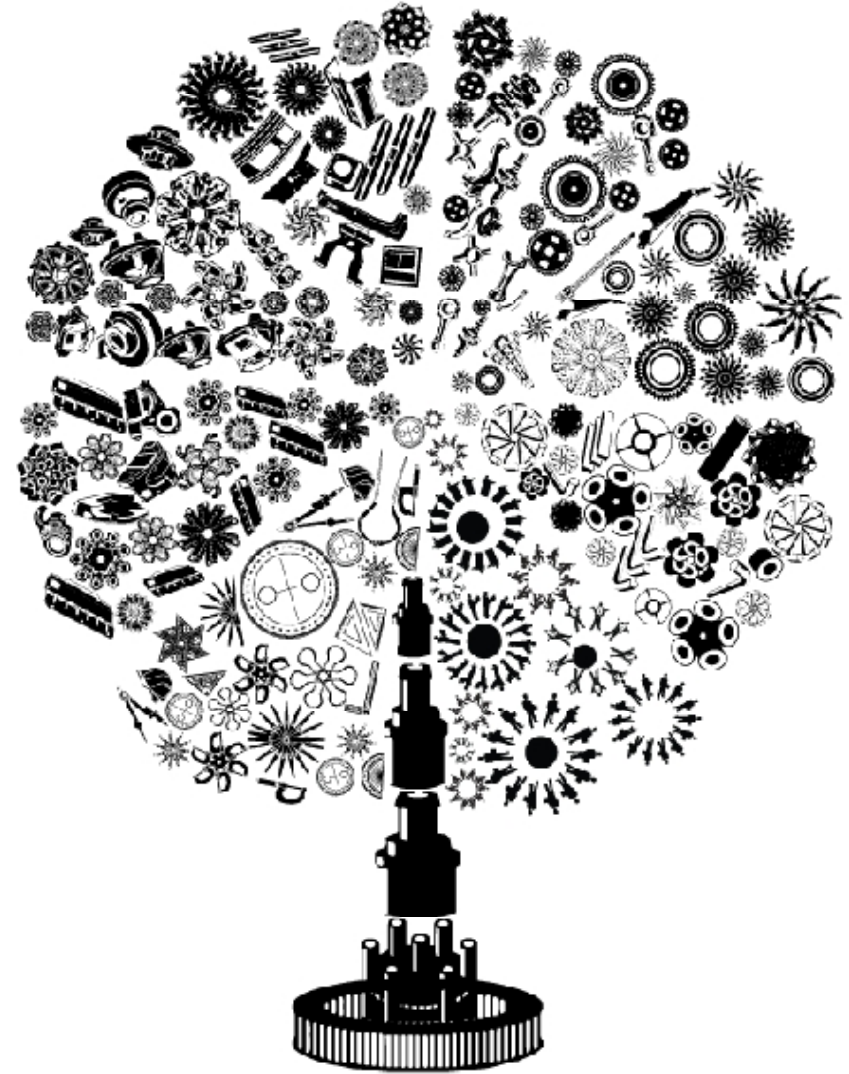


Mahindra Forgings

9MAR2011 / Investor Meet

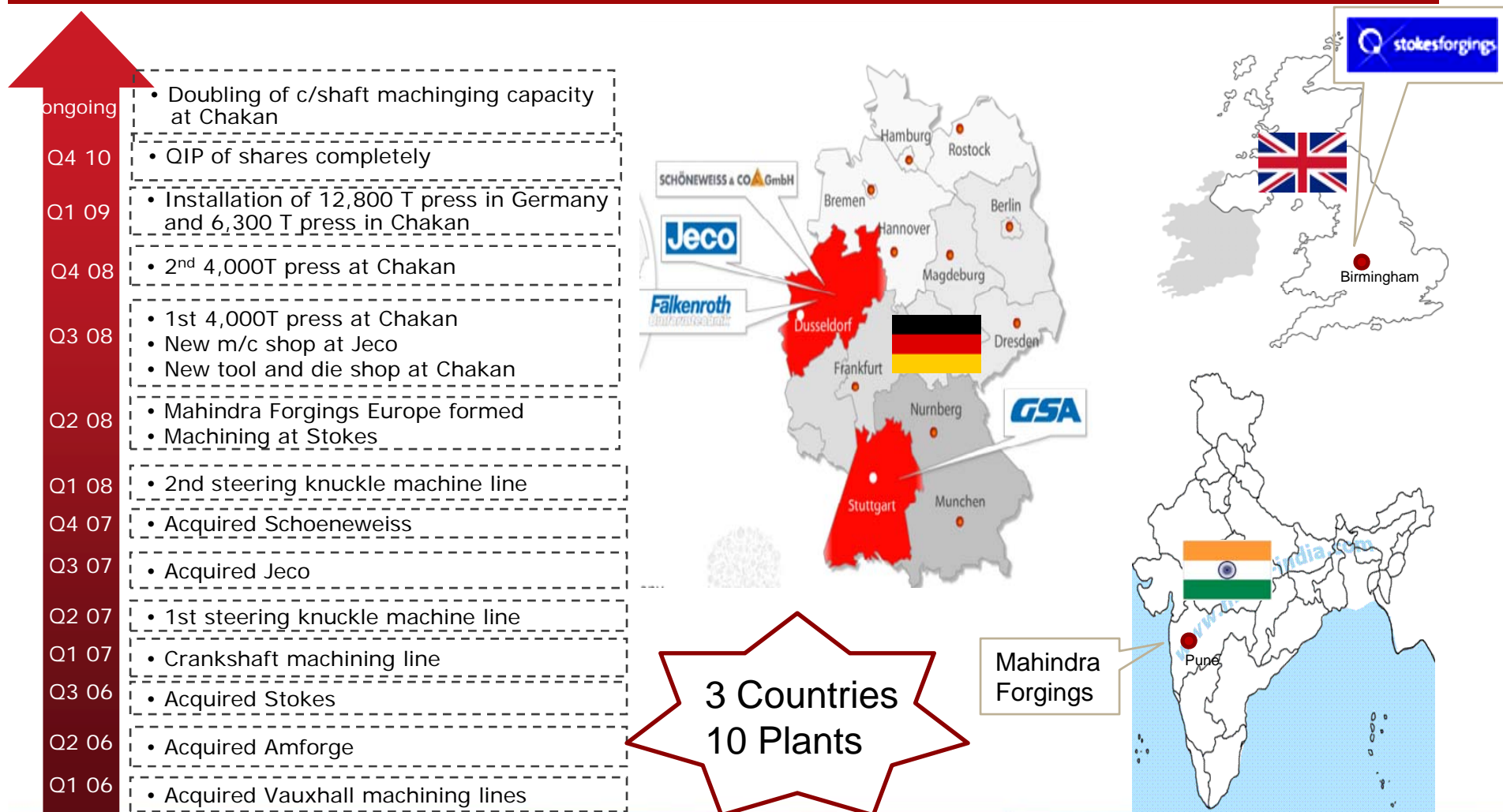


Overview

- ➔ Mahindra Forgings : An Overview
- ➔ Mahindra Forgings : Market Situation
- ➔ Mahindra Forgings: Short Term & Long Term Strategy
- ➔ Mahindra Forgings : Financials
- ➔ Mahindra Systech : An Overview
- ➔ Mahindra Systech : Strategy & Financials
- ➔ One Systech

Mahindra Forgings : Origins

Organic & Inorganic Growth to achieve scale, technology & customer reach



Mahindra Forgings: Manufacturing Capabilities

German operations are the largest

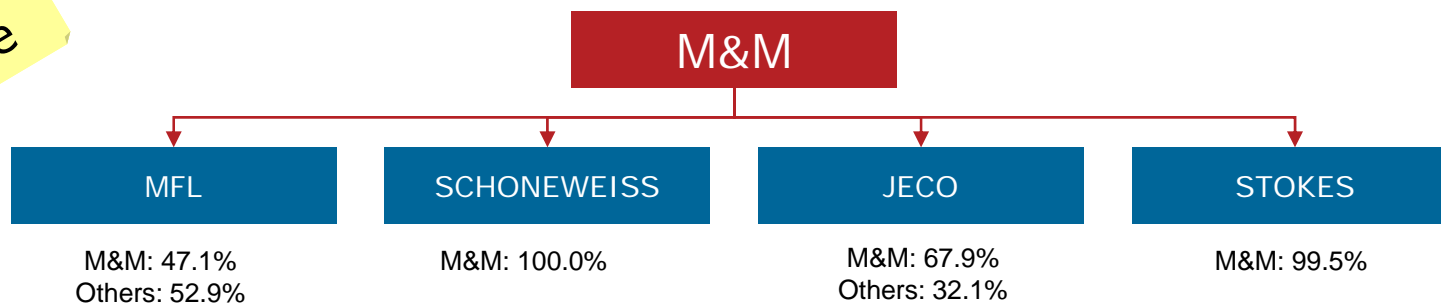


Location	India	UK	Germany	Germany
Plants	1 Plant	2 Plants	4 Plants	3 Plants
Key products Truck + Cars	<ul style="list-style-type: none"> Crankshafts Knuckles Con Rods Links / Arms Shafts Stub Axle 	<ul style="list-style-type: none"> Hubs / Spindles Links / Arms Shafts / Gears Flanges / Yokes Levers / Bracket 	<ul style="list-style-type: none"> Links / Arms Piston Knuckles Ball Joints Shafts 	<ul style="list-style-type: none"> Links / Arms Knuckles Wheel Carriers Spindles Shafts Front Axle Beams
Key highlights	<ul style="list-style-type: none"> Leading supplier of crankshafts and stub-axes for cars/ MUVs in India 	<ul style="list-style-type: none"> Expertise in producing 'flashless' parts and near-net forgings for car market 	<ul style="list-style-type: none"> Value-added/ machined products Provides a basket of forgings products to truck industry Non-auto presence (marine /stationary engines) Cost Leader 	<ul style="list-style-type: none"> Among leading axle beam manufacturers globally Focused on truck market Very strong co-development abilities
% of Revenue (FY10 = Rs 13345 mn)	<p>23% 23%</p>	<p>11%</p>	<p>44%</p>	<p>22%</p>

Mahindra Forgings : Structure

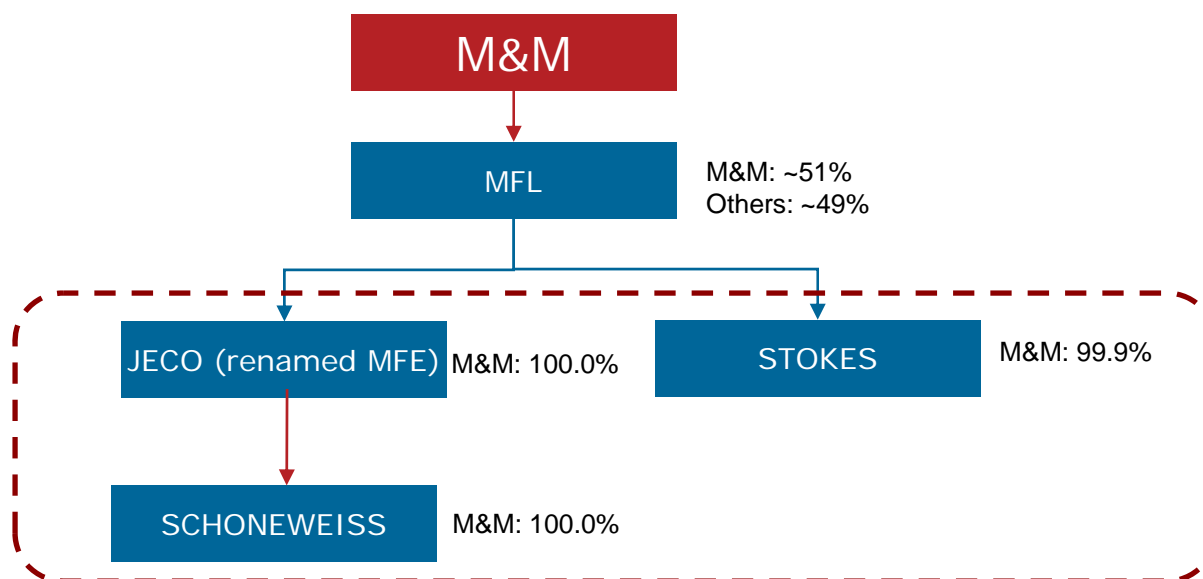
Holding structure created to enable global strategy

Before



After

Managed independently by European operations team which works closely with the Indian operations team in Pune



Note: Investments in JECO & Schöneweiss are held through investment companies in Mauritius

Mahindra Forgings : Overview of Operations

Europe and India have complementary products and end user segments

Europe

- **Main area of operation - CV Forgings**
- >100 years of manufacturing history
- Strong innovation culture – 3 patents awarded and applied for 11 others
- Co-development partner of OEMs
- Wide range of forging capabilities – hammer forging, press forging, hot extrusion, precision forging, friction welding, 12,800T press in Germany
- Strong tool, die and machining capabilities
- Daimler and MAN are top customers

End User Segments

- **Commercial Vehicles segment accounts for more than half of the revenue**
- Non-auto segment also accounts for a significant portion of the revenues. It includes –
 - Marine (stationary engines)
 - Railways
- Other segments are cars & tier 1 suppliers

India

- **A Leading manufacturer of crankshaft and stub axles for Indian cars/ MUVs and tractor manufacturers**
- Non-M&M business accounts for >70% of total sales
- New Chakan unveiled after acquisition
 - 4 new presses installed
 - 2 machining lines installed
 - Invested in well equipped die-shop
- Exports to customers like Renault, Benteler, ZF, VM Motori

End User Segments

- **Passenger Cars & UVs constitute >60% of revenues**
- Non-auto segment also accounts for 20% of the revenues. It includes –
 - Tractors
 - Others incl. railways
- Other segments are LCVs

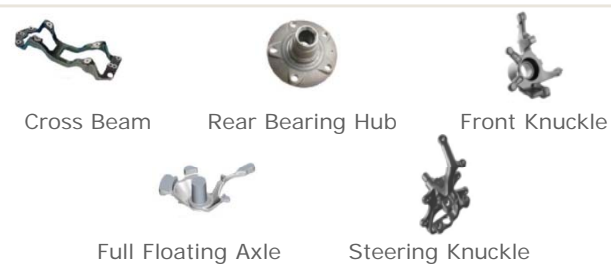
Mahindra Forgings: Product Portfolio

Europe

Commercial Vehicles



Passenger Cars



Non-Auto



India

Crankshafts



Stub Axle / Steering knuckle



Suspension/ Chassis Parts



Gear Blanks



Fully assembled stabilizer bar



Mahindra Forgings : Customers

Marquee Customers

Europe



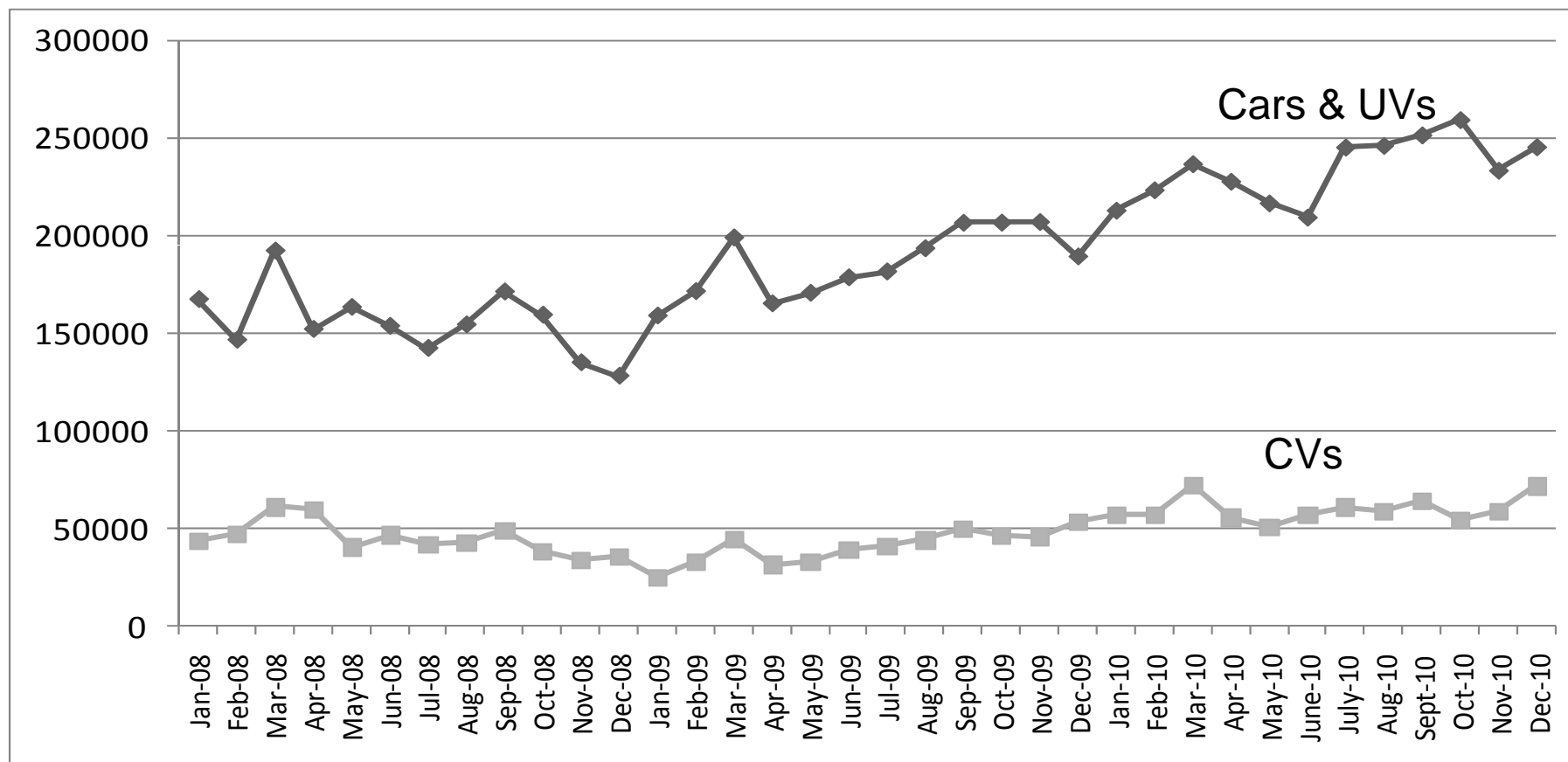
India



Market Situation : India

Trajectory of continuous growth

Production of Vehicles in India (Month-wise)

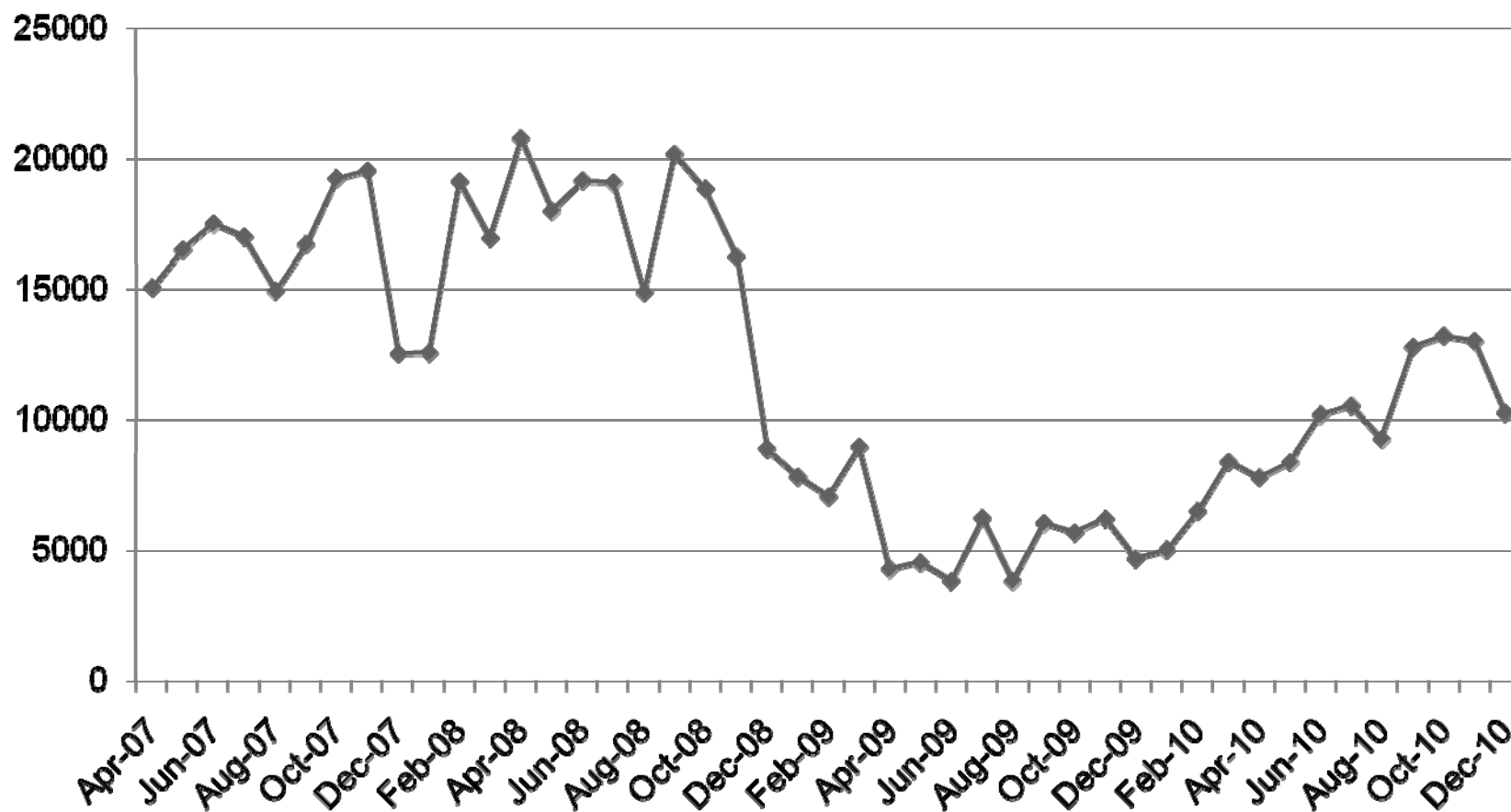


Source - SIAM

Market Situation : Germany

@ 60% of peak levels

Production of Heavy Trucks (>6T) in Germany (Month-wise)



Source - VDA

Market Situation : Germany

MFE Customers have a Positive Outlook

Commercial Vehicle Production Volume Growth

Group Name	2009	2012F	2015F	CAGR
Daimler Group	179	357	445	9%
Volvo Group	85	250	305	12%
Tata Group	129	198	222	5%
MAN Group	73	139	179	9%
Paccar	59	166	161	10%
Isuzu	66	128	155	8%
International	65	122	126	6%
Ford Group	54	87	118	7%
IVECO Group	37	84	110	10%
Scania Group	30	74	95	11%
Toyota Group	44	76	93	7%
Nissan	1	3	5	18%
GM Group	6	0	0	-100%

 Mahindra Forgings Europe Customer

Source: National sources; Industry sources; J.D. Power Automotive Forecasting; ACT Research, E&Y analysis

Note 1: ERF volumes in Austria/Germany now included with MAN

Note 2: VW/Brazil volumes now included with MAN

Note 3: Chinese MHCV manufacturers are not shown

Market Situation : Germany

Manufacturing revival expected to sustain in the future

Monday, Mar. 07, 2011

How Germany Became the China of Europe

By Michael Schuman / Stuttgart



*"...The small, often family-owned enterprises that make up the backbone of German manufacturing have historically specialized in the unsexy side of the industrial spectrum: not smart phones or iPads but machinery and other heavy equipment, **metal bashing infused with sound technology and disciplined engineering.***

*...But in recent years, German firms, aided by farsighted government reforms, have turned that into an art form, **forging the most competitive industrial sector of any advanced economy.** The proof is a boom in exports, which jumped 18.5% in 2010, that is the envy of the developed world..."*

MFE : Performance Overview

Breakeven lowered

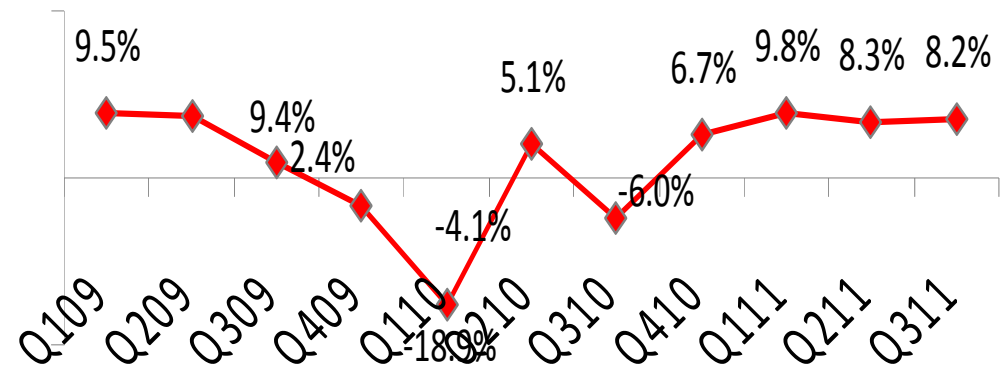


- Markets recovering
- Headcount lowered (30%)
- Core team retained
- 15 patents



- Shape of recovery?
- L, U, W, √...

EBITDA%



EBITDA% H1F11 @ 60% utilisation
 =
EBITDA% H1F09 @ 100% utilization

MFL, India : Performance Overview

Recovering after a dip

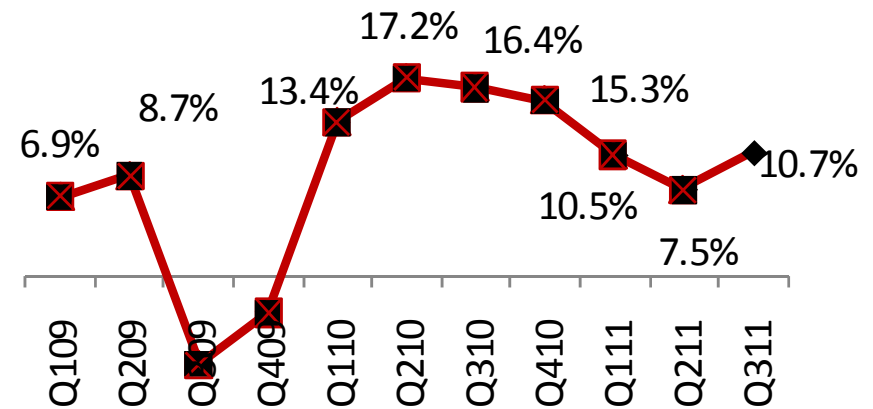


- Peak quarterly EBITDA % of 17% in Q210
- Machining capacity being doubled post QIP



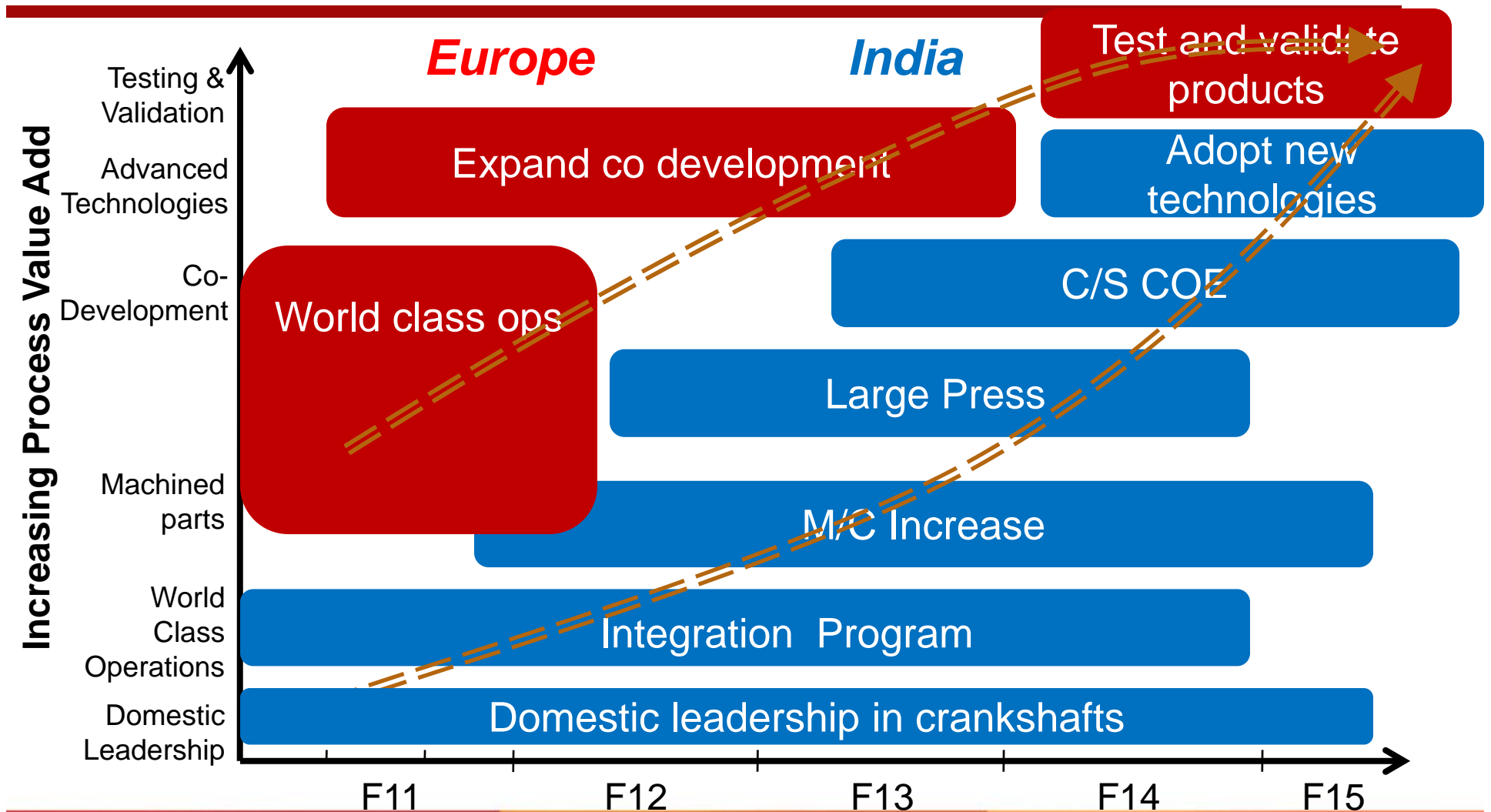
- MFL performance not sustained
- Mentorship program with MFE for performance improvement

EBITDA%



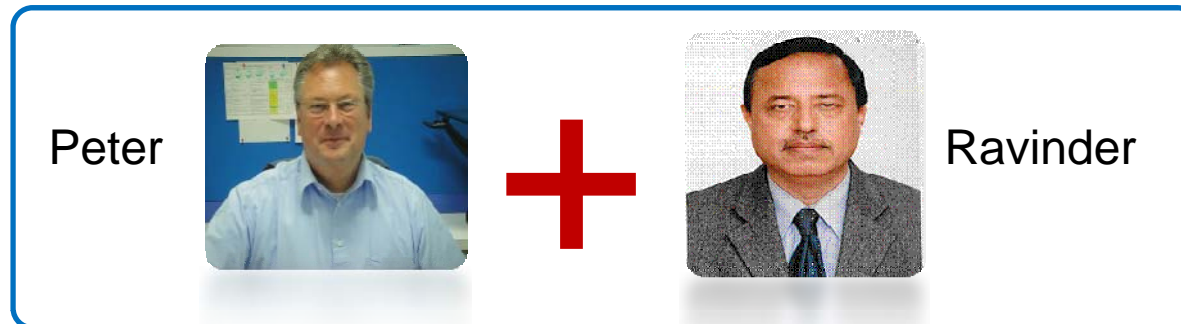
Mahindra Forgings: Long Term Strategy

Focus on creating differentiation and capturing growth



Mahindra Forgings: Long Term Strategy

Mentorship program @ Chakan to bring India to European levels



MFE Technology by F12, operating parameters by F14

1. Functional teams across geographies
2. Time bound transfer of know-how
3. Global KAM + Dual shoring
4. Uniform & Predictable Global Quality
5. Center of Excellence for Product & Process Innovation

Mahindra Forgings: Financials

Financial Summary

Consolidated Financials *

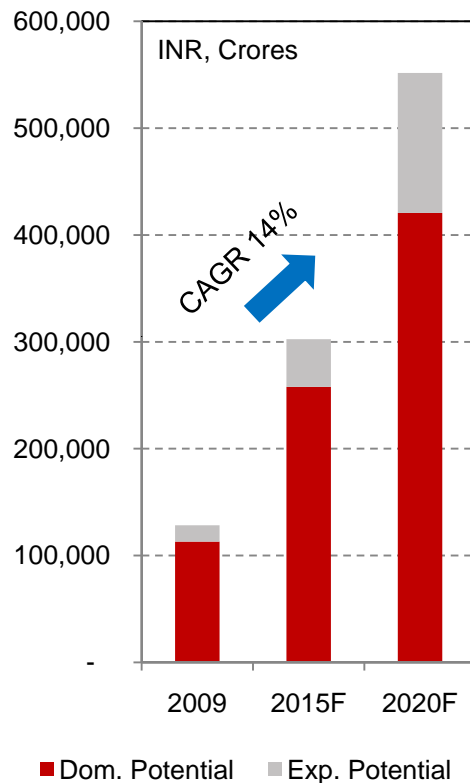
INR Cr	FY 08	FY 09	FY10	YTD Dec,F11
Net Sales	2331	2249	1334	1359
EBITDA	196	143	(9)	119
EBITDA (% of net sales)	8.4%	6.4%	0%	8.8%
One-time write-off (Stokes)			(18)	
Profit (loss) (excluding one-time writeoff)	16	(117)	(166)	(4)
Shareholders' Funds	918	744	794	
Total Debt	811	874	654	
Total Fixed Assets (inc CWIP)	1437	1400	1236	
Cash and Bank Balance	43.7	34.8	28.7	

Standalone Financials

INR Cr	FY 07	FY 08	FY 09	FY 10	YTD Dec,F11
Net Sales	217	221	242	302	261
EBITDA	24.4	23.4	7.1	47.0	25.0
EBITDA (% of net sales)	11.2%	10.6%	2.9%	15.6%	9.6%
One-time write-off (Stokes)				(90)	
Profit (loss) (excluding one-time writeoff)	(12.5)	(14.2)	(41.4)	(4.5)	(2.0)
Shareholders' Funds	118	764	671	802	
Total Debt	100	210	243	149	
Total Fixed Assets (inc CWIP)	184	290	239	227	
Cash and Bank Balance	4.1	2.8	4.7	7.8	

Auto Component Industry : Bright Future

Growing with Domestic Needs + Accelerating Exports

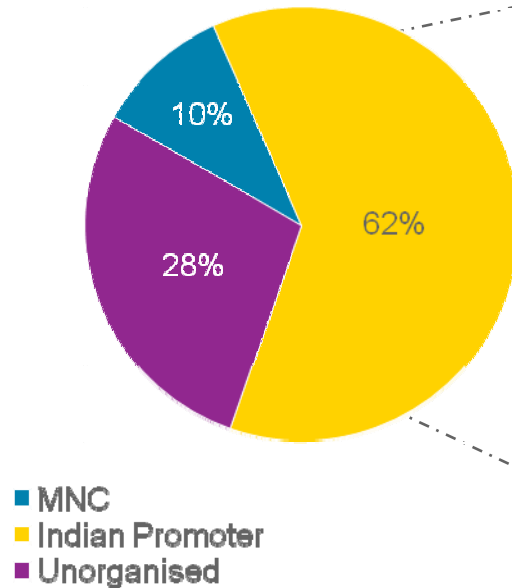


- ➔ The Indian auto components industry grows from INR 1.3 lac cr (USD 28B) to an estimated INR 5.5 lac cr (USD 123B)
- ➔ Exports grow at a faster pace ~22% CAGR
- ➔ Comparisons between North American and European markets show that
 - North America is more “open” to sourcing from distant LCCs
 - European and North American markets are similar in size
 - Indian exports will take a larger share in the European market
- ➔ Trends
 - India sourcing focus continues to grow for OEMs
 - With vehicle downsizing in North America and increasing use of global vehicle platforms export markets might not be “either/or” options

Source: ACMA - Ernst & Young Vision 2020 Report

Structure of Indian component industry

Total: Rs. 108300 Cr.



Promoter groups	FY-10 revenues (Rs. Cr.)	% of industry revenues
T.V.S. Iyengar Group	13,866	12.80%
Sumi Motherson Group	6,955	6.42%
Amtek Group	4,455	4.11%
Kalyani (Bharat Forge) Group	4,329	4.00%
Hero (Munjals) Group	2,929	2.70%
Mahindra Systech*	2,461	2.27%
TACO	2,317	2.14%
Rico Auto Inds. Group	1,578	1.46%
Rane Group	1,480	1.37%
Lumax Group	1,449	1.34%
J B M Group	1,329	1.23%
Anand D.C. Group	1,308	1.21%
Sona Group	1,169	1.08%
Total		~ 42%

* Mahindra Systech revenues include: MUSCO (Stampings), MHIL, MFL, Composites, Mah. Gears & T/M, Metalcastello (Excluding Steel & Engg Services)

Source: Prowess, Crisil Research, EY Analysis
Note 1. Includes overseas operations of these companies reported in India

Mahindra Systech: Origin

Formed in 2004 - objective of becoming a global auto-component player

Background

- ➔ Around 2004-2005, European and US auto component manufacturers were going through tough times –
 - 35+ auto part makers filed for bankruptcy protection; S&P downgraded 25 US-based auto component suppliers
- ➔ Auto components was increasingly being looked at as a global business out of low-cost countries
 - Rapid increase in exports from India and China with India being recognized for expertise in engine components

M&A to fill in strategic gaps

Key Considerations

- Technology
- Market Access
- Quality of Management
- Location: Europe
- Complementary product portfolio
- No auction
- Optimal size: 75-100 mn Euros

Acquisitions

Mahindra Forgings



Casting



Gears



MES



Mahindra Systech: Mission

Become a global “art to part” player

To create India's most
Valuable, Innovative, “Art to Part”
auto component entity that
partners with its global customers
to meet & surpass their business
needs



Mahindra Systech: Size

Significant part of US\$7.1bn Mahindra Group

Automotive



Multi Utility Vehicles
Commercial Vehicles

Farm Equipment



Tractor
Industrial Engines

Two Wheelers



Scooters
Motorcycles

Trade, Retail & Logistics



Inter-trade, Retail,
Logistics, Middle East
Electrical Steel Service
Centre

After Market



First Choice (used
cars), Spares Business

Information Technology



Telecom
Design

Mahindra Satyam

Systech



Auto Components
Manufacturing,
Sourcing
Mahindra Engineering
Mahindra Aerospace

FY10 = US\$725 mn

Specialty Business



Defense
Engg. & Chemical
Products
Mahindra Defence

Infrastructure Development



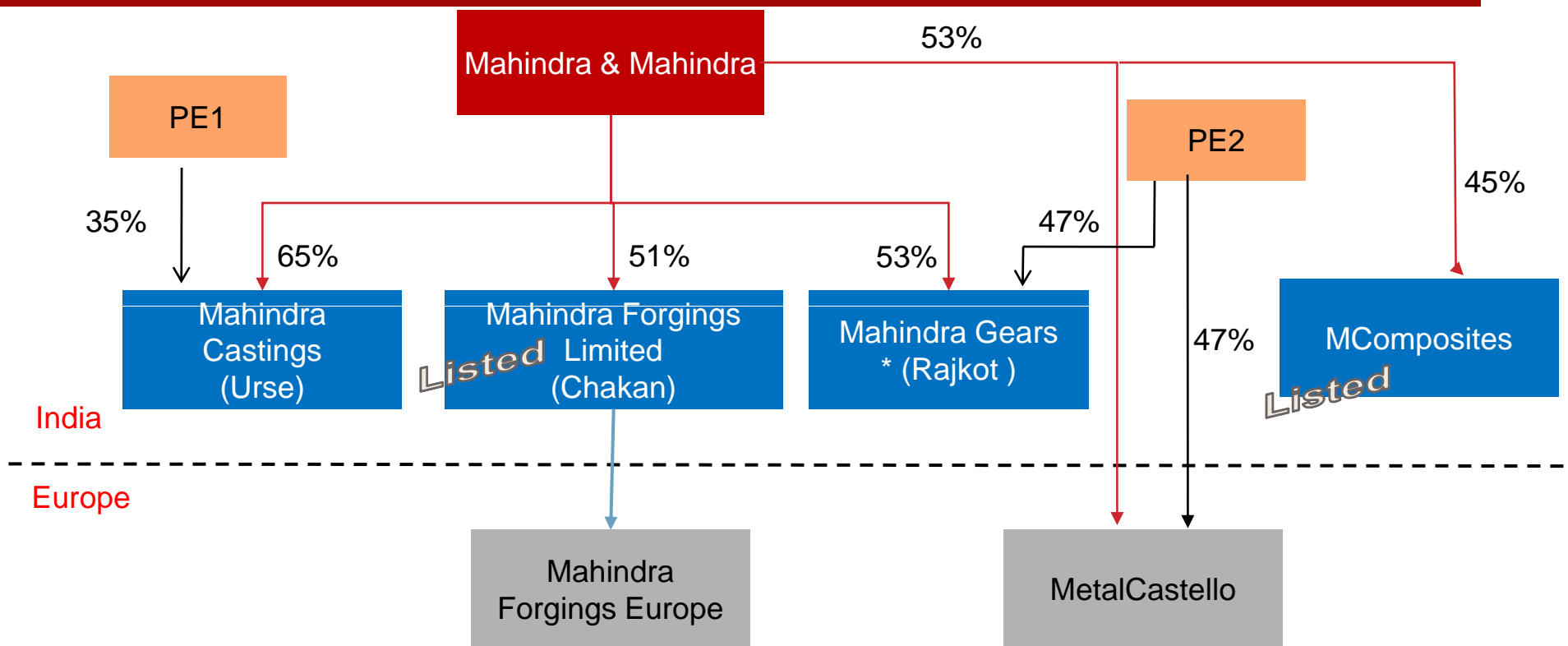
SEZ, Real Estate, Time
Share

Financial Services



Finance, Insurance &
Trade

Current Systech Schematic



Note: Equity holding figures are approximate

Mahindra Systech: Overview

Snapshot of key verticals



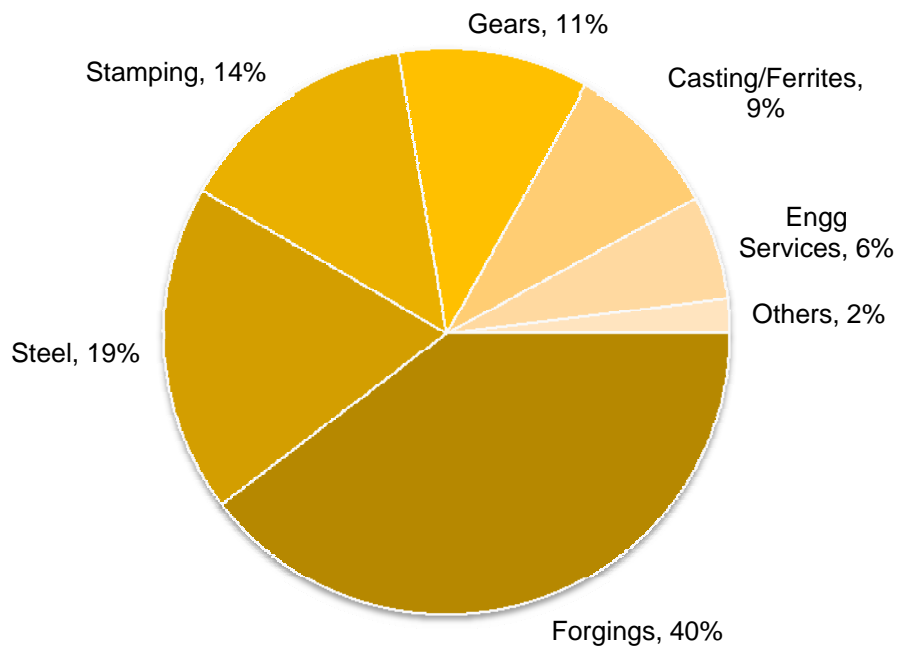
	Forgings	Castings	Gears	Stampings & Steel	Engineering Services	Composites
Key Businesses	<ul style="list-style-type: none"> ■ Mahindra Forgings (Listed) 	<ul style="list-style-type: none"> ■ Mahindra Hinoday (IVF – PE) 	<ul style="list-style-type: none"> ■ Mahindra Gears and Transmission Pvt. Ltd. ■ Metalcastello S.r.l. (I-Ven – PE) 	<ul style="list-style-type: none"> ■ MUSCO (Listed) 	<ul style="list-style-type: none"> ■ Mahindra Engineering Design and Development Co ■ Engines Engineering ■ Plexion Technologies 	<ul style="list-style-type: none"> ■ Mahindra Composites (Listed)
Brief Description	<ul style="list-style-type: none"> ■ One of the leading forgings company in the world* ■ Market leader in CV forgings in Europe ■ Market leader in forged crankshafts in India 	<ul style="list-style-type: none"> ■ Leading ductile iron foundry in India ■ Market leader in India in axle & transmission housings ■ Largest producer of ferrite magnets in India 	<ul style="list-style-type: none"> ■ One of the highest EBITDA% in Europe 	<ul style="list-style-type: none"> ■ Leading manufacturer of alloy steel in India ■ One of the lowest cost stampings manufacturer 	<ul style="list-style-type: none"> ■ Among the top 10 Indian engineering services outsourcing companies 	<ul style="list-style-type: none"> ■ Key player in the Indian market

Combined Systech offers single window offering to clients, superior cost efficiencies and high bargaining power

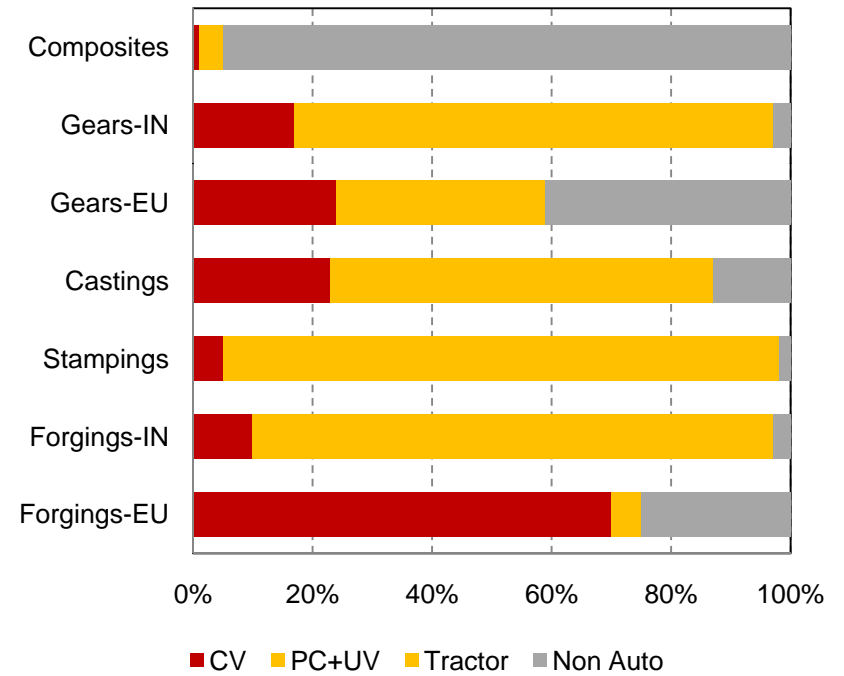
Mahindra Systech : Business Snapshot

Diverse Products with Diverse Automotive Markets

F2010 Revenues
USD725M / INR33B



Market Segments



Source: Systech Analysis 2009

Mahindra Systech : Vertical wise Focus

Business	Product/Service Focus	Segment Focus
Steel	Specialty Microalloy Steels	Automotive, Oil&Gas, Mining, Engineering
Castings	Turbocharger Housings (Global), Axle and Transmission Components (India)	Automotive, Construction Engg
Forgings	Crankshafts (IN), Truck Forgings(EU)	Automotive, Rail, Defense
Stampings	Skin Panels and value added products like Fuel Tanks, Pedal Box	Automotive
Gears	Higher Precision Gears like CWP & Synchros, Sub-Assemblies, Product Development Capability	Off Road, Construction
Composites	Pipes/Sheets, CNG Tanks, Automotive Parts, Windmill Parts	Infrastructure & Cold Chain, Electrical, Automotive & Alternative Energy
Magnetics	Magnets for auto industry; Forward integrate (lighting, cooktops)	Automotive (P/M); Industrial/Retail (New Products)
Engineering Services	Increase domain knowledge in auto engg; diversify outsourcing services into aero & defence	Automotive, Construction, Aero, Defence (India)

Mahindra Systech : Financials

All figures in Rs cr.

Business	F10 Actuals		9 Months F11 Actuals	
	Revenue	EBITDA	Revenue	EBITDA
Forgings Consolidated*	1334	(6)	1359	119
Steel & Stampings	1086	81	974	60
Castings & Ferrites	298	28	271	18
Gears*	370	29	321	34
Engg Services	191	38	130	18
Total	3173	162	3025	246

* Substantial European presence

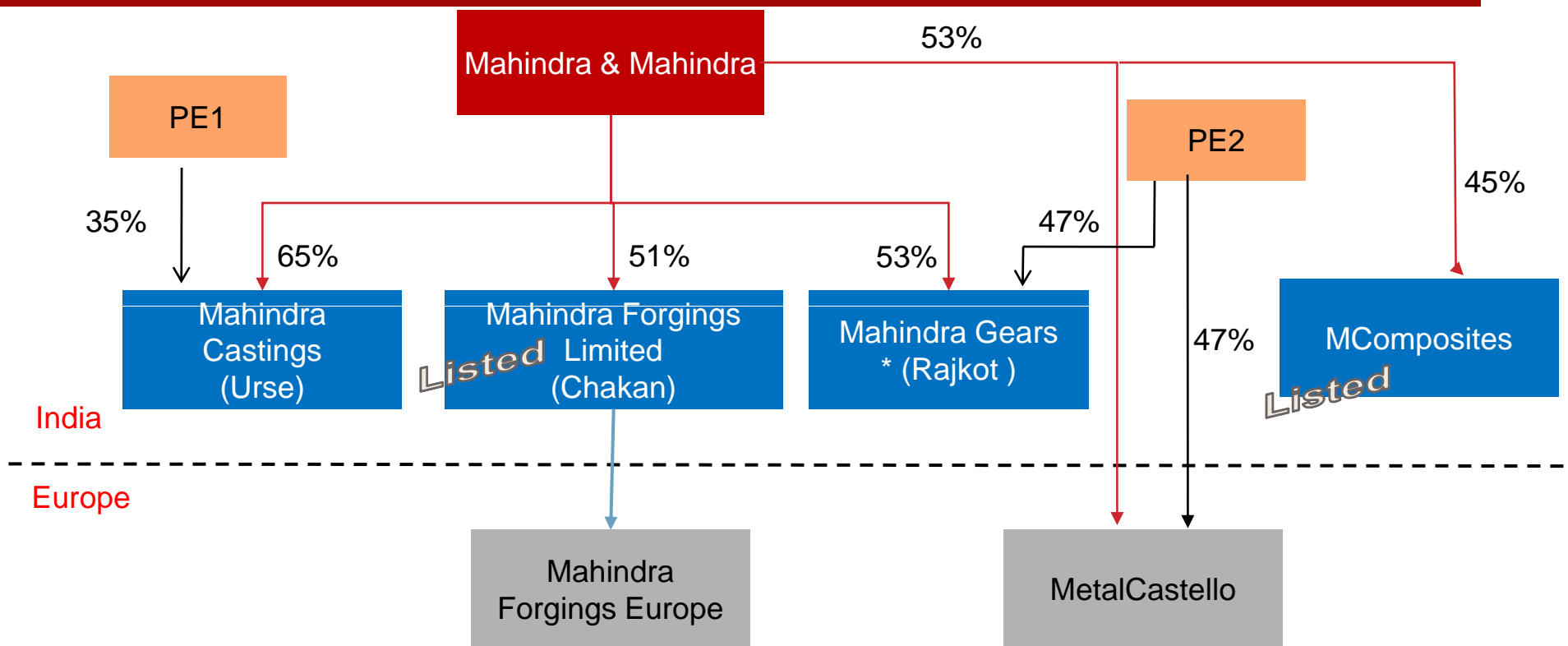
Note: Total calculated after considering other businesses like Composites, intercompany transfers and HQ costs

Mahindra Systech : Strategy Going Forward

Focus on growth, differentiation & synergies to achieve profitability

- Keep in step with the tremendous growth opportunities in the Indian market
 - Capacity expansion at Castings, Gears & Forgings (only machining) in India
- Return Europe to profitability
 - Achieve pre-crisis EBITDA% at 60% of pre-crisis volumes @ MFE
- Focus on key products at each vertical to achieve differentiation
 - E.g. turbocharger housings @ Castings, CWP & Synchronos @ Gears etc.
- De-risk through non auto & exports
- Use 'One Systech' to create shareholder value and enable synergies
 - Key account management
 - Engg support to verticals

Current Systech Schematic



We are considering combining all Indian entities under one company –

- All European entities would be subsidiaries of this company
- All investors will be folded into this one entity
- New partners will also invest in this entity

Note: Equity holding figures are approximate

Implications of One Systech

Create an organisation better positioned to exploit future opportunities

- Higher value for shareholders
 - Higher EBITDA and ROCE for larger players
 - Larger multiples for bigger players
- Enhanced ability to make investments
 - Component industry is capital intensive
 - Industry in India is expected to witness exponential growth and will require investment
- Greater focus on engineering for differentiation
 - Margins increase as companies move from process to product group and then to system integration
 - Shortening product cycles at OEMs and new emission and lightweighting norms would require greater product development capabilities
- Higher ability to capture economies of scale
 - Procurement and other synergies

Thank You