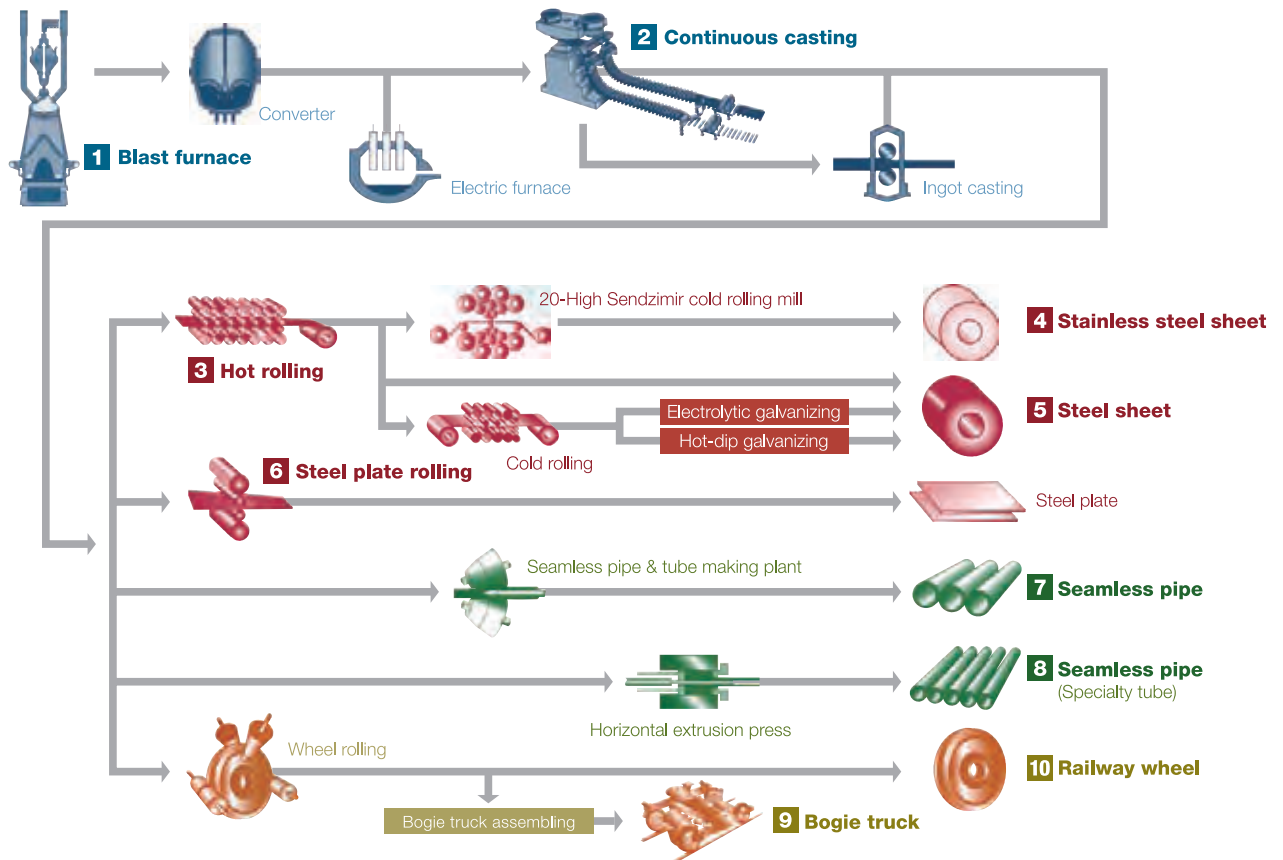


Technology Assets

Driving the Acceleration of Distinctiveness

At the Sumitomo Metals Group, we are accelerating research and development in our dedicated areas of strength and strengthening technologies that differentiate us from our competitors, in order to raise corporate value. Our integrated operation of R&D, production, marketing and sales will help earn the trust of our customers.

Sumitomo Metals' technological development has received high acclaim in many areas.



Major awards in recent years

Highest-ranked award

1 Blast furnace

Longest campaign life of No.4 Blast Furnace of the Wakayama Steel Works

2010 **Okochi Memorial Foundation Production Prize**

2009 **Monozukuri Nippon Grand Award / Excellence Prize**

2007 **Nikkei Monozukuri Grand Prize**

2 Continuous casting

Development of new continuous casting technologies for very thick plate (PCCS)

2009 **The Japan Institute of Metals / Technical Development Award**

Innovation in manufacturing method of high-quality steel plates using nano-size particles

2007 **Monozukuri Nippon Grand Award / Prime Minister's Prize**

Development of mold flux for high-speed continuous casting

2007 **National Commendation for Invention / Invention Prize**

3 Hot rolling

Development of an innovative production method allowing the production of flat hot-rolled high-tensile steel plates

2009 **Monodzukuri Nippon Grand Award / Excellence Prize**

4 Stainless steel sheet

Development of high fatigue strength stainless steel for cylinder head gasket

2010 **Science and Technology Commendation from Minister of Education, Culture, Sports, Science and Technology, in the Development Category for Science and Technology** <Joint development with Honda R&D Americas, INC.>

2008 **The Japan Institute of Metals / Technical Development Award** <Joint development with Honda R&D Co., Ltd.>

Development of stainless steel foils for bipolar plates of polymer electrolyte fuel cells

2009 **The Japan Institute of Metals / Technical Development Awards**

Development of heat resistant stainless steel sheet "NAR-AH-7" for advanced high-temperature heat exchangers

2010 **Development of heat resistant stainless steel sheet "NAR-AH-7" for advanced high-temperature heat exchangers**

5 Steel sheet

Development of non-oriented electromagnetic steel sheet for high-efficiency motors / Development of resource-saving, high-strength electromagnetic steel "SXRC"

2010 **The Japan Institute of Metals / Technical Development Award**

2008 **Science and Technology Commendation from Minister of Education, Culture, Sports, Science and Technology, in the Development Category for Science and Technology**

2007 **Ichimura Industrial Prize / Contribution Prize**

Chromium-free surface-treated steel sheet "NEO Coat T2" for case materials for the small motor

2008 **CHO' MONODZUKURI Innovative Parts and Components Award / Encouragement Award** <Joint development with Asahi Chemical Co., Ltd.>

Development of crash-box that improves fuel and crash safety

2009 **Science and Technology Commendation from Minister of Education, Culture, Sports, Science and Technology, in the Development Category for Science and Technology** <Joint development with Toyoda Iron Works Co>

Development of small specimen testing technique and its application to strength evaluation of spot weld of steel sheets for automotive body

2007 **The Japan Society of Mechanical Engineers / JSME Young Engineers Award**

6 Steel plate rolling

Development and commercial application of new functional steel material with an extended fatigue-life

2010 **Science and Technology Commendation from Minister of Education, Culture, Sports, Science and Technology, in the Development Category for Science and Technology**

2009 **Ichimura Industrial Prize / Contribution Prize**

7 Seamless pipe



Invention for super-high strength low-alloy steel oil country tubular goods

2008 **National Commendation for Invention / Imperial Invention Prize**

8 Seamless pipe (Specialty tube)

Development of a high-strength austenitic steel tube, SUPER304H, for USC boilers

2007 **The Japan Institute of Metals / Technical Development Award**



Development of advanced stainless boiler tube for Ultra-Supercritical (USC) coal-fired thermal power plants

2008 **Okochi Memorial Foundation Grand Production Prize**

Invention of strengthened low-alloy steel for economical boilers

2009 **National Commendation for Invention / Invention Prize** <Joint development with Mitsubishi Heavy Industries, Ltd.>

9 Bogie truck

Fatigue design approach for railway bogie frames

2008 **The Society of Materials Science, Japan / JSMS Award for Technical Developments**

10 Railway wheel

Development of fatigue evaluation method for railway wheel under multiaxial stress state

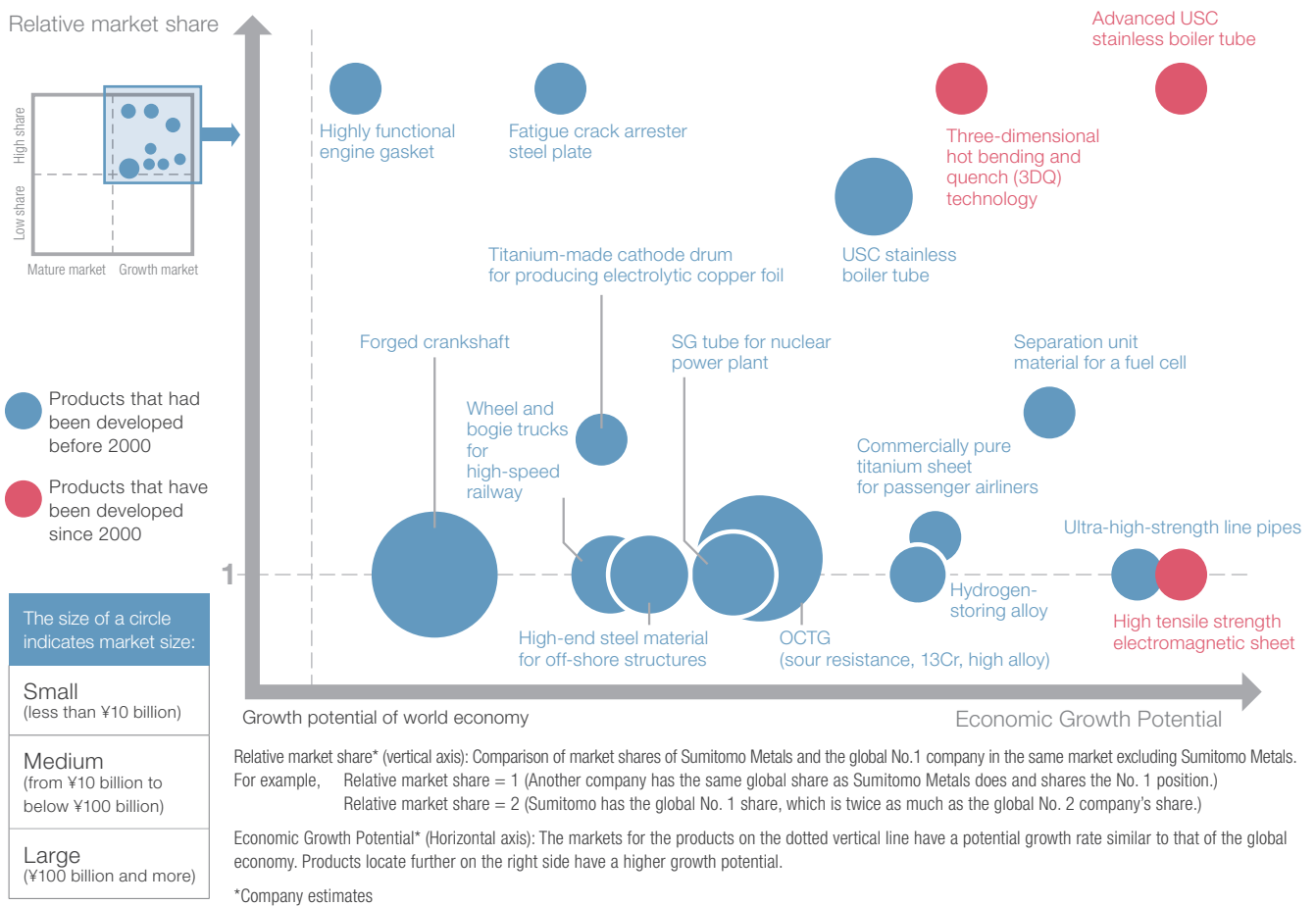
2009 **The Japan Society of Mechanical Engineers / JSME Young Engineers Award**

Distinctive Technologies Support Sumitomo Metals Group

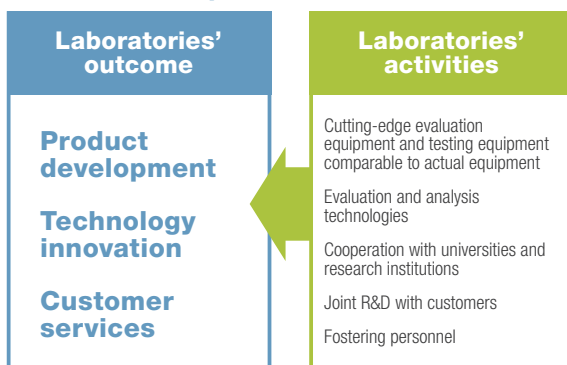
The Sumitomo Metals Group has developed new distinctive products and technologies in growth areas. Most of our current highly-profitable products have been identified as focused areas and developed since the 1990's. Our Corporate Research & Development

Laboratories are now doing research on next generation core products. We will continue to allocate development resources to our areas of strength and make sure to "add strength to strength," with the aim of raising corporate value.

Bringing Up Next-Generation Core Products for Future Growth



Corporate Research & Development Laboratories



Research and Development Toward Solving Environmental Problems

