

MODISON
THE SILVER PEOPLE



Modison
Electrical Contacts
One stop Solution for LV, MV and HV globally

MODISON
THE SILVER PEOPLE

Contents

Introduction

Executive Summary

Business Overview

Product Portfolio

Manufacturing Facility

Financial Performance 2013-14

Management Overview

Industry Overview

Financial Overview

Way Forward



A leading global player in the electrical contacts industry



- Product range covering contacts for entire range of switchgears upto 1100kV
- Market leadership in India, with near monopoly in HV segment
- Modern, integrated & global-scale manufacturing facilities
- Long-term supply relation with most leading global switchgear players
- Sound technology base with history of successful product development
- Strong financial track record
- Attractive growth prospects backed by new product launches

Modison is one of the 3 global players with access to HV technology

Modison Metals limited



Founder Mr G L Modi

MODISON
THE SILVER PEOPLE

Revenue

171 Crore

Number of Employees

244

Corporate Office

Nariman Point ,Mumbai

Manufacturing Facility

Vapi

180 Km from Mumbai

Ownership

Public

Listed in BSE

Who We Are...



Foremost Electrical Contacts company in India



Leader in LV ,MV and HV electrical contacts



The only company in India and one of two in the world with presence in all three segments

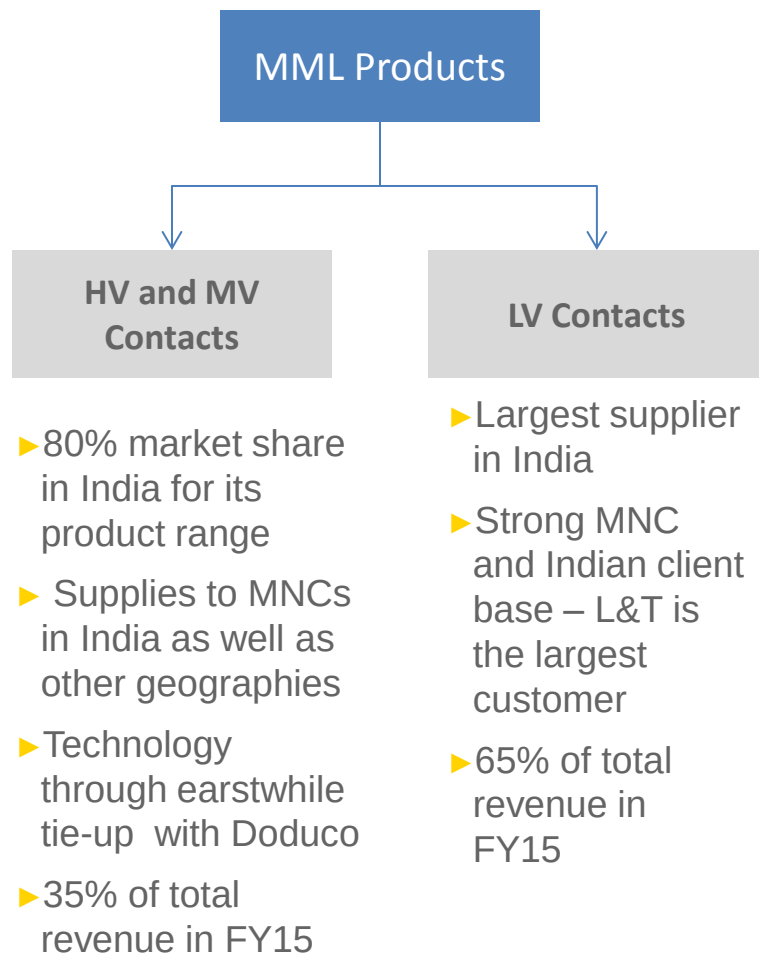


Doduco (German) Technology

Introduction

- ▶ Modison Metals Limited (“Company” or MML or Modison) is a leading manufacturer and provider of electrical contacts for low, medium and high voltage switchgears in India and internationally
- ▶ The Company was incorporated in 1965 and ventured into electrical contacts in 1978
- ▶ Headquartered in Mumbai, Modison Metals has an integrated manufacturing plant located in Vapi, Gujarat in western India
- ▶ Current installed capacity of 200 thousand arcing contacts for HV as well as 30 tonnes per annum of LV contacts at its Vapi plant
- ▶ Modison has strong technical capabilities backed by historical technical alliance with renowned global electrical contacts manufacturer, Doduco, Germany
- ▶ Has strong and established customer base including leading global and Indian switchgear manufacturers like Alstom, ABB, Siemens, L&T and CG

Product Portfolio



The Journey

- ▶ Established silver refining facility in Mumbai

- ▶ Technical collaboration with Doduco for AgCdo (ZH) contacts
- ▶ Supplied ZH contacts to L&T

- ▶ Technology transfer for complete HV contacts from Doduco
- ▶ Developed own copper chrome alloy for HV contacts

- ▶ License agreement with Doduco ended
- ▶ Commenced exports of HV contacts to Europe and Japan

- ▶ Shifted HV plant to a new building
- ▶ Started steel backed button contacts; imported plant from Italy

- ▶ Developed high performance current carrying contacts
- ▶ CuCr contacts for vacuum interrupters (final stage of production)

1975

1983-85

1989-91

1997-99

2007-08

2011-
today

1965

1978

1986-87

1991-95

2002-03

2009-10

- ▶ Founded as a trading unit for export of engineering and general merchandise

- ▶ Started manufacturing electrical contacts and contact materials at Vapi

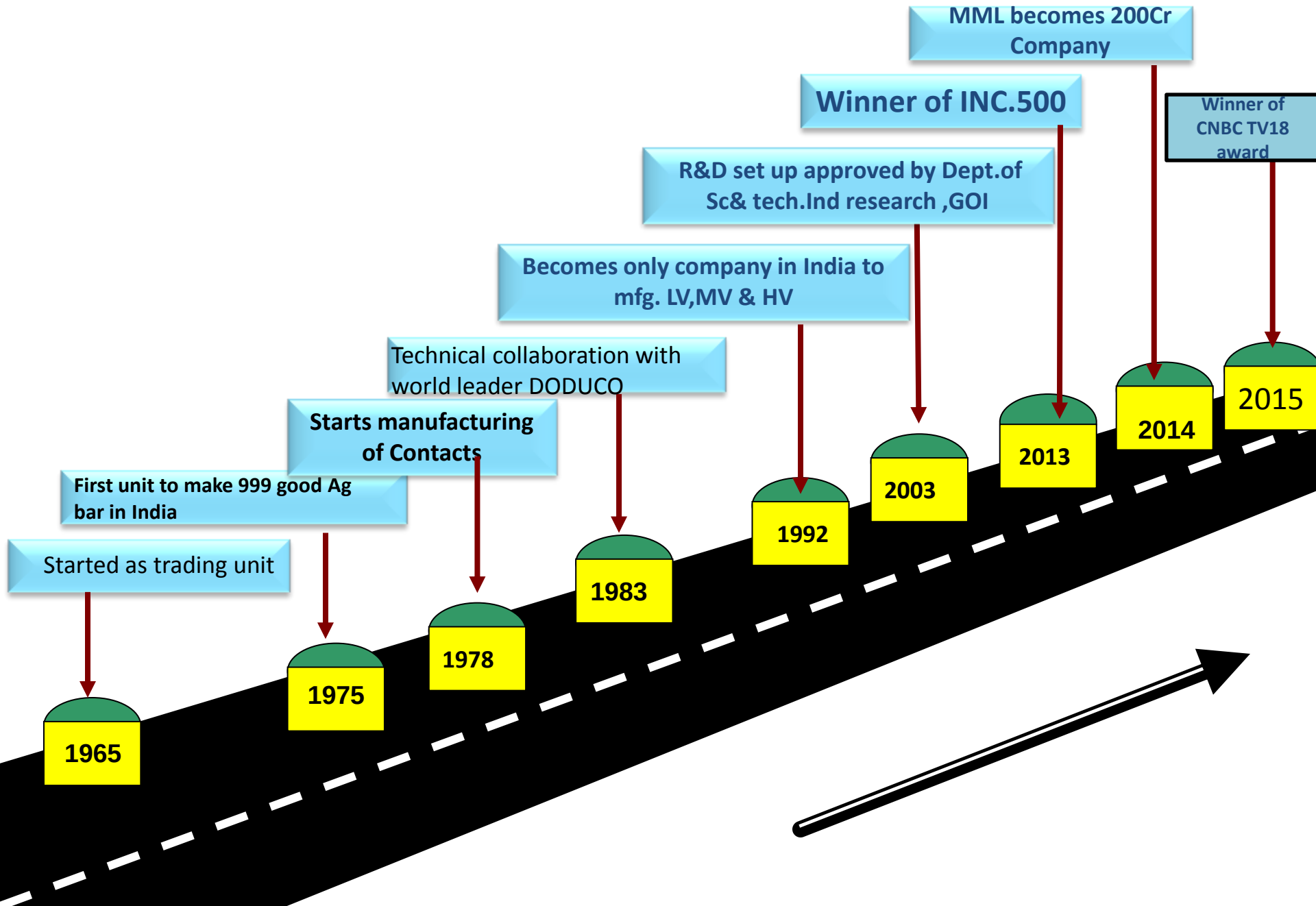
- ▶ Collaboration with Doduco for AgW and CuW contact tips for ACBs and MCCBs

- ▶ All HV contacts type tested and approved
- ▶ Acquired 100% market share of HV contacts in India

- ▶ Major capex for increase in HV capacity: EB welding, vacuum induction furnace, CNC and extrusion press

- ▶ Installed automatic contact welding and forming line

MODISON MILESTONES



Vision ,Mission & Value

VISION

At Modison its our vision to become ENTITY which can provide one stop solution in INDIA and that can manufacture everything under the gambit of electrical contacts for switchgear industry

MISSION

we are committed to meet the expectations of our customers, employees & the stakeholders and continuously evolve ourselves in order to achieve vision

VALUE

Modison shall foster continuous caring culture, While meeting the expectations of Stakeholders, environment and society

Customer Profile

MODISON
THE SILVER PEOPLE



World's leading players are our customer

Milestones of 2015...



Nominated
for CNBC-
TV18
Emerging
India Award

Modison
Enters North
America



Single A minus
to Single A (long
term)

A2+ to A1 for
short term

CARE rating
improved

Revives
Bullion
business as
new business
vertical



Emerging India awards Accolades)

Nominated in

“Engineering & capital Goods”
Category as top 3 companies

By CNBC TV18
Powered by CRISIL (S&P)



Accolades



Investment Bar /Bullion



You Buy... We Guarantee... Buy Back.....



Minted

- India's First Refinery To Manufacture 999 Silver
- Fully Integrated Refinery Exclusively For Silver
- ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007
Certified Company
- Purity Guarantee
- Competitive Price
- Buy Back Guarantee At Prevailing Silver Price
- World Class Mirror Finish
- Clear Detailing
- Minted For Gift
- Casted For Investment
- Customisation Possible For Bulk Order



Casted

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33 - Nariman Bhavan, 227 - Nariman Point,
Mumbai - 400 021, INDIA
Tel.: +91-22-2202 6437
Fax: +91-22-2204 8009

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9 & 10 - Mumbadevi Chamber, 1st Floor,
101 - Sheikh Memon Street (Zaveri Bazar),
Mumbai - 400 002, INDIA
Tel.: +91-22-2344 1967 / 4939

sales@modison.com
www.modison.com



With Certificate of Purity
999 & buy back offer

Salient Features

Attractive Product Portfolio

- ▶ One of the 3 players globally and the only Indian company with capability to supply contacts for the entire range of LV, MV and HV switchgears
- ▶ Product range includes –
 - ▶ LV contacts – contacts based on silver cad-oxide, bimetals, silver nickel etc. for various current ratings for control gears and switchgears
 - ▶ MV contacts – supplies contacts for SF6 based switchgears; currently in advanced stages of developing contacts for vacuum switchgears
 - ▶ HV contacts – arcing and non-arcing contacts. Company has developed and supplied contacts for up to 800kV rating switchgears
- ▶ The Company has a strong track record of developing / indigenizing products for its customers
- ▶ Strong technical know-how – one of the only facilities which has Doduco technology to manufacture electrical contacts through the Z/H process
- ▶ The Company is developing a range of new products across LV and HV which is expected to drive growth in the medium term going forward
- ▶ Key new products developed include (a) High performance current carrying contacts in the form of crowns, pins and contact bands (b) copper chromium contacts for vacuum interrupters (final stage of production) (c) silver alloy semis

Salient Features (cont'd.)

Market leadership position

- ▶ Modison is the largest electrical contacts manufacturing company in India
- ▶ Only player in the HV contacts market – In the high voltage switchgear contacts segment, the Company enjoys ~80% market share
- ▶ It enjoys strong market presence among all the products offered by the Company

State-of-the-art and integrated manufacturing facility with capacity in place

- ▶ Integrated operations – all key processes in-house – silver refining to producing electrical contact materials and finished contacts for low, medium and high voltage switchgear
- ▶ Strategic location – in Gujarat, well connected with roads and ports
- ▶ Facility well positioned with capacities in place –
 - ▶ HV contacts facility has global scale; has capacity to manufacture ~200,000 arcing contacts
 - ▶ Company has new equipments (Electron Beam Welding machines , automatic contact welding line and automated machining centres) to expand capability and capacity in the LV & HV facility
 - ▶ Company has 100% backward integrated manufacturing facilities helping the SCM, Quality & responsiveness
- ▶ Testing – modern testing facility for raw material as well as finished products for both LV and HV contacts

Salient Features (cont'd.)

Longstanding relationship with major switchgear OEMs

- ▶ Supply relation with all key switchgear manufacturers with relationship spanning ~20-25 years

SIEMENS

ABB

ALSTOM



ANCHOR
by Panasonic

- ▶ #1 in most of its supplies to the customers with a significantly strong position
- ▶ Introduction of MV range of contacts to help broaden customer base to new geographies like Eastern Europe, Russia, USA etc.

India amongst the most attractive switchgear markets

- ▶ Large switchgear market in India estimated at ~USD 1.8 billion with the market expected to grow at 12-15% in the medium term
- ▶ Growth driven by visibility on planned T&D equipment spend – USD 140-150 bn over the next 5 years (12th Five Year Plan)
- ▶ Most global switchgear manufacturers already present in India or evaluating opportunities in the market
- ▶ India emerging as a manufacturing and sourcing base for switchgear MNCs
- ▶ Key drivers for growth include – addition of generation capacity, development of the transmission network in India, government initiatives in rural electrification, replacement demand, growth in exports

Salient Features (cont'd.)

The Company has sustained robust financial performance

- ▶ Consistent growth – decent CAGR volume growth from FY13; driven by market performance as well as new product introduction track record
- ▶ Sustained profitability – good EBITDA margins past many years ; backed by the strong market leading position in LV and virtual monopoly in HV
- ▶ Low leverage – strong balance sheet position
- ▶ Not exposed to metal price risk – existing contracts with all key customers ensure that Modison is not taking risk on account of metal price volatility
- ▶ Expected to grow volumes at ~15-20 % in the medium term with sustained EBITDA margins; growth driven by a combination of market growth as well as new product introductions

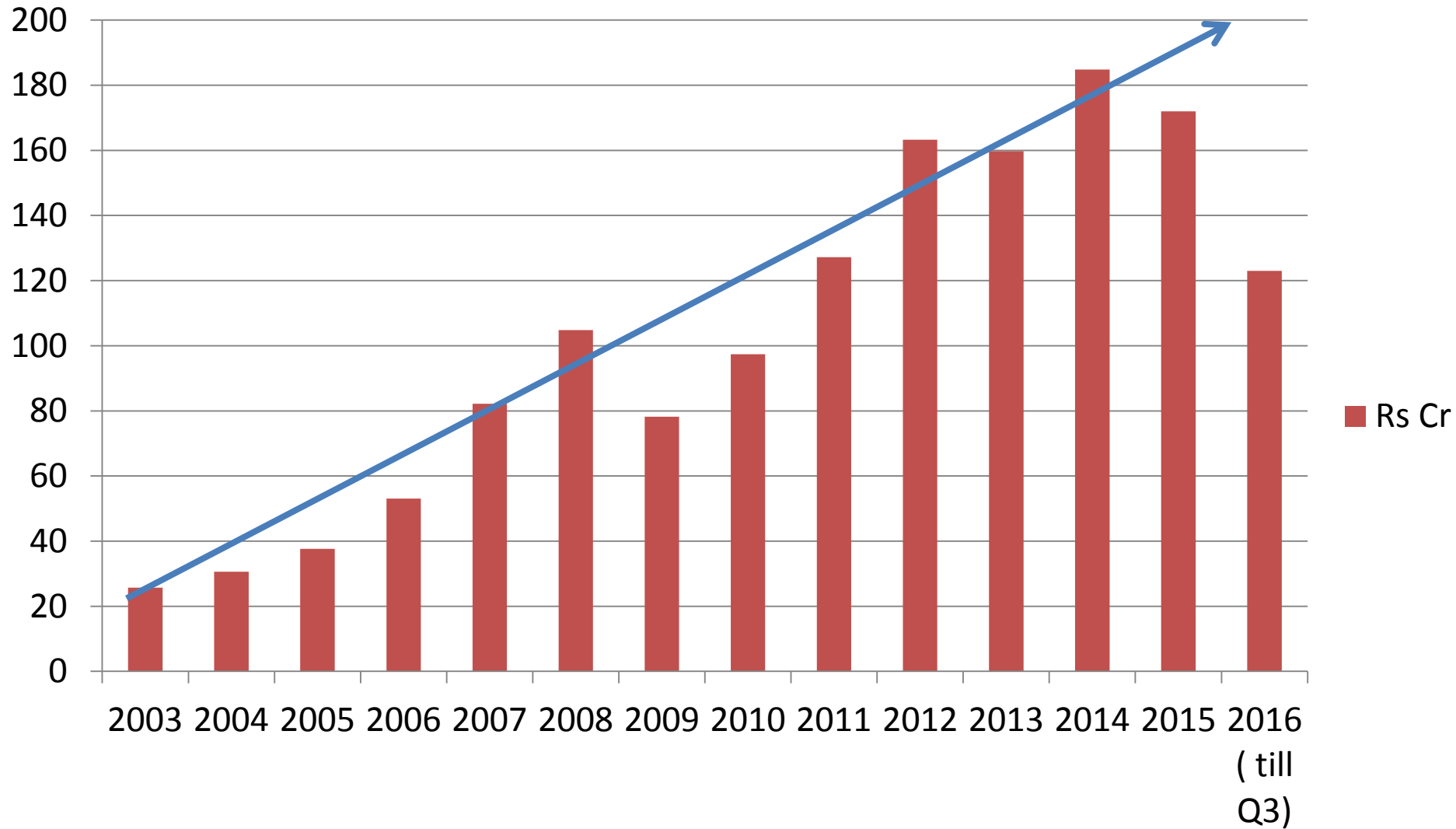
Strong visibility on growth

- ▶ Company has a pipeline of new products with strong visibility on commercial supplies commencing to customers over the next 3 to 6 months
- ▶ In addition to revenue visibility, the new products developed by the Company like vacuum interrupters for MV switchgears and silver alloy semis will help create footprint in new geographies like East Europe, Russia and USA
- ▶ Sluggish Exports at the moment due to weak global cues ,however new geographies added to give impetus moving forward.

Experienced professional management

- ▶ Professionally managed Company with an experienced team in place to take care of key aspects of the business including new product development, plant operations, finance, admin functions etc.
- ▶ Key management team has experience of over two decades of working with the Company

Revenues(Net Sales)



Financial Summary

Rs CR	FY12	FY13	FY14	FY15	FY16till Q3
Net sales	163	160	185	172	123
EBITDA	31.62	19.49	28.0	16.75	19.31
<i>margin (%)</i>	<i>19.5%</i>	<i>12.1%</i>	<i>15.0%</i>	<i>9.75</i>	<i>15.45</i>
PAT	15.98	6.56	12.18	4.60	7.52
<i>margin (%)</i>	<i>9.80%</i>	<i>4.11%</i>	<i>6.59%</i>	<i>2.70</i>	<i>6.11</i>
Net Fixed Assets	54.7	62.0	60.65	59.00	60.00
Net worth	85.786	88.4	95.8	97.36	105.00
Total Debt	21.5	23.8	25.62	26.00	22.00

*

Market Data

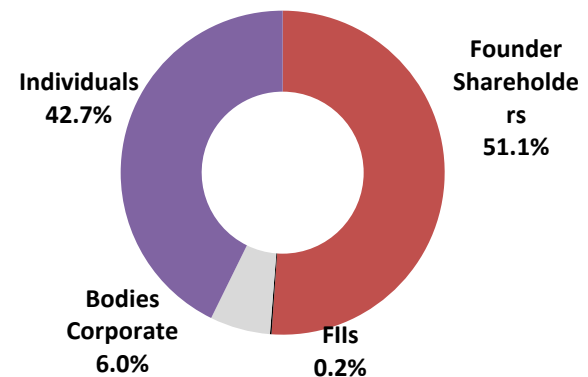
Market Cap Rs 160 Cr

Current share price – Rs50

52 wk low/high – 35/60

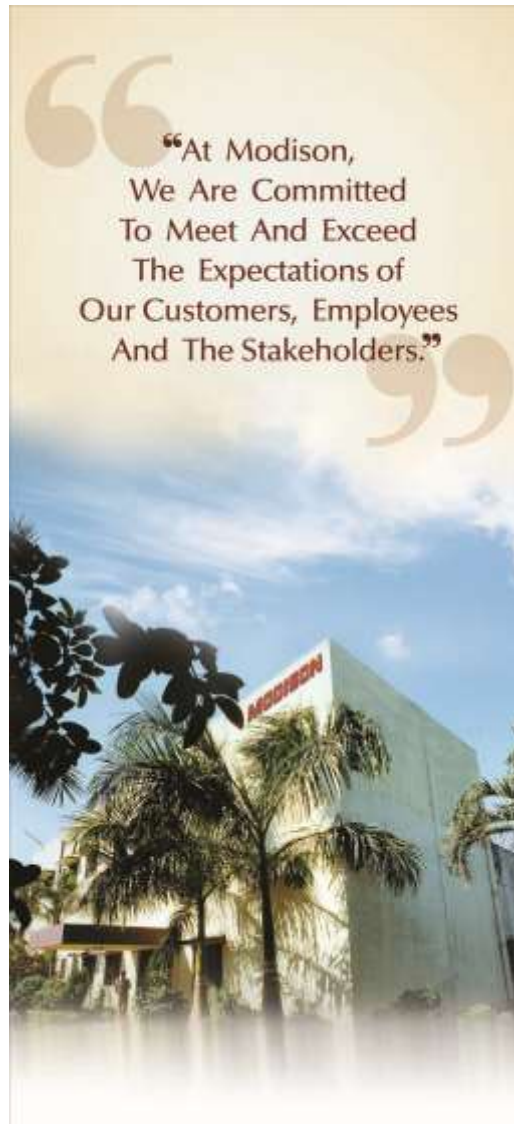
Source: Capitaline

Shareholding pattern



Source: BSE

Manufacturing Facilities



“At Modison,
We Are Committed
To Meet And Exceed
The Expectations of
Our Customers, Employees
And The Stakeholders.”



Self sufficient state of the art
Refinery

100% Backward integrated set up

R&D approved by dept of science &
tech. GOI

**Located at NH8 ,Vapi ,
Gujarat**

Excellent IR

Area- 16,791sq mt

Built up - 11,783 sq mt

Certifications

Quality

Environment

Health & Safety



Integrated manufacturing facility

Overview of manufacturing facility

- ▶ Integrated operations from silver refining to producing electrical contact materials and finished contacts for low, medium and high tension switchgear all under one roof
- ▶ The manufacturing facility is spread across 16,791 sq mtr of land with a built up area of 11,783 sq mtr
- ▶ The land is owned by Gujarat Industrial Development Corporation (GIDC) leased out to the Company for 99 years
- ▶ Certified by DET NORSKE VERITAS for ISO 9001, ISO 14001 and OHSAS 18001

Current capacity

- ▶ The LV and the HV plants are located in separate buildings
- ▶ Currently, the HV plant has a capacity to manufacture ~200 thousand arching contacts per annum. Post completion of the ongoing expansion plan, the plant will be able to manufacture ~400 thousand arching contacts
- ▶ The LV plant can process upto 30 tones of alloys pa which can be expanded to 40 tones without any capex
- ▶ The plant undergoes stringent audit procedures by its global customers like Siemens and Alstom



LV Manufacturing Facility



Key Equipments

1000 T Extrusion Press

Silver and copper refining

Air induction melting, vacuum induction melting, gas fired furnaces for Ag/ Ag alloy melting

WERTLI's Continuous Casting for AgCd

Ag powder production: Atomizer, Chemical, Cementation

Powder mixing & blending, Isostatic pressing, Sintering & Extrusion presses

Power Compacting Presses and Conveyor Sintering Furnaces

Rolling, Bonding mills & Oxidation / Annealing Furnaces with Atmosphere Control

Fully Equipped Press Shop

Automatic Cold / Hot Bonding Contact Rivet making machines

Automatic wire welding, Forming machines

Automatic Cutting & Slicing Machine for AgC

Cold coining presses

Fully equipped in-house Tool Room with Wire Cut, spark erosion

Silver plating facility

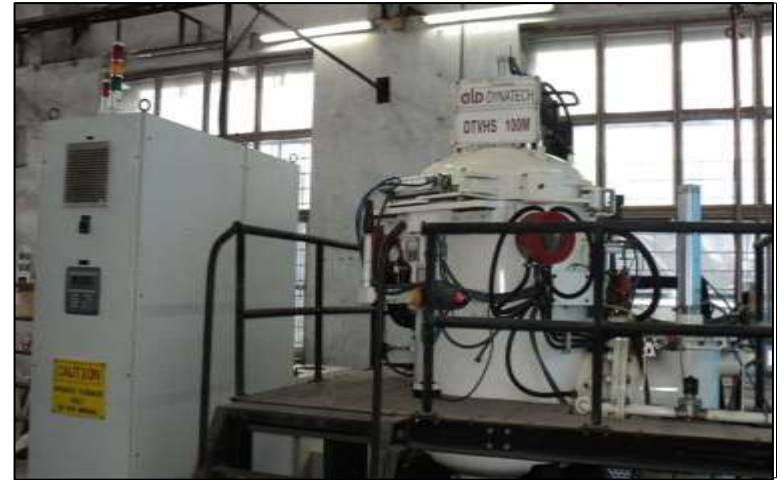
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Plant is equipped with the latest technology & equipments to manufacture a wide range of products

Source: Management

MV Manufacturing Facility

- ▶ State of the art CuCr disc manufacturing facility with end to end capabilities
- ▶ Whole facility in clean room
- ▶ Eutectic brazing alloy for vacuum interrupter
- ▶ applications in the form of foils, washers & shims
- ▶ Eutectic brazing alloys can be offered based on customised solution as well



Machine/Process

Powder mixing & blending

400T compacting press

Vacuum sintering Furnace

Vacuum Induction melting
furnace

Ultrasonic Cleaning equipment

Vacuum packing facility



HV Manufacturing Facility

- ▶ HV plant was shifted to a new building in 2007-08
- ▶ Modern facility equipped with machinery providing end-to-end capabilities
- ▶ HV facility is spread across 4,300 sq mtr of land with a built up area of 2,660 sq mtr
- ▶ With the addition of the new electron beam welding and CNC machine, the plant to become one of the largest HV contact facilities globally, capable of manufacturing 400 thousand arching contacts from the current capacity of 200 thousand arching contacts



Machine/Process

Electron beam welding machines*

High temperature sintering cum melton furnaces

State-of-art CNC machining centres**

Powder mixing & blending and powder compacting presses upto 4,000 KN

Fully equipped in-house Tool Room with Wire Cut, Spark Erosion machines

Silver plating plant for Full / Selective Plating

Fully equipped inspection facility for load, surface roughness, CMM etc

New Investments

Consistent CAPEX investment for capacity & capability building

Helps to remain contemporary and state of the art.

Electron beam welding

- 3rd electron beam welding machine from Germany
- It is a Seam Tracking System – offline with EBO Deflect
- Has 2 step process: scanning the surface of the work-piece near the joint by the beam, measuring the real position and welding along the joint by beam deflection



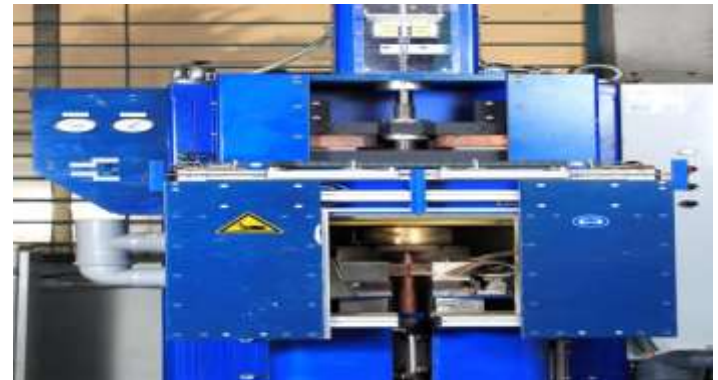
CNC Chucker

- ▶ Installed a state of the art twin spindle CNC chucker from Muratec, Japan
- ▶ The machine has gantry loader with turnaround unit with tool monitor software
- ▶ The part will be fully finished machine in two set-ups without operator intervention and the expected cycle time reduction is ~30%



Percussion Welding

- ▶ Percussion Welding facility to manufacture HV contacts
- ▶ The maximum weld current can be 106kAmps and can butt-weld up to 22 mmΦ
- ▶ Significant Fixed installed in-house capacity for arcing contact making Modison one of the largest across the globe



New Investments

Consistent CAPEX investment for capacity & capability building

Helps to remain contemporary and state of the art.

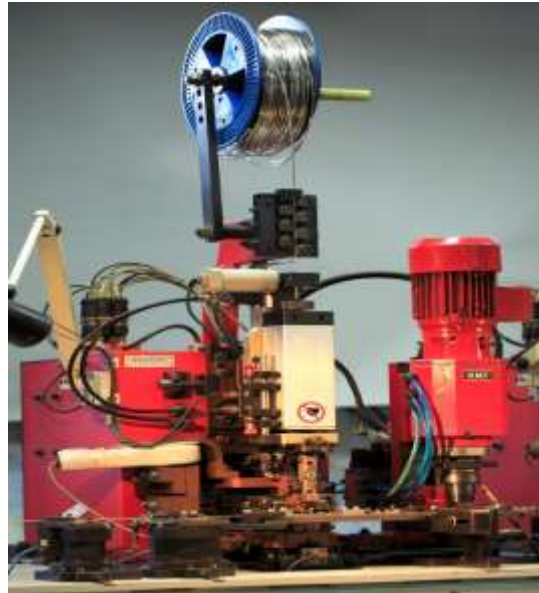
1000T Extrusion press

- Direct and indirect silver alloy extrusion press with PLC control panel
- Capacity 1000 MT
- Constant speed extrusion facility by close loop control
- Adjustable extrusion speed with pre-set control
- Automatic extrusion cycle



Automatic inline welding

- Automatic welding line with capacity of 50 spots per minutes
- Can weld in round and rectangular shapes
- Horizontal and vertical both options available



FY16 – Salient features

- Volume increase at CAGR of 15%
- North America gaining momentum
- Overall Exports muted on weak global economic Scenario
- Bullion Business revival

Till Q3 FY16 LV volume growth 4.5 %

Till Q3 FY16 HV volume growth 10%

**Financial rating long term &
short term improved by
CARE rating**

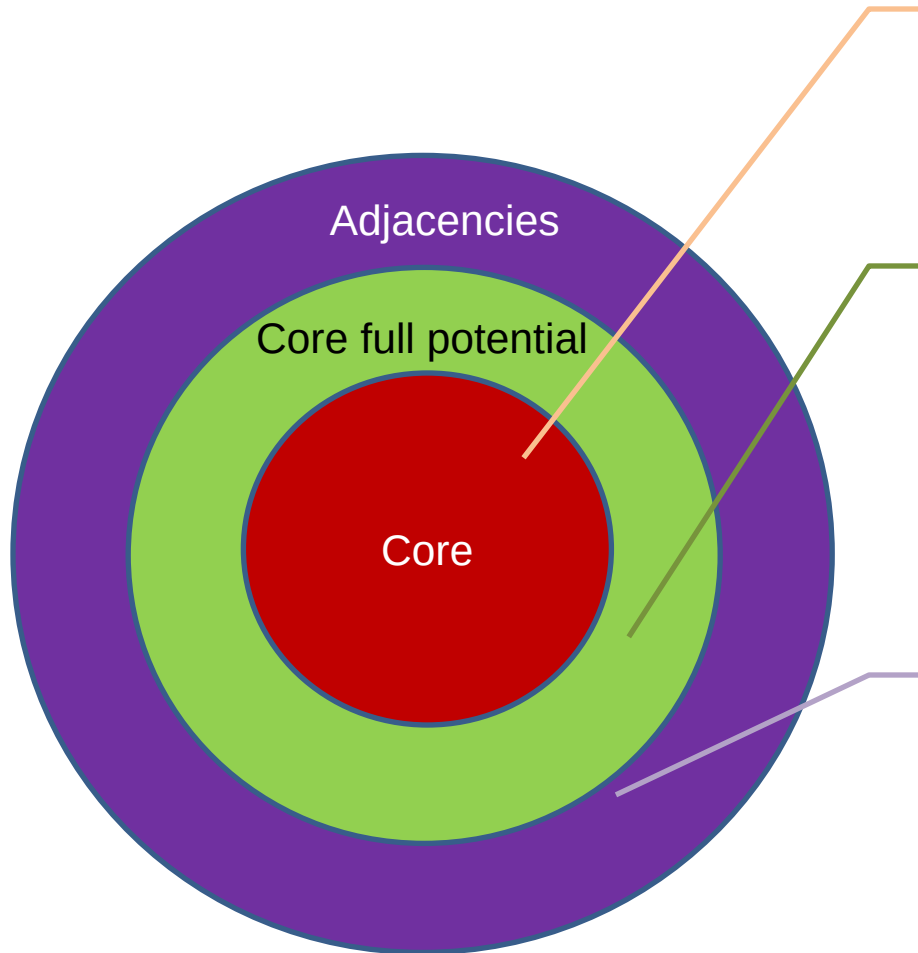
Major growth expected from new products going forward

Products	Comments
Crown contacts (HV)	▶ In the domestic market, started supplying to an Indian T&D equipment manufacturer and is in discussion with Indian electrical equipment manufacturer ▶ Chinese & European market approved the product ▶ Major growth is expected from the export market
CuCr zirconium pins (HV)	▶ Majority of the demand is from a global European major ▶ Started supplying to its Indian plant and samples have been sent for testing to its European plant
CuCr with vacuum silver brazing alloy (MV)	▶ Developed CuCr products but current in nascent stage of production ▶ Samples are being sent to an Indian electrical equipment manufacturer and developing samples for an Indian plant of a global European company ▶ Majority demand expected from customers in Russia and East European countries
Contacts by top lay brazing (MV)	▶ Samples have been approved by the German unit of global European company and an Indian diversified engineering company ▶ Expected to book small portion of revenue in FY13
Beryllium Copper	▶ At advance stages of development ▶ Likely productionisation by June'16
Investment bars	▶ Fully Operational & established

- ▶ Modison is developing new products as per customer's needs
- ▶ Additional products under development are:
 - ▶ 550kV contact
 - ▶ silver cad-oxide contacts for East European markets
 - ▶ Tin-oxide contacts for Europe

New products are expected to contribute ~ 15-20 %of revenues by FY18

Leverage & Compliment the core



PRODUCT: LV ,MV and HV

GEOG: To focus on specific

- Leadership in Existing markets/ geographies
- Improved Customer intimacy
- Improved marketing
- Conversion customer focus
- Improve share of wallet

- Focus on New Products (MV contacts, Brazing alloys, AgNi wire)
- New geographies /Maximise existing ones
- expansion

CSR (Corporate Social Responsibilities) Activities

Contributing to
PM initiative
BBBP

मोहनलाल मोदी हॉस्पिटल
फतेहपुर- सोबावाटी- सीकर (राजस्थान)



प्रधानमंत्री श्री नरेंद्र मोदी
के बेटी बचाओ अभियान से प्रेरित

मोहनलाल मोदी हॉस्पिटल में बेटी के जन्म पर
₹१०० रुपये का अनुदान

बेटी लक्ष्मी है, उसको पढ़ाएं!

मोदीसन चैरिटेबल ट्रस्ट, मुंबई
के सांजन्व से

१ जनवरी २०१६



- Runs Modison Charitable Trust
- Built Maternity Hospital
- Donation of 5 beds for TB patients treatment on yearly basis
- Scholarship to Pre Primary needy students

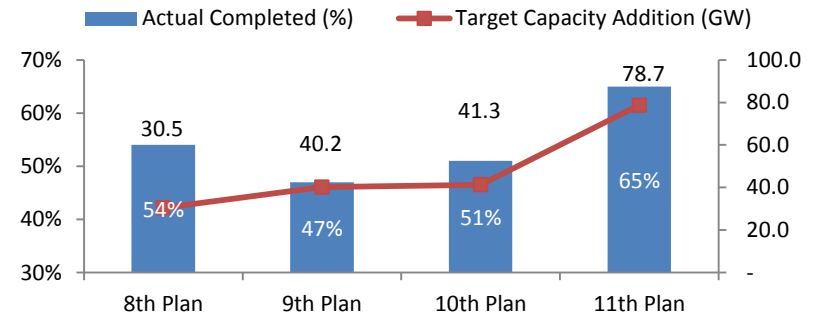
Indian Power Sector

Poised for growth...

Key Highlights

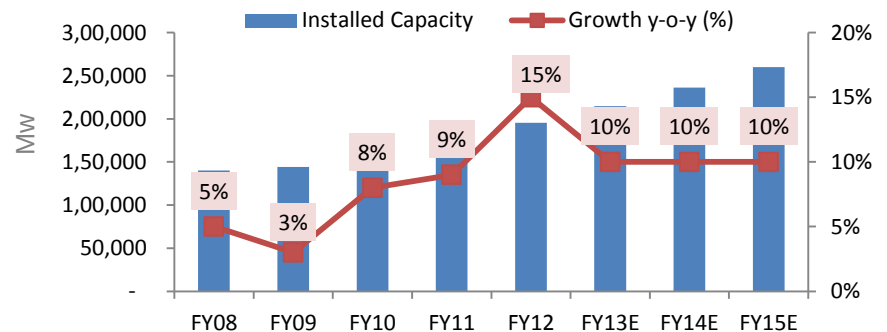
- ▶ Current installed capacity: 200GW
- ▶ ~USD 230 bn investment plan for power sector in the 12th Five Year Plan (from 1-Apr-12 to 31-Mar-17)
 - ▶ Power generation: US\$ 130 bn
 - ▶ Power transmission: US\$ 37 bn
 - ▶ Inter State: US\$ 25 bn
 - ▶ Intra State: US\$ 12 bn
 - ▶ Power distribution: US\$ 65 bn
- ▶ Expected to add ~100 GW of power capacity in the 12th plan as compared to 50 GW additions during the 11th plan
- ▶ Increasing private sector participation with the private sector expected to add ~45 GW of power over then next 5 years
- ▶ With envisioned capacity additions, India is expected to reach an installed capacity of >350 GW by 2022
- ▶ China and India together expected to account for over half of the incremental growth in power demand by 2030

Improving performance of the 5 year plans



Note: 8th Plan: 1992-97, 9th Plan: 1997-02, 10th Plan: 2002-07, 11th Plan 2007-12, above 11th plan information available up to Mar 10

Consistent Growth in Capacity Additions Y-o-Y ...



The Government has introduced various reforms and policies and recognised the importance of private participation to address the issues facing the power sector

Source: CEA, IEEMA, Analyst Reports

Transmission & Distribution (T&D) - India

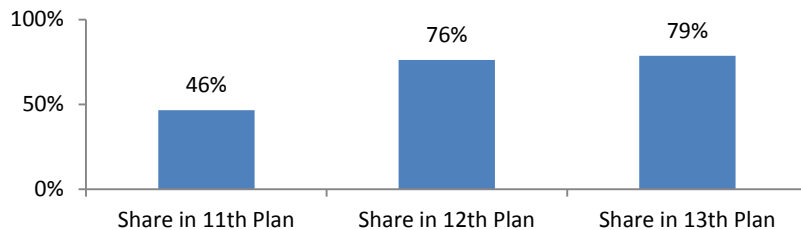
Positive regulatory impetus has led to encouraging investment trend...

Overview

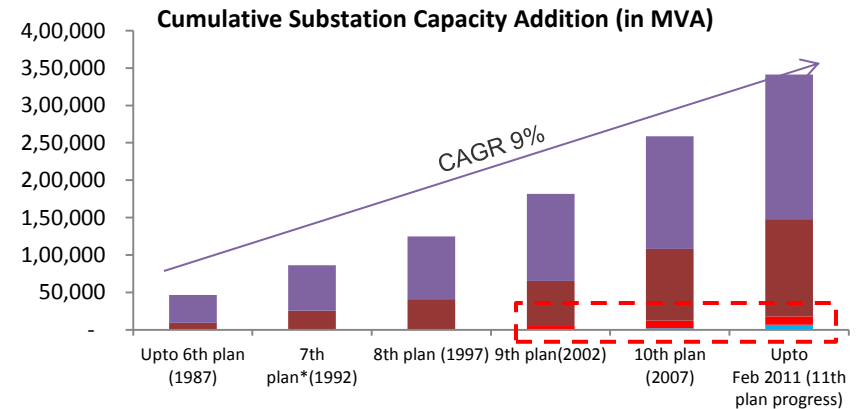
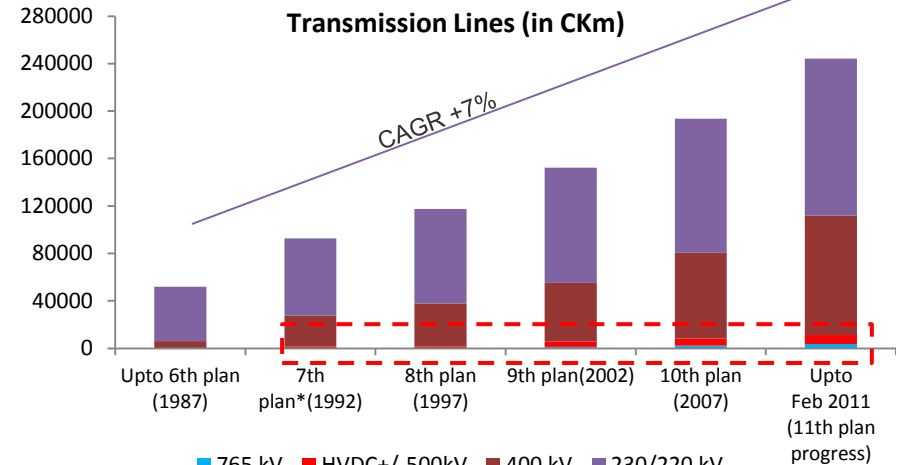
- ▶ For every Re. 1 spent on power generation, India spends Re. 0.50 on T&D, as compared to the world where this ratio is 1:1, signifying huge untapped potential
- ▶ Substantial capacity addition in transmission lines in last two decades
 - ▶ Currently cumulative transmission lines length is 240,000 Ckms, CAGR of 7%
- ▶ US\$ 100 bn expenditure envisaged in T&D in 12th Five Year Plan with 25-30% private sector participation
- ▶ **Transmission** line network set to grow to >275,000 Ckm in 2012 with inter-regional transmission capacity planned to increase by >20GW
- ▶ For **Distribution**, the government has targeted to spend US\$ 8 bn for the reduction of T&D losses and another US\$ 8 bn for the electrification of rural areas

Clear thrust on T&D segment of the power sector...

T&D as % of Generation Capex



Steady growth with increasing capacity addition



Note: 10th Plan: 2002-07, 11th Plan 2007-12, 12th Plan: 2012-17

Thrust on T&D capex with a specific focus on HV transmission lines

Source: CEA, IEEMA, Analyst Reports

India is an attractive destination for global players



- Expects high growth from Indian markets
- Schneider acquired the distribution business of Areva T&D in 2010



- ▶ Acquired the transmission business of Areva T&D in 2010
- ▶ Manufactures MV and HV switchgears for the utility, industrial and infrastructure sectors



- ▶ Plans to invest ~USD 45 million for new facilities in India to manufacture high voltage power products and transformers
- ▶ In 2004, established a technology centre in Nasik, Maharashtra to develop medium voltage products catering to power distribution sector for the global market



- ▶ *"India is a strategic market for Legrand"- Gilles Schnepf, Chairman and CEO*
- ▶ Making India a manufacturing base for certain switches and sockets for exports
- ▶ In 2010, acquired Indo Asian, one the largest switchgear manufacturers in the country



- ▶ In 2007, Panasonic acquired Anchor Electricals to enter the Indian switchgear industry
- ▶ *"India is a key growth potential market for Panasonic, and therefore an area of strong commitment"- Daizo Ito, President, Panasonic India*
- ▶ Set up a green field manufacturing unit in Daman, India to manufacture wiring devices

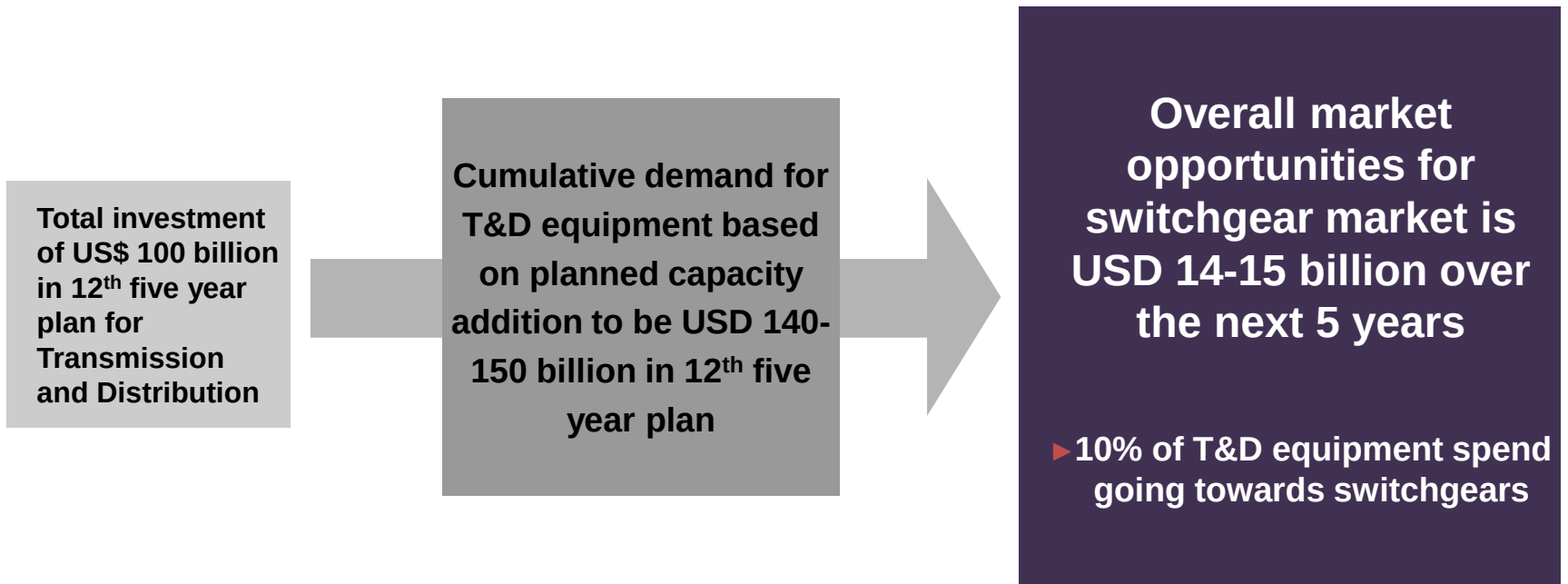


- ▶ Expanded capacity at its switchgear manufacturing facilities in Kalwa (near Mumbai) and Hyderabad; new MV switchgears facility in Goa in Jan-12 to manufacture GIS for up to 36kV
- ▶ *"India is a central point of our global growth strategy" – Peter Löscher, President and CEO of Siemens AG*

Source: Research reports, annual reports, website and news articles



Modison well positioned to capture upside in a growing market



- ▶ Company has a product portfolio across LV, MV and HV contacts
- ▶ Supplies to all the key players in the Indian switchgear market
- ▶ Looking to actively grow customer base in areas like north India

Summary

✓

- ▶ **Attractive product portfolio – Only Player with capability to supply LV, MV and HV switchgears in India**

✓

- ▶ **Modern and integrated manufacturing facility – . Capacity available to maximise the upside from day one**

✓

- ▶ **Leading market position – virtual monopoly in HV; largest share in LV market,**
- ▶ **Major thrust on international sales with new geographies**

✓

- ▶ **Longstanding relationship with major switchgear OEMs**

✓

- ▶ **Product development capabilities & Experienced management team**

✓

- ▶ **Low financial leverage gives financial flexibility**

Ready to tread the journey of
stat.Plan 500 Cr

