



MICROSOFT BUSINESS SOLUTIONS FOR **Manufacturing—Axapta**



Microsoft[®]
*Business
Solutions*

Why Microsoft® Business Solutions – Axapta®?

Microsoft Axapta is a scalable and global Enterprise Resource Planning (ERP) solution that can be tailored to support the exact needs of your manufacturing business, while delivering a low total cost of ownership (TCO).

The solution has broad and advanced manufacturing functionality that supports many discrete and batch process manufacturing modes and is particularly well-suited to manufacturers operating in a mixed-mode environment. Thousands of customers worldwide, including many manufacturers, already use Microsoft Axapta to optimize their businesses.

To succeed in today's challenging manufacturing industry, you need an ERP system that helps you take advantage of opportunities in a changing market place, find new sources of revenue, boost

employee productivity and keep your customers happy while improving the bottom line. Microsoft Axapta delivers this through its flexibility, ease of use, connectivity, rapid development toolkit, unique architecture and advanced functionality covering manufacturing, Supply Chain Management (SCM), Customer Relationship Management (CRM), financial management, project management, Human Resource Management (HRM), business analysis and e-business.

Unique flexibility

Microsoft Axapta enables you to run your manufacturing business the way you want, and to quickly make changes so that you can optimize your manufacturing resources for increased profitability.

With Microsoft Axapta, there are a number of unique ways to cost-effectively tailor your solution to meet your exact needs. The powerful development environment of Microsoft Axapta enables fast customization of the solution to support unique or specialized processes.

This is one way that Axapta enables you to take advantage of change!

You can have your Microsoft Certified Business Solutions Partner implement the robust functionality that Microsoft Axapta provides “out of the box.” Or you can work with your partner to tailor the solution to match each of your business processes in detail. Either way, Microsoft Axapta can provide the functionality you need at a low TCO.

All in one

Microsoft Axapta is an all-in-one solution. You get all the functionality with one database, one development environment, one programming language and one business logic for all clients. This simplifies implementation, maintenance and upgrading, and contributes to the solution's low TCO. The exclusive Microsoft Axapta all-in-one architecture means that whenever the system is modified or new data is added, the updates appear throughout the system in real time, helping you react to changes faster.

Microsoft Axapta gives you the freedom to grow into new markets and expand your solution with new sites and new users as required. The multi-site, multi-language and multi-currency capabilities of Microsoft Axapta help manufacturing companies do business across borders easily, whether you have suppliers and subcontractors located in several countries, or your company is spread across sites located in different countries. Microsoft Axapta has advanced technology designed to scale easily to support your growing business. The three-tier architecture of Microsoft Axapta makes it easier for you to add more users and support new lines of business while maintaining your overall system performance.

With Microsoft Axapta, you can have an ERP system that integrates tightly with other Microsoft products including Microsoft Windows®, Microsoft Office, Microsoft SQL Server™, Microsoft Analysis Services, Microsoft Internet Information Server, and Microsoft BizTalk® Server. This helps you standardize your technology

platform across your company, to increase ease of use, minimize training and maintenance costs and improve employee productivity.

WORLD-CLASS SUPPORT

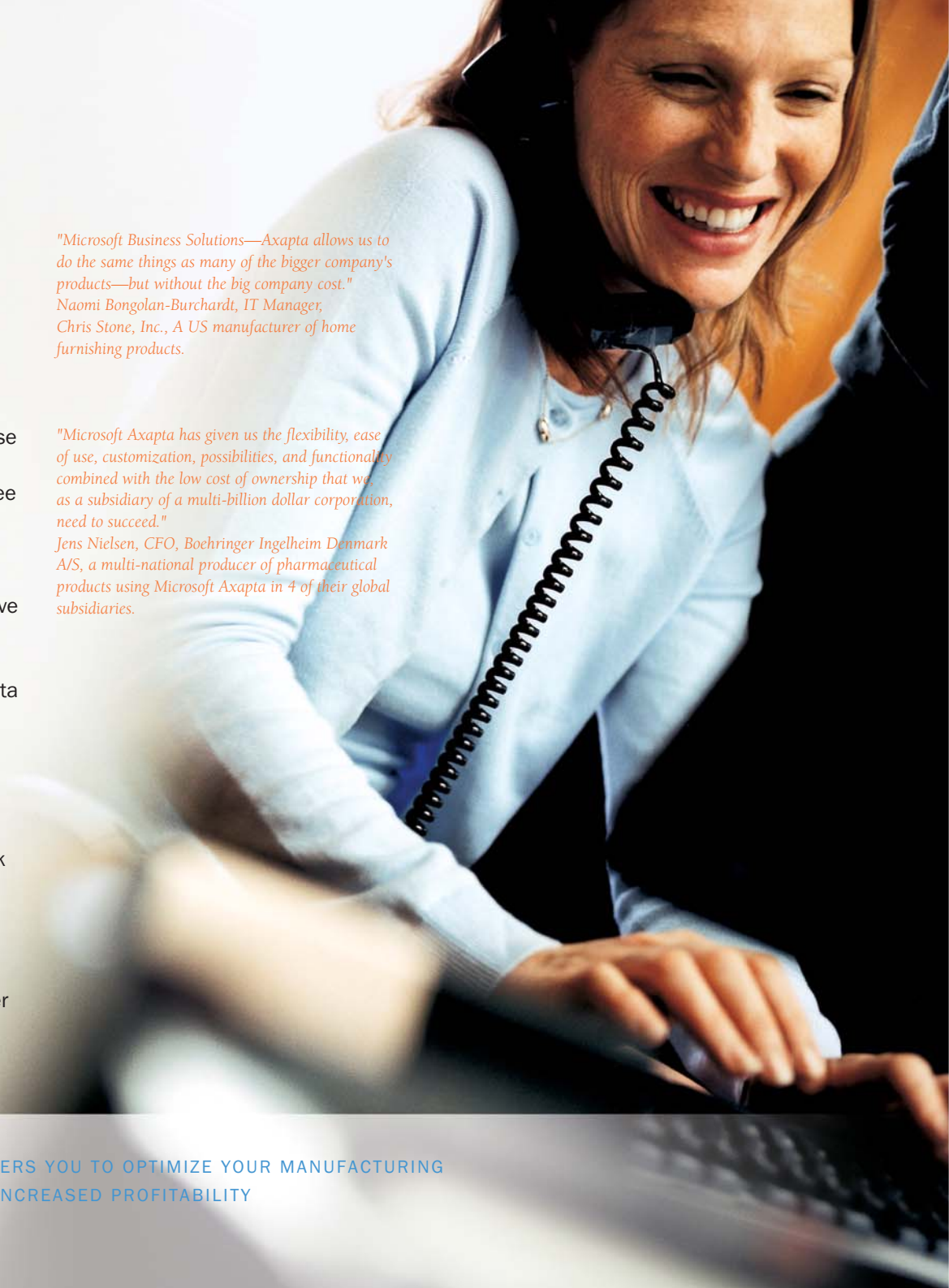
Recognized as one of the most responsive and innovative service teams in the industry, Microsoft Business Solutions backs your investment in Microsoft Axapta by working with your local Microsoft Certified Business Solutions Partner to offer remarkable training and support services.

You also have access to a global network of independent software vendors (ISVs) that can give you the support you need, and tailor Microsoft Axapta to your specific requirements. At Microsoft Business Solutions, serving the customer for a lifetime is more than a commitment—it's a mission.

*"Microsoft Business Solutions—Axapta allows us to do the same things as many of the bigger company's products—but without the big company cost."
Naomi Bongolan-Burchardt, IT Manager,
Chris Stone, Inc., A US manufacturer of home
furnishing products.*

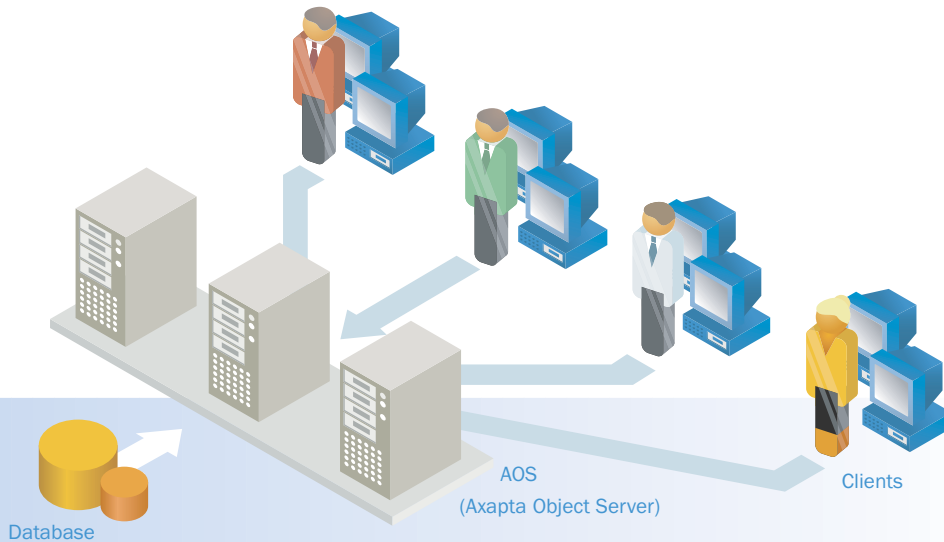
*"Microsoft Axapta has given us the flexibility, ease of use, customization, possibilities, and functionality combined with the low cost of ownership that we, as a subsidiary of a multi-billion dollar corporation, need to succeed."
Jens Nielsen, CFO, Boehringer Ingelheim Denmark
A/S, a multi-national producer of pharmaceutical
products using Microsoft Axapta in 4 of their global
subsidiaries.*

MICROSOFT AXAPTA EMPOWERS YOU TO OPTIMIZE YOUR MANUFACTURING PROCESSES AND SUPPLY CHAIN FOR INCREASED PROFITABILITY



Grow your business AND seize new opportunities USING THE UNIQUE

TECHNOLOGY AND ARCHITECTURE OF MICROSOFT AXAPTA



How the three-tier architecture of Microsoft Axapta supports your growing business

Microsoft Axapta gives you the option of having a two-tier or a three-tier set-up. Two tier means that the user has a complete Axapta installation and can access the database and the application directly. This works well in situations with a low number of users, and where all users are located close to the database. The Microsoft Axapta Object Server (AOS) provides extensive scalability for enterprises that want to harness the power of a distributed, three-tier system. The AOS is located between the client (the user) and the database which means that users access the AOS and do not need to access the database directly. AOS technology delivers a solution that minimizes server hardware costs and communication requirements and increases performance, stability and scalability. Three-tier installations can exist in both thin client or rich client environments. Two tier and three tier installations can co-

exist in the same installation, giving you flexibility to build your enterprise system to exactly suit your requirements. One of the strengths of three tier environments in Microsoft Axapta is that even though it's distributed, it's still managed and enhanced as one connected system. This means maximum value for your IT investment and reduced costs along the way.

MorphX® Development Environment:

The development environment used in Microsoft Axapta is called MorphX. MorphX is an Integrated Development Environment, or IDE, because it integrates several different functions such as designing, editing, compiling and debugging within one common environment. MorphX includes editors for the Microsoft Axapta client of Microsoft Windows, the Web and mobile devices, and it also uses IntelliMorph® technology and the X++® development language.

What makes Microsoft Axapta different is its combination of power and adaptability. You can choose the right mix of functionality for your business by choosing only the modules you need—unlike some other ERP vendors that force you to adapt your business processes to suit their systems.

That flexibility also includes upgrading and extending Microsoft Axapta with new capabilities, as your business expands and your needs become more complex. All the functionality is there in your initial Microsoft Axapta installation—just waiting to be turned on when you need it. Once activated, new functionality appears instantly throughout your solution, and your data is automatically synchronized to support the new features. With the unique layer technology of Microsoft Axapta, customizations are kept in separate upper layers, which leave the original application code unchanged and makes it easy and cost effective to perform upgrades.

The three-tier architecture gives greater performance with less hardware and bandwidth requirements and allows for easy addition of extra sites. With

Microsoft Axapta, you can operate multiple company offices from the same centralized database, helping you save on both hardware and operational costs per user while providing for easy sharing of information across company sites. The integrity of your data is maintained more easily because, with a single database, there is no need to synchronize databases which can dramatically reduce data corruption issues.

Multi-country capabilities let you operate across borders, languages and currencies with a solution that conforms to the legal and market requirements of 32 individual countries right out of the box. Run multiple languages, interchanging them in real-time. Your global employees can work in the language of their choice, and you can send trading documents to your suppliers and customers in their native language. Microsoft Axapta also calculates and updates different currency values automatically.

You can modify Microsoft Axapta quickly using customization tools to support new sourcing and production strategies, which gives you the power to react fast and

*"Thanks to Microsoft Axapta, the estimated cost calculation time decreased by ten times. We were able to make our planning process more precise and effective."
Konstantin Yurganov, IT Director, PNTZ,
one of the largest manufacturers of steel pipes in Europe.*

The Product Builder provides information on the price and delivery date for configured products



best matches your needs at any given time, including finite or infinite capacity and materials scheduling, backwards or forwards scheduling, detailed scheduling by hours and minutes or scheduling by day. The solution performs both finite capacity and finite materials scheduling simultaneously, giving you a more reliable production plan.

Use Microsoft Axapta to speed up planning by performing production and materials planning as often as you need to in a net change mode—daily, hourly or weekly. Plan more effectively by using multiple plans to perform 'what if' simulations to foresee the impact of different sales forecasts. Microsoft Axapta also supports multiple Bill of Material (BOM) and routing versions.

seize new opportunities. The MorphX development suite makes it easy to adapt the solution to changing requirements and new strategies. In addition, the powerful Microsoft Axapta IntelliMorph technology provides for easy customization of the user interface.

Microsoft Axapta enables you to extend your business processes to the Internet so you can reach out to your supply chain. The Internet is a natural part of the solution. The single Microsoft Axapta toolbox is all you need to Web-enable your business processes and take advantage of the opportunities the Internet offers.

*"I am always amazed how easily Microsoft Axapta can be adapted to our changing business requirements."
Dr. Alan Fischer, Head of IT, PSD Switzerland, CarboGen, part of Solutia Pharmaceutical Services Division (PSD), a Switzerland based pharmaceutical company.*

*"The thing I love most about Microsoft Axapta is the ease of changing fields. Our old system cost up to \$15,000 for minor modifications. With Microsoft Axapta, it takes me all of 30 seconds and it's free."
Rich Gearheart, IT Manager, CERAC Inc., a US based specialty manufacturer of inorganic materials and physical vapor deposition materials.*

OPERATIONAL FLEXIBILITY:

Take Advantage OF CHANGE

Outsource production to sub-contractors as the need arises by modeling sub-contractor capacity levels in the system in order to help free up capacity and keep your delivery promises to customers.

Microsoft Axapta helps you increase the speed and efficiency of your production and materials flow, using strong planning and scheduling tools with built-in flexibility. The flexible scheduling options help you minimize lead times and satisfy customer demand. You can get tight control over how your manufacturing resources are used, for optimum performance of your business processes.

With Microsoft Axapta Master Planning, you can select the scheduling method that

Win more orders and increase customer loyalty by offering customized products. With Microsoft Axapta Product Builder and Enterprise Portal, your customers can configure and order customized products over the Internet, using a standard Web browser. Your customers can also use the Web functionality of Microsoft Axapta to get up-to-date product, price and lead time information. The all-in-one architecture of the solution means that changes you make in your system are automatically replicated on your company Web site.

Insight

MANAGE YOUR MANUFACTURING RESOURCES FOR **increased profitability**

Microsoft Axapta gives you real-time insight into production schedules, capacity loadings, materials planning, shop floor activities and production costs, so that you can manage your manufacturing resources more effectively and increase profits.

You can optimize your production flow with the scheduling Gantt chart which provides a real-time, graphical overview of your production schedule and lets you make tactical scheduling changes using simple drag and drop functionality. You can also gain insight into the costs and production requirements for each component of the sales order with graphical representation of multi-level BOMs, and increase the efficiency of product design and BOM creation with the graphical BOM designer.

Microsoft Axapta helps you gain insight into shop floor operations, so that you can monitor performance and costs and implement changes when needed. Eliminate manual processes and increase shop floor efficiency with automated collection of employee time and attendance information, production data

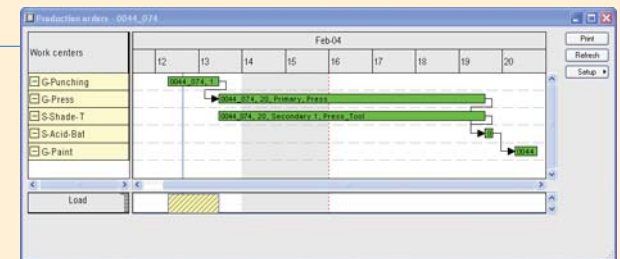
and job progress from the shop floor. By automatically generating payroll based on hours worked or jobs completed, the solution saves administration time and cost. Visibility into agreements and prices helps you speed up the sales and purchasing process and improve your customer service. You can generate purchase orders with Microsoft Axapta Master Planning, which automatically selects the vendor that offers the lowest price or the shortest lead time for a particular item.

Microsoft Axapta gives you detailed insight into your inventory and increased warehouse efficiency, helping you deliver to your customers on time. You can get a detailed overview of your inventory, and optimize purchasing strategies by classifying your inventory according to different dimensions. The solution helps you manage multiple warehouses effectively by setting them up with individual parameters to help ensure the right level of safety stock and service, as well as helping you increase warehouse efficiency by optimizing your picking routes and warehouse layout using aisles, racks, shelves and bins.

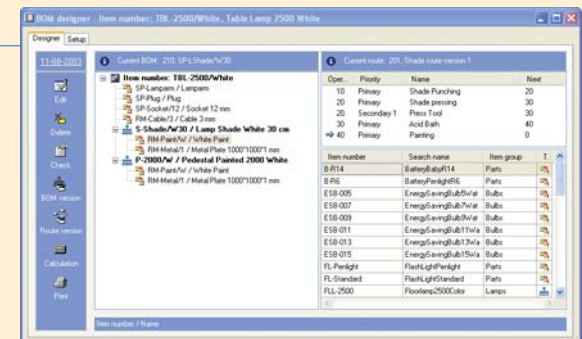
"With the help of Microsoft Axapta, we can now automatically control the movement of metal, round billet, and semi-finished items in the departments. This solution provides us with the complete information on state-of-the-art production orders."

Konstantin Yurganov, IT Director, PNTZ, one of the largest manufacturers of steel pipes in Europe.

Use the Gantt scheduling functionality to get insight into the production flow



With the Graphical BOM designer, you can create a BOM and get an overview of existing BOMs and routes in the one window



Connectivity THROUGHOUT THE SUPPLY CHAIN FOR INCREASED **efficiency** and **performance**

Invoice Customer account group	Name	Currency	Total misc. charges	Amount excl. misc. charges	Amount incl. misc. charges
4002 40	Light and Design	USD	0,00	4.537,50	4.537,50
4002 20	The Bright Idea	USD	0,00	1.512,45	1.512,45
4002 20	The Specialist	USD	0,00	302,50	302,50
4002 10	Furniture World	USD	0,00	2.937,00	2.937,00
4002 40	Office Design Inc.	USD	0,00	137,50	137,50
4002 30	The Warehouse	USD	0,00	470,00	470,00
4002 20	Habitat	USD	0,00	787,50	787,50
4012 20	The Lamp Shop	USD	0,00	297,00	297,00
4012 40	Georgia State University	USD	0,00	300.000,00	300.000,00
4022 70	Inter Company	USD	0,00	0,00	0,00
Total customer turnover			0,00	311.181,45	311.181,45

With the Microsoft Axapta Enterprise Portal, your customers, suppliers and employees can get the online information they need to efficiently do business with you

Delivering deep, real-time connectivity across your business is one of the key advantages of Microsoft Axapta. The solution connects sites, departments and individual processes inside your company and extends that connectivity to your supply chain partners.

With Microsoft Axapta, you can create and update sales orders and purchase orders across your locations in real time, minimize your stockholding costs by making stock-on-hand enquiries in all subsidiaries, and source raw materials across locations. Consolidate transactions from across your locations into one account for centralized reporting.

The solution helps you maintain fast production and on-time customer deliveries through real-time information sharing between production, sales, finance, warehousing and purchasing. You can speed up order processing and deliver fast and accurate information on product availability, delivery times and prices to your customers, using consolidated information from warehouse, sales, purchasing and production. Microsoft Axapta also provides both available-to-promise and capable-to-promise functionality.

Save time and increase production efficiency with automatic posting of material consumption, work in progress and finished production costs directly into the financial general ledger. And, respond quickly to demand changes by including the probability of winning quotes from CRM in forecast scheduling.

Microsoft Axapta uses the Internet to help you connect with your suppliers and customers. Microsoft Axapta Commerce Gateway helps you reduce your transaction costs and makes it easier for supply chain partners to do business with you through automatic, electronic exchange of trading documents. And Microsoft Axapta Enterprise Portal lets your customers, suppliers and business partners place orders and receive on-line information through a Web portal custom-designed for their needs. Enterprise Portal not only empowers your customers, it empowers you! You can manage the visibility a customer or vendor has into your system without expensive Active Server Pages (ASP) programming.

"The straightforward data structure of Microsoft Axapta and the simple interfaces to the Microsoft Office® products have allowed us to quickly and reliably create data analyses. This enables our business leaders to quickly make fact-based decisions about our rapidly changing business environment."

Dr. Alan Fischer, Head of IT, PSD Switzerland, CarboGen, part of Solutia Pharmaceutical Services Division (PSD), a Switzerland based pharmaceutical company.

"Microsoft Axapta became the clear-cut winner. When the results were tallied, the functionality of Microsoft Axapta won hands-down."

Rich Gearheart, IT Manager, CERAC Inc., a US based specialty manufacturer of inorganic materials and physical vapor deposition materials.

“Microsoft Axapta has among the strongest master planning functionalities you’ll ever see. It has eight different time frames built in, allowing you to forecast three to five years ahead and create a master schedule that typically looks one to six months ahead. You can specify exactly how you want to run your business, both from an inventory and a manufacturing perspective.”

Mark V. Melfi III, Vice President, Southfield Packaging,
a US based contract packaging company

Microsoft Axapta offers broad and advanced manufacturing functionality that connects with other functional areas of the solution to help you optimize your manufacturing resources and supply chain for improved results.

AXAPTA MANUFACTURING Functionality



Microsoft Axapta is a total, all-in-one solution to cover all processes in your manufacturing organization—not just manufacturing-centered functionality. The functionality of Microsoft Axapta is grouped into several different modules, most of which can be licensed individually or in functional series. You can choose only the functionality you need, and can easily upgrade later by adding modules.

*"We are just as excited about what Microsoft Axapta has in the financials as we are about its manufacturing components."
Scott Norling, MIS Director,
Willmar Poultry Company, one of the largest poultry producers in the United States.*

Microsoft Axapta Key Features

MANUFACTURING

- MRP/II-compliant supply and demand planning
- Finite and infinite capacity and materials planning
- Job scheduling and sequencing
- Resource management
- Shop floor management
- Work order management with job costing
- Product configuration
- Graphical bill of materials designer with version control

DISTRIBUTION

- Multi-site warehouse management
- Inventory management with dimensions
- Order handling with trade agreements
- Order promising
- Item and lot number reservation and tracking

SUPPLY CHAIN MANAGEMENT

- Demand forecasting
- Intercompany trade
- Procurement management
- Partner self-service Web sites
- Performance monitoring
- Electronic information exchange

PROJECT MANAGEMENT

- Project types and hierarchies
- Project finance and invoicing
- Consultant self-service Web sites

FINANCIAL MANAGEMENT

- Financial management with dimensions
- Intercompany accounting and consolidation
- Complete audit trail

CUSTOMER RELATIONSHIP MANAGEMENT

- Sales force and marketing automation
- Telemarketing and questionnaires
- Sales management
- Customer self-service Web sites
- Computer telephone integration
- Document management

HUMAN RESOURCE MANAGEMENT

- Organizational charts and employee registration
- Skills mapping and recruitment
- Employee self-service Web sites
- Business process management

BUSINESS ANALYSIS

- Designer for multidimensional data cubes
- Integration with Microsoft Analysis Services
- Analysis views through embedded Pivot Tables
- Balanced scorecard with key performance indicators

GLOBAL SOLUTION

- Supports local legal and accounting requirements
- Multiple languages
- Multiple currencies
- Local sales and support

TECHNOLOGY

- One integrated and Web-enabled business logic
- Three-tier, scalable system architecture
- Highly customizable code with integrated development environment
- Conforms to all relevant technology standards and interfaces

System Requirements

At least one of the following requirements within each area must be met

CLIENTS

- Windows 98
- Windows NT 4.0
- Windows 2000
- Windows XP

SERVER PLATFORMS

- Windows 2000 Server
- Windows 2000 Adv. Server
- Windows NT 4.0
- Windows Server 2003 Std.
- Windows Server 2003 Enterprise

WEB SERVER

- Internet Information Server 5.x
- Internet Information Server 6.0 (from Axapta 3.0 SP2)

DATABASES

- Oracle 9i
- Microsoft SQL Server 2000

BROWSER

- Microsoft Internet Explorer 4.01
- Microsoft Internet Explorer 5.5
- Microsoft Internet Explorer 6.0

MICROSOFT OFFICE (only if needed)

- Microsoft Office 2000
- Microsoft Office XP



"Microsoft Axapta helps companies accelerate the speed they can do business, offering them a key competitive edge in today's complex, rapidly changing markets. And it enables business leaders to worry less about day-to-day financial transactions, so they can focus on the fast, informed decision-making that is crucial to meeting customer needs."

Bill Gates, Chairman and Chief Software Architect, Microsoft Corporation



About Microsoft Business Solutions

Microsoft Business Solutions, a division of Microsoft, offers a wide range of integrated, end-to-end business applications and services designed to help small, midmarket and corporate businesses become more connected with customers, employees, partners and suppliers. Microsoft Business Solutions' applications optimize strategic business processes across financial management, analytics, human resources management, project management, customer relationship management, field service management, supply chain management, e-commerce, manufacturing and retail management. The applications are designed to provide insight to help customers achieve business success. More information about Microsoft Business Solutions can be found at www.microsoft.com/BusinessSolutions.

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