 810-R Invoice

<u>EDIFACT Documents</u> DELFOR-R - Planning Schedule DESADV-S - Advance Ship Notice APERAK-R - Error Notice		DELJIT-R – Purchase Order CONTRL-R – Functional Acknowledgement RECADV-R – Shipment Status			
<u>Other</u>	<u>Documents</u> PIES-S	IPO-S/R		PO-R - TRANS	SNET
<u>Standa</u>	<u>ards</u> ANSI-X12	EDIFACT		XML	TRANSNET
<u>EDI Tı</u>	<u>cansmission Types</u> VAN - Inovis	PartnerShip N	etwork	FTP	XML Over the WEB
EDI Interchange Qualifier and ID Test: 01* 007166853 Production: 01* 007166853					
<u>Comp</u>	<u>uter Hardware Platform</u> iSeries				
<u>Softwa</u>	a <u>re platforms</u> EDI – Inovis TLi	ERP – JD Edwa	ards		

SMP-I uses the internet for sending and receiving all e-mail. Our user mail box is (firstinitial lastname)@smpcorp.com; i.e., Chris Romine can be reached via e-mail at <u>cromine@smpcorp.com</u>.

#### Packaging and Labeling Capabilities:

SMP-I has full packaging capabilities as follows:

- Custom product identification labels
- Bulk packaging
- Custom bulk packaging (partitions dividers custom inserts)
- Individual white box available
- Can pack customer's graphic boxes
- UPC bar coding individual boxes
- Standard bar code shipper labels (customized to customers specifications)
- Standard or heavy duty shippers or custom sizes
- Customer specific bar code shipper labels
- Normal or heat treated skids
- All skids are stretch wrapped
- Shipments can be made via most carriers

We are capable of the most current AIAG bar code requirements.

#### Material Storing and Handling:

We recently JD Edwards at our facility and currently use a typical MRP along with a pull system utilizing both internal and external Kanbans. We also do some consigned inventory and have bonded inventory programs set up with several suppliers, many of which we are releasing weekly pulls electronically on supplier websites. SMP-I has supermarkets set up in many areas of the manufacturing facility in which the operators are using a visual trigger for order replenishment. The operators are faxing the suppliers to ship the fixed order quantity and the suppliers backfill their stock after each pull. Purchasing sets up yearly blanket orders with release quantities and there is a coversheet for every item managed in the supermarket. Fax machines are placed strategically on the shop floor, the employees have ownership and this has proven to be a very successful joint effort in our facility.

## Shipping Capabilities:

We are able to meet any customer's requirements for ground, air or ocean shipments. We offer full or LTL shipments, UPS, FED-X, export or expedited services. We also can provide an ASN or any other customer documentation required.

# Additional Information:

Additional information available at <u>www.smpoe.com</u>.

A certificate of product liability insurance is available upon request by contacting Steve Flynn via telephone at 718-316-4363 or e-mail at <u>sflynn@smpcorp.com</u>.

Requests for country of origin information may be directed to Christine Quigley via telephone at 718-316-4522 or e-mail at <u>cquigley@smpcorp.com</u>.

## **Documents Available Upon Request:**

- Quality Policy and Manual
- Company Brochures and Literature
- Annual Reports
- Organization Chart
- Facilities Listing Equipment and Processes