



The Metal Powder PRESS® Powder

Winter 2006

Published by Metal Powder Products Company The Leader in P/M Technology and Manufacturing

MPP Mission Statement

To create value by delighting our customers and enhancing the capabilities of the entire company.

FREE PUBLIC P/M DESIGN SEMINARS
Evansville, IN – March 23, 2006
Cleveland, OH – April 5, 2006

For additional seminar dates, or to sign up for a seminar on-line, visit our web site at www.metalpowderproducts.com or contact one of the MPP sales managers, or Melinda Hightower at MPP Headquarters at 317.571.3712.

Divisions

MPP Anaheim

Anaheim, CA 800.767.9706
Susanna Gomez, Inside Sales Manager, 714.970.5500
Mark Sowerbutts, Plant Manager

MPP Canada

Blenheim, Ontario 519.676.8161
Rick Armstrong, Sales Manager, 519.676.8161
Phil Goodwin, Plant Manager

MPP Ford Road

St. Marys, PA 888.359.9992
George Shturtz, Sales Manager, 814.781.5101
John Mosco, Plant Manager

MPP Mexico

Querétaro, Mexico 011.52.442.217.05.03
Juan Manso, Sales and Plant Manager

MPP Ridgway

Ridgway, PA 888.809.6671
Tony Zimmerman, Sales Manager, 740.342.4512
Nick Gismondi, Plant Manager

MPP Washington Street

St. Marys, PA 888.741.2352
Steve Patrick, Sales Manager, 814.834.5408
John Mosco, Plant Manager

MPP Regional Sales Managers

Gary Fulton, 828.441.1138
Vince Licari, 248.398.3299
John Moczalla, 815.675.0151

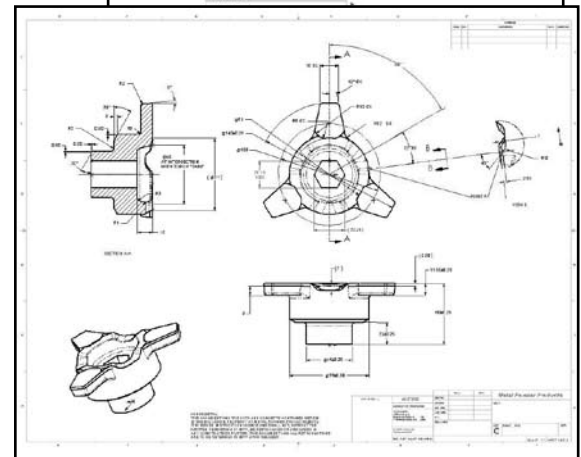
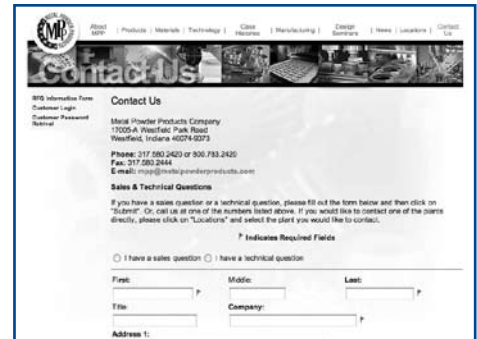
MPP Introduces MPPartPortalSM on Web Site

Feature Will Allow Customers to Submit Drawings and RFQs

Current MPP customers and even first-time visitors can now use the MPP web site to send RFQs (Requests for Quotation), part drawings, and other documents. Our new MPPartPortalSM feature allows customers to submit RFQs and other documents to MPP, including part drawings generated by many of the most widely-used CAD (computer-aided design) packages, such as AutoCAD®, ProEngineer®, Unigraphics®, and others, as well as many vector graphics, raster, bitmap, and word processor formats. File types supported by MPPartPortalSM include: .igs, .dwg, .stp, .stl, .prt, .pdf, .jpg, .tif, .txt, .doc, and others.

Accessing MPPartPortalSM and uploading documents couldn't be easier. Visitors to the MPP web site (www.metalpowderproducts.com) simply select "Contact Us" at the top of any page of the web site. On the Contact Us page, first-time visitors to this section of the site should select "RFQ Information Form" on the left of the screen. This will open the RFQ Information Form, which, when completed and submitted, will provide MPP with important information regarding the customer's part request. After the form has been submitted to MPP, a login name and password will be generated automatically and sent to the visitor's e-mail address. The customer can then log in and begin uploading drawings and other information to MPP in a totally secure environment. Existing customers who have previously used the feature will select "Customer Login" on the "Contact Us" page and will then enter their login name and password, which will allow them to submit new RFQs, drawings, and documents, or to append new documents or drawings to a previously-submitted RFQ.

Additional information, including links to these specific pages of the web site, will be e-mailed to customers in our next Tech Bulletin. Make MPPartPortalSM your link to the quality, value, and cost savings of MPP.



By selecting and then completing the "RFQ Information Form" on the MPP web site, you can submit RFQs and a variety of drawings and documents.



VALUE-ENGINEERED PARTS

These parts are just a few examples of how MPP's value engineering reduces customers' total costs.



COMPRESSOR VALVE PLATE

This copper-infiltrated steel compressor valve plate replaced a four-piece brazed stamping that was plagued with high scrap rates that were due to voids in the joining of the individual pieces. The MPP plate resulted in an overall cost saving of more than 30%.



PLANETARY GEAR ASSEMBLY

Designed specifically for P/M, this planetary gear assembly is used in automatic sliding commercial door operators. It uses eight P/M components in five part configurations and meets high strength and performance standards.



THRUST WASHER

This P/M thrust washer replaced an investment cast part. It is used in a tandem axle assembly for Class 8 trucks with 40,000-lb. axle capacity. Pressed to net shape, it requires no secondary machining, and is sinter-hardened, which eliminates the need for heat treating.

MPP Combines With Other Companies to Form Revere Industries, LLC

MPP has joined with three of its Charter Oak Capital Partners sister companies to form Revere Industries, LLC. The other companies are Ross Aluminum, Revere Aluminum, and selected operating facilities of Titan Plastics Group. Elliott Archer, who previously served as President of MPP, has been named President and CEO of Revere. In announcing the formation of Revere, Archer stated that "The combination of these companies into a single entity provides our expanded company, our customers, and our employees with significant opportunities for growth and added value. Our combined purchasing power, technical expertise, and worldwide manufacturing base (including India and China) will allow us to expand our product offerings to customers, and to do so in a cost-effective manner."

Looking Back and Looking Forward

This is my last column for the MPP newsletter. It seems like only yesterday that I wrote the first one, although that was in 1998. Perhaps this is due to the pace of activity that we have experienced here at MPP during the past seven years. As Ben James, MPP's new president, points out (below), those years have been characterized by the improvements that we have made in technology, manufacturing, quality, and customer service.

I now move into a different role as president of Revere Industries, LLC. In that role, I will still be involved with MPP and its customers, but also with the markets and customers served by the other components of Revere Industries. Revere headquarters will be located here in Indianapolis, but with operations in the U.S., Canada, Mexico, India and China, my travel schedule will undoubtedly get a little more hectic. Nevertheless, I hope to see many of you in the coming months and years. Thank you for your business.



A. Elliott Archer, President & CEO, Revere Industries, LLC

Ben James Named President & COO of MPP

Ben James has been named President and Chief Operating Officer of Metal Powder Products Company. James has more than 30 years of experience in the powder metal components industry. He served as President of the North American Powder Metal Group of T & N, plc, and, while at Federal Mogul Corporation, as Managing Director for North American Sintered Products and as Global Director for Business Development – Sintered Products. James joined MPP in 2000.

The Next Level

A Message From MPP's New President

It is with great enthusiasm that I write my first column for the MPP newsletter. Elsewhere in the newsletter, you will read about the changes at MPP and Revere Industries related to my being named president of MPP and to Elliott Archer's new role as president of Revere Industries. You will also read about our significant award from Black & Decker and about our enhancements in manufacturing (robotics), in technology (new CAE software), and in customer service (the new RFQ feature on our web site). When Elliott initiated this column in 1998, he named it "The Next Level" because, as he said then, it meant that "in every area of the company –technology, manufacturing, quality, customer service– we are taking MPP to the next level of performance." We have been doing exactly that since he wrote that first column, and I believe that the examples I just cited are evidence that we continue to do so. Again, to quote from Elliott's inaugural column, "We look back on the past several years with a sense of accomplishment and we look ahead with confidence and enthusiasm." I echo that sentiment today.



Ben James, President, MPP



VALUE-ENGINEERED PARTS

MPP Receives Black & Decker “Supplier of Excellence” Award for “Exceptional Cost Management”

On December 13, 2005, Metal Powder Products received one of the highest honors awarded to suppliers by Black & Decker Corporation – their “Supplier of Excellence” Award for “Exceptional Cost Management.” Supplier of Excellence awards are given in five separate categories. A cross-functional committee of Black & Decker Sourcing, Planning, Quality, and Engineering personnel chooses the recipients from among all “key commodity” suppliers. Only the top 2% of Black & Decker’s worldwide suppliers receive the award.

MPP has been a supplier to B & D for more than 25 years, supplying a variety of components from its Ford Road, Ridgway, Washington Street, and MPP Mexico Divisions. A new product is also nearing production release at MPP’s Anaheim Division, which will make five out of six MPP divisions supplying Black & Decker. B & D is a global manufacturer and marketer of power tools and accessories, hardware and home improvement products. Black & Decker® and DeWalt® brand products are marketed in more than 100 countries. Black & Decker has more than 28,000 employees, and operates manufacturing facilities in eleven countries.

Joint Effort Needed to Achieve Cost Management

According to both MPP and Black & Decker management, the Supplier of Excellence Award for Exceptional Cost Management is not awarded to suppliers who merely reduce prices. The focus, rather, is “on the joint identification of value improvement opportunities and the ability to capitalize on these”, according to Steve Patrick, Sales Manager at MPP’s Washington Street Division. “B & D challenges suppliers to help them remain competitive in the world market – and we are one of the suppliers that has met that challenge”, says Patrick. “In turn, B & D rewards these suppliers with additional business.”

Bill Heath, MPP Vice President of Marketing adds: “What we do for B & D is really no different than what we do for any of our customers. Value Engineering is a discipline we practice that helps our customers reduce their total cost. Total cost takes everything – like warranty costs and overall processing costs – into account, not just price.” Heath says “These value engineering activities are one of the reasons that MPP customers -like B & D- keep coming to us with additional components. They know we’ll help them manage costs.”

Examples of several value-engineered MPP components are shown in the margins of this page and the facing page.



MPP was awarded the prestigious “Supplier of Excellence” award from Black & Decker Corporation on December 13, 2005.



MPP Vice President of Marketing Bill Heath receives the 2005 “Supplier of Excellence” award. Pictured (left to right) are: Jamie Mann, DeWalt President John Schieh, Heath, Humberto Zapata, and Tom Koos, President of B & D’s Consumer Products Group.



STAINLESS STEEL CLAMSHELLS

These stainless steel clamshells are used in a patented bicycle rack system. The customer ruled out die cast parts because of strength, cosmetic, and galvanic corrosion issues. P/M stainless steel was chosen over a machined, investment cast design because it represented a 65% cost saving, closer overall tolerances, improved wear resistance, and superior surface finish.



SAW HUB GUARD

This P/M aluminum hub guard for a circular saw was chosen over magnesium because aluminum, unlike magnesium, does not cause a galvanic reaction. This part is just one of the more than 50 million P/M aluminum parts manufactured by MPP since 1992.

Robots Installed at MPP Plants

MPP’s Washington Street and Ford Road Divisions have recently installed robotic part handlers, which are used in the production of aluminum cam caps for DOHC V6 engines. Sometimes referred to as “mini-robots”, these compact units are designed with a “small footprint” that allows them to work in tight spaces. The robots are highly accurate, featuring ± .004 mm repeatability. According to MPP President Ben James, the six-axis, electric servo-driven, “pick-and-place” robots “allow us to reduce handling of parts, eliminate accidental damage, and increase productivity. This, in turn, helps us control customer costs.”



This robot was recently installed at MPP’s Washington Street Division.

The Metal Powder Press is published by:

Metal Powder Products Co.
17005-A Westfield Park Road
Westfield, IN 46074
Phone: 317-580-2420 800-783-2420
Fax: 317-580-2444
E-mail: mpp@metalpoderproducts.com
Internet: www.metalpoderproducts.com

We welcome your comments and suggestions. Please send us the names of others who should receive this newsletter.

©2006 Metal Powder Products Company



MPP OFFERS FREE P/M DESIGN SEMINARS

Because of the importance of end-user understanding of the basics of powder metallurgy, MPP offers free P/M design seminars. These seminars are suggested for design engineers, purchasing personnel, and other specifiers of materials and components. Attendees will learn P/M design fundamentals, and will receive copies of the MPIF P/M Design Solutions Guide and other helpful materials. Lunch and materials are free of charge.

We also offer in-house seminars in your facilities. Seminars are limited in size, so register early.

PUBLIC SEMINARS

Evansville, IN – March 23, 2006
Cleveland, OH – April 5, 2006

For additional upcoming seminars visit our
web site at www.metalpowderproducts.com

IN-HOUSE SEMINARS

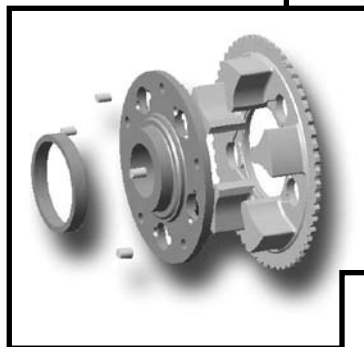
To arrange an in-house seminar at your plant or office, call
1-800-783-2420 or call one of the sales managers listed
on page one.

MPP Adds New Dimension to Engineering Capability

MPP has added a new dimension to its engineering support capability with the installation of SolidWorks computer-aided-engineering software at the MPP Technology Center. This state-of-the-art software permits engineers to design any component or assembly in 3-D. "Solidworks adds significant value for MPP's customers", says Dr. Chaman Lall, MPP's Vice President of Technology. "We are using several of the features of SolidWorks, such as its tooling design capability, that help us shorten time-to-market for the customer." Expanding on the tool design feature, Lall points out that MPP now uses the part drawing to cut the tool, which eliminates the need for coordinates to be manually typed in, reducing the possibility for costly tooling errors. MPP can now design the press assembly and even simulate press motion, using the software's "physical dynamics" feature. MPP also uses SolidWorks' built-in FEA capability to conduct analyses for stress, load, thermal characteristics, etc., on components and on tooling designs.

One of the most valuable features of SolidWorks is the ability to send 3-D drawings to customers. Even without having SolidWorks installed, customers can rotate and view the drawings from all viewpoints. MPP generates files called eDrawings™, which are sent as executable files and can be read and published by a wide variety of engineering software systems, such as AutoCAD, Inventor®, Pro/ENGINEER®, CATIA® V5, Unigraphics/NX®, Solid Edge®, and others. These files can be annotated with comments on dimensions, manufacturability issues, etc., making them an invaluable engineering communication tool.

For more information about MPP's CAE capability or to inquire about sending or receiving eDrawings from MPP, please contact Dr. Lall at 800-783-2420.



MPP's new CAE software allows customers to view and publish component drawings through their own CAE systems.

