

**TATA** TECHNOLOGIES



**BETTER FOR YOU**

**TATA** TECHNOLOGIES BETTER & BETTER™

**BETTER FOR  
YOUR CUSTOMERS**

# For us, 'the best' is never good enough.

Because nothing stays 'the best' forever. The fastest runner is always overtaken. The tallest building is always surpassed. The biggest ship is always superseded.

We believe there's a more worthwhile ambition than wanting – or claiming – to be 'the best'.

We are determined to get better and better because that's an unending ambition. And it makes us alert, innovative and self-critical.

We help our clients achieve better products for their customers – and better benefits for themselves. So every time we undertake a project, we continually ask ourselves hard questions. Can we do this more cost-effectively? Can we do this faster? Can we enhance the design? Can we improve on the performance? Can we increase the benefits for client and customer? And can we achieve all these advantages at the same time?

By asking such questions we find positive answers. And those answers are the foundation of our growing global reputation.

Tata Technologies: Better & Better™.



**\* Patrick McGoldrick**

Patrick McGoldrick holds a master's degree in Computer Science from Stanford University, USA and has completed the Harvard Business School Advanced Management Program. He spent 11 years at Lawrence Livermore National Laboratory in the USA before joining the Tata group in 1981. He is currently Chief Executive Officer of Tata Technologies.

“Helping people to create terrific products. That’s what motivates us.” \*

**\*\* Warren Harris**

Warren Harris holds an honors degree in Mechanical Engineering and is a Chartered Engineer. He started his career at Babcock Power before moving to INCAT in 1988 where he rose to become Chief Executive Officer in both the UK and the USA. Today he is President and COO of Tata Technologies.



“This organization is special. It does things that other organizations cannot do. It’s exciting. It’s diverse. It’s global. And it attracts better people.” \*\*

# Tata Technologies helps manufacturers to create better products that will benefit people. That's our business.

## How do we do it? By doing some things differently – and by doing everything **better**.

### Being different

We focus exclusively on projects that demand engineering skills and product-development IT. And that focus means that our engineers and software architects are always at the leading edge of every new development.

Companies that only have a hammer must make every business problem look like a nail. But our pragmatism and wide range of services mean that we can provide the solution that not only makes the most sense but also offers the greatest value. We can provide onshore services. Or introduce you to our offshore delivery centers. We can advise you regarding the most appropriate engineering software technology. And offer a full range of services to gain the maximum benefit from your chosen software. So – we do what it takes.

Also, we sell what we use and use what we sell. The quality of our engineering is built on our knowledge of product-development focused IT – and our technology solutions benefit from our wide knowledge of manufacturing domains.

Moreover, our advice and assistance is absolutely independent of both products and vendors.

### Being better

We work to be better in everything we do. And so we enable you to access more and better engineering resources, more and better experience and knowledge, and more and better product-development IT to ensure that you can achieve a complete solution to your design and manufacturing issues.

Of course we have skills and expertise in particular areas and geographies. But we also have the ability to bring together all aspects of our business to give you an appropriate balance of elements. We integrate this balance based on our engineering skills, common sense approach, global delivery and resources, knowledge and investment in design technology and profound understanding of the relationships and IT infrastructure that support product development.

That means we offer process and application consultancy, design engineering, software engineering, and IT and change management to manufacturers and suppliers in the automotive, aerospace, shipbuilding, fabrication, assembly, plant design, tooling and consumer goods industries.

### Gaining maximum value

Some clients choose to rely on our engineering skills. Or our offshore facilities. Or our design capabilities. Or our knowledge of IT systems in support of product development and manufacturing processes. Or any of a number of our other skills and resources.

But those clients who receive the maximum value from our services are those who access our whole portfolio of skills, experience and resources. Because we not only have those at our fingertips, but we can put them together in the most efficient and appropriate way – in any configuration or scale – to serve your needs precisely.

It's not just that the individual components we offer are better. It's that we can put them together in combination better than anyone else. And that makes us not only better – but unique.

# “We have the ability to create something for somebody that changes the world. That’s the thing that drives us.” \*

## Getting better all the time

Our origins lie with disparate organizations started in India, Europe and the USA over 20 years ago. Gradually the European and North American companies came together until in 1989 a single entity emerged – INCAT. Following growth and acquisition, that company firmly established itself in North America, Europe and Japan. And in 2004, INCAT was launched on the London Stock Exchange.

Tata Technologies started in Singapore in 1994 as a provider of specialized IT-enabled consulting, services and products to leading manufacturers. Establishing itself in the USA, UK and India, the company’s first major outsourcing contract was with Tata Motors. Then, in 2005, Tata Technologies acquired INCAT.

Today, the enlarged company serves the major automotive and aerospace OEMs and their suppliers. Its integrated workforce of 4,000 professionals in 14 countries, plus near-shore and offshore centers around the world, means offering service where you need it, when you need it. And at price points that make your products better: better for you and better for your customers.

Tata Technologies is active in North America, Europe, the Middle East and the Asia-Pacific region, and currently services all of the top ten aerospace original equipment manufacturers (OEMs) and all of the top ten automotive OEMs.

## The Tata group

We are part of the Tata group, one of India’s oldest, largest and most respected businesses. Founded by Jamsetji Tata in 1868, the group pioneered industries of national importance to India: steel, power, hospitality and airlines.

With revenues over US\$62.5 billion, the group today has 3.2 million shareholders, 96 operating companies in six continents and employs more than 350,000 people. It focuses on steel production, power generation, commercial and passenger vehicles, chemicals, hotels, textiles, consumer goods, consultancy, information technology and telecommunications.

Earning the trust and respect of millions of stakeholders around the world, the group and its enterprises have adhered to a rigorous set of business ethics and a strong commitment to corporate social responsibility for over 140 years.

## Tata Group: a world entity

- ✓ 96 operating companies
- ✓ 350,000 professionals
- ✓ Revenues over US\$62.5 billion

“This marketplace will be defined not just by organizations that have better processes and better technology; it is going to be defined by those organizations that have better people.” \*\*



**Paul Nokes: Director, Global Aerospace Practice**

Paul Nokes has qualifications from Bath Technical College and the University of Western Ontario. He has worked across the whole spectrum of the aerospace industry – both military and civil. He has been involved in concept design; the engineering of metallic and composite structures; landing gear; hydraulic, fuel and electrical systems; and interiors. He also has extensive experience in maintenance repair and overhaul, manufacturing processes and leading-edge IT technology.

As a design engineer with a close knowledge of offshoring, he is able to work with our clients to secure greater quality, enhanced delivery and to introduce new and better value to our clients.



**Ganesh Khedkar: Associate Vice President, Digital Manufacturing/ Plant Automation**

Based in Pune, India, Ganesh Khedkar is a graduate in Mechanical Engineering with an MBA in Industrial Management. In a long career with the Tata group, he was involved in establishing the powertrain machining facility for the Indica, India's first indigenous car from Tata Motors, and in optimizing the process to achieve substantial savings.

Ganesh also developed the Digital Manufacturing practice at Tata Technologies. Growing from two to 70 people, the team is exceptional in supporting the client by tackling real problems on the shop floor. Today he is particularly passionate about the ability of digital manufacturing to save time in execution, to reduce capital and operating costs, and to achieve operating efficiencies.



**Srinivasa Karlapati: Services Manager, Product Lifecycle Management (PLM)**

Srinivasa Karlapati is based in Novi, Michigan, USA. He is a graduate in Mechanical Engineering and a post-graduate in Mechanical Engineering Systems Design. His wide ranging responsibilities cross every industry sector and include technical business development, product lifecycle management (PLM) solution architecture and the management of PLM implementations.

For example, when an aerospace client needed to integrate engineering and the manufacturing bill of material by using PLM software solutions, Srinivasa designed the software solution and developed the methodologies to ensure a successful implementation. And when automotive clients wanted to manage their design, release and change processes in globally distributed environments, he was instrumental in creating the solutions and managing their implementation.



## Our people are outstanding

They have an extraordinary depth of knowledge and experience – both strategic and practical. And they have a profound commitment and passion about providing the best possible service to our clients.

Because of that, they not only do those things you'd expect but constantly seek ways to do things better. Here are just some of the highly talented and experienced people who make Tata Technologies stand out.



### **Aniruddha Kadkol: Project Manager, Manufacturing Automation and Control Systems (MACS)**

Aniruddha Kadkol works with clients in the Asia-Pacific region and is based in Pune, India. He has a degree in Mechanical Engineering.

Knowledge and experience meant that when a client with a legacy manufacturing plant wanted to update old machinery to make it perform as well as contemporary equipment, Aniruddha devised an affordable solution where new equipment was introduced only in critical areas.

And when a manufacturer needed to improvise a new cost-effective testing system for cutting tools, Aniruddha made it possible for them to accommodate a variety of products, and synchronize complex handling patterns together with automatic recognition of batch sizes. The client's needs were not only met, consistently and accurately, but also without using high-cost technology.



### **Rahul Shandilya: Associate Vice President, Enterprise Solutions Practice**

Based in Pune, India, Rahul Shandilya is a qualified engineer and has an MBA. He has worked extensively in IT-based business process consulting and IT strategy consulting.

He is currently responsible for ensuring that the solutions offered to worldwide clients not only offer the maximum possible value in terms of technology and process but that they are also affordable, scalable and easily absorbed into the client's organization. In servicing the strategic IT plans for a large Brownfield joint venture between two global automotive players, Rahul helped to create an appropriate technology vendor and investment model that cut the original budget and brought substantial savings across an eight year road map.



### **Kevin Fisher: Head of Delivery Operations**

Kevin Fisher has a degree in Mechanical and Production Engineering and over 30 years' experience in international engineering. As an innovator, he has secured – with clients – numerous vehicle patents.

Today he works to provide high level engineering quality and cost-savings to Tata Technologies' automotive clients around the world. He asserts that there are limitless opportunities for engineering innovation via global delivery and that with expert guidance, better engineering can provide enormous competitive advantages for international manufacturers. Kevin has a unique perspective on the profound business implications associated with full vehicle program development involving a blended onshore/offshore strategy.

# Engineering and Design

Tata Technologies offers a comprehensive Engineering and Design (E&D) capability. Our design engineers are chosen for their innovation, experience and design technology skills. And they are supported by applications engineers with extensive knowledge and experience in all phases of product development: simple and advanced.

Our engineers are experienced in all major systems and we provide continuous training updates. We also offer shared services in design and engineering at our worldwide delivery facilities.

As E&D requires a high degree of client intimacy, we have engineers working alongside our clients at their sites, supported by our near and offshore delivery centers working around the clock. There are currently over 4,000 of our engineers employed around the world – on both short- and long-term assignments. We leverage our global resources to provide engineering services wherever our clients need us to be.

And we provide the kind of local interface that gives you the hands-on interaction that builds trust. If that wasn't enough – we take it to the next level in product development by delivering ground-breaking advances in digital manufacturing, analysis and simulation, and embedded and electrical systems.

Tata Technologies is partnered with the best-in-class software providers – Dassault Systèmes, MSC Software, Siemens and Autodesk – to enable best-in-class engineering and design results. And the company has a strategic joint venture with Hindustan Aeronautics Limited for the design-and-build of aerostructures. This provides clients with access to new markets and also helps them to realize competitive gains in product development. Underpinning our E&D value to our clients is one-voice access to all of the Tata group companies, which you can leverage as your business requirements dictate.

## Global delivery

Tata Technologies has fine-tuned its ability to gather its global resources in combinations that reap the utmost benefit for our clients.

We can combine our scalable resources – both human and physical – with our proven technology and our accumulated lengthy experience to address any client requirement. And we can do it while providing the underlying assurance that all our efforts are underpinned by a robust reputation for thorough organization and first-class engineering.

At each client engagement, we balance our resources for maximum benefit. For example, we can adjust our offshore and onshore resources to meet your exact requirements in terms of collaboration, communication, costs, schedule and delivery.

And we take a balanced approach to achieving the efficient use of technology, including the appropriate use of product-development IT and all the components of PLM. With access to several thousand engineering and technology specialists, we can also provide the right level of qualifications, experience and skills to meet your exact requirements.

In addition, our global services delivery team is led by individuals with a robust background in engineering.

### We offer real-world education for:

- ✓ Dassault Systèmes
- ✓ Siemens PLM
- ✓ Autodesk(mechanicaldesignapplications)
- ✓ MSC Software

# Centers of excellence, research, development and delivery

## **Local and global: that's better and better**

Tata Technologies has extensive onshore resources and world-class offshore capabilities to help you build better products. We have Global Development Centers in Germany, India, Thailand, the UK and the USA, plus Centers of Excellence/Research and Development in India and the USA. We also have offices in Canada, China, France, Germany, India, Ireland, Japan, Korea, Mexico, the Netherlands, Singapore, UK and USA.

These facilities and their highly qualified personnel give us the flexibility to be wherever you want us to work. And with a roster of talented engineers and innovative professionals available around the globe, you can better meet your budgets and schedules. Our onshore engineering services enable you to handle sudden surges in development demand or can guide you in developing new products. By integrating our designers and engineers into your staff, you can develop better products in tighter timeframes.

## **Global engagement**

Our global services give you greater flexibility and let you determine the extent of the engagement and the resources required. This flexibility means that you can meet your geographical and budgetary challenges while retaining control over the processes and communications you need to achieve the results you want.

A leader in engineering services outsourcing, Tata Technologies has over 4,000 highly skilled professionals. All have access to our global facilities and design centers, as well as a varied menu of onshore and offshore services. As a result, your engineering and design can take place around the clock. Whatever the time zones or cities your work is located in – Coventry, Bangalore, Bangkok, Los Angeles, Mexico City, Singapore or Stuttgart – we can manage the engineering and design collaboration between them all: 24 hours a day. So saving you money, time and administrative resources.

“The long-term future belongs  
to those who are alert to the  
reality of a borderless world  
of talent.” \*\*

# Product Lifecycle Management

PLM includes everything from a product's conception and design to manufacture, assembly, packaging, transport, long-term use and eventual disposal. So Tata Technologies PLM services are totally focused on helping you to build better products and define better processes – while cutting costs at the same time. In addition we have industry-leading software partners, innovative training services and an intense focus on understanding the challenges you face.

For example, our team of consultants is highly skilled and rich in experience. And they have detailed, practical knowledge of the leading product data management systems (PDM) because we use what we sell – and sell what we use.

We fully understand the challenges and processes in the automotive and aerospace industries as well as the worlds of industrial machinery, fabrication and assembly, and consumer goods. And we have a profound knowledge and technical expertise in the PLM product suites offered by Dassault Systèmes, Siemens PLM, Autodesk and Parametric Technology Corporation (PTC).

But above all, we offer a better balance of available resources, proven technology, long-term experience and engineering know-how. We can combine offshore and onshore resources as necessary. We can balance the selection, implementation and educational elements of PLM technology. And we can offer you the reassuring benefit of decades of practical experience.


Complementing our clients' investment in PLM technology, we optimize their investment in new software through world-class PLM educational options designed to meet life-long learning needs. With a variety of training locations and comprehensive knowledge management powered by *iGETIT*<sup>®</sup>, our education delivery is configured to enhance and sustain your company's productivity – enabling you to perform better.

## We cover all aspects of the product development process:

- ✓ Design and styling
- ✓ Business management
- ✓ Product engineering
- ✓ Product development
- ✓ Quality/advanced product quality planning
- ✓ Manufacturing engineering
- ✓ PLM/IT



“Our key benefit  
is the fact that  
we understand  
every facet of  
the product  
development  
process.” \*



“We are a pure play, dedicated, domain-driven engineering company with a global delivery capability.” \*\*

# Enterprise solutions

For over 20 years, Tata Technologies has been implementing enterprise solutions according to best practice. But best practice can be the enemy of better practice – unless getting better and better is what drives your company.

Our prowess in providing enterprise solutions stems from working with the world's most admired companies in their manufacturing and engineering process re-engineering, long experience in evolving technologies and a structured methodology for implementation.

Our objective is always to deliver better and better value through our global reach; our mastery of the issues resulting from accumulated expertise and our consulting and advisory services; our superior methodology for project management; and our continuing emphasis on contemporary and emerging technologies.

## Product-development IT

IT is the lifeblood of your business. And aligning your enterprise systems, PLM, enterprise resource planning (ERP), customer relationship management (CRM), information lifecycle management (ILM), application lifecycle management (ALM) and production systems to your business strategies is key to creating successful products, satisfied customers and enhanced profits.

Tata Technologies is unique in that we look at this area holistically, aligning your business strategies to the most appropriate software and systems. Get that right, and you have a much better chance to meet your business goals.

We have been engaged in SAP implementation services for product-centric organizations in a wide variety of industries around the world. Our SAP service offerings span all phases of the lifecycle of your enterprise – from planning to implementation, customization, development, testing and post-manufacturing support. And that's how we keep the lifeblood of your company flowing.

Better CRM initiatives are not limited to software installation, they involve considering the context, support and understanding of professionals so that they can learn and take full advantage of your information systems. That's why our CRM implementation service helps you build optimized, cost-effective solution blueprints and implementation roadmaps.

And it's also why we take the time to build the relationships that facilitate the easy adoption of 'quick-start' or 'plan and deploy' implementation strategies. That way those on the people side of the business can realize the full value of CRM.

The Tata Technologies ILM practice helps you build better storage and information systems that tie in with overall IT governance and management, data storage, change control processes, requirements for system availability and recovery times.

We also improve the products and processes that surround the application lifecycle through better and more innovative application development, more efficient data management, more clearly defined application customization and more rigorous testing – as well as better overall application lifecycle management.

And by bringing together the various components of your enterprise system we can help to ensure seamless integration between business applications, product management applications and the engineering and design environment.

“We are known for the quality of our customers.” \*

**BAE Systems:**  
**BETTER ON THE GROUND**  
**BETTER IN THE AIR**

BAE Systems is a prime contractor for Eurofighter Typhoon, a multi-role combat aircraft, and it needed to change its organization and working practices. We worked closely with BAE to implement and integrate CATIA solutions with minimal disruption to workflow – and to develop better processes in order to optimize the design cycle.

The short-term results included faster design times for components; better collaboration within the design team; improved engineering processes and enhanced production quality. The long term promises reduced cycle times, major cost savings and improved product quality.

**Airbus:**  
**BETTER COMPUTING**  
**BETTER SAFETY**

Airbus, a leading aircraft manufacturer, is working with Tata Technologies to optimize the flow structure for aircraft fuel systems. This follows the Federal Aviation Authority mandate to demonstrate adequate fuel tank protection following the mid-air explosion of a TWA flight in 1996.

Consequently Airbus is using the EKA supercomputer at Tata Technologies' campus at Pune, in India to calculate Computational Fluid Dynamics (CFD). As well as the only commercially available supercomputer capable of tackling a project of this complexity in the time required, we are also providing a ten-man team, all with master's degrees and over five years' experience in CFD.

**PAIG – Premium Aircraft  
Interiors Group:**  
**BETTER DESIGN**  
**BETTER COMFORT**

Contour Premium Aircraft Seating, a subsidiary company of PAIG, asked us to help develop and lead a design project and outsource strategy to re-design, engineer and optimize a premium quality 'first class' Airbus 380 cabin seat.

Tata Technologies delivered a project solution that placed more than 60% of the work with offshore resources. As a result, we freed up valuable client engineering resources; supported the transfer and retention of key product knowledge; moved towards an 'end-to-end' engineering model; and significantly cut the costs of engineering and manufacturing.

**AgustaWestland:**  
**BETTER LINKS**  
**BETTER LIFT**

AgustaWestland designs and manufactures helicopter systems, structures and components. Over a number of years, Tata Technologies has helped to integrate the company's design and manufacturing departments onto a common platform; achieve time and cost savings in all the programs concerned with redesigning the Lynx helicopter; speed up the transfer of product data giving engineers the benefits of design automation and full integration with the design department; and has helped provide the software to cut the rotor blade design cycle times by 50%.

**GKN Aerospace:**  
**BETTER INSIDE OPERATIONS**  
**BETTER OUTSIDE RELATIONSHIPS**

GKN Aerospace is a global leader in engine nacelle design and manufacture, as well as the building of aircraft structures. It sought the ability to work more closely with its customers, to create new organizational structures and better working practices, and to cut costs and enhance quality.

Working closely with GKN, we introduced new organizational structures and working practices; improved the company's ability to meet customer demands; significantly cut costs with quality improvement schemes; and achieved maximum value and results from the company's investment in CATIA.





“Barriers to  
innovation  
are usually  
in the mind.”

Ratan Tata

Chairman of the Tata group

“It is easy to  
become a  
number one  
player. The  
difficulty is  
staying at  
number one.”

Ratan Tata  
Chairman of the Tata group



**Visteon:**  
**BETTER COMMUNICATION**  
**BETTER DRIVING**

Visteon, a leading automotive supplier, sought our help in meeting Nissan's requirement for a new instrument panel. We provided a well-equipped center for the Visteon design team and also supplied technical assistance, access to hardware and software, the communications and server capacity for project data management and a virtual private network for secure communications.

Visteon gained significant time-savings, seamless communication and rapid acclimatization to the required processes and systems. Nissan benefited from a project delivered on time and under budget.

**Ford Motor Company:**  
**BETTER MANUFACTURING**  
**BETTER CUSTOMER**  
**SATISFACTION**

Ford Thailand needed to design 21 optional accessories for the Ford Focus and to bring the products to market following rising customer demand. It turned to Tata Technologies' Center for Automotive Engineering and Design located in Bangkok, Thailand to undertake a range of tasks from styling to surfacing, engineering and drawings. The partnership ensured that the accessories were designed on time and within budget while a dedicated Tata Technologies' design team enhanced product quality - meeting the expectations of Ford and its customers.

**Tata Motors:**  
**BETTER PLANNING**  
**BETTER DECISIONS**

In introducing the Tata Nano, a small car offering comfortable and safe transportation to the mass of Indian families, Tata Motors, India's largest automobile company, needed additional support in design, manufacturing, packaging, engineering and knowledge-based engineering.

Tata Technologies and Tata Motors created a global team that improved the program's timing, costs, development processes and tools, product design and quality, and knowledge capture and transfer. This enabled the client to conduct the program without distracting manufacturing personnel from their normal duties, and to identify the cost and impact of the new vehicle program before committing to the project.

*iGETIT*<sup>®</sup> – an engineering knowledge management application developed exclusively by Tata Technologies – is backing the Ford Motor Company's global C3P-NG P2 release by allowing Ford's Digital Innovation group to deliver all global core next generation (NG) methods through a single, easy-to-navigate access point. The methods content can be configured to support the specific needs of individuals or groups and can be delivered to suit each user's own learning path. The *iGETIT* portal was used to deliver P2 release pod casts, issues, FAQs, methods and training that influenced more than 17,000 Ford professionals and 100 suppliers around the world. *iGETIT* is used by over 110,000 engineers worldwide.

**Jaguar Land Rover:**  
**BETTER OFFSHORE**  
**BETTER ONSHORE**

Tata Technologies has a managed services contract with Jaguar Land Rover (JLR) until 2013 to assist in the IT migration process from Ford to Tata Motors. This involves moving over 1,000 IT applications from Ford into the new JLR environment and involves up to 100 specialists from Tata Technologies.

The company will also provide ongoing support for the transitioned applications for five years, using 250 staff located both in the Coventry area and at the company's offshore delivery center at Pune, in India. The program builds on an existing, long-standing and valued relationship.

## We are known by the companies we keep:

- ✓ AgustaWestland
- ✓ Boeing
- ✓ Cessna Aircraft
- ✓ Chrysler
- ✓ Contour Premium Aircraft Seating
- ✓ CSC
- ✓ Faurecia
- ✓ Fiat
- ✓ Ford Motors
- ✓ Honda
- ✓ GE Aircraft Engines
- ✓ General Motors
- ✓ GKN Aerospace
- ✓ Goodrich Aerospace
- ✓ Gulfstream Aerospace
- ✓ Jaguar Cars
- ✓ Lear Corporation
- ✓ Northrop Grumman
- ✓ Porsche
- ✓ Pratt & Whitney
- ✓ Sikorsky Aircraft
- ✓ Tata Daewoo Commercial Vehicle
- ✓ Taco Group
- ✓ Tata Motors
- ✓ Tata Steel
- ✓ Textron
- ✓ Toyota
- ✓ Valeo
- ✓ Visteon

## Software partners

Together with our software partners, we can ensure that any implementation, user migration, maintenance and enhancement meets the highest industry standards.

## Dassault Systèmes

Tata Technologies is recognized as a Premier Partner with Dassault Systèmes, a global software alliance for the CAD/CAM/CAE/PLM market.

- ✓ **CATIA** products are based on the open and scalable Dassault Systèmes V5 and V6 architecture. CATIA is the leading product development solution for all manufacturing companies, from big OEMs to small producers.
- ✓ **SMARTEAM** brings affordable product data management capabilities to small-to-medium companies.
- ✓ **ENOVIA** is a leading enterprise solution for robust, collaborative product data management.
- ✓ **DELMIA**'s digital manufacturing solutions enable the continuous creation and validation of manufacturing processes throughout the product lifecycle.

## MSC Software

MSC Software is the leading global provider of integrated enterprise simulation solutions.

- ✓ **SimOffice** easy-to-use simulation enables engineers to verify design in the Microsoft Windows desktop environment.
- ✓ **Nastran** is the powerful all-purpose finite element analysis solution used by the world's most admired manufacturers.
- ✓ **Adams**, the market-leading motion-simulation software, simulates system level and loads.

- ✓ **Patran**, with its universal graphics user interface enables finite element modelling, analysis and data integration, analysis simulation and visualization capabilities.
- ✓ **Marc** is ideal for the simulation of non-linear physical behaviour of material conditions under extreme stress.

## Siemens PLM

Siemens PLM provides leading software solutions that help manufacturers turn more ideas into successful products.

- ✓ **Teamcenter** powers innovation and improves productivity by connecting your team with the product and process knowledge you need to make good decisions throughout the product lifecycle. Teamcenter's open PLM foundation powers end-to-end lifecycle process excellence.
- ✓ **NX** Synchronous technology from Siemens PLM Software can make your design process up to 100 times faster. With this breakthrough, you no longer have to choose between constraint-driven or history-free modeling, and you can use data from multiple CAD systems.
- ✓ **Solid Edge** with synchronous technology is a complete feature-based 2D/3D CAD system that combines the speed and flexibility of direct modelling with precise control of dimension-driven design.

## Autodesk

Autodesk is a world-recognized leader in design, visualization and documentation software products. Tata Technologies is an Autodesk Premier Solutions Provider with the added distinctions of being a 'Manufacturing Specialist' and an 'Authorized Training Center'. Tata Technologies provides clients with **AutoCAD**, **AutoCAD Electrical**, **AutoCAD Mechanical** and **Autodesk Inventor** software and service-based solutions.

“Whether we’re selling products or providing services, it’s our comprehensive understanding of every aspect of manufacturing that sets us apart. And that understanding has important implications for reducing cost, saving time and enhancing quality.” \*

**Making life better and better for our clients – and their customers**

With Tata Technologies you’re better able to create better products because you can rely on our wide scope of skills and experience as well as our reputation for organization and engineering.

You can enjoy a better range of business options and be better placed to balance them to meet your precise needs because of our worldwide resources and proven ability to allocate and manage them to your advantage.

You can gain better flexibility – and better control of your costs and timing – by accessing our high-end manufacturing experience in North America, India and Europe as well as the skills, efficiencies and dynamism of our delivery centers in the Asia-Pacific region.

You can access better knowledge and skills by working with our highly qualified and skilled specialists – and have better opportunities to conduct your business anywhere in the world by relying on our purpose-built global teams and worldwide delivery centers.

You can make better product-development IT choices because we actually use the applications we sell and have long-term partnerships with the leading software suppliers. This makes it better for you to secure better engineering advice and assistance.

All of which makes you better able to plan for your future and better able to reach your business goals.

**Better & Better: it’s a way of life for us.  
And we can make it that way for you and  
your customers too.**

“Our ability to partner and our ability to team are very much part of the DNA and character of our company.” \*\*

**Find out more**

For further information about Tata Technologies and what we can do to help you create better products for your customers, simply check out our website [www.tatatechnologies.com](http://www.tatatechnologies.com)

“We help great companies  
create great products.” \*\*

**Singapore**

International and  
Asia-Pacific Headquarters  
5 Shenton Way  
UIC Building #22-08  
Singapore 068808  
Tel: +65 6536 5009  
Fax: +65 6372 4955

**United Kingdom**

European Headquarters  
Prospect Way  
London Luton Airport  
Bedfordshire LU2 9QH  
United Kingdom  
Tel: +44 (0)1582 878750  
Fax: +44 (0)1582 878751

**United States**

North American Headquarters  
41370 Bridge Street  
Novi Michigan 48375-1302  
USA  
Tel: +1 (248) 426 1482  
Fax: +1 (248) 426 8398

**India**

Indian Headquarters  
25, Rajiv Gandhi Infotech  
Park, Hinjawadi Phase 1  
Pune-411057, India  
Tel: +91 (0)20 6652 9090  
Fax: +91 (0)20 6652 9035

[www.tatatechnologies.com](http://www.tatatechnologies.com)