

BEST

B E I N G T H E

Annual Report

02

COMPANY TO

INVEST IN

BUY FROM

WORK FOR

The spirit of innovation drives us to be the best in everything we do, whether it's for our shareholders, our customers or our colleagues. This year, our Annual Report features some of the people whose attitudes, determination and commitment to excellence make Air Products the best company to work for – people like Tim Compton, copper CMP slurry program engineer for our Electronics Division (cover), and Kevin Stank, applications development chemist, Specialty Additives, Graphic Arts (above). We also explore the unique connection we have with our global customers – strong relationships that fuel creative problem solving and make us the best company to buy from. And we highlight our portfolio management actions, our capital discipline, our solid business execution and the earnings stability of our business models – all helping us be the best company to invest in.

financial summary

FOR THE YEAR (millions of dollars)	2002 ^(a)	2001 ^(a)	BETTER/WORSE
Sales	\$5,401	\$5,858	(8%)
Operating Income	806	861	(6%)
Net Income	519	519	--
Capital Expenditures	806	806	--
Operating Return on Net Assets ^(b)	10.6%	11.1%	
Return on Average Shareholders' Equity	15.7%	17.6%	

PER SHARE DOLLARS

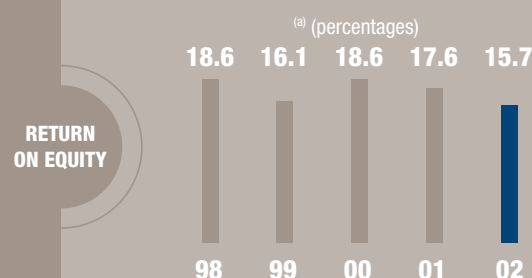
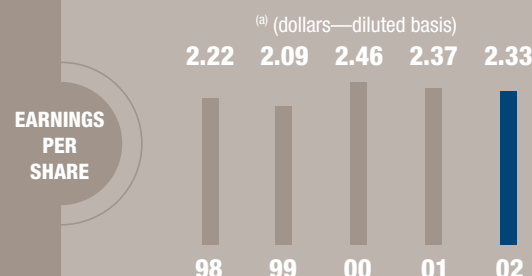
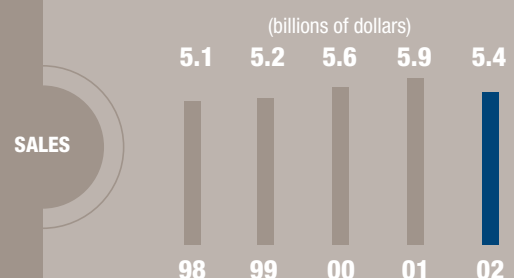
Basic Earnings	\$2.39	\$2.42	(1%)
Diluted Earnings	2.33	2.37	(2%)
Dividends	.82	.78	5%
Book Value	15.83	14.41	10%

AT YEAR END

Shareholders' Equity (millions of dollars)	\$3,460	\$3,106
Shares Outstanding (in millions)	219	215
Shareholders	11,100	11,200
Total Employees	17,200	17,800

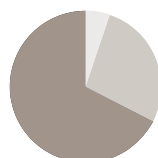
^(a) Exclusive of special items.

^(b) Operating income divided by five-quarter average net assets (less investments in equity affiliates).



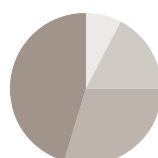
2002 SALES BY BUSINESS SEGMENT

Industrial Gases	68%
Equipment	5%
Chemicals	27%



2002 PROPORTIONAL SALES BY DESTINATION

United States	45%
Europe	30%
Canada and Latin America	8%
Asia/Other	17%

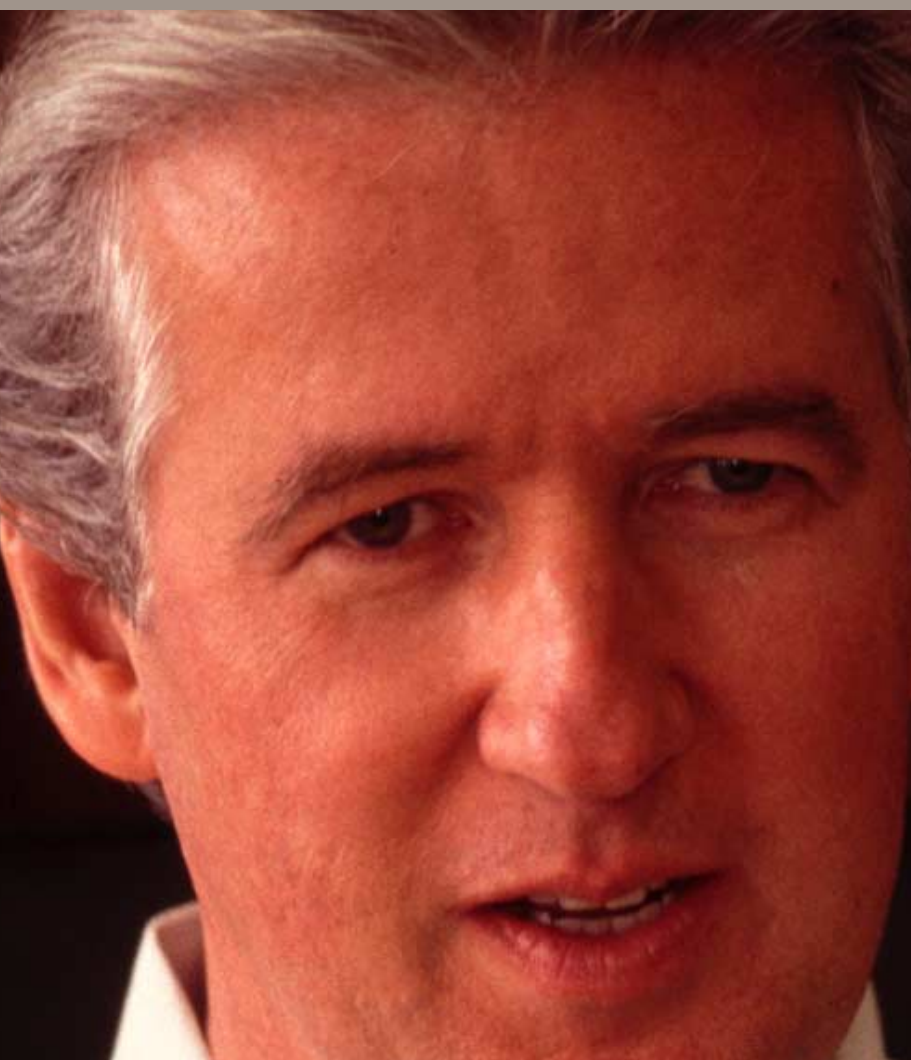


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T O O U R S H A R E H O L D E R S

John P. Jones III
Chairman, President, and Chief Executive Officer



This year, we dealt with *reality*. The struggling economy. A sluggish manufacturing environment. Front-page headlines dominated by corporate governance scandals. Terrorism. World events that created market instability.

But despite these *realities*, fiscal 2002 was a year of significant action and progress for Air Products. As I look back, there are many areas where we've made tremendous strides in "being the best company to invest in, buy from and work for." The evidence runs across the bottom of these pages, in the stories we tell in each section, and most importantly, in our results. And each accomplishment is an example of three main areas where we have focused our energy as a management team: executing on our growth strategy, driving our return on capital and developing the best team in the industry.

02

H I G H L I G H T S

• INVEST IN

• BUY FROM

• WORK FOR

Financial Discipline and Integrity

For two years running, our total shareholder return has outperformed the S&P – this year, by 31 percent. That’s a testament to our portfolio management actions, our unwavering focus on growth markets and geographies, and our ability to execute.

But fiscal 2002 remained a challenge, as the global industrial downturn that began in 2000 dragged on. And while there has been modest growth since January, there is continued pressure and limited visibility today. Despite record HyCO (hydrogen, carbon monoxide and syngas) volumes, a significant year-on-year improvement in our chemicals margins and significant success in improving our merchant gases pricing, our operating income, exclusive of special items, dipped for the second straight year as demand dropped in most of our end markets, and most steeply in electronics. Sales of \$5.4 billion were down eight percent and, exclusive of special items, net income of \$519 million was flat compared with the prior year.

With our continued focus on growth and return on capital, we reduced our spending and became much more disciplined in where we placed our dollars. We didn’t pursue growth at the expense of returns. We went for deal quality, not quantity. And we focused on growth markets, preferentially placing capital in higher-value opportunities.

I am proud to say that Air Products always has been a company with great financial discipline. We live and work by values that are rooted in a proud

history of integrity and accountability. In May we appointed KPMG LLP as our external auditor, replacing Arthur Andersen LLP who had served us for 52 years. In that mutual selection process, our new auditor also confirmed the integrity of our financial process as part of the completion of the current year audit. And in August, when John Owings, our new CFO, and I signed the certifications required by the SEC and the Sarbanes-Oxley directive, it was business as usual.

We also have a business model that is very appealing given its stability in cash flow from operations, which leads to relative stability in earnings per share (EPS). Our operating EPS went from a record \$2.46 in fiscal 2000 to \$2.33 in this anemic 2002 economic environment, down just 13 cents from the peak. What little cyclicality we do have comes mainly from our volume-sensitive merchant gases, chemicals and electronic specialty materials. All three of these areas have substantial operating leverage once demand returns.

In addition, our balance sheet is very strong. In the period between January and March, when many other companies were facing downgrades, Moody’s upgraded us and S&P raised its outlook, resulting in welcome interest savings. All of this speaks to continued strong free cash flow into fiscal 2003. With our debt balance in very good shape, we have the opportunity to use this cash flow for share buy-backs and dividends, in addition to making smaller-sized acquisitions. While specific plans for free cash flow in 2003 will be determined as the year develops, we:

- remain committed to our long-standing dividend policy,

- will seek to maintain a stable diluted share count over time, and
- will continue to evaluate acquisitions that are consistent with our strategies and financial objectives.

Firmly Rooted in Our Values

In a year rocked by incredible tales of scandal in corporate America that destroyed massive shareholder value, I want to clearly assure you of where we stand on public issues of concern.

While stock options served the corporate world well for many years, we think it is inevitable that they will be treated as an expense. We believe a uniform accounting standard should be developed, and we will monitor closely this potential accounting change.

Supporting the integrity and accountability of Air Products is a very proactive and involved board of directors, with benchmark practices of corporate governance appropriate for our industry and our times. I thank them for the many hours they served this year and for their skilled advice and counsel.

I am also very proud of our employees’ leadership in environment and safety. We had the best record for recordable injuries among the large chemical companies in the U.S. for the fourth year in a row. And two days after September 11, we appointed a director of process safety integrity, our version of Homeland Security, to ensure that we are safe, not only from the inside out,

<ul style="list-style-type: none">• Added multilingual capabilities to the APDirectSM extranet• Began implementation of a global Performance Enhancement Process	<ul style="list-style-type: none">• Deployed a new Web-based “KeepCOLD[®] ColdTrack Service to further build our leadership position serving the MRI industry• Introduced a new EnviroGem[®] AE surfactant and an EnviroGem AD01 low-foam wetting agent for coating formulators	<ul style="list-style-type: none">• Acquired Messer Griesheim’s Mexican operations (with our Mexican joint venture partner)• Forged an alliance with Parelec Inc. to develop advanced materials for electronic circuit metallization	<ul style="list-style-type: none">• Signed a long-term hydrogen supply agreement with Ultramar’s Wilmington, California refinery• Formed four employee diversity networks to promote dialogue and understanding
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but also from the outside in. We have been a leader in developing these new security standards for the chemical industry.

Four Corporate Initiatives

Two years ago, I laid out four corporate initiatives that I said we'd undertake to help us be the best. They were portfolio management, growth, work process improvement and change management. In 2002, we delivered firmly and visibly on all four.

Portfolio Management

The world we operate in has become increasingly fluid. Changes in the global economy and the competitive landscape impact our businesses at an ever-increasing pace. Our portfolio management initiative is designed to continuously assess all of our businesses with the same set of lenses, making changes necessary to increase value for our shareholders. Numerous changes can result from this process, including acquisitions, divestitures, closures, new ventures and alliances, and business model restructuring.

We knew the time had come to make some tough but very necessary decisions about our portfolio. There were some businesses that simply would never be able to meet their return on capital and growth targets, despite their important roles in our company's long and proud history. Other businesses needed to be restructured to deliver the returns that our shareholders have come to expect. And in other businesses, there were opportunities to build

Portfolio Management Actions

Acquired a majority ownership in San Fu Gas Company Ltd., the #1 gas company in Taiwan

Divested our lower-return, lower-growth U.S. packaged gas business to Airgas, Inc. and National Welders Supply Company, Inc.

Closed or are divesting underperforming chemicals operations

Acquired Messer Griesheim's Mexican gases operations (with our Mexican joint venture partner)

Created a new business model in our more than \$1 billion merchant liquid gases business that allows us to offer and get paid for value creation

Acquired American Homecare Supply, LLC (AHS), the leading homecare provider in the Northeastern U.S., giving us an entry platform into the high-growth U.S. homecare market (transaction closed October 1, 2002)

on our leading market and geographical positions. We took advantage of those opportunities, all in the name of growth and profitability.

Growth

We have more of our business aligned in growth markets than any of our competitors. We have four very solid growth platforms within our business segments, representing well over half of the company's sales.

Air Products is the number one supplier of specialty materials to the global electronics industry, with about \$940 million in sales (including affiliates) from over 100 gases and chemicals going into the manufacture of our customers' integrated circuits, compound semiconductors and other devices.

We have the world's number one position in hydrogen, with double-digit growth expected through at least 2008. Through our engineering

and construction alliance with the Technip-Coflexip Group, we have built 18 hydrogen plants for global refiners, providing world-class, competitive technology. We now have more than 60 facilities producing or purifying hydrogen and carbon monoxide for customers.

Healthcare is our third growth platform, and we are a worldwide supplier, providing medical gases to institutions, helium and related services for magnetic resonance imaging (MRI), and homecare services. In fact, we are the #1 homecare provider in Spain, Portugal and Mexico, and the #2 provider across Europe. And with our acquisition of AHS in October, we entered the fragmented U.S. homecare market, giving us the #1 position in the Northeast/mid-Atlantic region and a strong entry platform for future growth.

Finally, in Performance Materials, what was once a product-oriented strategy has evolved into a technology-oriented strategy to more fully capitalize on our competencies in surface and materials

- Completed the divestiture of our U.S. packaged gas business
- Brought a new hydrogen plant onstream in Tarragona, Spain to support Repsol's hydrocracker

- Broke ground for a new air separation unit in Point Lisas, Trinidad to supply Atlas' methanol production facility
- Received an award from the EPA for a decade of work in reducing PFC emissions from semiconductor processes

- Extended our alliance with Technip-Coflexip for building global hydrogen plants
- Hosted a R&D conference with the theme, "Creating Value"

- Appointed a new external auditor (KPMG LLP)
- Introduced a new helium recovery and recycle system for fiber optic manufacturers

science – skills that have evolved from our years as both a gases and a chemicals company. This change opens up new markets for performance solutions and advanced materials, not only in our traditional chemicals markets like coatings, adhesives and nonwovens, but also in several of our gases markets, such as electronics.

Our company has grown because of the operational excellence and innovation we have brought to our customers throughout the world. Not that innovation is anything new to Air Products – the company was founded on the innovative concept of on-site supply of industrial gases. But now, our growth strategy calls for innovation at a new level, innovation that is focused, strategic and differentiating. Since becoming chairman, one of my priorities has been to redirect our research and development (R&D) toward the areas with the most growth. Today, about 65% of our R&D is spent in growth areas. We have exciting projects under way that will accelerate our rate of new product introductions, significantly expand the markets for our existing products, and lead to exciting new business models. It's what we need to fuel our growth. And it's something to which I am very committed.

Work Process Improvement

This year we made significant inroads in the areas of process management, continuous improvement and knowledge management. And we've done some benchmark work in customer engagement and E-Business, including adopting technology, building infrastructure and implementing Internet-enabling processes for customers. But one of our largest process improvement efforts was the start of the SAP implementation in a new corporate

enterprise resource planning system. Phase 1 was successfully completed with our July "go-live" in Germany. We are on schedule and on budget for future rollouts, with corporatewide implementation expected in mid-2005.

SAP has become a standard for business. It's a tool that fits with our one-company attitude. And it will provide significant benefits to our operations. For example, we will have the ability to instantly recognize and react to customer orders, supplier activity, production results, and shipments and deliveries. SAP will compress the time required by the entire supply chain to sense and respond to constantly changing business conditions.

Change Management

Being the best company to work for is about connecting with our people to successfully manage and implement change throughout the organization. This year my management team and I spent a great deal of time with the senior leadership of the company, making sure that our vision and strategies were clearly communicated and internalized by employees. We also rolled out a global human resources system, integral with SAP, that requires all managers around the world to practice the same employee development process. This will ensure that we have the right people in the right jobs at the right time to help us execute on our strategy. We are looking at our entire talent pool, identifying leadership skills, and making important staffing and succession decisions to ensure a high-performance organization. In the words of Jim Collins in his book, *Good to Great*, we're "getting the right people on the bus" and in the right seats. Combined with our growth strategy and financial discipline, the rest falls into place.

In Closing

We are driving portfolio management, improving our processes and embracing change. We are investing in our four leading growth platforms. We know where the opportunities are, and we're pursuing them with confidence.

We also remain focused on our financial goals of 13 percent operating return on net assets (ORONA) and double-digit average earnings growth, while maintaining 15 percent or better return on equity (ROE). Despite ongoing economic uncertainty, our long-term business models, market diversity and geographical focus provide insulation against downturns. When the markets rebound, we have significant operating leverage from available capacity.

My leadership team and I remain committed to doing all we can to outperform for shareholders in both the short and long term. We are very proud of all of our employees worldwide who are delivering the Air Products difference through their understanding, integrity and passion. It is through their innovative spirit that we are being the best company to invest in, buy from and work for.



John P. Jones, III
Chairman, President, and Chief Executive Officer

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| <ul style="list-style-type: none"> Formed an alliance between Motorola and our DuPont Air Products NanoMaterials JV to market CMP slurries for semiconductor manufacturing Celebrated Innovation Week | <ul style="list-style-type: none"> Acquired a majority ownership in San Fu, the largest industrial gas company in Taiwan Had the best safety record in the category of total recordables among large-scale chemical manufacturers in the U.S. in 2001 | <ul style="list-style-type: none"> Certified the company's prior financial statements in compliance with the SEC and the Sarbanes-Oxley Act of 2002 Introduced a new Airflex® EF811 VAE emulsion to replace vinyl acrylic copolymers | <ul style="list-style-type: none"> Shipped 65th LNG heat exchanger to Qatar Kicked off Air Products' Mentoring Program |
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June

July

August

September



B E I N G T H E B E S T

COMPANY TO



I N V E S T I N

Being the best is about identifying the areas where you can be great and focusing all of your energy and resources there. So what are we doing to outperform our competitors and the market and drive earnings growth and return on capital? On the next few pages, you'll read about some of our recent portfolio management initiatives to improve, change, divest or acquire businesses that position us with a more profitable and higher-growth mix. You'll discover how portfolio management is just one element of a larger, company-wide strategy, and how product and service innovation plays an important role in that strategy. You'll also learn about our commitment to our communities and the environment, and our unwavering focus on safety – all critical to our continued success as the world's only industrial gases and chemicals company.

Our people are regularly recognized for their commitment to their communities and their superior environmental, health and safety performance. David Swan, amine derivatives development manager at our Teesside, U.K. chemicals plant, explains to Samantha Smith and Daniel Campbell, students at nearby Manor College of Technology (Hartlepool), how reed beds can help protect the environment by optimizing natural wastewater treatment processes.

Social Responsibility and Environmental Commitment

Social responsibility is an integral part of our corporate culture. We have a proud history of supporting the communities in which we operate and in which our employees and their families live and work. We know that our continued growth and success—indeed, our ability to remain a “best to invest in” company—are closely tied to the difference we make in our communities. We invest about \$5 million annually in grants to community organizations. Many of our employees serve in leadership positions with these organizations, and thousands more give their time and talent as part of a companywide employee volunteer effort.

In addition to these ongoing community initiatives, we continue to make significant progress in the areas of environmental, health and safety (EH&S) performance. Not only are we reducing our own emissions and wastes—working toward our ultimate goal of zero—but we're also helping our customers and others to do the same. For example, in March we received a prestigious Climate Protection Award from the Environmental Protection Agency. The award recognized our Electronics Technology Customer Applications (ETCA) group for their work assessing the impact of perfluorinated compounds (PFCs) on global warming. With more than a decade of research behind them, the ETCA team has worked closely with more than 20 global semiconductor manufacturing customers to optimize chamber cleaning processes using environmentally friendly process gases such as nitrogen trifluoride, or NF_3 .

Of course, as a global industrial gases and chemicals company, safety remains our #1 priority. We continue to live our belief that nothing is more important than safety – not production, not sales, not profits. According to data compiled by the American Chemistry Council (ACC), for the last four years we have had the best safety record in the category of total recordables among large-scale U.S. chemical manufacturers. And throughout the year, many of our individual manufacturing facilities also were honored by government and civic organizations for safety and environmental improvements.



In February we divested our U.S. packaged gas business—a business in which Air Products held a very small share of sales—to focus resources on our growth platforms. However, Air Products maintains a strong packaged gas business in other parts of the world, including Mexico, where we have the leading cylinder supply position through our partner, the Infra Group. Pictured: Carlos Flores Castillo (left), Barrientos plant manager, and Jesus Melendez Cañete, sterilizing mixes supervisor.

Allen Chien (right), president of San Fu, and Morris Ku, plant manager, stand at Air Products' Nanke facility at the Tainan Science-Based Industrial Park, which is slated to become the semiconductor and flat panel display manufacturing center for Taiwan. Air Products has brought onstream the world's largest ultrahigh-purity bulk gas production facility, a pipeline bulk gas distribution network and a related state-of-the-art electronics specialty materials center to serve customers in the park.

Acquisitions That Make Cents

Under our portfolio management initiative, we have defined growth and return targets for each of our businesses and for the corporation as a whole. We are restructuring some of these businesses, divesting others, and making strategic acquisitions in areas where we can enhance our leadership positions in key markets and geographies.

This year one of our biggest portfolio management activities was the July acquisition of an additional 22 percent (giving us a 70 percent interest) in San Fu Gas Company Ltd., the largest industrial gas company in Taiwan. For 15 years, we have built a powerful business with our Taiwanese partners, combining our global commercial and technical knowledge with their local expertise and strong customer relationships. Although San Fu is a full-service industrial gas company, more than 80 percent of its products and equipment serve customers in the strategic, high-growth electronics and chemical process industries (CPI) segments.

In electronics, San Fu has focused on the semiconductor and display markets. These two areas account for the majority of San Fu's sales to the industry, and both represent very good opportunities for rapid growth in the coming years. Taiwan has one of the largest concentrations of operational 300mm fabs, and San Fu is a major supplier to all of them. And many new display

applications are developing beyond laptop computers and flat screens, including applications like automobile navigation displays. Taiwan currently produces nearly 40 percent of the world's flat panels, and that number is expected to increase further over the next few years.

Exiting Our U.S. Packaged Gas Business: Focusing on Core Competencies and Leadership Positions

With that same commitment to portfolio management, we also continue to exit businesses that cannot be successfully restructured or are no longer integral to our operations.

The best example was the divestiture of our U.S. packaged gas (cylinder) business to Airgas, Inc. early in the calendar year. We had been in this business for a very long time — since the 1940s. Over the last few years, we put an optimization plan in place to restructure our operations and help us achieve better returns. However, it had become clear that the regionalized nature of the U.S. packaged gas business, coupled with the sheer volume of distributors serving the market, would prevent us from achieving an acceptable combination of profit growth and rate of return on investment in the long term. And as we looked at our other Gases businesses where we had already built leadership positions—including merchant/tonnage

supply, electronic materials, hydrogen for refineries, helium for MRI, and medical gases—we knew we needed to redirect our resources and focus on our core competencies.

But in other parts of the world, the packaged gas business has different marketplace dynamics, and we have invested many years building very successful positions in a number of countries. In fact, today we hold leading market positions in the Netherlands, Spain and Mexico; we have strong market positions in the U.K., Portugal and Taiwan; and we operate significant packaged gas businesses in other parts of Europe, Asia and Africa. Our cylinder sales outside the U.S. amount to about \$500 million, with gases and mixtures being used widely in the metal fabrication, laboratory and analytical, and drink-dispensing market segments. We continue to acquire businesses with large cylinder gas portfolios in these countries, extracting value and synergies by deploying differentiated products and a successful global business model.

Over the next decade, hydrogen fuel cell technology will become an important part of energy infrastructure – in industrial distributed power, small portable devices, domestic power and transportation. Here, Mark Wait (right), senior project engineer for our new hydrogen energy station in Las Vegas, Nevada, talks with Bob Golden, Department of Energy program director and project officer, about hydrogen's use as a safe and clean energy alternative.

Positioned to Serve Emerging Energy Markets

Industrial gases are used widely in energy markets, but changes going on in many of these markets have created significant growth opportunities for Air Products.

Of course, we have an established and growing business providing hydrogen to refiners to help them meet requirements for low-sulfur gasoline and diesel fuels. We are the global leader by a wide margin, and we're doing some great things to improve our customers' flexibility and profitability. You can read more about those efforts in the next section of this Report.

Another established and growing market is for liquefaction and shipping of natural gas, or LNG. We provide the liquefaction technology and heat exchangers for about 90 percent of the world's LNG capacity, supplying the needs of countries such as Japan, Korea and India. To date, we have manufactured and shipped 65 exchangers through our world-class Wilkes-Barre, Pennsylvania equipment manufacturing facility. And we anticipate that the market will continue to grow, as countries like China, and perhaps even the U.S., step up their demands.

Another opportunity includes global efforts to recover large volumes of stranded natural gas in remote locations around the world. In addition to producing LNG, natural gas can be converted to methanol, diesel fuel and other liquid products and then economically shipped to other countries. A good example of our ability to serve this market is our air separation project for Atlas, a joint venture between BP and Methanex Corporation in Trinidad. Our joint venture company will supply a large quantity of oxygen to this gas-to-methanol project under a long-term contract, and we will take part of the methanol production as feedstock for our global chemicals operations beginning in 2004.

In addition, as the world's largest supplier of merchant hydrogen today, we continue to work with many public, private and government organizations to develop and promote the commercialization of hydrogen as a fuel. Higher standards for clean air and a need for less dependence on foreign oil will continue to drive interest in hydrogen, particularly since it's renewable, abundant and efficient. For example, buses powered by Air Products' hydrogen already have served in normal transit service in several cities, not only carrying passengers, but also providing valuable operating data that will assist in further development and refinement. And beyond transportation, we are developing capabilities in other potential hydrogen fuel cell markets, including portable and stationary applications.



Technology Innovation: Focusing on Growth

Nearly two years ago, we formed a Corporate Development Office and a Growth Board to ensure that we would have the executive leadership, skills and resources to drive strategic planning and growth. The influence they have had on our R&D efforts has been significant. Today we are focused on three main areas: expanding our performance-based materials solutions; leveraging our excellence in process engineering, systems integration and operations; and developing new service offerings based on unique supply positions. In fiscal 2002, our R&D spending was about \$120 million, and more than 65 percent of those dollars were applied to strategic growth areas.

With our culture of innovation, we have already pioneered many technologies designed to meet future market demands. For example, our new helium recovery and recycle unit helps fiber optic manufacturers conserve a precious resource and achieve greater operational flexibility. We also have developed high-temperature, ceramic ion transport membranes, or ITMs. When combined with power production or used with syngas production, ITMs offer dramatic process and capital advantages that could revolutionize oxygen and syngas production for remote gas conversion, creating huge new markets.



We also continue our history of innovation in the electronics industry, working with a major semiconductor OEM to develop a spin-on material for future generations of devices. The development of the MesoELK™ product draws on our polymer science, surfactant expertise, zeolite chemistry and coatings technology. This extreme low-k dielectric material will help the industry address broader processing challenges as spin-on technologies begin to take hold in several years. In our performance chemicals area, our new EnviroGem® specialty surfactants provide enhanced properties in our traditional coatings, graphic arts and adhesives markets. They also have properties that will allow us to penetrate new markets in oil and gas development and precision cleaning.

The bottom line? Our technology planning process is focused on opportunities where we have the greatest potential for success.

More than 65 percent of our fiscal 2002 R&D budget was applied to strategic growth areas. That includes work undertaken by people like Tara Kresge, research technician in our polymer emulsions coatings lab, who tests our Airflex® EF811 VAE emulsion product in high-performance and environmentally friendly paint formulations.

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We can never lose our focus on customers. Our reputation for quality and our record of success have been built on our ability to develop strong commercial relationships. And in many cases, our products, services and people have become essential to our customers' operations. So being the "best to buy from" means we always have to go the extra mile, not only to understand our customers' businesses and markets, but also to actively participate in them. It means continuously anticipating what customers' markets will demand, both in the short and long term, and providing innovative technologies and services that deliver a competitive edge and help improve performance. For us, it's about sharing knowledge and understanding for mutual benefit.

Air Products has become a global leader in meeting the needs of the electronics industry by supplying consumable products that surround the process tool and by building lasting relationships with customers virtually everywhere in the world. Pictured here: Rod Steigerwalt, Class 10 cleanroom welder in our Semiconductor Equipment Manufacturing Center (Allentown, Pennsylvania).

Electronic Materials Solutions: We're All Over It

When it comes to supplying our Electronics customers' processing needs, we have them covered. That's because we supply a complete range of high-purity industrial and specialty gases and chemicals, as well as equipment and service solutions to surround the process tool. Our superior R&D, coupled with our operational excellence and understanding of product life cycles and process integration issues, has made us the one-stop shop for manufacturers of chips, flat panel displays and other devices.



We all know it was a very tough year for the electronics industry. But we continued to help our customers weather the downturn by optimizing their existing processes and by unveiling new specialty material innovations. The best examples? Our low-k dielectric precursors and chemical mechanical planarization (CMP) slurries.

As the semiconductor industry continues to strive for increased device speed and performance, each succeeding generation of chip requires these specialty materials – and more of them. Our gaseous and liquid products for low-k processes, including chemical vapor deposition and spin-on materials, are helping customers fulfill their technology roadmaps. In fact, we won supply of low-k materials at 16 of 19 fabs we bid on this year. And we expanded our low-k portfolio even further by forming a long-term agreement with Dow Corning to market and distribute three new liquid CVD precursors. The agreement builds on an existing alliance with Dow Corning to globally distribute their Z3MS™ CVD precursor (trimethylsilane).

In CMP, through our successful joint venture with DuPont (called DuPont Air Products NanoMaterials L.L.C.), we continued to create competitive advantage for our customers by combining our materials development and handling strengths with DuPont's colloidal silica knowledge and manufacturing capability. Only

a handful of suppliers have the technology expertise to serve this growing \$350 million annual market, and we are providing differentiation through a tailored portfolio of CMP slurries and a strong global supply chain. This year the joint venture introduced a new tungsten slurry and signed an agreement with Motorola to collaborate on an advanced copper CMP formulation.

Chemicals: A Performance Portfolio

When it comes to developing innovative product solutions for our customers, it's all about performance. In 2002, we introduced several new performance chemical offerings that are delivering significant productivity and environmental benefits.

Take our new Airflex® EF811 emulsion polymer, developed through Air Products Polymers, L.P., our joint venture with Wacker-Chemie GmbH. Vinyl acetate-ethylene, or VAEs, traditionally have been considered superior performers over vinyl acrylic copolymers in paint formulations. However, up until now they were also more expensive to formulate. Airflex EF811 is a breakthrough for the coatings industry because it provides all of the performance attributes our paint-formulating customers look for in a VAE, but at a cost comparable to vinyl acrylics. And since it only requires minimal amounts of solvent, Airflex EF811 also helps formulators meet tightening environmental restrictions for volatile organic compounds.

This year we also introduced our new family of EnviroGem AE surfactants, readily biodegradable, low-foam wetting agents that are prepared using clean process technology. They are great examples of "green chemistry" for a variety of our customers' applications, including coatings, graphic arts, adhesives, oil and gas development, and precision, institutional and industrial cleaning.

These innovations are based on our culture of anticipating customers' needs and developing breakthrough solutions that make Air Products their first choice.

The automotive coatings industry has a real need for biodegradable surfactants that help reduce defects and provide a smooth finish. Here, Kelly Boyer, global marketing manager for our Specialty Additives business, and Bob Matheson, technical manager for strategic technology, DuPont Performance Coatings (Troy, Michigan), talk about the benefits of Air Products' EnviroGem Surfactants based on Gemini technology.



Helping Refiners Navigate the Road to Clean Fuels

The global refining industry is facing challenging times. Under the constraints of producing cleaner fuels and reconfiguring processes with limited capital resources, many global refiners are turning to Air Products to help them increase productivity and address environmental legislation requirements. In fact, over the last year many of our refining customers started planning for the investments they will be required to make between 2004 and 2008 to meet the next wave of clean fuels regulations.

That's where our innovative hydrogen outsourcing model comes into play. Today, 80 percent of our global hydrogen capacity—the major component in our HyCO product line—is supplied to petroleum refineries via pipelines to help produce high-quality gasoline and diesel fuels with lower

Ray Groom, senior operator, works at our steam methane reformer facility in Port Arthur, Texas, which supplies Premcor Refining and other pipeline customers with hydrogen. Premcor's hydrocracker is a key element of its overall upgrade of heavy crude and is critical to its profitability.

sulfur content. As the global HyCO supply leader, we are more than two times the size of our next closest competitor, with more than 1.3 billion standard cubic feet per day of capacity now online. We also have aggregated several refiners' individual hydrogen needs into large capacity sources along our pipeline systems in the U.S. Texas Gulf Coast, Louisiana-Mississippi River Corridor, Los Angeles Basin and the Europoort Complex near Rotterdam, the Netherlands.

But it's really our operational excellence that makes the difference. The reliability of our supply and the process optimization solutions we bring result in improved productivity and lowered costs.

Of course, in order to provide this reliability, we have to deliver world-class technology. That's why, for nearly 10 years, we have worked with the Technip-Coflexip Group to build hydrogen plants that can generate anywhere between one million and one hundred million standard cubic feet per day of hydrogen supply. With the recent extension of our companies' successful alliance, we will be positioned to provide another decade of flexibility and superior hydrogen delivery systems to our customers.

Healthcare: Bringing Caring and Commitment

When it comes to caring for people's health, we bring understanding, integrity and passion to the job. No matter where in the world we operate, we are offering solutions that meet the needs and expectations of patients and referral services – with quality, safety and reliability.

For example, we supply breathing oxygen and other medical gases to hospitals in more than 30 countries, backed by a long heritage of excellence and unsurpassed regulatory compliance. We also have a more than 50 percent global share in the supply of liquid helium and related services for magnetic resonance imaging (MRI) – one of the most powerful noninvasive techniques in diagnostic clinical medicine and biomedical research. Performing more than 40,000 MRI fills annually, we serve nearly 3,500 customer sites in the U.S. and nearly 6,000 sites worldwide.

But perhaps the greatest opportunity for the hands-on "patient connection" is through our homecare services. We first placed a cylinder of oxygen in a patient's home about 50 years ago, and since then, we have built a global homecare business through the acquisition of quality companies with strong local market presence. By providing innovative product and service solutions that have met and exceeded patients' expectations, we have grown to become the #1 homecare provider in Spain, Portugal and Mexico, and the #2 provider across Europe. With the October 1 acquisition of American

Air Products has served the homecare business for 50 years, with a culture of safety and compliance and a reputation for reliability, innovation and quality. We bring caring and commitment to meet the needs of patients and caregivers who are increasingly demanding cutting edge technology and treatment solutions outside the hospital setting.

Homecare Supply and its family of companies—marking our entry into the U.S. homecare market—we now serve nearly 300,000 patients in 14 countries.

We're proud of the important role we play in helping medical communities around the world save lives. That's our commitment – it's at the heart of our relationships with all those in the healthcare industry who place their trust in us.

Easy E-Business

Since its founding in 1999, our E-Business team has helped us become a benchmark Internet leader by rapidly adopting technology, building infrastructure and implementing Internet-enabling processes for customers. Central to the team's plans has been the rollout of the Air Products Direct (APDirectSM) extranet – a secure and convenient self-service portal that makes transactions easy. Customers can place orders online at their convenience, enter repeat orders quickly via personalized templates, review status and track deliveries while in transit, and access their recent purchase histories.

Since its launch, customers have placed over 11,000 product orders, downloaded hundreds of Certificates of Analysis per month, and are requesting almost one-third of all chemical product samples through the APDirect extranet. The portal is now multilingual, with existing customers in North America and Europe able to select from one of eight languages.



But E-Business isn't just about making it easy to order products and providing access to helpful information. It's also about collaboration and engaging customers in a powerful electronic dialogue. That's why we established Project Workspace, which uses eRoom technology to provide a secure, Internet-based tool that allows our employees to collaborate in an online workspace with customers and other external partners. Documents can be exchanged easily, and people can brainstorm, resolve issues and work efficiently across time and geographic boundaries.

This year the team also focused heavily on developing business-to-business (B2B) electronic connections and other collaborative relationships with external ventures and our suppliers. For example, our position in Elemica and active participation in RosettaNet allow seamless exchange of B2B electronic transactional documents with suppliers, customers and marketplaces across the global chemical and electronics industries. And by going live with Ariba® Enterprise Sourcing™, we have standardized and improved our online sourcing processes. More than 1,700 active users in the U.S. and U.K. have access to Ariba Buyer, and we are realizing several million dollars in annual savings by increasing the volume of purchased goods from preferred suppliers.

Nora Esquieres, market manager for Polyurethane Intermediates (PUI), and Jeff Yockers, knowledge management process coach, were responsible for setting up an eRoom with Dow Chemical Company (Freeport, Texas), one of our largest PUI customers. We use the technology to exchange information with Dow on a regular basis, including volume reports, rolling forecasts and feedback needed for our ISO certification and compliance.



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Air Products people make the difference. That's a statement backed by years of customer and shareholder research and a proud history of strong relationships built on understanding, integrity and passion. In this section you'll learn how our talented and results-oriented employees are the driving force behind the company's transition from good to great. It's a process being catapulted by communication, innovation, leadership, diversity, business process improvements and a never-ending focus on safety, health and the environment.

Today, more than 25% of our global Information Technology (IT) employees are benefiting from alternative work arrangements or job share assignments. Aji George, senior technical IT specialist, is an international team lead, serving as a liaison between nine IT personnel in other countries and IT engineering personnel in the U.S.

Delivering Through Diversity

The first requirement for innovation is to get as many ideas as possible on the table for consideration. A culture that encourages diverse ideas often can identify a creative solution that might otherwise have been overlooked.

But to have a pool of diverse ideas, there must be a diverse employee population that is empowered to bring them forth.

If we reflect on the past decade, we have to be honest with ourselves and admit that our corporate diversity efforts have not been completely successful. We sometimes have been



too focused on executing a particular compliance-related initiative or program, sacrificing a more holistic approach for a short-term win. But today we have more commitment from senior leadership and greater involvement of all employees, and we are approaching diversity as a cultural transition, using the lessons we've learned about managing change wherever we can.

And we have made progress. To date, more than 10,000 employees throughout the U.S., U.K., Spain, Portugal, Denmark and Brazil have undergone formal diversity training. The training continues for employees in Mexico, Germany and the Far East. We also have aggressively filled positions across geographic boundaries, increasing the number of women and minorities in management positions. With sponsorship from the company's Executive Forum for Diversity, four employee networks (Ethnically Diverse Employees, Gay and Lesbian Empowered Employees, Parents' Association, and Women in Business) have improved understanding and created forums for new ideas to be expressed and considered. Late in the year, we also launched a global mentoring program, starting with about 150 employee pairs who will provide input and help tailor the program so that it can be rolled out more broadly.

Reinventing Innovation

If we're going to drive earnings growth and return on capital for our shareholders, innovation is key. Part of being an innovative, "best to work for" company means that employees have the freedom to effectively exchange information and the resources to stretch their creativity. Without that freedom, they can't transform new ideas into business success. Enter the Innovation Roundtable.

Kicking off in January of last year, the Innovation Roundtable is a grass-roots "knowledge network" that is helping people reach beyond their functional and geographic boundaries to leverage information, capabilities and ideas. It is by far the largest roundtable within Air Products, with approximately 250 members working to improve the overall innovation process and commercialization success rate by providing closer links among R&D organizations, business areas and new product development process experts. Every three to six weeks, members meet to hear presentations and discuss a particular innovation-related topic. They operate in an open and respectful environment where each participant can discuss best practices and learn from the successes and failures of colleagues.

Out of the Innovation Roundtable have sprung a number of other grass-roots organizations — groups that are working to move beyond brainstorming and discussion to translate ideas with great potential into action. One of these is the Air Products Innovation Action Council, a group with origins in a solution collaboration workshop that spawned an entire week of innovation-related activities this past June. There are also Knowledge Creation and Intelligence Communities of Practice, both focused on harvesting knowledge to find better and faster solutions to problems. And there are informal Communities of Interest and formal

The Innovation Roundtable—the largest roundtable within Air Products—and a number of other grass-roots innovation organizations are enabling our people to reach beyond their functional and geographic boundaries to leverage information and ideas across the organization. Innovation Roundtable members (from left to right): Dani Cao, Merrill Brenner, Nancy Easterbrook, Vince Grassi and Mary Kay Tripodi.

Centers of Excellence, many with charters that have goals tied to the success of the company's overall innovation process. Taken as a whole, these diverse groups are helping to build a true community learning model.

People . . . Passion . . . Performance

More than 500 leaders throughout the company now participate in a comprehensive Leadership Education curriculum that provides them with the opportunity to assess their leadership styles, strengths and needs for development. They develop skills needed to empower people to connect the work they do to one or more of Air Products' four strategic initiatives: growth, portfolio management, work process and change. And because change issues are so critical, there is a dedicated module to help leaders build strategies to lead successful change. Participants also focus on bringing together high-performance teams to maximize diversity and collaboration – vital skills in an increasingly performance-driven business world.

Because we know leadership skills and related training are important for employees at all levels throughout the organization, we've begun to cascade the principles of the Leadership Education curriculum. For example, just this past year, we began a new leadership initiative known as the Asian Management Development Program (AMDP) in an effort to develop self-awareness

and team-building skills in the next level of management. This program was developed by our Asian team specifically for our Asian employees. To date over 200 Asian managers have participated in training sessions, and over the next 12 months, more than 300 more will undergo Leadership Education and AMDP training – all conducted in their native languages. In Europe we continue to run a "Building Our Future Through Leadership Skills" program for middle managers, with more than 250 individuals participating over the last five years. And in the coming fiscal year, we are planning to pilot a new set of Leadership College sessions for managers and supervisors.

These training efforts are rooted in our belief that all of our people should be evaluated based on total performance, not just financial or operating performance. That's why, under our global Performance Enhancement (PE) Process, our employees are being assessed not only on the results they achieved ("the what") but also the way those results were achieved ("the how"). For example, as employees complete their performance appraisals at the end of the year, they are asked to explain not only how their activities met department and company goals, but also how teamwork, communication, personal initiative, leadership, integrity and respect for others helped them reach those goals.

Featuring ads showcasing Air Products employees, seven trailers in our North American fleet became our first-ever rolling billboards. Here, driver John Robinson (left), one of our LaPorte, Texas million-mile drivers, talks with Paul Hesch, driver supervisor, in front of a branded trailer. For more information about the company's global brand program, visit www.airproducts.com/tellmemore.



Our People, Our Brand

Our people, through their understanding, integrity and passion, are the essence of our global brand that differentiates us in the marketplace. That's why it's only fitting that our communication vehicles—like our corporate and business advertisements and this Annual Report—focus on the accomplishments of our people as well as the benefits of our products, equipment and services.

This past year we did some innovative things to spotlight the unique knowledge and commitment our people bring. In a radical departure from our traditional marketing communications, we gave our brand wheels. We began placing our “tell me more” tagline (which signifies shared understanding for mutual benefit) together with our company Web address (www.airproducts.com) on all 500 cryogenic trailers in our North American fleet – vehicles that safely travel more than 50 million miles per year.

To pilot an innovative form of advertising, seven new trailers became our first-ever rolling billboards, featuring ads showcasing Air Products employees who have provided special services, solved a problem or contributed to product development. Our trucks long have been one of the most recognized symbols of our company. So the bigger-than-life ads are yet another way to highlight the ingenuity of our people while increasing public awareness of Air Products' products. Over the next year, we plan to add new corporate and business advertisements to more trailers in our fleet.



Milan Patel, manager, standard systems and assurance, led an effort to redraft and condense the company's global safety standards. Here, he works with Christina Fry, principal European EH&S engineer for our Clayton, U.K. epoxy additives plant, which was recognized this year by the Royal Society for the Prevention of Accidents and The Chemical Industries Association for outstanding safety performance.

Safety and Security: Our Top Priorities

The world changed on September 11, 2001. The clock was reset from a security standpoint. And since that fateful day, Air Products has been working even more closely with government agencies, local and regional law enforcement officials and other member companies of the ACC and the Compressed Gas Association, focusing on counterterrorism issues to ensure that chemical facilities are adequately designed and protected in the event of a terrorist attack.

In fact, several Air Products teams, under the leadership of our director of process safety integrity in EH&S, have worked together to develop a new Security Vulnerability Assessment (SVA) tool that has been used to evaluate our global facilities. The SVA tool also has been certified as an ACC-approved technique that meets all of the organization's rigorous security and process safety assessment requirements. In an effort to share that knowledge, the ACC has posted the tool on its Web site, and we are responding to requests for help from other chemical companies looking to assess the security of their facilities and implement improvements.

But even with all of this new activity, our strict focus on safety remains a vital, underlying element of the Air Products culture. And that focus is global, as evidenced by a recently completed effort to redraft and condense more than 1,000 of the company's EH&S standards into 120 global procedures. Many of the original standards were plant-specific, business-specific or region-specific, a situation not consistent with our one-company approach. So our global Gases and Chemicals line organizations and EH&S staff worked together on the redrafting effort. And following September 11, the teams decided to add an additional 15 security-specific standards to the list. Today, all 135 standards are being deployed globally using a newly developed process linked to Air Products' Basic Safety Process (BSP). BSP is a structured management system that personalizes safety among all of our people worldwide and promotes incident prevention by requiring every employee to use accident predictive techniques to correct unsafe situations.

In combination with ongoing safety and security training for our people, these initiatives are great examples of how we're stepping up to "be the best" on the crucial issues of workplace safety and the environmental integrity of our plants.

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Chairman, President, and Chief Executive Officer.
Director of the company since 1998.

Mario L. Baeza, age 51

Chairman and Chief Executive Officer of
TCW/Latin America Partners, L.L.C.
Director of the company since 1999.

L. Paul Bremer III, age 61

Chairman and Chief Executive Officer of Marsh Crisis
Consulting Company. Director of the company since
1993.

Michael J. Donahue, age 44

Group Executive Vice President and Chief Operating
Officer of BearingPoint, Inc. Director of the company
since 2001.

Ursula F. Fairbairn, age 59

Executive Vice President, Human Resources and
Quality of American Express Company. Director of the
company since 1998.

Edward E. Hagenlocker, age 63

Former Vice Chairman of Ford Motor Company and
former Chairman of Visteon Automotive Systems.
Director of the company since 1997.

James F. Hardyman, age 68

Retired Chairman and Chief Executive Officer of
Textron, Inc. Director of the company since 1997.

Terry R. Lautenbach, age 64

Former Senior Vice President of International
Business Machines Corporation. Director of the
company since 1991.

Terrence Murray, age 63

Chairman of FleetBoston Financial Corporation.
Director of the company since 2002.

Charles H. Noski, age 50

Vice Chairman and Director of AT&T. Director of the
company since 2000.

Paula G. Rosput, age 46

Chairman, Director, President, and Chief Executive
Officer of AGL Resources Inc. Director of the
company since 2001.

Lawrason D. Thomas, age 68

Former Vice Chairman of Amoco Corporation.
Director of the company since 1994.

Corporate Executive Committee

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Chairman, President, and Chief Executive Officer

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Vice President—Human Resources

W. Douglas Brown

Vice President, General Counsel, and Secretary

Andrew E. Cummins

Group Vice President—Chemicals

Robert E. Gadomski

Executive Vice President—Gases and Equipment

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Group Vice President—Engineered Systems
and Development

John R. Owings

Vice President and Chief Financial Officer



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