



Tyco Electronics

Analysts Presentation

Shanghai, PRC

Juergen Gromer

President, Tyco Electronics

May 26, 2004

tyco / Electronics

Analyst Meeting - Shanghai

May 26, 2004

at Tyco Electronics

Agenda

8:30 – 9:15	Tyco Electronics Presentation	J. Gromer President, Tyco Electronics
9:15 – 10:00	Plant Overview & China Mfg.	M. Okamoto VP Global Communications, Computer and Consumer Electronics
10:00 – 10:15	Q & A	
10:15 – 11:00	Plant Tour	Telco Outside Plant / Energy Site M. Okamoto
11:00 – 11:15	Transfer to CC&CE Plant Site	
11:15 – 12:00	Plant Tour	CC&CE Plant - M. Okamoto

Forward Looking Statement

This presentation and/or the accompanying presentation materials may contain certain "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations and are subject to risks, uncertainty and changes in circumstances, which may cause actual results, performance or achievements to differ materially from anticipated results, performance or achievements. All statements contained herein that are not clearly historical in nature are forward looking and the words "anticipate," "believe," "expect," "estimate," "plan," and similar expressions are generally intended to identify forward-looking statements. The forward-looking statements in this presentation and/or accompanying presentation material include statements addressing the following subjects: future financial condition and operating results. Economic, business, competitive and/or regulatory factors affecting Tyco's businesses are examples of factors, among others, that could cause actual results to differ materially from those described in the forward-looking statements. Where we have used non-GAAP financial measures, reconciliations to the most comparable GAAP measure are provided, along with a disclosure on the usefulness of the non-GAAP measure.

Segment Overview *

Electronics Segment

2003 Revenue \$10.5 billion

54 Countries

Electronic Components

2003 Revenue \$10.4 billion

80,000 Employees



- ▶ Designs, manufactures and markets a broad range of electronic, electrical, and electro-optic passive and active devices

Telecommunications

2003 Revenue \$140 million

475 Employees



- ▶ Designs, manufactures and installs undersea telecommunication systems
- ▶ Services and maintains undersea telecommunication systems

Unparalleled Brands

AGASTAT

Alcoswitch®

AMP

ASG

AXICOM

CHIP COOLERS

CoEv

corcom

CRITCHLEY

Crompton Small Motors



DITEL



ELASTOMERIC
TECHNOLOGIES

ELCON
PRINT CONNECTION PRODUCTS GROUP



greenpar®

HTS

idento®

Kilovac

LDI.

MAACOM

MADISON Cable

MICRODOT

DEG

OpenSky.

P&B

Precision Interconnect

pretema

RANGESTAR
WIRELESS

Raychem

the ROCHESTER
corporation

SCHRACK

tdi BATTERIES

tyco
Electronics

Largest Global Sales Force in the Industry



80,000 Employees
5,200 Sales & Marketing
7,000 Engineering

World Class Customers

Telecommunications

3Com
Alcatel
Bell South
BT
China Telecom
Cisco
Deutsche Telekom
Ericsson
Lucent Technologies
Motorola
Nokia
Nortel
NTT
Siemens
Telefonica
Verizon

Computer & Consumer Electronics

Dell
HP/Compaq
IBM
Matsushita
Philips
Sony
Sun Microsystems
Toshiba

Automotive

BMW
DaimlerChrysler/
Mitsubishi
Ford
GM/Fiat
Honda
Porsche
PSA
Renault/Nissan
Toyota
VW
Bosch
Conti Temic
Delphi
Denso
Dräxlmaier
Hitachi
Lear
Leoni
Motorola
Siemens/VDO
Sumitomo
TRW
Valeo
Visteon
Yazaki

Industrial & Commercial

ABB
Agilent
Airbus
Boeing
ConEd
Electrolux
GE
Hitachi
Invensys
Mitsubishi
Raytheon
Rockwell
RWE
Samsung
Schneider Group
Siemens
Toshiba
UTC
Whirlpool

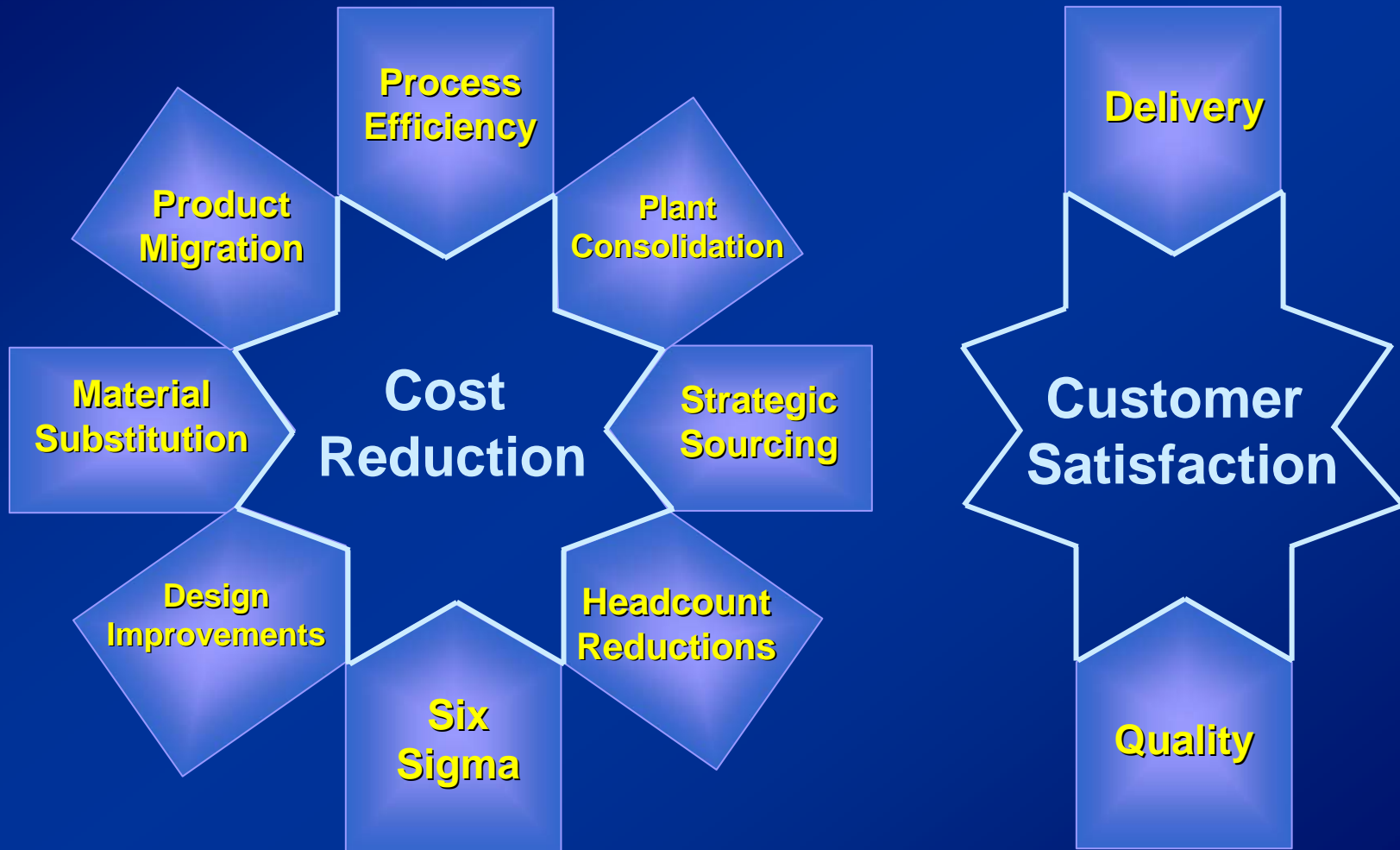
Distribution

Anixter
Arrow
Avnet/Kent
Eurodis
Future
Sonepar
TTI

EMS

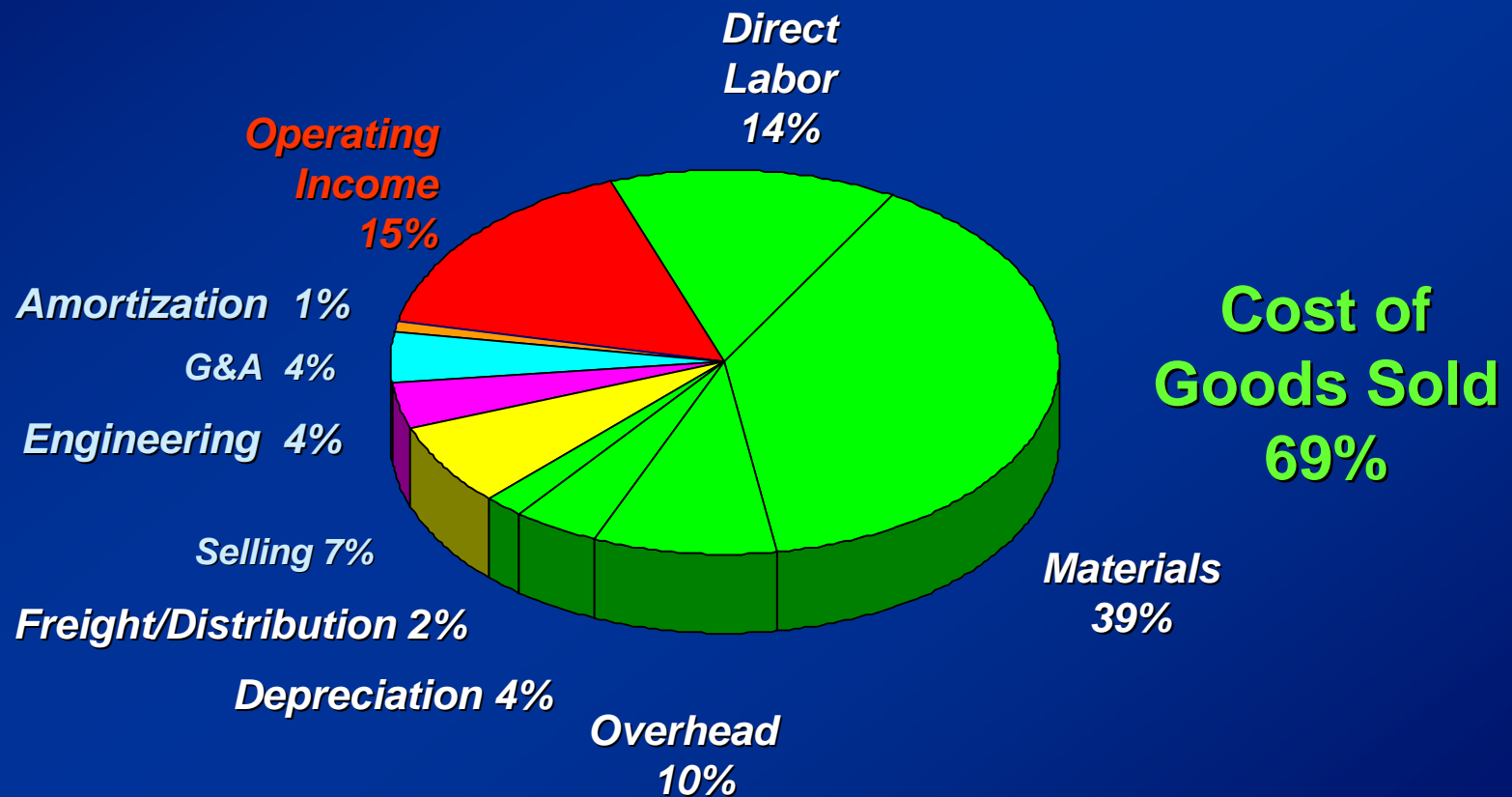
Celestica
Flextronics
SCI
Solectron
Jabil

Accelerating Performance: Operational Excellence



Total Cost Overview

Percent of Sales



*A reconciliation to GAAP Operating Income can be found in the Appendix on the Electronics Segment Overview Page

Manufacturing Sites Consolidation

1999 Total = 294

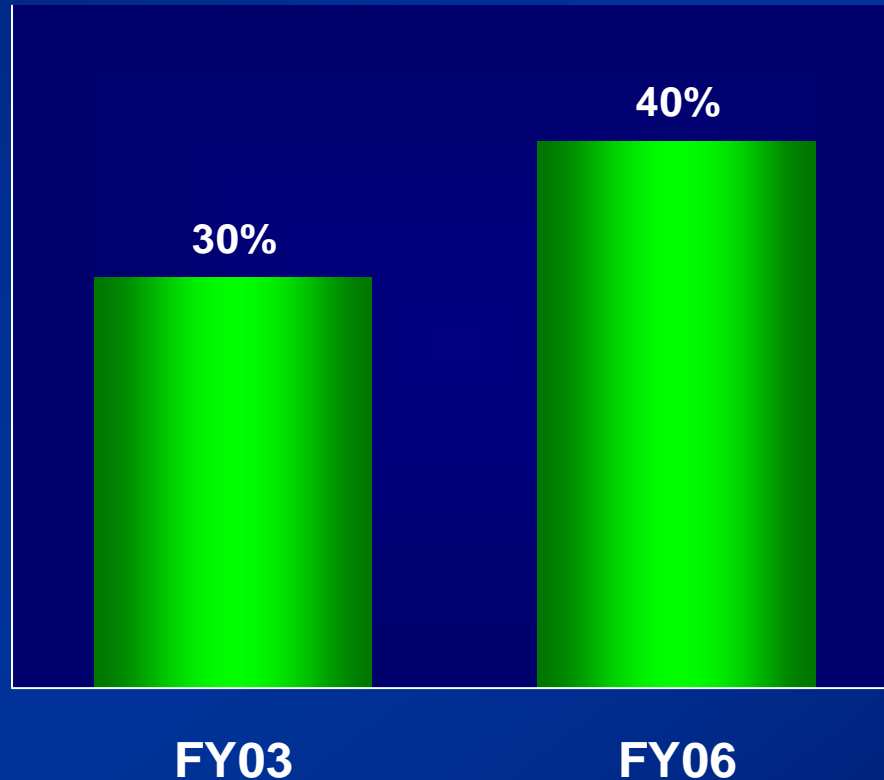
Current Total = 171



40% Site Reduction Over 4 Years

Low Cost Production Plans

*Percent of Production
in Low Cost Countries*



~33% Increase By 2006

Strategic Sourcing Initiatives

2004 Estimated Material Spend = \$4.1 Billion

- One Tyco
 - Leveraging volume effects both on TE and corporate level (conductor wire, magnet wire, PBL materials, magnets, cores)
- Qualification of lower cost materials and alternative suppliers
- Develop raw materials suppliers in Asia, mainly China
- Global Sourcing – China, Taiwan, India

Targeted 6+ % Savings on Spend

Strategic Sourcing Initiatives

- e-Bidding, e-Auctions, internet solutions
- Standardization of material & components
- Early Involvement in specification of material - leverage new activity
- Renewed focus on indirect spend
- Reduce spend on capital equipment and spare parts by leveraging volume and sourcing in China and Eastern Europe

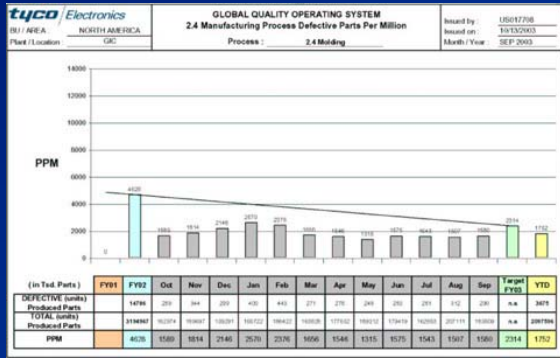
Supply Chain Initiatives

- Simplify the Supply Chain
 - Reduction of warehouses
 - Reduction of suppliers
- Consignment & Just-in-Time Programs
- Expand EDI Links with Customers
- Increase Direct Drop Shipments
- Flexible Manufacturing Processes
 - Shorter Lead Times

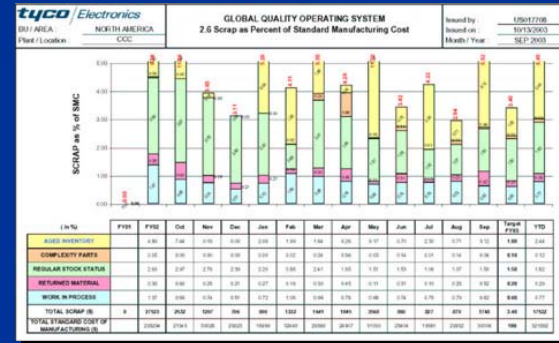
Continuous Improvement in Delivery Performance

Customer Satisfaction Quality

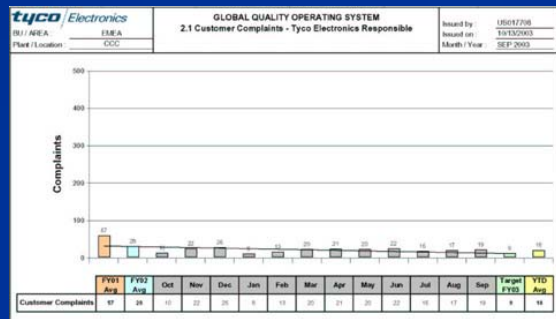
Improve Process Quality
(Measured in PPM)



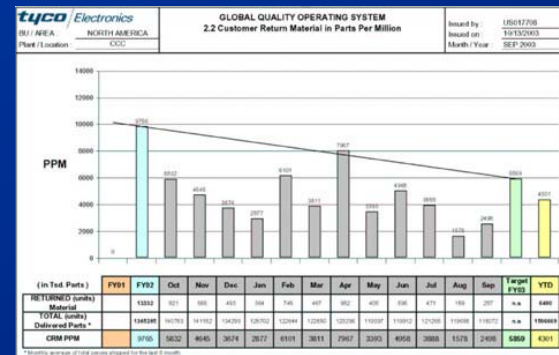
Scrap Reduction



Reduction in Number of Incidents



Customer Return Material Reduction



Six Sigma Focus

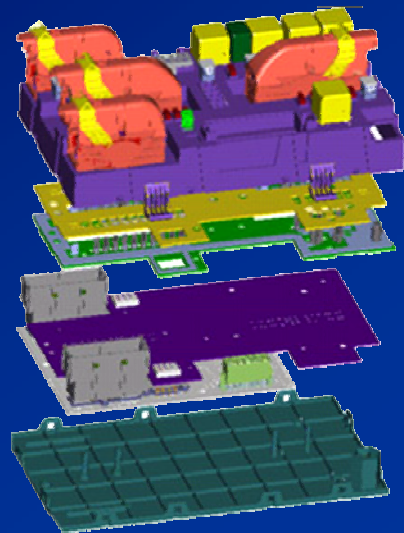
Design to Cost

- Key Elements for Low Cost Design
 - Clear Objectives
Specs/Schedule/COST
 - Accurate Design Systems
Design to what you need
 - Multidisciplinary Development Team
Elect, Mech, Mfg, Purchasing, Customer
 - Investment
Tooling, Automation, Engineering Talent

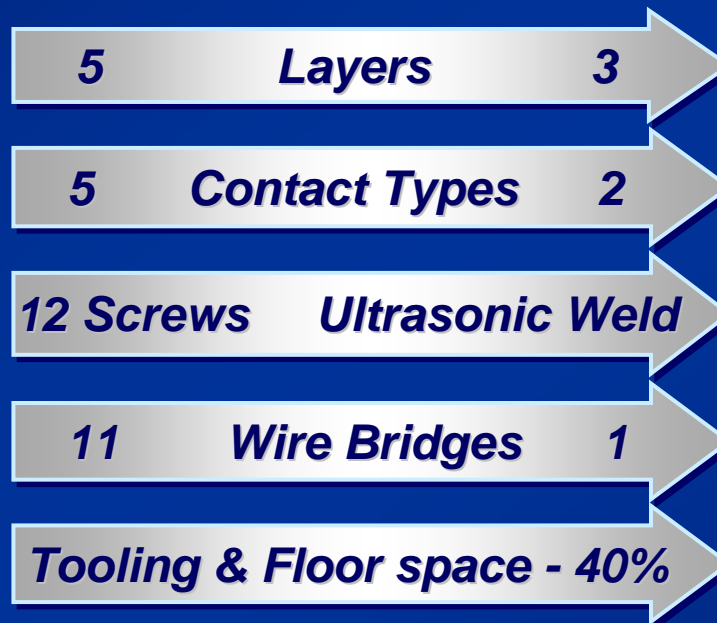
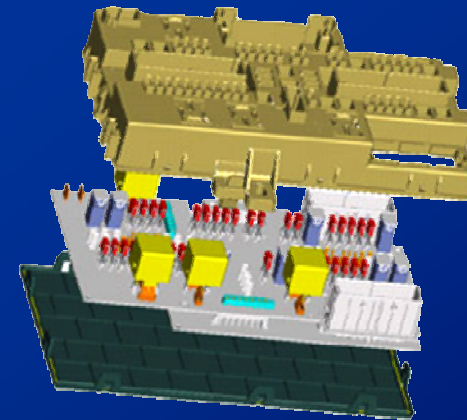
Low Cost Is Not Low Tech

Design to Cost: Automotive Fuse/Relay Box

Initial Design



Final Design



Cost Reduction – 25%

Products: Strong Leadership Positions

Product Segments	Market Position	Major Competitors
Connectors	1	Molex, FCI, Delphi, Hon Hai, Amphenol, Methode, Sumitomo
Relays	1	Omron, NEC, Denso, Hella
Heat Shrink Tubing / Harnesses	1	Sumitomo, Cannusa, DSG
Touchscreens	1	3M, Guzo, Eturbo Touch
PolySwitch™ Devices	1	Littelfuse, Bourns, Polytronics
Multifunction RF Assemblies	1	REMEC, ST Microwave, Herley, Ball Aerospace
Application Tooling	1	KOMAX, JAM
Wireless Systems	2	Motorola
Fiber Optic Components	2	Agilent, JDS Uniphase, Yazaki
Power Systems	3	American Power, Power One, Emerson, Marconi
GaAs/Silicon/Passive Components	3	Motorola, RFMD, Skyworks (Alpha), Watkins-Johnson
Printed Circuit Boards	10	Sanmina, Compeq Mfg Co, E&E, Merix

Tyco Electronics' Strength – Product Portfolio

 = Product Segment Position

Company	Terminals & Connectors	Cable Assemblies	Relays	Smart Cards	Circuit Protection	Wireless	Printed Circuit Boards	Fiber Optics	Wire & Cable	Battery Packs	Electronic Modules	Power Systems	Touchscreens
Tyco	■	■	■	■	■	■	■	■	■	■	■	■	■
Amphenol	■	■					■						
Cannon	■												
FCI	■			■			■						
Foxconn	■	■				■							
JST	■												
Molex	■	■					■						
Omron			■										
Power One											■		
Skyworks						■							
Teradyne	■						■						
3M	■							■					■

Scale and Diversification

Market Share Strategy

- Excel in High Growth Markets
- Leverage Product Portfolio - Increase Market Share for all Products with our Customers

<i>New Sales Model</i>		
Increase Sales Force in High Growth Regions	Global Account Management Program (GAM)	Sales Opportunity Program (SOP)
Focus on Emerging Markets	Focus on Large Accounts	Focus on Small to Medium Accounts

GAM and SOP Programs

- Build & manage a worldwide sales team for each targeted account to sell all products
 - Includes cross training of product offerings
 - Establishing communication networks in sales across the globe and business units
- Align with customer purchasing organizations to lower their supply base and provide more cost savings by using Tyco
 - Determine the total sales potential for all products
- Establish detailed customer account plans for accountability
- Drive program using commission incentives for GAMs driven by total product sales (all business units)

**Leverage the Breadth and Size of
Tyco Electronics to Gain Market Share**

High Growth Market Opportunities

Eastern Europe

<u>Share</u>	<u>Potential</u>	<u>5Yr CAGR</u>
10%	\$1 B	10%-15%

Latin / South America


<u>Share</u>	<u>Potential</u>	<u>5Yr CAGR</u>
10%	\$1 B	5%-10%

China and India

<u>Share</u>	<u>Potential</u>	<u>5 Yr CAGR</u>
11%	\$10 B	15%-20%

Significant Emerging Market Potential

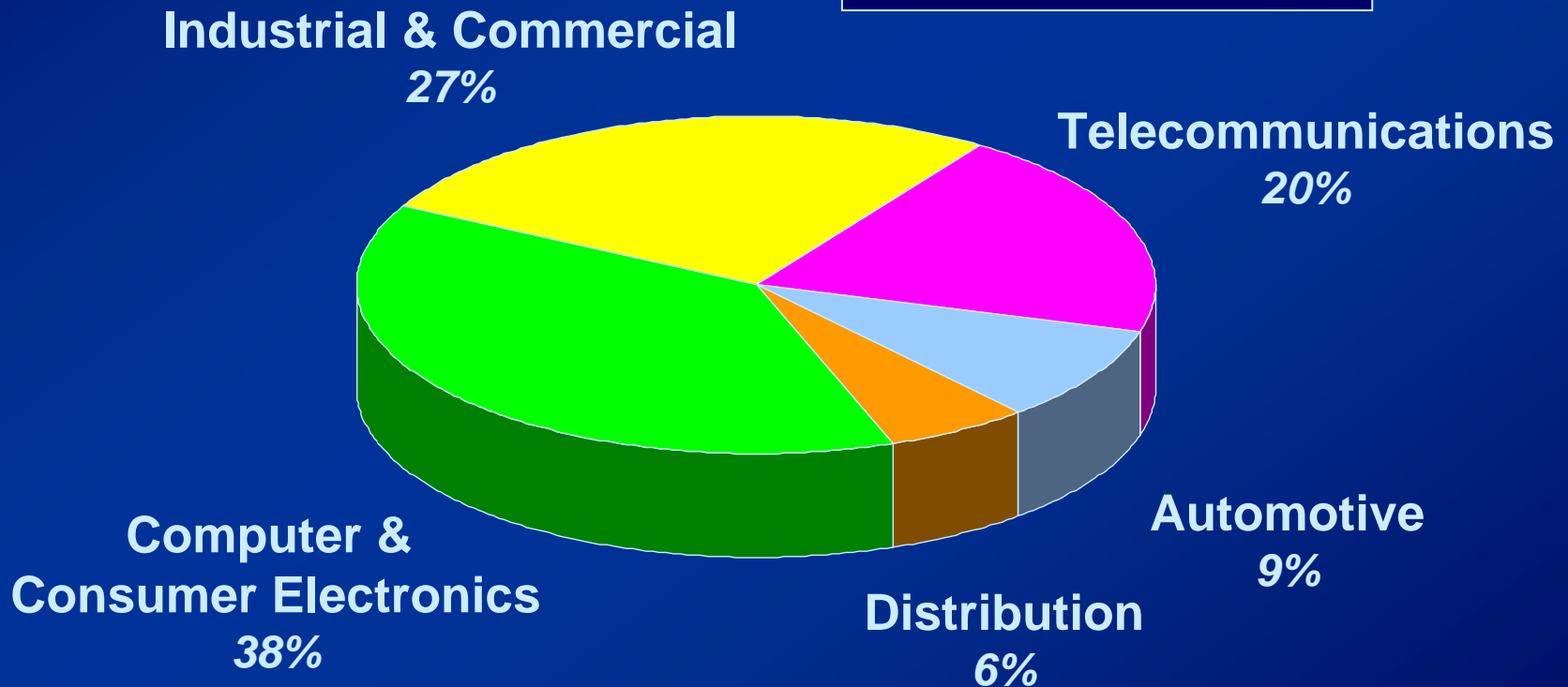
Why Is China So Important?

- Significant Local Market Potential
- International Customers in China Request Local Supply
- Cost Competitiveness
- Time to Market  Through Manual/Semi-Automatic Assembly Equipment
- Flexibility

Tyco Electronics' China Sales

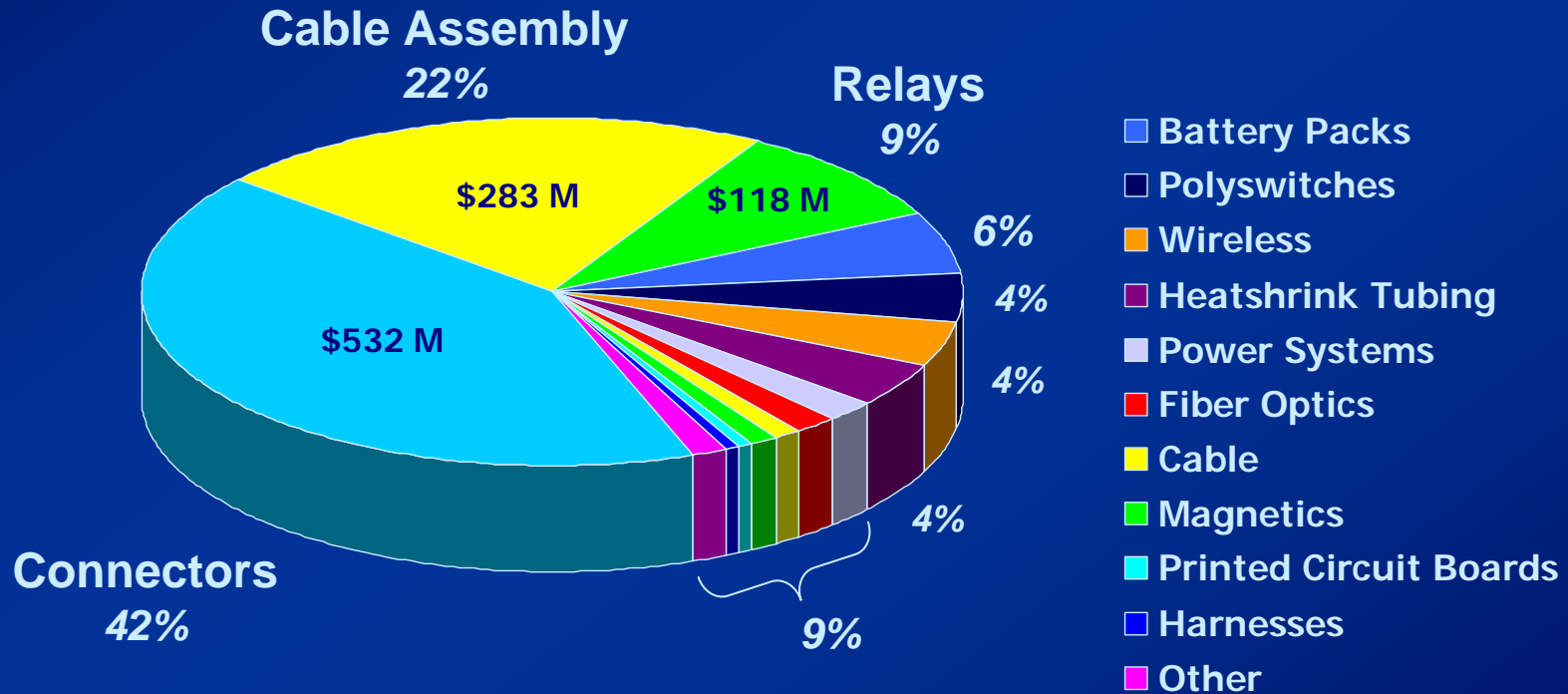
FY2003 Total Sales
\$1.3 billion

Local Sales: 51% of total
Export Sales: 49% of total



China Sales by Product Segment

**FY2003 Total Sales
\$1.3 billion**



Significant OEM and Local Customer Base – Top Customers in China - 2003

■ Alcatel Shanghai Bell	■ GM	■ Motorola Inc.
■ Arrow Electronics	■ HK Wiring Systems	■ Philips Electronics
■ Asustek	■ Huawei Technologies	■ Quanta
■ Changchun Electric	■ Ingram Micro	■ Shanghai Donqi
■ Cherry	■ Jabil Circuit	■ SH PTAC
■ Chun Fat Enterprises	■ Kun Shan Hugang Automobile	■ Solectron
■ CLP Power Hong Kong Ltd	■ Lear	■ Sumitomo
■ Compal Electronics	■ Lucent Technologies	■ Takane Denki
■ Delphi	■ Maximax Ltd.	■ Tech-Front
■ Flextronics	■ Microstar	■ USI Electronics (Shenzhen Ltd.)
■ Ford	■ Mitac International	■ VW

Investment in China

Category	\$ US in Millions
Machinery & Equipment	\$ 232
Buildings & Land	\$ 56
Gross Fixed Assets	\$288*

*As of 9/30/03. Excludes \$16 Million in Hong Kong.

Tyco Electronics' Current Manufacturing Footprint



China Manufacturing *Products & Employees by Facility*

Facility	Products	Total Employees
Shanghai - AMP	Connectors	1,908
Guandong	Connectors, Cable Assemblies	3,047
Qingdao	Connectors, Relays	3,198
DongGuan - FAI	Cables, Cable Assemblies	2,420
Shenzhen	Relays	3,552
Kunshan	Circuit Protection, Cable Assemblies	880
DongGuan Transpower	Magnetics	5,042
Shanghai - WGQ	Fiber Optics	470
Wuxi	Telecom Outside Plant	43
Zhuhai	Cable Assemblies	386
Shanghai - PCG	PC Board Assemblies	140
Zibo	Insulators	87
Shanghai - Raychem	Heat Shrink Tubing, Battery Packs	879
		22,052

300,000 Square Meters of Capacity

China Cost Reduction Example - Migration

Conversion Cost Comparison Connector Plant

<i>US\$ 000's</i>	United States		China	
Expenses				
Labor Related	\$29,700	62%	\$6,600	35%
Fixed (<i>Depr/Utility/Taxes</i>)	13,900	29%	6,700	36%
Variable - Non Labor	4,100	9%	5,500	29%
Total Conversion Cost	\$47,700		\$18,800	

61% Reduction
before Freight Cost Impact (approx. 15-20%)

Expected Production Migration


Next 18 Months



\$320 Million of Sales Value

China – Expected Market Development

Next Five Years

- Local market growth of 20% per year to \$20 billion
 - Plus further migration of key customers
- Tyco Electronics Target
 - Annual growth: 20% to 25% per year
 - Grow from \$1.3 B  \$3 to \$4 B

Tyco Electronics: Expansion Plan in China

Global Industrial & Commercial

- 20,000 m²
- \$8 million of capital
- 500 to 1,000 employees

Global Automotive

- 30,000 m²
- \$20 - \$22 million of capital
- 2,000 - 3,000 employees

Communications, Computer & Consumer Elect.

- 15,000 – 20,000 m²
- \$15 million of capital
- 3,000 employees

Shanghai Engineering Center

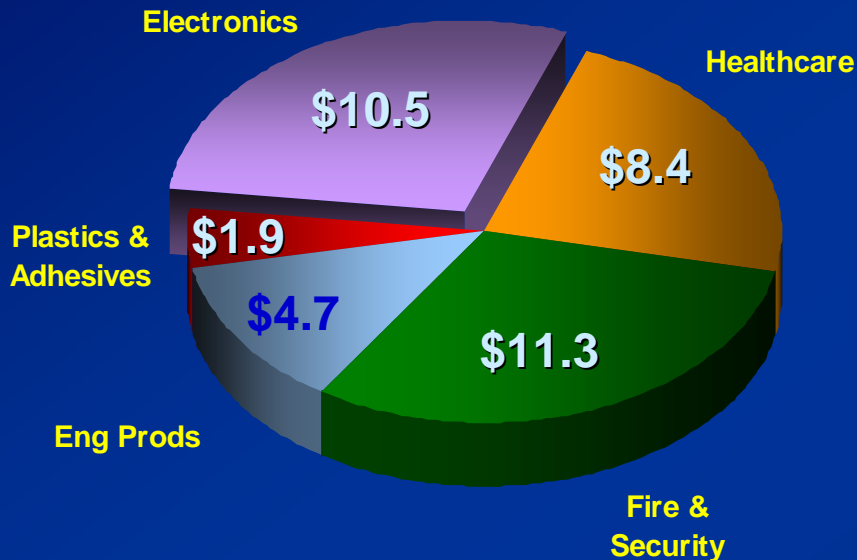
- Additional space of 2,000 – 2,500 m²
- \$4 million of capital
- 341 additional employees

Tyco Electronics...

- The Technology Leader
- Solid Organic Growth Outlook
- Significant Operational Excellence Opportunities
- Strong Operating Leverage with Improving Global Economy

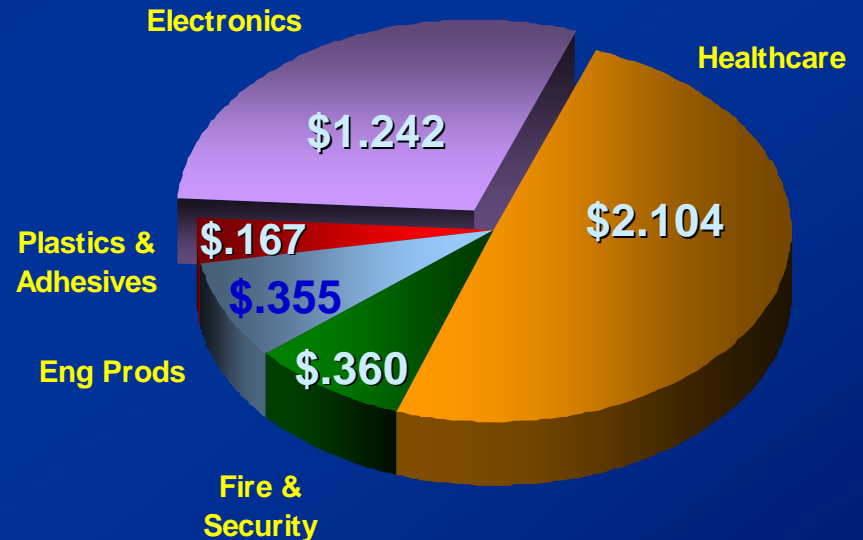
Tyco International *

2003 Revenue



\$36.8 billion

2003 Operating Income



\$4.2 billion (excl. Corp. Exp.)
 (\$3.1 billion including Corporate Expenses)

* Restated for Classification changes disclosed in 8-K dated March 2004

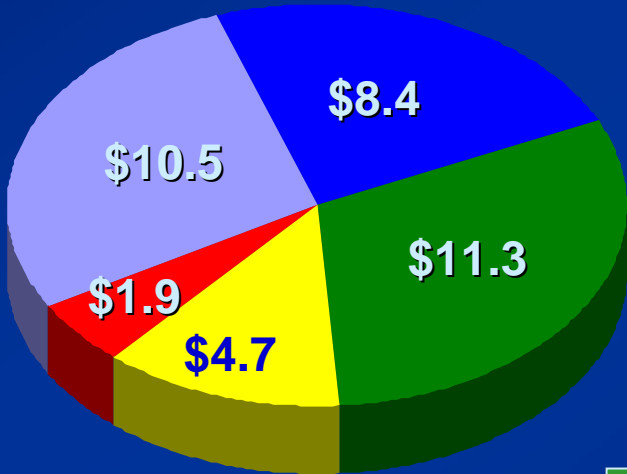
Tyco International * - Multi-Industry Leadership

Electronics

- #1 - Connectors
- #1 - Heat Shrink Tubing
- #1 - Circuit Protection Devices
- #1 - Cable Identification
- #1 - Relays

Healthcare

- #1 - Wound Care
- #1 - Vascular Compression
- #1 - Sharps Containers
- #1 - Incontinence Care
- #1 - Electrosurgery



Plastics & Adhesives

- #1 - Industrial Duct Tape
- #1 - Garment Hangers

Fire & Security

- #1 - Fire Protection Installation
- #1 - Fire Protection Product
- #1 - Fire Protection Service
- #1 - Security

Engineered Products

- #1 - Industrial Process Valves
- #1 - Water Utility Valve Products
- #1 - Steel Pipe & Tube... Electrical Conduit
- #1 - Fire Protection Products

2003 Revenue of \$36.8 B - Over 2/3 of From #1 Products

* Restated for Classification changes disclosed in 8-K dated March 2004

Diverse Portfolio of Leading Brands

Electronics

AMP

Raychem



MACOM

CII Technologies

Healthcare

U.S. Surgical

Auto Suture

MALLINCKRODT

KENDALL

Valleylab

Plastics & Adhesives

Ludlow



Nashua
TAPE PRODUCTS

POLYKEN

Engineered Products & Services

UNISTRUT

allied
TUBE & CONDUIT



Grinnell



KEYSTONE

Fire & Security Services

ADT

Sensormatic

WORMALD

SCOTT



Tyco International - Accelerating Performance in 2004

- *Market Leadership in Attractive Industries*
- *Solid Growth Strategies in Every Segment*
- *Significant Operational “Runway”*
- *Strong Cash Flow / Improving Balance Sheet*

Appendix

Electronics Segment Overview *

All data in millions and translated at historical rates

<i>2003 Sales & Operating Income Reconciliation</i>	Sales	Op. Inc.	Op. Inc. %
Components	\$ 10,356.2	\$ 1,522.4	15%
Telecommunications	136.0	(43.6)	n/a
Impairments / Restructuring	-	(237.3)	n/a
Total Segment	\$ 10,492.2	\$ 1,241.5	12%

* Restated for classification changes as described in 8-K dated March 2004