



World-Wide Value Offerings

Component Solutions

- Turnkey chip design
- Turnkey package design

Business Solutions

- Manufacturing services
- Technology consulting
- IP management consulting
- Verification and e-design

System Solutions

- System architecture and design services
- High performance packaging services
- Power and mechanical design services
- Industrial solutions

Mission Transfer Services

- Technology outsourcing
- Fab management outsourcing

Translating
Technology
into
Business
Value

Business Solutions/Manufacturing Services EMEA (Europe, Middle East and Africa)

End to End Manufacturing Consulting

- Technology procurement
- Manufacturing process optimization
- Manufacturing yield and quality enhancement
- Customer relations

Technology Implementation

- Technology transfer
- Process customization
- Process/product qualification

Facilities Infrastructure

- Project management
- Environmental control systems

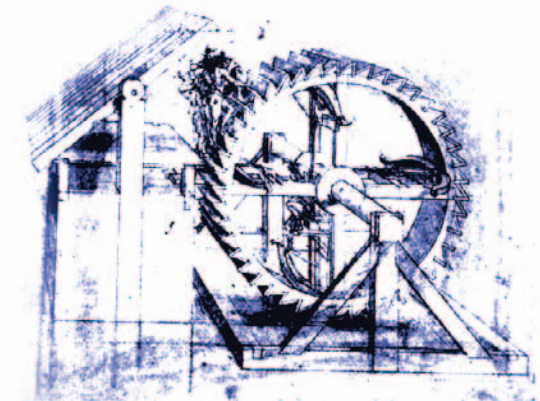
Manufacturing Systems & Operations

- Automation and IT solutions
- Manufacturing data systems
- Equipment engineering

Translating
Technology
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End to End Manufacturing Services

(E2E Manufacturing Services)



IBM E&TS is a new division of IBM within the IBM Technology Group. Specializing in applied technology services, IBM E&TS collaborates with businesses whose success depends on the integration of complex technology.

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e-business on demand

Manufacturing Yield & Quality Enhancement

- Total quality management
 - Process/parts/product
 - 6 sigma concepts
 - Outgoing quality
- Yield management/failure analysis
- Data & traceability concepts
- Statistical process control
- DOE/FMEA

Manufacturing Process Optimization

- Manufacturing line control/planning & utilization
- Material flow/storage concepts

Technology Procurement

- Supply chain management
- Competitive source/supplier selection
- Supplier & component qualification E2E
- Secure incoming component quality using continuous improvement concepts
- Technical specification management
- Fair value cost analysis/value engineering
- Procurement systems
 - Collaborative supply chain & quality tools
 - Total quality management tool

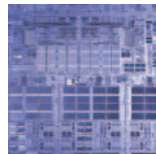
Customer Relation Management

- Closed loop corrective action concepts
- Critical situation management
- Audit preparation



Facility Infrastructure & Manufacturing Process Environment

- Technology enhancement services
- Tool specification, selection, layout & installation
- Process development, optimization & process control (chemical & cleaning)
- Contamination & ESD control
- Facility concepts/planning/build up service
 - Project management
 - Layout/people/storage/logistics
 - Technical requirements
 - Clean media supply concepts (pure water/gas/chemicals)



Manufacturing Business Processes

- Chemical/environmental consultancy
 - ISO conform mapping & development
 - Description, definition, execution
- Environmental control/affairs
- Process management systems
- Process change management
- Operator & tool certification concepts
- Manufacturing organization concepts
- Product qualification concepts

Manufacturing Data Management

- Yield/performance/parameter reporting
- Data warehouse/data mining
- Build interactive user interfaces

We offer End to End Service!



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