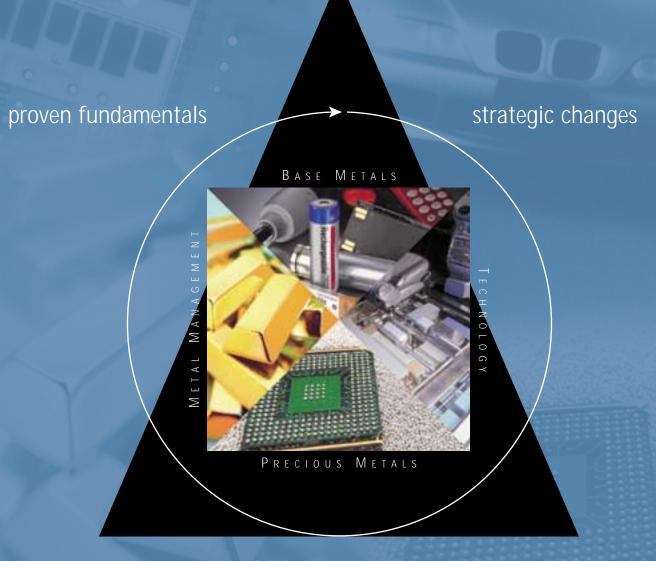
# 01 Annual Report OM Group, Inc.



driving opportunity

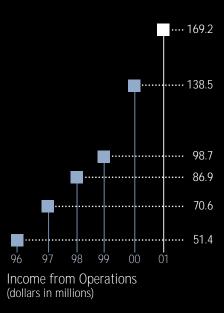


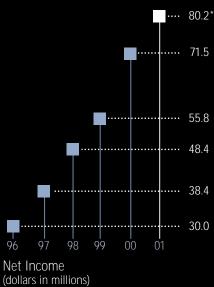
# Financial Highlights In thousands, except per share data

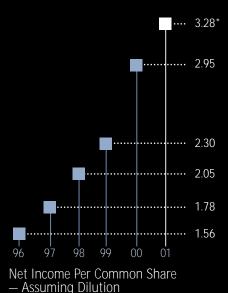
For the year ended December 31,	2001	2000	1999	1998	1997	1996	
Net Sales	\$2,367,399	\$ 887,743	\$ 506,955	\$521,226	\$487,296	\$387,999	
Income from Operations	169,240	138,493	98,737	86,924	70,572	51,421	
Net Income	\$ 80,240 *	\$ 71,500	\$ 55,825	\$ 48,358	\$ 38,443	\$ 30,047	
Net Income Per Common Share	\$ 3.34 *	\$ 2.99	\$ 2.35	\$ 2.11	\$ 1.84	\$ 1.61	
Weighted Average Number							
of Shares Outstanding	24,021	23,843	23,767	22,874	20,929	18,624	
Net Income per Common Share —							
Assuming Dilution	\$ 3.28 *	\$ 2.95	\$ 2.30	\$ 2.05	\$ 1.78	\$ 1.56	
Weighted Average Number of							
Shares Outstanding —							
Assuming Dilution	24,467	24,251	24,324	23,546	21,654	19,266	
At year end							
Total Current Assets	\$1,452,052	\$ 611,741	\$ 495,056	\$420,241	\$322,909	\$275,370	
Total Assets	2,541,222	1,357,462	1,012,528	870,719	601,063	443,456	
Total Current Liabilities	422,722	207,255	126,558	119,567	100,682	101,509	
Total Stockholders' Equity	\$ 569,533	\$ 506,130	\$ 449,228	\$404,143	\$301,241	\$185,322	

<sup>\*</sup> Prior to an extraordinary charge of \$4,600, or \$0.19 per diluted share, in connection with the early retirement of bridge notes.

CONTENTS			
Financial Highlights	Inside front cover		
About OM Group, Inc.	1		
To Our Shareowners	2		
Review of Operations			
Introduction	7		
Base Metals	8		
Raw Materials	14		
Metal Management	15		
Precious Metals	16		
Technology	22		
Shareowner Information	24		
Form 10-K			
Directors and Officers	Inside back cover		







Prior to an extraordinary charge of \$4.6 million, or \$0.19 per diluted share, in connection with the early retirement of bridge notes.

(dollars per share)



# About OM Group, Inc.

OM Group, Inc., through its operating subsidiaries, is a leading, vertically integrated international producer and marketer of value-added, metal-based specialty chemicals and related materials. The company supplies more than 1,700 customers in 50 countries with more than 625 different product offerings. OMG's products usually represent a small portion of the customer's total processing or manufacturing costs, yet are typically essential ingredients to superior performance.

The company's products serve 30 major industries, including aerospace, appliance, automotive, catalysts, ceramics, coatings, electronics, fuel cells, hard metal tools, magnetic media, petrochemical, plastics, rechargeable batteries, rubber, stainless steel and other specialty chemicals.

OMG is the world's leading producer of cobalt-based specialty chemicals and a leading producer of nickel-based specialty chemicals and platinum group metal catalysts and products. The company also produces specialty chemicals and materials from copper, barium, calcium, gold, iron, manganese, potassium, rare earth, silver, stainless steel, zinc and zirconium.

Additionally, OMG operates a metal management business that acts as a metal sourcing operation for other business segments and customers, primarily procuring precious metals such as platinum, palladium, gold, silver and rhodium.

Headquartered in Cleveland, Ohio, OMG operates 35 manufacturing facilities in Africa, Asia, Australia, Europe, North America and South America. The company employs approximately 5,200 associates in 24 countries and has approximately 11,000 shareowners. OM Group stock trades on the New York Stock Exchange under the symbol OMG.



OMG's new precious metals business is among the world's leading suppliers of automotive catalysts and is at the forefront of the emerging fuel cell industry, while the metal management business is among the leading precious metal trading operations.

# **Dear Fellow Shareowners**

This past year represented a period of unprecedented change in the history of OM Group, as we completed the acquisition of a company significantly larger than our historical business in terms of revenues, plant locations and associates. The acquisition of the precious metals unit of Degussa AG in August 2001 brought OMG a precious metals capability that is highly complementary to our base metals business. Moreover, we acquired a metal management business that creates a reliable, optimal cost position for precious metals raw materials similar to what we enjoy in our unique raw materials supply position with base metals.



While the acquisition represents change, it also represents an adherence to our long-term fundamental values and strategies, including:

- Leveraging our expertise in metal-based, high value-added specialty chemical products to our customers' benefit;
- Accelerating broad end-market exposure with a large, diverse blue-chip customer base;
- Maintaining a strong market share position across virtually all product lines;
- Securing a unique, highly reliable raw materials supply base;
- Reducing the impact of metal price changes due to the high value-added nature of our product line; and, most importantly,
- Fostering OMG's ability to maintain high earnings growth that continues to out-perform our industry and the broad market indices, which, in turn, creates exceptional shareowner value.

For the year ended December 31, 2001, net income increased 12.2 percent and earnings per diluted share were up 11.2 percent before an extraordinary item for the write-off of fees in connection with the early retirement of bridge notes. These increases were

achieved despite weakening economies worldwide and the disruptions resulting from the tragic events of September 11, 2001. They were also achieved despite precipitous declines in pricing of our major raw materials, including cobalt, nickel and copper.

Because OMG is a "delta over the metals" business, sharp declines in raw materials prices can negatively impact results.

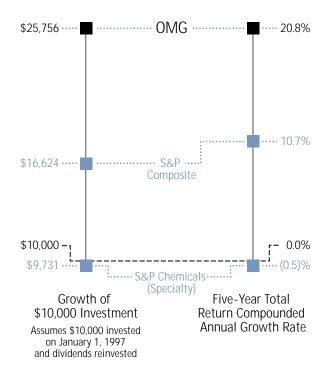
Net income for 2001 of \$80.2 million, prior to the extraordinary item, compares to \$71.5 million a year ago, and diluted earnings per share prior to the extraordinary item increased to \$3.28 from \$2.95 in 2000. After the extraordinary item, net income was \$75.6 million, or \$3.09 per diluted share. Income from operations grew 22 percent, to \$169.2 million from \$138.5 million a year ago.

Net sales for 2001 were \$2.37 billion, up from \$887.7 million in 2000. Due to the volatility of metals prices and the resulting impact on our sales line, we have always encouraged investors to regard income from operations and net income as far more important measures of OMG's growth than net sales, and this perspective is even more important following the acquisition. Our precious metals operation involves substantially higher priced raw materials than our base metals business, while metal management includes a substantial trading function with inherently small profit margins and high sales volumes.

OMG's net income and diluted earnings per share grew significantly during 2001 despite adverse economic conditions. The company's compounded growth rates over the past five years are as follows:

- 27 percent in income from operations;
- 22 percent in net income;
- 16 percent in diluted earnings per share; and
- 21 percent in total return to investors (share price appreciation plus reinvested dividends.)

Once again, all measures are substantially higher than both our peer group and the Standard & Poor's composite, and investors have rewarded this performance through share price growth of 21 percent during 2001, while overall markets and peer group stock price performance declined.



### Acquisition Brings Short- and Long-Term Benefits

The structure of the precious metals acquisition involved OMG purchasing all of the operations of dmc<sup>2</sup> Degussa Metals Catalysts Cerdec AG from Degussa AG for Euro 1.2 billion, or approximately \$1.1 billion at closing in August 2001. Subsequently, in September 2001, we sold the Electronic Materials and Cerdec divisions to Ferro Corporation for approximately \$525.5 million, resulting in a net purchase price of \$594.9 million.

While the acquisition was immediately accretive to earnings, and, in fact, helped offset a slight decline in base metals' operating income performance, we are even more enthusiastic about the long-term prospects brought about by the union of the two organizations.

- Technical expertise The union of the base metals business and the precious metals business creates a unique opportunity for both new product development and process improvement;
- Sales force strength Both sales forces possess a strong customer focus and highly skilled technical expertise that enables them to be problem solvers to meet customer needs. We see opportunities to harness this combined expertise to drive growth of precious metal products in North America, increase growth of base metal products in Europe and enhance the presence of both in Asia:

- Cross-selling opportunity Many OMG customers have needs for both base metal products and precious metal products, and we hope to accelerate our position as customers consolidate their supplier bases;
- Procurement We believe we can enhance our metal management operation by integrating the expertise and skill of our base metal and precious metal procurement capabilities into it.

### Other Acquisitions Broaden Capabilities

In December 2001, we completed two other acquisitions that offer strategic advantages to OMG. We acquired Rhodia Holdings Limited's metal organics business, expanding our base metal product offering and adding manufacturing facilities in Bethlehem, Pennsylvania, and Manchester, England. This added capacity in Europe enabled us to close a small batch processing facility in France.

We also acquired the mineral rights and chemical processing capabilities of Centaur Mining and Exploration Ltd:s Cawse operation in Western Australia, resulting in an additional 8,000 tons per year of nickel feedstock and approximately 800 tons per year of cobalt feedstock for our Harjavalta, Finland, facility.

Cawse deposits are nickel and cobalt laterite, similar to deposits we are evaluating in Indonesia with our joint venture partner, Weda Bay Minerals. Due to uncertainty in Indonesia, we have asked Weda Bay to reduce its activity to a maintenance level until the situation stabilizes.

### Secondary Offering Improves Capital Structure

Subsequent to year-end, we successfully completed a secondary stock offering of 4.025 million common shares, including a 525,000-share over-allotment, with net proceeds to OMG of \$225.7 million, all of which were used to repay debt incurred as a result of the acquisitions. Proceeds allowed us to decrease borrowings under our revolving credit facility and a term loan.

In December 2001, we issued \$400 million of Senior Subordinated Notes due 2011, with proceeds used to retire the bridge notes, which financed a portion of the precious metals acquisition. The retirement of

these bridge notes resulted in the extraordinary charge to earnings in 2001, in accordance with generally accepted accounting principles.

As a result of the secondary offering, our debt to total capitalization ratio now stands at less than 60 percent, compared to 70 percent at year-end. Our goal is to reduce this further to approximately 50 percent, primarily through cash from operations. In recent years, substantial investments in future growth have resulted in capital spending being higher than depreciation and amortization. However, with most of these major investments completed, we expect capital expenditures to be below depreciation and amortization for the next few years, and this, combined with strong net income performance, should result in lower debt levels.

### <sup>□</sup>Dividend Increased

In keeping with the Board of Directors' policy of paying out approximately 20 percent of prior year earnings in dividends, the Board increased the quarterly cash dividend by 8 percent, to 14 cents from 13 cents, at its February 11, 2002 meeting. We are pleased with the continued high level of shareholder participation in OMG's Dividend Reinvestment Plan, which remained at the 90 percent level during the past year. The plan allows for reinvestment of dividends and purchase of up to \$5,000 per month in OMG shares on a commission-free basis.

### □New Director, Officers Appointed

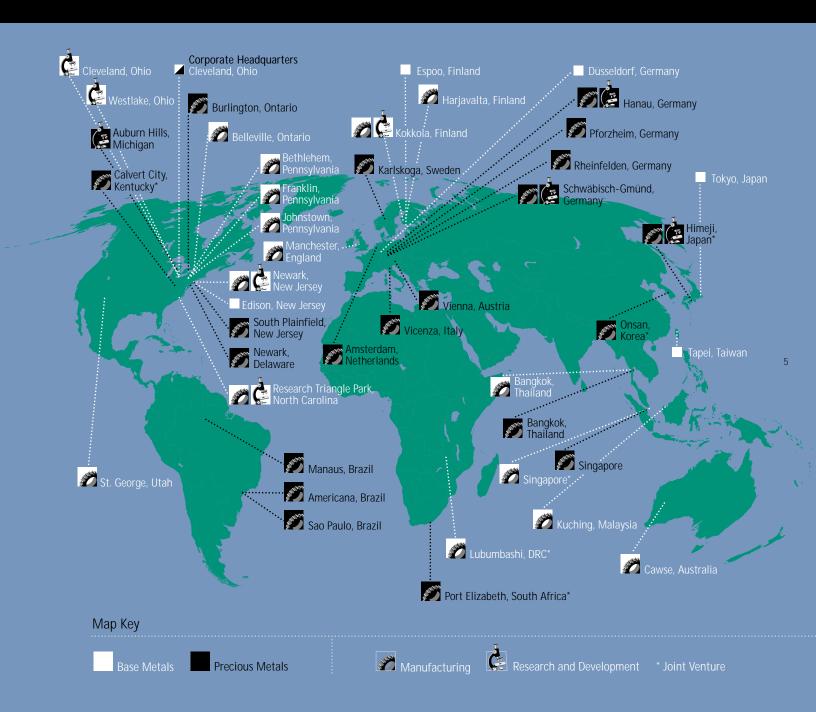
Also at the February 2002 Board meeting, Katharine L. Plourde began service as an OMG director.

Ms. Plourde was formerly a principal at Donaldson, Lufkin & Jenrette, a leading investment firm in New York. She has more than 20 years of experience as a specialty chemicals analyst, and for 10 years was ranked the number one specialty chemicals analyst by Institutional Investor magazine. We are pleased to be gaining both her industry expertise and capital markets experience.

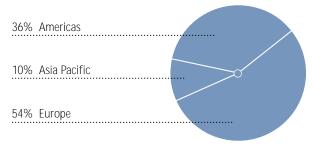
Richard P. Adante was recently promoted to Group Vice President – Precious Metals, reporting to Edward (Bud) Kissel, OMG president and chief operating officer. He was previously vice president of operations at OMG, and earlier had served in several manufacturing and materials management positions with Goodyear Tire and Rubber Company.

### **Expanding Worldwide Reach**

OMG now operates 35 manufacturing facilities on 6 continents, supported by 9 research and development laboratories. This broad geographic reach enables OMG to better serve its internationally diverse base of customers, most of which are consolidating their supplier relationships and looking for global partners.



#### 2001 Product Sales by Geography



William Lohman joined OMG as Group Vice President – Metal Management, in February 2002, also reporting to Bud Kissel. Mr. Lohman brings more than 20 years of metal management experience to the company, and for the past seven years has served as a consultant in the materials supply field.

### <sup>□</sup>Citizenship Commitment Confirmed

OMG remains committed to providing a safe workplace for our associates and environmentally compatible facilities in our plant communities. We continued our long-term participation in the chemical industry's Responsible Care program in 2001. This program aims for continual improvement in health, safety and environmental performance. Updates on OMG Management Systems Verification and posting of Responsible Care Goals have been included on our web site (www.omgi.com) for the past year, allowing interested parties to view our progress on a regular basis.

### <sup>2002</sup> Outlook Optimistic

While our double-digit earnings growth in 2001 was substantially better than our peer group and broad market indices, it was below our target of 15 percent per year increases. We expect to resume our historically strong growth rates in 2002, and our guidance to the investment community as we start the year is between \$3.55 and \$3.85 per diluted share, an increase of between 8 percent and 17 percent over 2001 per share earnings prior to the extraordinary charge.

The base metals unit's operating income was off slightly in 2001, but our underlying success in gaining additional value-added production, increasing market

share and expanding capacity, should all bode well as the overall economy improves. We expect gradual economic improvement in the first half of 2002, followed by sharper increases in the second half of the year. Meanwhile, we also expect to begin recognizing the benefits of synergies between the base metals business and the precious metals business.

In addition to benefiting over the near term from the anticipated economic recovery, OMG is at the forefront of a number of exciting and promising longer-range technological opportunities, including:

- Hybrid electric vehicles, which are a relatively small but rapidly growing segment of the auto industry;
- The gas to liquid process, which essentially converts natural gas to other petroleum by-products;
- Advanced automotive catalysts, particularly those for diesel engines; and
- Fuel cells, which convert hydrogen to energy. Unlike the first three areas, this opportunity is years away from commercial fruition, and we are viewing it as a venture capital situation.

In summary, we feel we have a full platter of both short- and long-term opportunities laid before us, and our challenge at this point is to successfully implement our business plan to take advantage of them.

We are pleased to welcome our newer OMG associates from the precious metals, Rhodia and Cawse operations, and are particularly appreciative of the efforts by associates in base metals and precious metals facilities who are working diligently to better integrate the two operations and realize their combined potential. We applaud the efforts of our associates in base metals who faced extremely tough market conditions throughout most of the year.

To our customers, shareowners, suppliers, bankers and investment analysts, we appreciate your continued interest and support over the past year and will continue to work diligently to maintain your confidence in the company.

P. Mooney

Sincerely,

James P. Mooney
Chairman and Chief Executive Officer

6





# Review of Operations



### BASE METALS

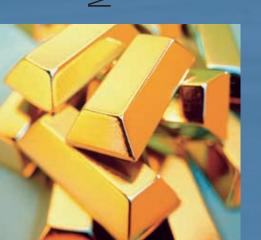
OMG's base metals business consists of the operations of OMG prior to the precious metals acquisition, and includes organics, inorganics, powders and metals. While 16 base metals are used as raw materials, the primary metals refined are cobalt, nickel and copper. Others include barium, brass, bronze, calcium, germanium, iron, lithium, manganese, potassium, rare earth, tin, zinc and zirconium.

The metal management business procures precious metals for OMG's other business segments and for the company's customers. The segment also centrally manages price risk associated with precious metal purchases and sales through techniques such as hedging and risk-pooling, as well as precious metal trading on a limited basis.

One of OMG's primary strategies to increase shareholder value is to provide more value-added benefits to the existing product line and to create new, high valueadded products to address new market needs. OMG maintains close partnerships line to meet their changing requirements and, at the same time, is at the forefront of new technology, such as fuel cells, gas to liquids, hybrid electric vehicles, rechargeable batteries and electronics.

The company's precious metals business includes operations acquired from Degussa in August 2001. The product line includes mainly from metals such as platinum, palladium, rhodium, gold and silver. Main applications include automotive catalysts, fuel cells and fuel processing catalysts, electronics packaging and electroplating products, jewelry and glass manufacturing

### PRECIOUS METALS



5

 $\triangleleft$ 

Z

لتا



specialty chemicals and materials produced

OMG's Franklin, Pennsylvania, facility produces metal organics and is the company's largest base metals facility in the Americas.

Currently, nickel briquettes, shown below, and cathodes make up 80 percent of production at the Harjavalta, Finland, facility. OMG's goal is to have 50 percent of Harjavalta production in higher value-added products by 2005, following the doubling of value-added production last year.

### **Base Metals**

Declining metals prices during most of the year, coupled with the economic recession, resulted in a slight decline in operating profit for OMG's base metals business, from \$158.4 million in 2000 to \$154.7 million in 2001. Operating profit from base metals represented 80 percent of OMG's total segment operating profit for 2001, and 60 percent of operating profit in the fourth quarter, the first full quarter following the precious metals acquisition.

#### 2001 Revenue by Base Metal

11% Cop	per		
30% Cob	alt		
49% Nick	(el	Å	
10% Oth	er		

#### 2001 Revenue by Base Metal Product Group

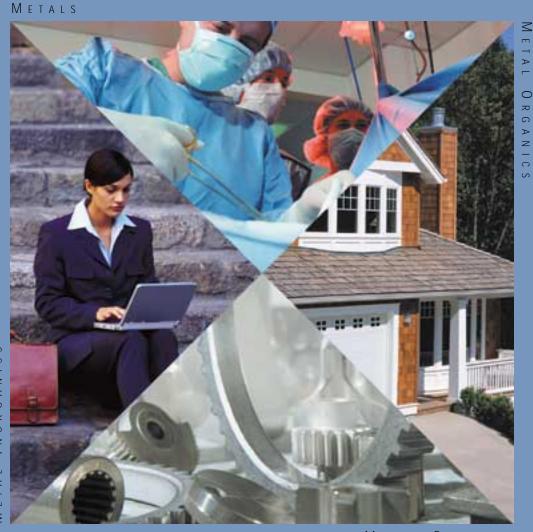
23% Inorganics	
14% Organics	
40% Metals	
23% Powders	

The base metals business comprises the traditional product lines of OM Group, prior to the precious metals acquisition. Product lines include:

- Organics, including plastics additives and metal carboxylates produced from cobalt, barium, calcium, zinc, iron, magnesium, potassium and other metals;
- Inorganics, including cobalt and nickel salts and rechargeable battery chemicals;
- Powders produced from cobalt, tungsten, stainless steel, iron and copper; and
- Metals, primarily nickel cathodes and briquettes.

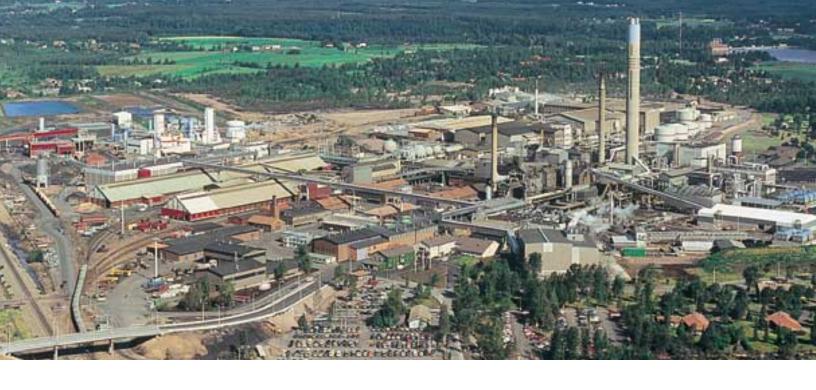
Physical volumes of organics, inorganics and powders declined, while metals volumes increased significantly as a result of a full year's impact of the Harjavalta refinery, which was purchased in April 2000.

OMG's base metals business serves more than 1,500 customers in over 30 industries with high value-added products that improve performance. Shown below (clockwise from top) metals used in stainless steel medical instruments; metal organics used in a myriad of products found in the home, including coatings and wood preservatives, building materials and flooring; metal powders incorporated in powdered metal parts for machinery and auto applications; and metal inorganics, including battery grade chemicals that improve performance of rechargeable batteries in portable electronic devices.



TAL INORGANICS

METAL POWDERS



### <sup>□</sup>Major Projects Accelerate Payback

Projects representing significant investments in base metals over the past several years accelerated their payback in 2001. These include:

- Harjavalta Nickel Refinery OMG acquired this facility in 2000 for \$188.1 million, and continued to invest in it over the past year, including the installation of proprietary, low-cost solvent extraction technology. The company began producing nickel powders at Harjavalta last July, and is investing approximately \$25 million in 2002 for the production of nickel salts. OMG's goal is to migrate at least half of the capacity of this facility to value-added products, versus briquettes and cathodes, by 2005. Substantial progress toward this objective was made in 2001, with the value-added portion of the output increasing from 10 percent to 20 percent, while overall capacity increased to 60,000 tons.
- Big Hill Project Consisting of a smelter and a large adjacent slag pile, the Big Hill project in Lubumbashi, Democratic Republic of Congo (DRC), enables OMG to produce 5,000 metric tons of cobalt per year and another 4,000 metric tons of copper from lower-grade feedstocks. The smelter became operational in the fourth quarter of 2000, and was running routinely by the fourth quarter of 2001. OMG is a majority partner in this \$120 million project with Gecamines and the George Forrest Group.

- Kokkola Expansion As a result of a multi-year \$50 million investment, most of which was completed by 1999, the Kokkola, Finland, refining facility can now produce more than 10,000 metric tons of cobalt, up from 5,000 metric tons prior to the expansion. In 2002, OMG will begin producing germanium oxide at Kokkola, using feedstocks from the Big Hill. Germanium oxide has major uses in fiber optics and electronics. OMG also invested approximately \$15 million to install copper refining capacity and another \$5 million to increase capacity of value-added cobalt salt products during 2001.
- Selected Expansions at Smaller Facilities –
   During the year, the company continued to
   make targeted investments for expansion of
   specific product lines at smaller refineries,
   such as cobalt/lithium at the Johnstown,
   Pennsylvania, facility.



The Kokkola, Finland, facility (right) is able to process lower-grade feedstocks into high value-added products.





Reactors at Franklin, Pennsylvania (above), produce a wide range of metal carboxylates and PVC additives.

OMG's Harjavalta, Finland, facility (opposite page, top) represents one of the company's largest opportunities to increase shareowner value. Immediately accretive to earnings when it was acquired in 2000, this nickel processing operation is increasing its contribution to OMG operating profit by migrating its production to higher value-added products, including battery chemicals and other nickel salts and nickel powders. Associates at Harjavalta (opposite page, below) work closely with customers to constantly update OMG's product offerings to improve customer product performance.

# Base Metals Products and Markets

#### METAL ORGANICS

#### **Products**

Metal carboxylates, including metal organic salts such as neodecanoates, octoates, tallates, napthenates, oleates,



acetates and sterates of cobalt, zirconium, manganese, calcium, potassium, rare earth, zinc and barium; trademarked blends of carboxylic acids, including Cem-All®,

Ten-Cem® and Hex-Cem®; and trademarked water-emulsifiable metal carboxylates, including Hydro-Nap® and Hydro-Cem®; and plastic additives

#### **Applications**

Reduce sludge build-up, prevent oxidation and reduce friction in auto engines, generators and mining equipment Liquid laundry soaps to catalyze detergent alcohol ■ Paint, coatings and printing inks to promote faster drying time - Polyester resins to accelerate their curing in fiberglass watercraft, storage tanks, automobile components and other uses -Polyvinyl chloride (PVC) for heat stabilization in medical applications such as tubing and blood bags; home applications like carpet backing, flooring, shower curtains and water beds; and boots, raincoats, toys and other consumer goods Radial tires to promote bonding of metal-to-rubber

#### End Use Industries

Appliances, building materials, consumer goods, farming, flooring, home furnishings, medical, natural gas conversion, paint and coatings, petrochemical including fuel oil and lubricant additives, plastics, polyester resins, printing, sporting goods, tires



#### METAL INORGANICS

#### **Products**

Metal salts including oxides, hydroxides, monoxides, carbonates, chlorides, nitrates and sulphates of cobalt, nickel, lithium, copper and manganese

#### **Applications**

Airbags that are safer, perform better and are recyclable Audio and video tapes to



improve recording quality Ceramics and glassware to provide color for pigments and glass and promote adhesion of porcelain to metal Digital memory to

enhance storage in computers, handheld digital organizers and other electronic devices • Household appliances to

enhance metal to glass bonding Marine coatings to improve antifouling properties
Petrochemical refining to reduce sulfur and nitrogen emissions Rechargeable batteries to enhance their performance and speed rechargeability for use in hybrid electric vehicles and portable electronics such as laptops and cellular phones
Steel auto bodies to improve corrosion resistance Silicone caulk to accelerate its production Synthetic fibers to enhance chemical production processes making them less susceptible to mold and mildew
Televisions to enhance screen resolution

#### End Use Industries

Automotive, ceramics and glassware, chemicals, corrosion protectors, digital devices, electronics, hardware, housewares, magnetic media, metal finishing, petrochemical refining, rechargeable batteries, silicone caulk, steel, synthetic fibers



#### **Products**

Standard, electrolytic, fine, extra fine and sub-micron cobalt, nickel, copper, iron, stainless steel, lithium, bronze, tin and brass powders

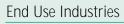
#### **Applications**

Bushings and bearings to reduce friction in electric motors such as those found in power tools • Construction and quarrying drilling equipment to bind industrial diamonds to cutting surfaces • Cutting tools for mining, machining and oil and

strength and durability • High-tech alloys to improve strength and prevent corrosion in aircraft and heavy equipment • Microdevices such as micro-drills used to manufacture printed circuit boards • Microelectronics to reduce solder bridging and improve solder joint strength for circuit boards and brazing • Powdered metal parts in automotive, appliance, power tools and lawn and garden applications for cost and performance benefits • Rechargeable batteries in

electronic devices such as cellular phones, cameras and laptops to improve electrical conduction and speed rechargeability

gas drilling equipment to increase



Aerospace, appliance, automotive, chemical, construction, electronics, hardware, heavy equipment, lawn and garden, manufacturing, mining and drilling, power tool, rechargeable battery, petrochemical refining, super alloys



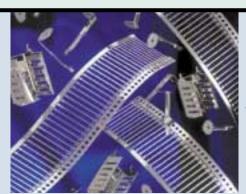


#### Products

Nickel briquettes, powders, cathodes and solutions

#### **Applications**

Key ingredients in battery, chemical, fuel cell plating and stainless steel applications



#### **End Use Industries**

Metal alloys, plating, stainless steel

. .

# Unique Raw Materials Position Supports Vertical Integration

ition 🌡 on

One of OMG's major strengths is a reliable supply of raw materials for both its base metals and precious metals businesses.



Base metal raw material sources include the Big Hill in the DRC (above) and the newly acquired Cawse operation in Australia (right, top and bottom).

Vertical integration in base metals is an ongoing OM Group strength. The company's major refineries at Kokkola (cobalt, copper, germanium) and Harjavalta (nickel) are supported by a program to secure long-term, reliable feedstocks. OMG's unique raw materials supply position consists of the following major projects:

- The "Big Hill" smelter and adjacent slag pile, which will supply the smelter for 20 years at current production rates. This \$120 million venture in the DRC began in 1998 and became fully operational late last year. Using OMG's proprietary technology, the Big Hill smelter is able to extract high purity cobalt from previously unusable slag;
- The Luiswishi project in Shaba, DRC, where OMG has a long-term supply contract for approximately 4,500 metric tons of cobalt and 4,500 metric tons of copper per year on a right of first refusal basis; and
- The Cawse operation in Australia, which provides 8,000 metric tons of nickel and 800 metric tons of cobalt per year.

Additionally, OMG has long-term supply agreements with other Australian cobalt producers and makes spot market cobalt purchases from producers in Zambia, Russia and the U.S. Additional nickel supplies are sourced through long-term contracts with producers in Australia and Brazil, and are supplemented through spot market purchases.



#### \_

# Metal Management

Raw Material Supply Reliability for Precious Metals Secured by Metal Management

The metal management business unit procures raw materials, including platinum, palladium, rhodium, gold and silver, for the precious metals business and the company's customers.

Headquartered in Hanau-Wolfgang, Germany, metal management operations include:

- Providing precious metal liquidity and financing for other OMG operations;
- Hedging and risk-pooling for the purchase and sale of precious metals for other OMG operations;
- Purchasing and selling precious metals;
- Proprietary precious metal trading on a limited scale; and
- Precious metal management consulting services for customers.

Because it is primarily a metals trading operation, with high precious metals costs included in both net sales and cost of sales, the metal management business has inherently smaller profit margins than OMG's other business segments. But it also employs few associates and requires limited capital resources, while providing important liquidity in precious metals to OMG. During 2001, the segment contributed

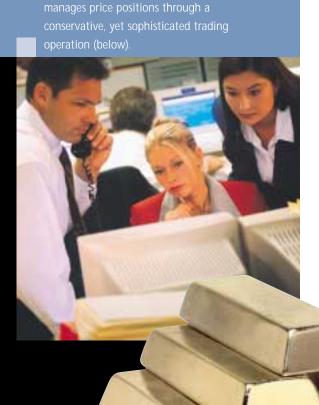
\$10.1 million in operating profit, or 5 percent of OMG's total segment operating profit.

For the fourth quarter, the first full quarter as part of OMG, the unit accounted for 9 percent of total segment operating profit.

OMG's exposure from proprietary trading activities is reduced by

limitations on both metal quantities

and the value of open positions. Traders are required to close positions at specific loss limit levels, both daily and monthly. OMG intends to maintain the conservative trading standards currently in place.



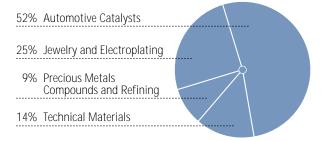
through an advanced metal management

group that secures feedstocks and

# **Precious Metals**

The precious metals business posted strong operating profit results following its acquisition, accounting for 31 percent of OMG's total segment operating profit in the fourth quarter.

#### 2001 Precious Metals Revenues



The segment produces inorganic and organic precious metal compounds from platinum, palladium, rhodium, gold and silver. The group also provides a variety of refining and processing services to precious metal users.

OMG's precious metal product line includes:

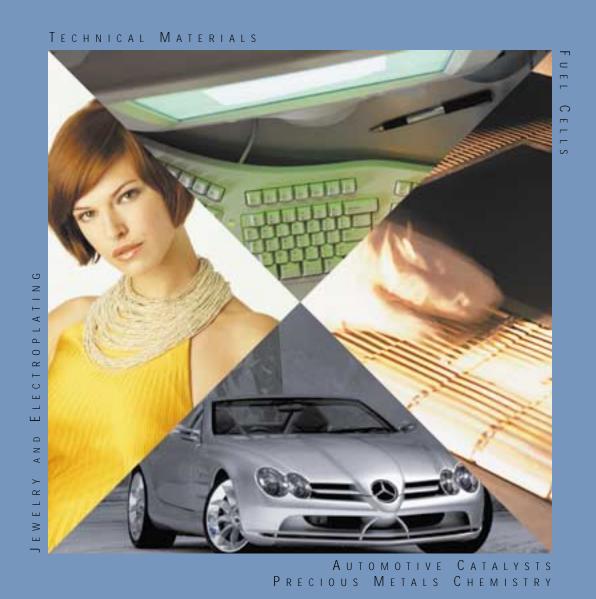
- Automotive catalysts, which account for more than half of the segment's sales;
- Technical materials, including electronic packaging materials, platinum engineering materials and fuse materials serving the electronic packaging, electrical engineering and glass industries;
- Jewelry and electroplating products, including semi-finished precious metals for jewelry manufacturers and electrolytes and precious metal salts for use in the electronics industry, printed circuit board industry, and in corrosion protection applications, among others;
- Precious metals chemistry, which involves the recovery and refining of precious metals and precious metals compounds from spent auto catalysts and chemical catalysts as well as from scrap. Inorganic precious metal products are used in production of auto catalysts, and in the electronics and plating industries, while organic precious metal products are used principally by the chemical industry; and
- Membrane electrode assemblies and PGM catalysts for the emerging fuel cell industry.

The Rheinfelden, Germany, facility is one of the company's major producers of automotive catalysts.



More than half of precious metals revenues is derived from automotive catalysts, the market for which is growing at a much more rapid pace than the auto industry overall.

OMG's precious metals business serves customers through five primary product lines that include (clockwise from top) technical materials for the electronics and electrical industries; fuel cell components for all segments of this emerging industry; catalysts and precious metals chemistry for the automotive industry and other engine producers that are beginning to face environmental regulation similar to the auto industry; and jewelry and electroplating products.





### ☐ Automotive Catalysts Growth Projected

During the past several years, significant investments were made in the automotive catalyst business to develop its capability in both research and manufacturing. The majority of these investments were directed to the Canadian, German and South African operations supplying primarily North American and European markets. As a result of the investment in new capacity and in advanced technology, OMG is poised to further improve upon its number three market position in automotive catalysts over the next few years.

Automotive catalysts are expected to grow more rapidly than the automotive market as a whole due to new environmental regulations, particularly in North America and Europe, to reduce particulate emissions; continuation of the auto industry's product mix trend towards SUV's and light trucks, which require more catalyst products than conventional autos; and expansion of emission catalysts into non-automotive applications such as snowmobiles, motorcycles and portable power equipment. Presently, some 80 percent of the world's recently manufactured autos contain emission control catalysts.

### Fuel Cells Offer Long-Range Potential

Fuel cells involve the reaction of hydrogen with oxygen to produce energy, and these chemical reactions typically use PGM catalysts. In addition to reducing use of finite fossil fuel resources, fuel cells are non-polluting. Like most developing technologies, fuel cells are in the process of migrating from laboratory technology to commercial applications. Such applications include:

- Stationary use, including residential and commercial heating and cooling. Residential units are currently undergoing extensive testing, and industry experts believe this use will be the first to become commercially viable, with cost effective units reaching the market by 2003 to 2004.
- Portable use, including consumer electronics.
   It is anticipated that this group of products will begin being commercially viable by 2003.
- Transportation, which faces major infrastructure issues such as hydrogen distribution for conventional auto and truck use. Fuel cells could begin being used in fleets that receive fuel from a central source as early as 2006 to 2008.

### $\Box$ Limited Cost Savings Targeted

OMG sees some opportunity to reduce costs as a result of the precious metals acquisition. Such reductions include possible savings through higher volume purchases of both raw materials and services and consolidation of offices and distribution facilities.





The Burlington, Canada, manufacturing facility (below) is expected to aid OMG's effort to gain market share for automotive catalysts in the U.S.





Hanau-Wolfgang, Germany (left), is a key center for OMG's precious metals business. The Hanau-Wolfgang facility is one of the company's largest processing operations and is the center of

fuel cell research. The segment's Technical Materials Division operations there (top left) supply the electronic packaging, electrical engineering and glass industries worldwide.

The Hanau-Wolfgang plant is a model production unit for contact and fuse materials, metallic and composite materials, platinum engineered materials and brazing technology.

# Precious Metals Products and Markets

#### AUTOMOTIVE CATALYSTS





#### **Products**

Platinum, palladium, rhodium

### **Applications**

Improves noxious emission control for engines in gasoline and diesel passenger cars, heavy duty vehicles and other moving vehicles and stationary gas and diesel engines

Catalysts and catchment systems for

#### **End Use Industries**

Automotive, motorized vehicles and machinery

#### TECHNICAL MATERIALS

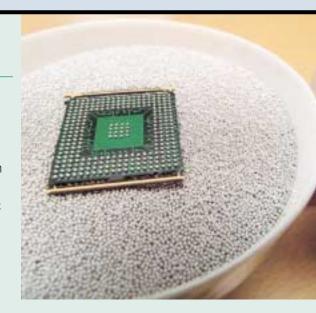
#### Products

High-purity lead and silicon-based soft solders, heat-sink materials of copper or copper-based materials, metal matrix composites, hermetic seal materials, platinum/rhodium catalysts and palladium catchment systems, platinum, fuses and switchgear including contactors, relays and circuit breakers, and contact materials



#### **Applications**

ammonia oxidation used by the commercial fertilization industry Contact materials used in low-volt switchgear and control units and vacuum switches - Heat-sink materials for power electronics Materials to create hermetic seals in microelectronic, power electronic and electrotechnical installations Metallic and composite materials used in electronic and electrotechnical installations - Platinum used to make high-quality glass manufacturing equipment for LCD monitors and metal thermocouple wire Solders for automatic silicon chip soldering, soft solder pastes and ball grid arrays - Spark plugs for the automotive industry



#### **End Use Industries**

Automotive, chemical, electrical engineering, electronic packaging, glass, mechanical analysis

#### JEWELRY AND ELECTROPLATING

#### **Products**

Gold, silver, platinum, palladium, brazing alloys and solders, alloy and solder pastes, and fluxes, precious metal electrolytes



#### **Applications**

Semi-finished precious metals for jewelry Industrial applications such as sputtering targets for CD-ROMs and DVDs Electrolytes and precious metal salts for technical and decorative

applications in various industries

#### **End Use Industries**

Jewelry, corrosion protection, cutlery, electrical engineering, electronics, flatware, plant construction, plumbing, power engineering, printed circuit boards, refrigeration, surface finishing, tool making

#### PRECIOUS METALS CHEMISTRY

#### **Products**

Inorganic and organic precious metals compounds based on platinum, palladium, rhodium, ruthenium and iridium; refining of these platinum group metals from recycled products and secondary materials



#### **Applications**

Automotive catalysts 

Fuel cell components 

Homogenous catalysts for oxo-synthesis 

Precursor materials for electronic materials and plating



#### **End Use Industries**

Automotive, chemical, electronics, fuel cells, plating

#### FUEL CELLS



#### **Products**

Platinum, palladium, rhodium, ruthenium

### **Applications**

Core components of polymer electrolyte membrane (PEM) fuel cell systems including membrane electrode assemblies, hydrogen generation catalysts and electrocatalysts

#### End Use Industries

Power generation for residential and commercial applications, portable devices and transportation



1

Fuel cell research represents a major component of the company's research and development program. OMG is working closely with manufacturers developing fuel cell technology for stationary, portable and transportation applications.

Approximately 40 percent of OMG's net sales, excluding metal management, results from new products introduced over the past five years.

The company continues to accelerate its R&D effort, recognizing that continually adding value to customer products and processes will enable it to grow market share.

# **Technology**

# ☐ Technical Commercialization Process Formalizes New Product Development

OMG's long-stated goal has been to derive 20 to 25 percent of total revenue from products introduced over the previous five years by 2005. By the end of 2001, 22 percent of base metal product revenues was derived from new products. Overall, 40 percent of revenues, excluding metal management, is now being derived from new products.

Recognizing the importance of new product development in aiding the ability of OMG's customers to compete, the company has devoted substantial resources to the product development process. Approximately 500 associates, or 10 percent of the company's total work force, are employed in Research and Development. These resources do not include cross-disciplinary teams from manufacturing, sales and marketing and finance that join together to bring new products to market once they are past the conceptual stage.

At OMG, the Technical Commercialization Process involves a Stage-Gate™ approach tailored to OMG's specific needs. The process begins with an idea or concept, moves to Probe, then Evaluation, Market Development and Commercialization. At each step, the resources required and the scrutiny of evaluation both increase.

# Technical Centers of Excellence Focus Resources

OMG's research and development approach has been to focus its R&D associates on broad categories of product development, related to their location and its sphere of activity. Currently, the company operates five Technical Centers of Excellence, including:

- Hanau-Wolfgang, where resources are directed to precious metal chemistry, processing and catalysis;
- Research Triangle Park, North Carolina, where associates concentrate on pyrometallurgical processes;
- Kokkola and Harjavalta, where efforts deal with metal separation technologies;

 Newark, New Jersey, which directs its efforts toward electronic chemicals.

At year-end, well over 100 new products were in one of the four R&D stages, up from 63 at the end of 2000. Combined revenue potential was more than \$900 million, compared to \$625 million at the end of 2000.

Also at year-end, OMG held approximately 900 patents. Applications were pending on about 1,000 others.

Among significant products being introduced to the market are:

- An over-based Calcium Oleate building block for polyvinyl chloride, which can replace barium in traditional PVC stabilizing applications. It is nontoxic and, as a result, OMG has applied for U.S. Food & Drug Administration approval for use in medical and food applications.
- Electroless Nickel/Immersion Gold for the printed circuit board industry, allowing that industry to further its miniaturization process while maintaining simplicity of operation and extremely high yields;

- An entire new generation of battery chemicals, including LSC Cobalt Oxide, LSX Cobalt Oxide and coated Spherical Nickel Hydroxide, all of which are geared to providing enhanced performance for the next generation of rechargeable batteries;
- A variety of nickel powders to further the upward migration of Harjavalta production to value-added materials; and
- Cobalt-Manganese Acetate solutions as oxidation catalysts for the chemical industry.

### $^{\square}$ Longer Range Opportunities In Development

In addition to these products being introduced currently, OMG has a number of longer range projects in development, including those focusing on support for emerging technologies, such as:

- Gas to liquids, which involves use of a cobaltbased catalyst to convert natural gas to diesel fuel, gasoline, lubricants and heating oil;
- Fuel cell development using PGM metals;
- Advanced automotive catalysts, also utilizing PGM metals;
- Hybrid electric vehicles, involving cobalt and nickel catalysts; and
- Pharmaceutical catalysts from PGM metals.

# Cooperation and Communication Critical to Process

Because each of the five Technical Centers of Excellence focus on their own processes and technologies, managers from all five meet quarterly to share information. Additionally, combined teams from the precious metals business and the base metals business have been formed to:

- Address metal separation and refining technology regarding recovery of precious metals from processed nickel and cobalt; and
- Exchange information on particle size, particle morphology and nanoparticles.

2

# Shareholder Information

#### Market Price of OMG Shares/Trading Information

OM Group common stock is traded on the New York Stock Exchange under the symbol OMG. Shares traded at a high of \$67.00 and a low of \$46.25 per share during 2001.

#### **Annual Meeting**

Shareowners and friends are invited to attend OMG's Annual Meeting, which will be held at the English Oak Room, Tower City Center - Lower Level, 230 Huron NW, Cleveland, Ohio 44113, at 11:00 a.m. on Tuesday, May 7, 2002.

#### **SEC Filings**

All OMG Securities and Exchange Commission filings, including the Form 10-K in this report, Form 10-Q, Notice of Annual Meeting and Proxy Statement and other filings are available on the Investor Relations section of OMG's web site at http://www.omgi.com. The company makes available these and other reports, upon written request and without charge, to shareowners without Internet access.

# Stock Transfer Agent, Registrar and Dividend Disbursing Agent

National City Bank is OM Group's common stock transfer agent and registrar. The bank maintains OMG's shareowner records and disburses dividend checks. Change of address, transfer of stock ownership and questions related to stock ownership should be directed to: National City Bank, Corporate Trust Operations, P.O. Box 92301, Locator 5352, Cleveland, OH 44139-0900, phone: 800-622-6757, fax: 216-476-8508.

#### **Dividend Payments**

Common stock dividends are payable quarterly upon authorization of the Board of Directors. Regular payment dates are in February, May, August and November.

#### **Dividend Reinvestment Plan**

OM Group maintains a Dividend Reinvestment Plan whereby cash dividends and a maximum of an additional \$5,000 per month may be invested in OM Group shares at no commission cost. Details of the plan are available by contacting Kristine A. Stepnowski, Manager of Investor Relations at 800-519-0083, or e-mail at kristine.stepnowski@omgi.com.

#### **Independent Auditors**

Ernst & Young LLP

#### Counsel

Squire, Sanders & Dempsey LLP

#### Corporate Web Site

Shareowners may access up-to-the-minute corporate news, analyst coverage, product information and links to SEC filings through OMG's web site at http://www.omgi.com. Shareowners without Internet access may request mailings of OMG's corporate news releases by calling 800-519-0083.

#### ANALYST COVERAGE

The following security analysts maintain coverage of OM Group and publish research reports on the company, and this list is provided solely as a convenience to investors. The reference to such firms does not imply any company endorsement of the information contained in research reports on OM Group.

#### Banc of America

Mark Gulley 212-583-8198

#### Commerce Capital

Christopher Crooks 215-282-4400

#### Credit Suisse First Boston

John McNulty 212-325-4385

#### First Analysis

Allen Cohen 312-258-1400

#### Goldman Sachs

Robert Koort 212-357-4333

#### Ingalls & Snyder

Rosemarie Morbelli 212-269-7800

#### Lehman Brothers

Tim Gerdeman 312-609-4031

#### LJR Great Lakes Review

Elliott Schlang/Gregory Halter 216-767-1340

#### McDonald Investments

Saul Ludwig 216-443-4646

#### Midwest Research

Dmitry Silversteyn 216-592-1910

#### Salomon Brothers

Gil Yang 212-816-5803

#### **UBS Warburg**

Jeff Cianci/Chris Shaw 212-713-2951

# **Board of Directors**

Lee R. Brodeur\*+, Retired Vice Chairman, Firestone Tire & Rubber, Co., Akron, OH
Frank Butler\*+, Retired President & General Manager-Coatings Division, Sherwin-Williams Co., Cleveland, OH
Edward W. "Bud" Kissel, President & Chief Operating Officer, OM Group, Inc., Cleveland, OH
Thomas R. Miklich\*, Chief Financial Officer & General Counsel, Invacare Corporation, Elyria, OH
James P. Mooney, Chairman & Chief Executive Officer, OM Group, Inc., Cleveland, OH
John E. Mooney, Chairman & Chief Executive Officer, SACHEM, Inc., Austin, TX
Katharine L. Plourde, Retired Principal, Donaldson, Lufkin & Jenrette, New York City, NY
Markku Toivanen, Senior Vice President, Corporate Strategic Development, Outokumpu Oyj, Espoo, Finland

Board of Directors left to right: Katharine L. Plourde James P. Mooney John E. Mooney Thomas R. Miklich Frank Butler Edward W. "Bud" Kissel Lee R. Brodeur Markku Toivanen



# **Executive Officers**

James P. Mooney, Chairman & Chief Executive Officer Edward W. "Bud" Kissel, President & Chief Operating Officer James M. Materna, Chief Financial Officer Michael J. Scott, Chief Administrative Officer

<sup>\*</sup> Member of Audit and Finance Committee + Member of Compensation Committee



OM Group, Inc. 50 Public Square 3500 Terminal Tower Cleveland, Ohio 44113-2204 Phone: 216-781-0083

Fax: 216-781-1502 http://www.omgi.com



