On-site investor day
Forward-looking statements

The information provided today will include forward-looking statements relating to our goals and estimates for future years, including statements about expected sales, operating earnings per share, cash flow, segment margins, our worldwide markets, our anticipated effective income tax rate, and others. These statements should be used with caution and are subject to various risks and uncertainties, many of which are outside the company's control. The following factors could cause actual results to differ, perhaps materially, from those anticipated in the forward-looking statements: unanticipated changes in the markets for the company’s business segments; unanticipated downturns in business relationships with customers or their purchases from us; competitive pressures on sales and pricing; increases in the cost of material and other production costs, or unexpected costs that cannot be recouped in product pricing; the introduction of competing technologies; unexpected technical or marketing difficulties; unexpected claims, charges, litigation or dispute resolutions; new laws and governmental regulations; interest rate changes; changes in currency exchange rates; stock market fluctuations; unanticipated deterioration of economic and financial conditions in the United States and around the world; the amount and timing of any dividends and share repurchases; and the risks identified in the company’s registration statement on Form 10 filed with the SEC. We do not assume any obligation to update these forward-looking statements.
A new steel company
…like no other

Ward J. “Tim” Timken, Jr.
Chairman, CEO and President
TimkenSteel: A compelling investment

• A leading manufacturer of high-quality, **high-performance** engineered steel products and value-added services

• Industry leading customer service delivering **customized** engineering and **innovative** design solutions for the most demanding applications

• **Niche position** in attractive Energy, Industrial and Automotive end market sectors

• **Leading industry margins** driven by value-added products and **competitive** operating cost structure

• Strong capital structure with good liquidity position to **drive growth**
Capacity adds

Tom Moline
Executive Vice President - Manufacturing
Focus on capital stewardship

- During the last 3 years, we have executed over $320mm of strategic capital investment projects in our business.
- The recent investments in FSP alone totaled $270mm.
- Approximately 200 continuous improvement and maintenance projects annually.

Source: TimkenSteel as of May 31, 2014
Robust process discipline

**Strategic procurement process**

**Scope development phase**
- Define project objectives
- Clarify functional requirements and scope of investment
- Explore and evaluate alternative solutions
- Contact potential suppliers and request budgetary proposals
- Narrow options to best solution

**Supplier assessment phase**
- Develop detailed functional specifications
- Prepare purchase specification
- Engage purchasing to request commercial quotations
- Prepare bid evaluation form and supplier scorecard
- Complete technical evaluation of supplier proposals

**Commercial negotiation phase**
- Evaluate commercial pricing and terms
- Provide feedback to suppliers regarding technical deficiencies and commercial gaps
- Establish schedule for final round of negotiations and request “best offers” from suppliers
- Conduct final negotiations with short list of suppliers, select and award final purchase agreement
- Notify other suppliers of purchase decision and acknowledge their efforts

**Technical assessments**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mitsubishi</th>
<th>Supplier A</th>
<th>Supplier B</th>
<th>Supplier C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw score</td>
<td>Normalized</td>
<td>Raw score</td>
<td>Normalized</td>
<td>Raw score</td>
</tr>
<tr>
<td>Forge Press Machine Design</td>
<td>21%</td>
<td>5.1</td>
<td>1.06</td>
<td>6.9</td>
</tr>
<tr>
<td>Material Handling Design</td>
<td>16%</td>
<td>8.6</td>
<td>1.00</td>
<td>13.3</td>
</tr>
<tr>
<td>Hydraulic System Design</td>
<td>19%</td>
<td>4.4</td>
<td>1.00</td>
<td>5.9</td>
</tr>
<tr>
<td>Process and Operating Technology</td>
<td>15%</td>
<td>4.1</td>
<td>1.00</td>
<td>7.6</td>
</tr>
<tr>
<td>Process Control and Automation</td>
<td>18%</td>
<td>4.3</td>
<td>1.00</td>
<td>6.8</td>
</tr>
<tr>
<td>Project Execution</td>
<td>12%</td>
<td>12.6</td>
<td>1.29</td>
<td>13.7</td>
</tr>
<tr>
<td>Cumulative weighted rating</td>
<td>1.05</td>
<td>1.52</td>
<td>1.27</td>
<td>1.78</td>
</tr>
<tr>
<td>Overall normalized rating</td>
<td>100%</td>
<td>145%</td>
<td>121%</td>
<td>170%</td>
</tr>
</tbody>
</table>
Industry leading return on invested capital

2013A Return on invested capital

- TimkenSteel: 11.9%
- Tenaris: 11.8%
- Carpenter: 8.1%
- Vallourec: 6.3%
- Steel Dynamics: 5.4%
- Nucor: 5.2%
- Gerdau: 3.8%
- Allegheny: (0.2)%

Source: Company filings, Factset
Note: Carpenter figures shown for FYE 6/30/13; all other companies’ figures shown for FYE 12/31/13

1 ROIC calculated as EBIT*(1 – tax rate) / (average debt + average book value of equity)
Targeted capacity addition strengthens our competitive position

Source: TimkenSteel internal estimates as of 12/31/2013

1 Replaced idle melt – target as cast billets, not SBQ bar
Strong outlook for North American automotive industry

North America light vehicle production (mm)

Source: IHS
TimkenSteel: key takeaways

- We have created a highly profitable niche in the SBQ industry that is difficult to replicate
- Our niche position is profitable and requires customized processes
- We drive targeted investments that lead to high – best in industry – ROIC
- Our process designs focus on capabilities that support our niche position and provide high ROIC
- We have a business model that continues to find and create niches by creating value for our customers
- Our manufacturing process designs create efficient production that is competitive with makers of standard (commodity) products
Supply chain differentiation

William P. Bryan
Executive VP Supply Chain & Information Technology
• Supply chain management overview
• Scrap sourcing and optimization
Unique combination of processes, experience and systems is a competitive advantage

Complex order book:
- 450 grades of steel
- 9,000 customer specifications
- 600 customers
- 400,000 bar configurations, more for tubes
- >40,000 orders shipped
- 30 major flow paths, 100 operations, 250 workcenters
- 7 manufacturing plants, 4 warehouses
- 25 ton average order size

Complex planning environment:
- 100% made to order products delivered at industry leading customer service

Source: TimkenSteel, 2013
Superior, integrated supply chain capabilities enable performance

Maximizing our assets and process paths to service diverse industries
Focused on operational excellence

- Structural improvement in customer service
- Primary focus is planning throughput to meet customer demand
- Working capital managed to support throughput and customer service

**Delivery performance (%)**

**Working capital management**

**2013A operating working capital/sales**

Source: TimkenSteel, 2013; Company filings

1 Operating working capital defined as (Current assets – Cash) / (Current liabilities – Short-term debt)
Supply chain management – key takeaways

• Complex planning environment
• Tightly integrated supply chain management functions
• Ability to quickly react to market changes
• Industry leading customer service
• Focus on optimizing global metrics
• Unique combination of process, experience, and systems is difficult to replicate
Agenda

• Supply chain management overview

• Scrap sourcing and optimization
Diversified and balanced supply base

Supply base overview

Local tons are highlighted in red

120 suppliers provide scrap to TimkenSteel

Maintaining a reliable supply of critical scrap types and purchased at competitive costs

Source: TimkenSteel, 2013
Sophisticated raw material systems are a competitive advantage

**Differentiation**

- Raw materials are ~40% of manufacturing spend
- >180 scrap types purchased from 6 strategic categories
- Mostly sourced from within a 100 mile radius
- Scrap return supply chain established with customers
- Raw material, alloy and natural gas price volatility largely passed on to customers through surcharge mechanisms

**Competitive sourcing model**

<table>
<thead>
<tr>
<th>Type</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frag</td>
<td>Versatile Critical to protect local supply</td>
</tr>
<tr>
<td>Alloy</td>
<td>Low cost source of alloy</td>
</tr>
<tr>
<td>Cast iron</td>
<td>Melts fast, free fuel, high yield Low residual elements</td>
</tr>
<tr>
<td>High dense, plate &amp; structural</td>
<td>Melts relatively fast Low cost alternative to busheling</td>
</tr>
<tr>
<td>Busheling</td>
<td>Low residuals – dilutes copper</td>
</tr>
<tr>
<td>Other</td>
<td>Small volumes for specific reasons</td>
</tr>
</tbody>
</table>
Scrap segregation for differentiation

- 55 acres of active inventory
- Yard configured to optimize efficiency (East, West, Middle)
- 284 piles
- 30 day turnover rate
- >180 different material codes to distinguish between suppliers, sizing and chemistry
Cost competitive scrap processing practices

### Scrap inspection & preparation
- Mobile spectrometer and Niton analyzers for chemistry segregation
- “Blue Sky” building with 8 torches to cut unprepared scraps to meet size specifications

### Scrap handling
- 9 Sennebogen 850 material handlers
- Automated scrap preparation facility with 8 torches to cut unprepared scraps to meet size specifications
- Receive 200+ truck deliveries per day
- Receive 400-600 railcars per month
High performance achieved through complex modeling

Overview

- Designs “recipes” for lowest cost mix for every heat loaded
- Optimizes use of alloy-containing scraps
- Considers cost, sizing, chemistry, density and optimum layering for each design
- Adjustable to market or operating constraints
- Off-line model used to test value of new scrap options

Source: TimkenSteel, 2013
Scrap sourcing and optimizing – key takeaways

• Sophisticated and strategic sourcing approach to obtaining raw materials
• Scrap return supply chain established with many customers
• Diverse and balanced supply base
• Optimization model with nimble delivery system
• Extensive scrap storage and segregation methods
Faircrest strategy

Ken Miller
General Manager – Technology
& Steel Strategy
### Faircrest steel plant overview

- **Opened in 1985**
- **Located in Canton, OH, USA**
- **450 acre campus; 20 under roof**
- **500 employees**

**Capabilities:**
- State-of-art large bar facility
- EAF - LRS - BP 28” Sq. (711mm) Ingots
- 18” x 24” and 11” x 17” cast blooms (2014)
- Finish sizes 5.5” - 16” (140mm – 406mm) rds/rcs
- 1,000,000+ TPY capacity
Faircrest strategic investments

- **Forge Press**
  - $35M (2013)
- **Jumbo Bloom Vertical Caster**
  - $200M (2014)
- **Ladle Refiner**
  - $25M (2013)
Strategy: Defend and grow leadership position in SBQ large bar

Total Shippable Tons: 925K

Source: TimkenSteel
Strategy: Defend and grow leadership position in SBQ large bar

Source: TimkenSteel

Total Shippable Tons: 925K
Strategy – operating flexibility and cost improvement

Source: TimkenSteel
Ladle refining system – breaking constraints

**Project scope**
- $25m investment commissioned April 2013
- 18 month project timeline
- > 20% IRR

**Investment benefits**
- Increase of 40k melt tons
- Exotic grades
- Combined with Jumbo Boom Vertical Caster increases plant shippable capacity by 25%

**Customer advantages**
- More TimkenSteel capacity
- Availability of new grades
- Steel cleanness
- Tight chemistry control

**Competitive advantages**
- Superior internal cleanness
- Know-how: TimkenSteel engineers served as general contractors on the build
- This unique single station ensures steel is delivered on-chemistry, on-cleanness, on-temperature and on-time to the casting operation
Jumbo bloom vertical caster – the world’s largest and most advanced

**Project scope**
- $200m investment to be commissioned in 2014
- 28 month project timeline
- > 20% IRR

**Investment benefits**
- 125k finished ton capacity add
- >10% yield improvement
- Flexible capacity in all markets
- Greater range of steel grades

**Customer advantages**
- More TimkenSteel capacity
- Steel cleanliness
- Chemical uniformity
- Custom cut bloom lengths

**Competitive advantages**
- Proprietary tundish design
- TimkenSteel process knowledge incorporated into the caster design protected through confidentiality agreements.
- Broader capability to support higher value SBQ and seamless mechanical tube markets
Benefits of continuous cast – yield improvement and productivity

Bottom pour

Liquid to bloom yield = ~85%

Continuous cast

Liquid to bloom yield = ~95%
Benefits of vertical continuous casting – cleanness, uniformity, surface quality

Curve mold design

Vertical design

Inner radius effect

Inclusion flotation and removal
In-line forge press – extending our leadership position in large bar

**Project scope**
- $35m investment commissioned April 2013
- 21 month project timeline
- >20% IRR

**Investment benefits**
- Add 125k finished ton capacity
- 2% yield improvement
- 40k increase in rolling capacity
- Entrance to new markets

**Customer advantages**
- More TimkenSteel capacity
- Enhanced center soundness
- Reduced lead time
- Reduces customer’s total cost of ownership

**Competitive advantages**
- Unique in-line process creates “forged” internal quality with rolling mill precision and productivity
- Achieves required soundness up to 16” bar
Increased sound center capabilities

Example: 4340 SBQ Bar
Class B Ultrasonic Certification
## Typical applications for forged-rolled bars

<table>
<thead>
<tr>
<th>Forged rolled tons (large bar – sound centers)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy markets</strong></td>
</tr>
<tr>
<td>• Drill collar</td>
</tr>
<tr>
<td>• Well heads</td>
</tr>
<tr>
<td>• Gas lift mandrel</td>
</tr>
<tr>
<td>• Swivel joints</td>
</tr>
<tr>
<td><strong>Mining</strong></td>
</tr>
<tr>
<td>• Tri-cone bits</td>
</tr>
<tr>
<td>• Work tool attachments</td>
</tr>
<tr>
<td><strong>Industrial</strong></td>
</tr>
<tr>
<td>• Large crankshafts</td>
</tr>
<tr>
<td>• Power generation rotor shafts</td>
</tr>
<tr>
<td>• Gearing</td>
</tr>
</tbody>
</table>
Large bar sound center sales growth

Forged rolled tons (large bar – sound centers)

Source: TimkenSteel
Supplier testimonials

“The level of teamwork between TimkenSteel and SMS Concast is how I would like to see all such projects managed.”

Luis Hernandez – President & CEO, SMS Concast AG

“The TimkenSteel team developed robust technical specifications and performance criteria for their new vertical caster, and worked closely with us during the equipment design, build, install and commissioning phases.”

Luis Hernandez – President & CEO, SMS Concast AG

“Timken’s knowledge, experience and confidence in its products combined with a professional approach to project management will assure success”

Henry Novak – President & CEO, Concast America
Faircrest – key takeaways

- Investments were part of an integrated business strategy
- Add 200k ship tons of annual capacity
- Margin enhancing investments
- Increase sales of sound center large bar
- Process flexibility
- Investments were executed on time, on budget, and are delivering the targeted results
- These new capabilities are unique TimkenSteel designs and are not easily replicated
Gambrinus strategy

Larry Pollock
Plant Manager
Gambrinus steel plant overview

- Opened in 1928
- Located in Canton, OH, USA
- 250 acre campus...22 buildings
- 1.2 million square feet under roof
- 500 employees

Capabilities:
- Tube making, thermal treatment, finishing, inspection, and shipping operations
- Finish tube sizes 1.9” – 13”
- One of the most advanced continuous thermal treatment facilities in the world
- New intermediate finishing line advances testing quality and reduces processing times
Plant highlights

Maximizing our assets and process paths to service diverse industries

- **Faircrest Steel Plant**
  - Melt 1.1mm tons per year
  - Refining
  - Soaking pits 46” Rolling Mill
  - 36” Rolling mill
  - Billet conditioning
  - Ship Truck & railcar
  - Customers or value-added plants

- **Harrison Steel Plant**
  - Melt 0.75mm tons per year
  - Refining
  - Bloom re-heat Harrison rolling mill Precision sizing mill
  - Bar finishing
  - Bar Ship Truck & railcar
  - Customers or value-added plants

- **Gambrinus Steel Plant**
  - Pierce 0.50mm tons per year
  - Billet cutting
  - Thermal treat 0.485mm tons per year
  - Tube finishing
  - Tube Ship Truck & railcar
  - Customers or value-added plants

- **Main operations**
  - Bars
  - Tubes
  - Blooms
  - Billets to pierce
  - Main operations

- **Customers or value-added plants**
Culture of continuous improvement

**Labor hours per ton**

**OSHA recordable incident rate (ORIR)**

Source: TimkenSteel, 2013
A leading producer of seamless mechanical tubing

U.S. tubing landscape

- OCTG 36%
- Line pipe 23%
- Stainless 1%
- Welded mechanical 12%
- Structural 14%
- Standard 10%
- Pressure 1%
- Seamless mechanical 3%

Differentiation

- Largest domestic capacity
- Broadest size range
  - 1.875” to 13.0”
- Heavier walls
- Higher value – added niche volume and alloy grade categories
- Leading producer of quench and tempered capability
- Custom grades, small order sizes, demanding applications make barrier to entry difficult

19.4mm annual tons - welded and seamless

Source: 2013 Preston Pipe and Tube Report

1 The chart is organized from lightest to darkest shading, with the darkest shading denoting the highest material value and performance
Unique process capabilities

- Assel mill versus stretch reduction technology
- Quick changeovers
- Flexibility accommodating small orders
- Near infinite size adjustments within mill range
- Significantly lower tooling costs
- Heavier wall thickness and small Diameter to Thickness (D/T) ratios
North America seamless mechanical tube capabilities

Landscape of capacity additions

Source: SMS Meer, TimkenSteel
Flexible operating model that supports a complex order book

Bubble size = Annual pierce tons

Avg. pieces per order = 48
Avg. tons per order = 22

Source: TimkenSteel
Importance of value-added thermal treat

- Tailor product properties to meet the increasing demands from customers and tighter specifications
  - Increase the hardness and strength
  - Improve ductility
  - Soften for subsequent forging or machining operations
  - Relieve stresses due to cold working
  - Develop low-alloy customized grades for severe applications
Thermal treatment is an integral part of our supply chain and service

- Finishing & value add
- Thermal treatment
- Bar and tube making
- Melt

Material value, order quantity flexibility

Specially engineered melt for thermal treat response
Thermal treatment solutions unmatched in the industry

- Temper: Relieves stresses or softens prior to cold working.
- Stress relieve: Relieves stresses and minimizes distortion for machining.
- Normalize: Provides uniform hardness and grain structure.
- Special Q & T: Heating, rapidly cooling for desired structure, and reheating for desired mechanical properties.
- Quench & temper: > 58 furnace cycles, Extremely flexible Q & T recipes.
- Spheroidize anneal: Produces microstructure best for machinability & ductility.
- Anneal: Long heating cycle to produce carbide microstructure for best machinability.
- Longer processing for most stringent structure and mechanical properties.

Thermal treatment

- Relieves stresses or softens prior to cold working.
- Produces microstructure best for machinability & ductility.
- Long heating cycle to produce carbide microstructure for best machinability.
- Provides uniform hardness and grain structure.
- Heating, rapidly cooling for desired structure, and reheating for desired mechanical properties.
- > 58 furnace cycles. Extremely flexible Q & T recipes.
## Investing for growth and competitive strength

### Continuous heat treat investment

<table>
<thead>
<tr>
<th>Market demand</th>
<th>Investment</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Increased drilling depths &amp; footage - deeper, larger bore well designs</td>
<td>• $40m investment to be commissioned in 2016</td>
<td>• Improved technical capability</td>
</tr>
<tr>
<td>• Strong market outlook</td>
<td>• 50k tons quench temper capacity</td>
<td>• Expanding presence in high value completion products</td>
</tr>
<tr>
<td>• Increase in steel intensive horizontal and offshore drilling &amp; completion</td>
<td>• Process 4”-13” bars &amp; tubes</td>
<td>• Grow market share</td>
</tr>
</tbody>
</table>
Intermediate Finishing Line (IFL) – game changing technology

**Intermediate finishing line**

**Project scope**
- $50m investment commissioned April 2013
- 18 month project timeline
- > 20% IRR

**Investment benefits**
- 65% cycle time reduction
- 40% labor productivity
- Advanced Inspection Technology improves quality assurance
- Enhanced safety and environmental controls

**Customer advantages**
- Faster customer response
- Entrance to new markets
- Services automotive, industrial, and oil & gas market sectors

**Competitive advantages**
- Processing flexibility
  - Bars & tube
  - Not grade limited
- Designed for future growth
- Dimension expansion
- Capacity expansion
- Complex non-destructive testing capabilities
Benefits of IFL – streamlined continuous flow

Before IFL

- Over 60,000 miles/year of material moves!

After IFL

1. Straightening
2. Water blast
3. Non-destructive testing (NDT)
4. Conditioning
5. Cutting operations
6. Ship/prep
7. Bundling & strapping

Over 60,000 miles/year of material moves!
IFL production ramp-up

Source: TimkenSteel
Gambrinus – key takeaways

- Broad scope of capabilities
  - Unique piercing capabilities
  - Unmatched thermal treat expertise
- Low volume job shop capabilities with high efficiencies
- Process flexibility
- Margin enhancing investments
- Unique combination of processes, experienced engineering and systems
Culture of innovation

Ray Fryan
Vice President – Technology & Quality
Innovative team of experts driving custom and tailored solutions

- Institutional expertise developed over 100 years

- Deep technical knowledge of processes and applications
  - ~46% of supervisors running mill operations are degreed
  - ~40% of salaried workforce have an engineering degree
    - 12 PhD (7 Material Science, 5 Mech Eng)
    - 37 M.S - Material Science
    - 12 M.S. - Mech Eng/Elec Eng.
  - Superior execution driving continuous improvement

- ~30% of our product offerings are less than 5 years old
Continuous innovation system creates ongoing opportunity for growth

Understand customer need + Experienced engineers + Unique set of assets = Trust yields additional opportunities

Supports unique business model, delivers differentiated capability, creates competitive advantage
New business sales ratio drives continuous innovation

~65 active projects/programs worth ~$400m NPV
New business sales ratio drives continuous innovation

New business sales ratio

Source: TimkenSteel

New business sales as variable pay metric drives culture change
Innovation process engages the entire company

Cross Functional Team multiplies innovation throughput and focuses entire company on customer need and strategy
What we know – clean steel & performance

- Longer life – customer need
- Engrs – material science & mfg know-how
- Unique measurement assets
- Performance & its prediction builds trust

Impurities cause early failure
People & tools to engineer cleanest steels

Models & tools to measure impurities & predict effect on failure

Clean Steel capabilities and innovation system creates measurable performance value for customers
“TimkenSteel is one of the few Steel Industry benchmarks (for the steels they are producing) when it comes to innovation—always ten years ahead—would have loved to have more insight views.”

Alexander Breskvar—Siemens
Customer value: enabling high performance

Case study – C125 For Production Liner Application

Customer need

- Demanding requirements
- High pressure – high temperature
- Highly loaded
- Corrosion resistant

Solution

- Grade development (lab + production scale)
- Heat Treat Process capabilities
- Supply chain exclusivity

Value created for customer

- Enabling shallow GOM ‘salt dome’ well completion
- Sustainable advantage
- Positioned for growth
Culture of innovation – key takeaways

• New business sales ratio
  □ Align associates to customer and strategy – differentiation first!

• Insulation from cyclicality
  □ New product revenue is more stable

• Strategic alignment
  □ Innovation with a focus on making our customers better yields profitable growth long-term

• Significant competitive advantage
  □ Decades of customer intimacy, application and manufacturing knowledge, and targeted investment create a system of sustainable strengths

Complex, highly aligned system of experts focused on customer needs and assets to serve them creates significant competitive advantage