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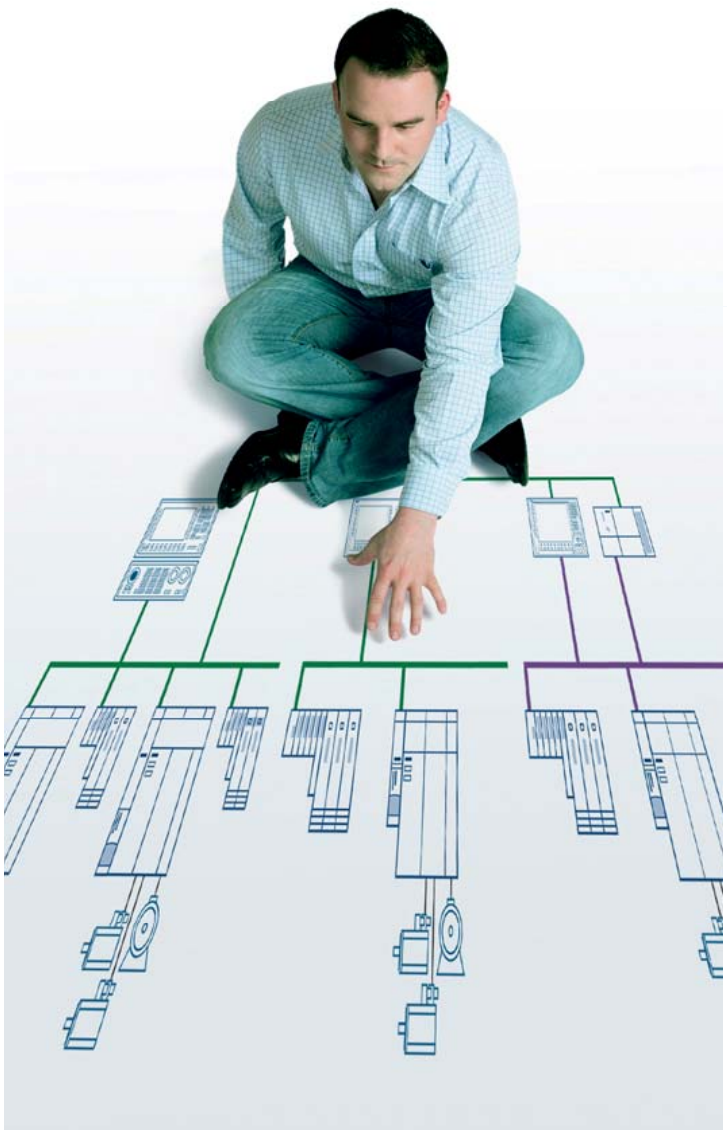

Siemens Solutions for CNC Training

Together we are strong!

Overview – Indian Manufacturing Industry

- **India is witnessing fast-paced growth in the manufacturing sector**

- **Automobile majors such as GM, Hyundai, Renault, Nissan, VW, Suzuki, TATA, Ashok Leyland,Mahindra are all establishing new manufacturing units or expanding existing set ups**

- **India has one of the fastest growing middle class population & hence is a lucrative destination for FMCG companies. Increased demand for consumer durables is driving the growth in the Die-Mold sector**

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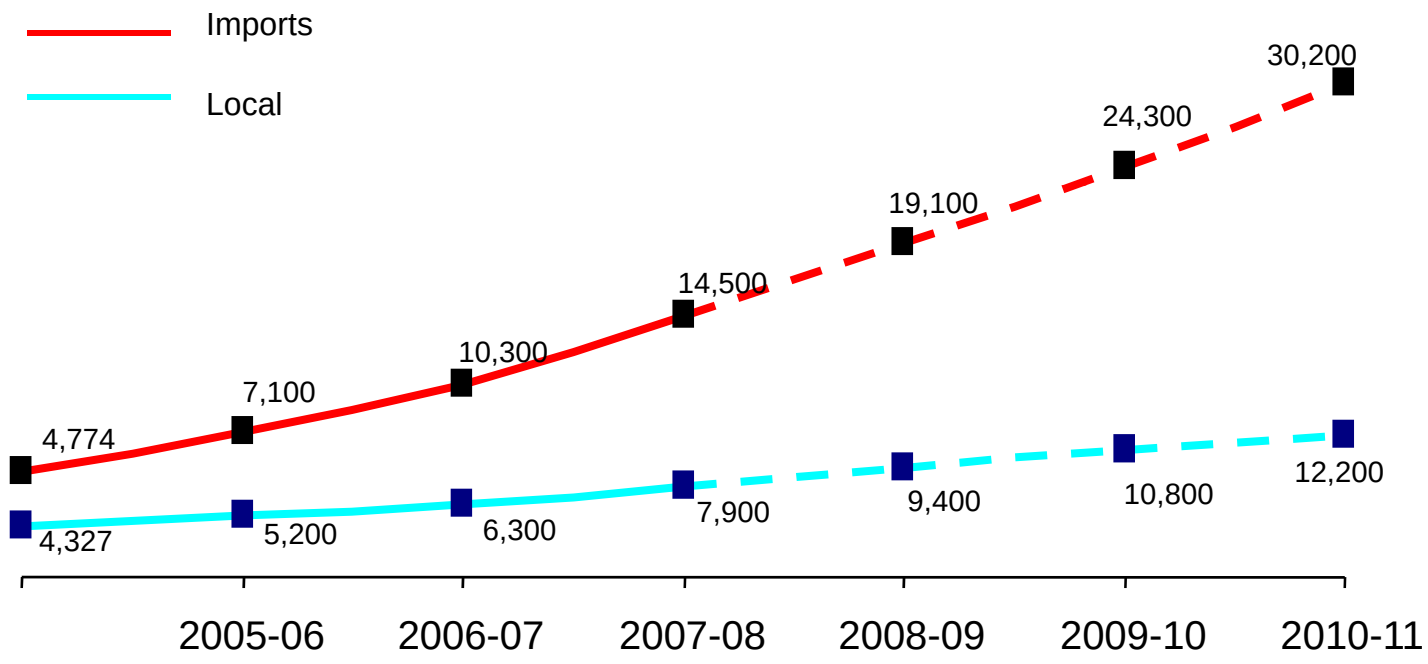
Overview – Indian Machine Tool Market



Source: IMTMA, OEM production statistics

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Training – A necessity in the Indian Machine Tool Industry

20,000 machines

I shift

II shift

III shift

2 - 3 shifts/machine

approx

30,000 - 50,000 operators

Huge requirement for CNC training

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End-Users' Training Requirements

- **Regionally available**
- **Technology-specific (turning, milling)**
- **Flexible timing (also classes on weekends or evenings)**
- **Practical training with real machines**
- **Locally known training provider**

- **Excellent training material**
- **Experienced trainers**
- **Up-to-date contents**
- **Efficient trainings concepts**
- **Up-to-date equipment**

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Siemens Answer for Training Requirements
- Partnering with Training Institutes

- **Large number of End Users are in need of CNC training for their operators**
- **These End Users approach Siemens for help with training**
- **Siemens holds training courses at our own training centres in Bangalore & Mumbai**
- **OR Siemens partners with industrial training institutes, vocational centers etc. such as Don Bosco, providing documentation and technology support.**
- **End Users can take advantage of the training courses held at these institutes**

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Siemens Solutions for Machine Tool Training
- What we can offer

- **Sinutrain – PC based CNC training software**
- **Training Kits – specially designed for classroom hands on training**
- **Training for Trainers**
- **Training documents**
- **Support for retrofitting of old machines**
- **Promotion material for training rooms such as posters, stand-up displays**
- **Possibility of Joint Certification**

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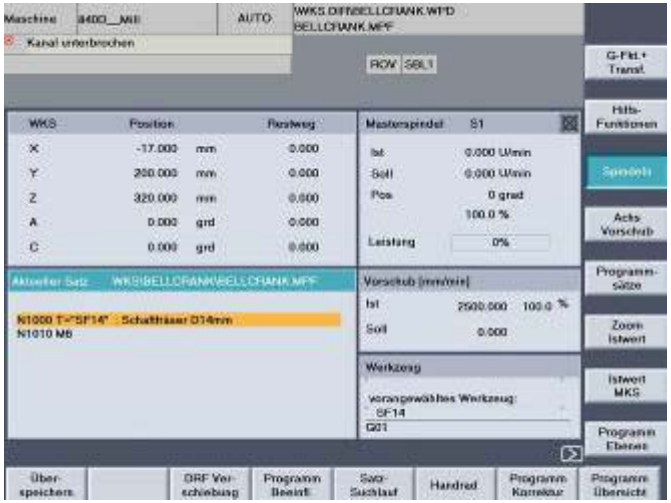
Sinutrain – CNC Training Software

- **Control-identical field-oriented, PC-based CNC training software**
- **Programming and operation in training and production**
- **Basis:**
  Standard CNC control interface SINUMERIK 802D/810D/840D/840Di/840Dsl/840Di sl
- **Programming: DIN/ISO Programming & Graphical programming (ShopMill/ShopTurn)**
- **Graphical 2D and 3D Simulation**
- **CAD Reader**



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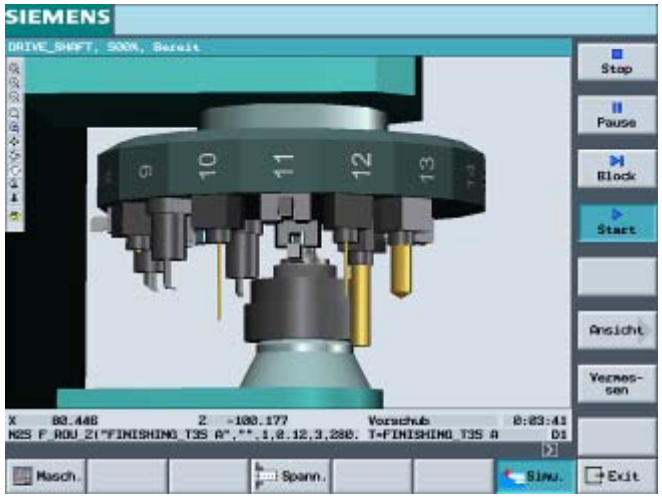
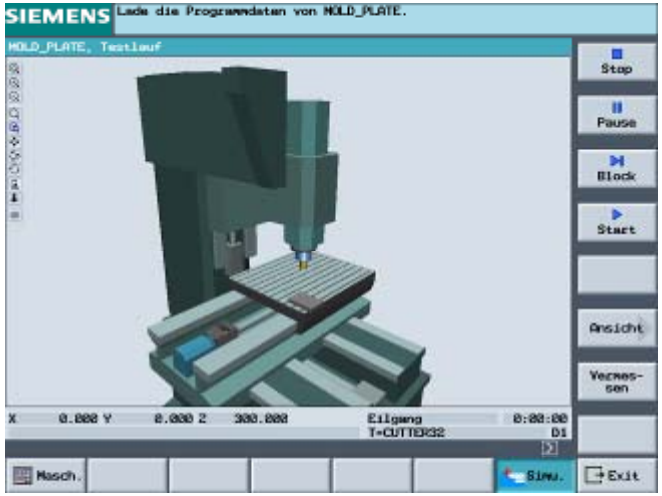
Virtual Machine – 3D dynamic simulation

- **The virtual training machine is a supplement to a real training machine**
- **Close to real “production” of workpieces on a PC via 3D visualization of the machining process**
- **Machine Area View, Tools, Collision Visualization, Final workpiece measurement**





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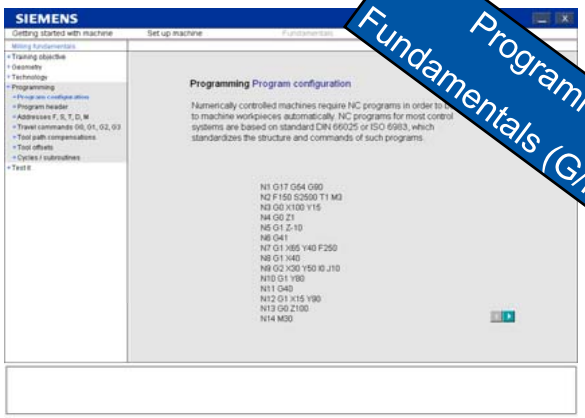
Additional Multimedia Software for CNC Basics

Learning basics of CNC technology



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USB Keyboard

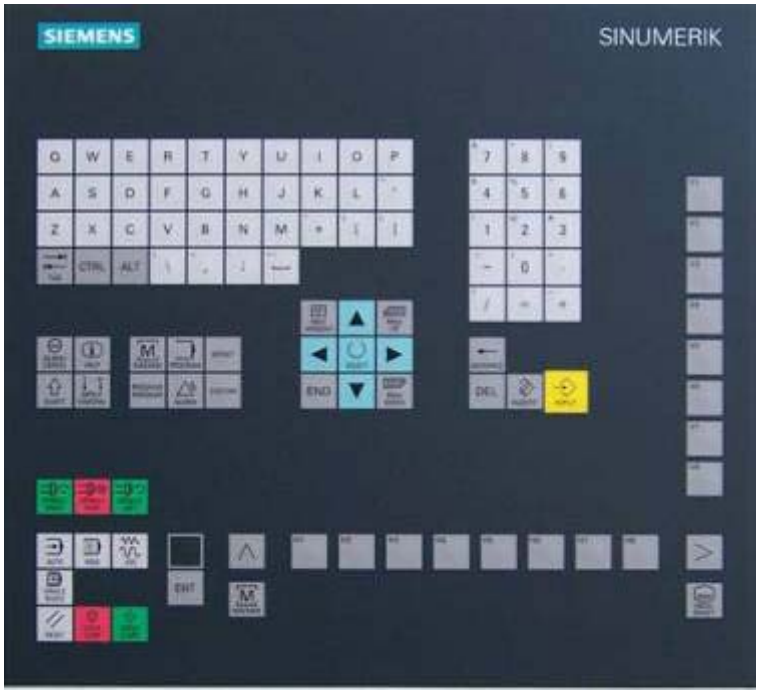
USB training keyboard :

Realistic training with a training keyboard **identical to the one on the machine**

Easy connection to PC via USB interface

No external power supply

No additional plug-in card



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CNC Training Kits

- **Complete Training Stand / Racks wired for realistic practice of operation, programming, startup & service tasks**
- **Enhance practical skills in Industries, training institute's and colleges**
- **Diagnostic setup / tool for Maintenance task leading to reduction in breakdown time**
- **Useful for development & testing offline projects**
- **Can be Supplied as per Customized designs with any type of Siemens SINUMERIK control & features.**

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“Train the Trainer” Initiative & Training Documentation

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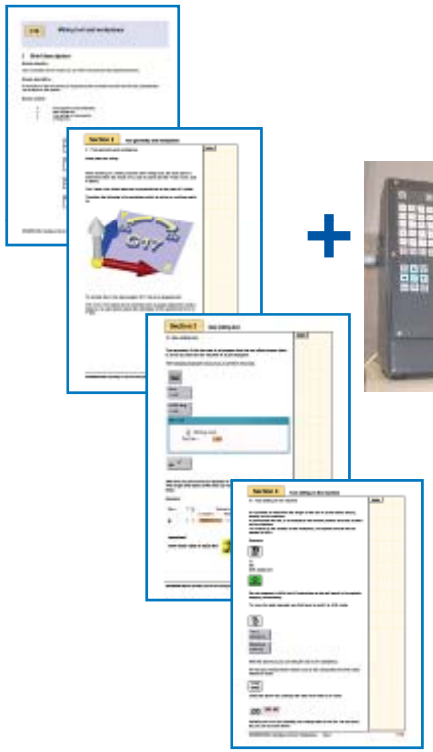

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Kit for training partner, OEM, dealer end user

Customizable for target group

Siemens Controller

Instructor Notes

Training Lessons

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Update to the Latest CNC Technology

- End Users require training on up to date equipment which is present in the industry

- Retrofit to update to the latest CNC technology

OLD: with System 3

NEW! with SINUMERIK 810D control

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Don Bosco – Siemens Partnership for CNC Training

- CNC Operating & Programming Training
- Training the Trainers
- Training Documentation
- Sinutrain
- Retrofits

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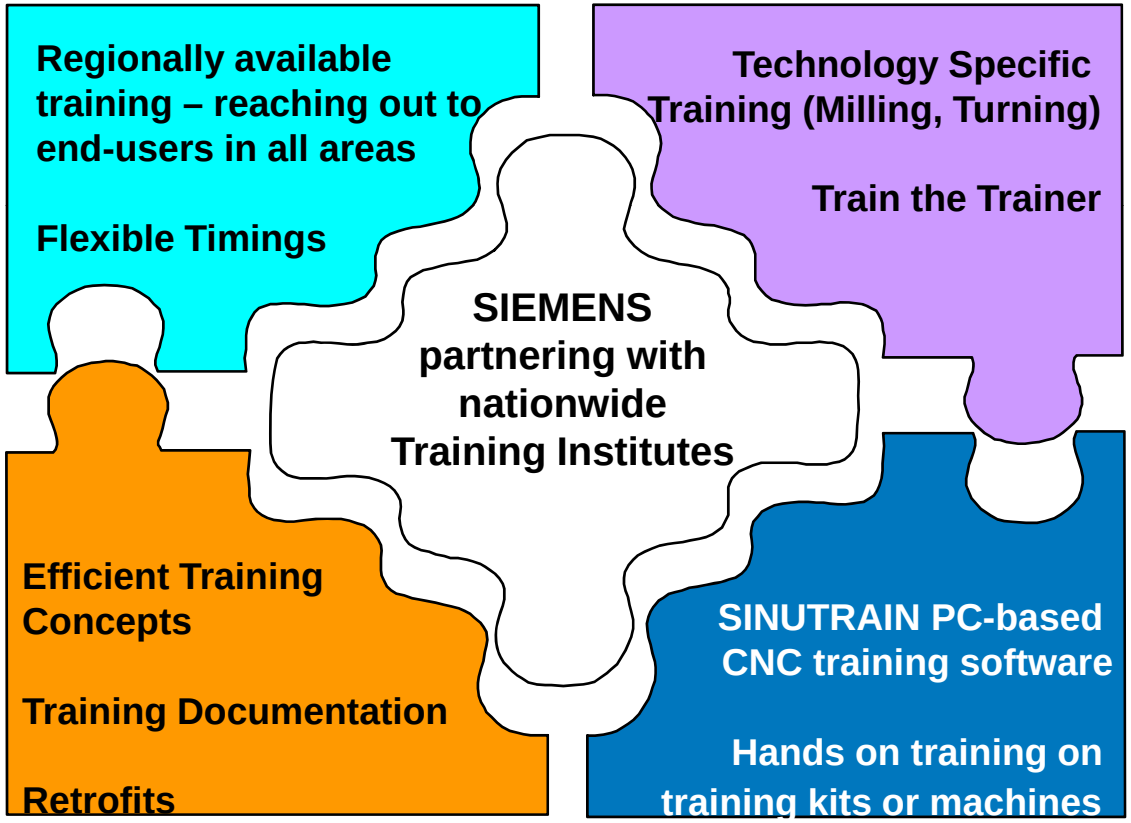
Fulfilling Industry's Need for Trained CNC Operators



Holistic Solution for CNC training!

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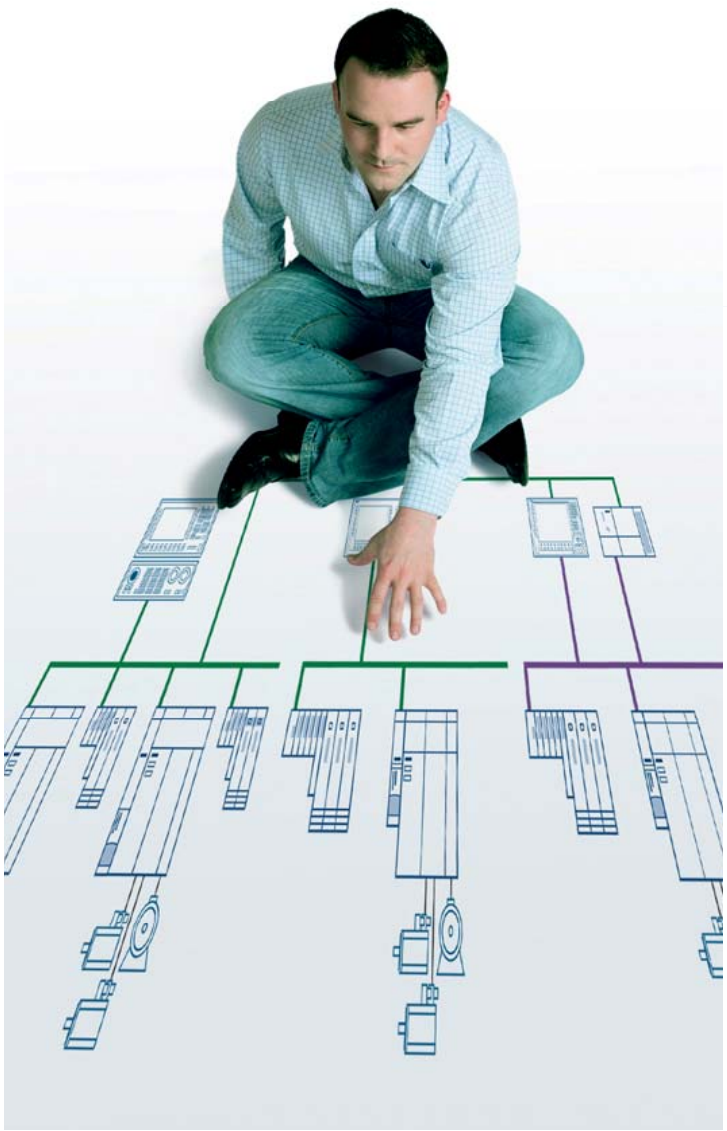

Thank you

Department: I DT MCMT