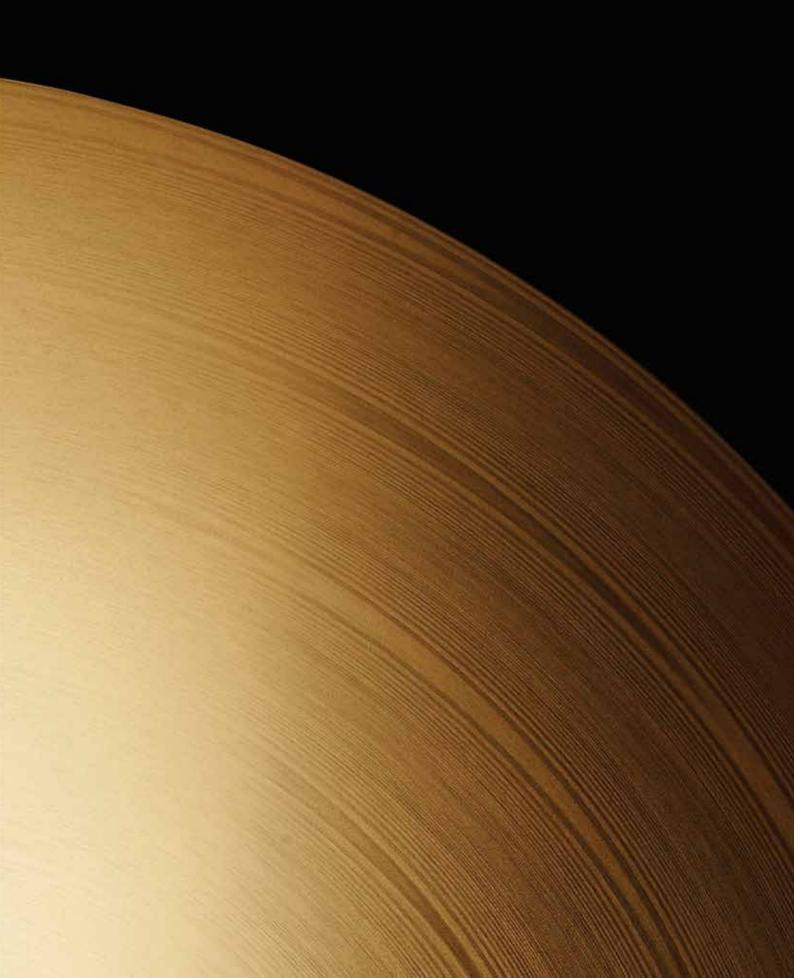
Annual Report 2016



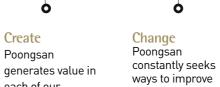


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Challenge Create Poongsan overcomes all obstacles to each of our success. operations.

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## **CORE VALUES**



VISION

MISSION

Poongsan Corporation can and will contribute to human progress through our superior products, employment opportunities, and uncompromising service.

Poongsan will set the global standard for excellence in everything we do.



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ways to improve our company, our industry, our world.

### Confirm

Poongsan consistently checks to ensure optimal quality in our work.

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### Communicate

Poongsan communicates openly with our customers, employees, partners, and shareholders.

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## To Our Valued Customers, Partners and Shareholders,

During 2016, many factors constrained global economic growth. These factors included natural disasters, efforts to reduce stagnant inventories, and unforeseen geopolitical developments led by the Brexit vote in the United Kingdom, and the U.S. presidential election. This uncertainty and slow growth have led many central banks to keep interest rates at record low levels and maintain loose monetary policies in order to bolster consumer activity and business expenditures.

Domestically, private consumption remained weak as demand and exports continued to struggle. As a result, the Korean economy once again grew at less than two percent, more or less conforming to the broader global trend.

However, despite such a difficult environment, Poongsan Group challenged its employees and partners to find new efficiencies, strengthen its competitiveness, and increase income.

To review Poongsan's business performance, sales decreased 0.3% over the year to 2.0 trillion KRW (US\$1.7billion). Our copper alloy and defense operations posted 1.2 trillion KRW and 0.8 trillion KRW, respectively. Pre-tax profits increased 116% to 175 billion KRW(US\$145million), mainly due to strong commodity prices, robust demand for copper alloys from the automotive, electric, and electronic industries, and record exports of defense products.

Poongsan will continue to focus on sustainable income and profits by channeling resources into growing each business operation. Responding to rising demand for high-quality copper alloy materials, we will develop and supply hi-tech components for the semiconductor, IT, and automotive electronics industries. Poongsan is also preparing for a wave of new infrastructure investments expected in the U.S. and China by developing a variety of new products and new applications. In the defense business, we will continue our role as a trusted munitions specialist. We understand that our customers turn to Poongsan because they expect the highest quality products and want those products delivered on time. At every phase of production, our defense team is passionate about exceeding our customers' expectations.

Finally, we will focus on maximizing profitability through value management, exploring all options to optimize the efficiency of each business unit to manage costs and enhance product quality and customer service.

Poongsan's shareholders, customers, and partners form the foundation for growth. To that end, we will continue our efforts to enhance Poongsan Group's performance, forging a higher global standard in each of our business divisions.

Once again, I want to express my heartfelt gratitude for your continued support of Poongsan Group. Please be assured that together with our executive team and fellow employees, each of us at Poongsan will work every day to hold your trust and confidence.

I wish you, your families, and your colleagues great health and happiness.

Yours truly,

Jin Roy Ryu Chairman and Chief Executive Officer

# PRODUCT INFORMATION

### COIN BLANKS

### **FABRICATED NON-FERROUS METAL PRODUCTS**

Sheets & Strips Leadframe Alloys Rods, Bars & Wires Titanium & Stainless Steel Tubes Stainless Steel Strips Precision Forgings

### **DEFENSE PRODUCTS**

Military Ammunition Components of Ammunition

### **COMMERCIAL AMMUNITION**

MACHINERY

**RESEARCH & DEVELOPMENT** 

#### O Coin Blanks

- Fabricated Non-Ferrous Metal
- Defense Products
- Commercial Ammur
- Machinery
- O Research & Developmer

## **Coin Blanks**

"One Stop Service" from melting old coin scraps to producing new coin blanks enables Poongsan to be an undisputed world leader in the coin blank industry.

Over the past forty-nine years, Poongsan has earned a reputation as a trusted supplier of coin blanks to the global market. In 1970, the company was designated as the sole coin blank manufacturer of the Republic of Korea by the Korea Minting and Security Printing Corporation. In 1973, Poongsan first exported its coin blanks to Taiwan. Since then, it has supplied over 60 countries in 6 continents with its coin blanks. As a recognized participant in the production of Euro coins, Poongsan not only continues to supply coin blanks to the EU market, but also has expanded to include Slovenian Euro coin blanks in 2006, Cyprus Euro coin blanks in 2007, Latvian Euro coin blanks in 2013, and Lithuanian coin blanks in 2014. Poongsan has continued its global market expansion with sales to Poland, the Czech Republic, Chile, and Peru. Today, forty-four years after its first export, it is the world's largest coin blank manufacturer, accounting for more than half of the world's coin blank trade volume.



Poongsan casts over 50 different types of coin blank materials - from brass, nickel silver, cupronickel, and aluminum bronze to other special copper alloys. In recent years, it has concentrated on meeting the global demand for bi-metal, clad metal and nordic coin blanks. It has also expanded its coin blank production to include stainless steel coin blanks.



Poongsan also operates special facilities dedicated to the production of precious metal coin blanks for commemorative coins and medallions. With its expertise of forty-nine years, it is a leader in the global market for precious metal blanks. Poongsan has supplied them for a variety of domestic and international events which include the 1988 Olympic Games, the 2002 FIFA World Soccer Game, the Asia-Pacific Economic Cooperation(APEC) in 2005, and the 2014 Asian Games.

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A large part of Poongsan's success in supplying its customers with superior products in a timely manner lies in its integrated production system. A sophisticated automatic gauge control system precisely manages the thickness of strips used to produce coin blanks and simultaneously manages the weight and surface of the coin blanks to meet the particular specifications of each of Poongsan's customers. Similar automated production systems are used for the processes of melting & casting, rolling, blanking, testing and packing. Poongsan performs rigorous tests at each stage to ensure exceptional quality in each product.

To further enhance its efficiency and effectiveness of production and delivery, Poongsan works closely with a global production network that spans Asia and the Americas. Established in October 2000, Siam Poongsan is strategically located in Thailand to improve Poongsan's ability to supply coin blanks to countries in Southeast Asia. It has a production capacity of 20,000 tons of copper alloy products. PMX, Poongsan's affiliate in the United States, manufactures materials used for minting coins in various countries, including coin blank strips for the dollar coins in the United States. With an annual production capacity of 120,000 tons of copper and copper alloy strips, PMX has emerged both as a trusted supplier of coinage strips and as an important supplier of industrial-based material.

With sophisticated technology and uncompromising dedication to excellence, Poongsan prides itself on consistent and timely delivery of its products at competitive prices. With uncompromising focus on superior products, reliable performance, and customer satisfaction, Poongsan has cultivated strong and loyal relationships with each of its customers. The ability to network globally coupled with an effective "one stop service" approach to production strategically positions Poongsan to further strengthen its global presence and to safeguard its place as the world's premier manufacturer of coins.

#### O Coin Blanks

- Fabricated Non-Ferrous Meta
- Defense Products
- Commercial Ammunition
- A Machinery
- Research & Development





# Coin Blanks Fabricated Non-Ferrous Metal Defense Products Commercial Ammunition Machinery Research & Development

## **Sheets & Strips**

Poongsan's rolled products vary in size ranging from 630mm to 9.2mm in width and from 2.4mm to 0.05mm in thickness.

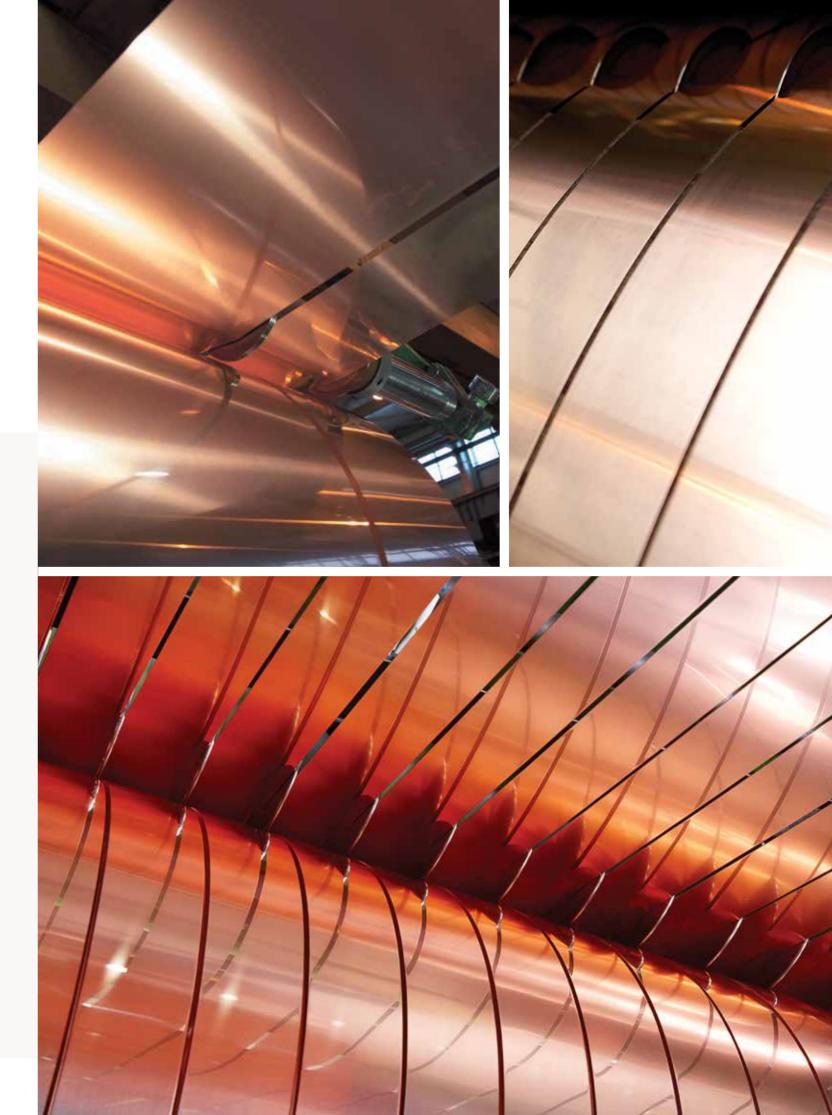


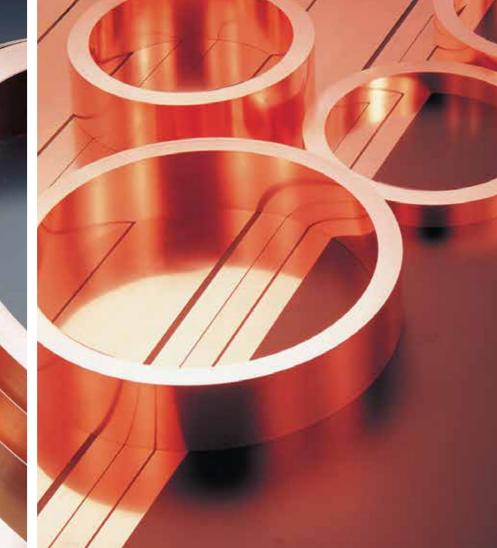
Poongsan takes pride in its efficiently and effectively integrated production system that includes the world's largest shaft furnace, hot mill, cold rolling mill, and slitting processing station. Housed in Poongsan's Ulsan plant, this system manufactures high quality, competitive products. Each of these products undergoes rigorous quality inspection using the latest equipment available in order to ensure accuracy in size and superior quality in both physical and surface properties. This detailed attention to quality results in Poongsan's ability to consistently meet the specific, individual needs of its customers.



Poongsan produces a diverse range of copper and copper alloy sheets and strips for use across many industries. This includes use in interior and exterior applications for both commercial and residential real estate as well as use in construction, machinery, automobiles, electronics, semiconductors, and telecommunication. These rolled products are available in copper, brass, cupro-nickel, phosphorous deoxidized copper, phosphor bronze, nickel silver, aluminum bronze, and other high performance alloys.

In addition to copper and copper alloy products, Poongsan produces tin-plated strips, multi-gauge strips, and stainless steel strips. As with rolled products, these strips are manufactured using state-of-the-art methods to ensure the highest quality products for customers. Poongsan's tin-plated, multi-gauge, and stainless steel strips boast uniform plating thickness, superior surface brightness, excellent welding and corrosion-resistant property factors, and a long-lasting plating layer that resists deterioration. As a result, they are widely used in switches, connectors, terminals, and other various electronic parts.

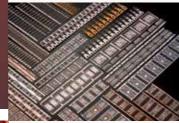




Coin Blanks
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 Machinery
 Research & Development

# Leadframe Alloys

Using its forty years of experience in fabricated copper, Poongsan now offers new high-tech materials for use in semiconductor leadframes and connectors.



Having already developed various copper alloys, Poongsan is now offering new copper alloys - PMC 102 and PMC 102M - that contain nickel, silicon and phosphorus. These alloys contain the ideal properties required in semiconductor leadframes - superior electrical and thermal conductivity as well as high strength and thermal resistance at high temperatures. Poongsan maintains patents for these alloys in the U.S., Japan and the United Kingdom.

In addition to PMC 102, Poongsan offers other copper alloys such as C194, PMC 90, PMC 90 (multi-gauge), C1100 and C1220. The properties of these versatile materials are ideally suited for use in leadframes, transistors, power-transistors and heat sink components.

In order to ensure the production of high quality leadframe alloys, Poongsan maintains dedicated production lines equipped with a casting furnace, rolling mill, tension leveler, tension annealer and slitting station at its Ulsan plant.







O Fabricated Non-Ferrous Metal

# **Rods, Bars & Wires**

Using a 4,000 ton extruding press, rod blocks and a combined drawing machine, Poongsan produces bars, rods and wires with diameters that range from 2.0mm to 105mm.

Poongsan produces a full range of high-quality copper and copper alloy rods, bars, and wires. In 2006, Poongsan developed and obtained a patent for the production of lead-free brass bars and wires. Bars are widely used in nuts and bolts, valves, various machinery, electrical parts and accessory components for automobiles and industrial equipments. Poongsan's free cutting brass bars boast superior welding and cutting capabilities and are popular for use in nuts and bolts, connectors, and electrical and electronic parts. Additionally, Poongsan brass wires are used in specialty products such as EDM wires. Currently, Poongsan is expanding its presence in the high-purity oxygen-free copper rods market.

Poongsan prides itself in the high quality products that it delivers to its customers. Its automated production line by product type ensures that the exact specifications requested by each of its customers are always achieved. Through strict quality control procedures from casting to chamfering to inspection, Poongsan focuses on quality from start to finish.









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## Titanium & Stainless Steel Tubes

Partnering with Neotiss SAS of France, Poongsan supplies defect-free welded titanium and stainless steel tubes to meet the ever changing needs of the most demanding customers throughout the world.

Poongsan Valinox, a joint venture established in 2004 with Neotiss SAS(France), operates a tube mill dedicated exclusively to the production of titanium and stainless steel tubes. Since its inception, Poongsan Valinox has supplied high-quality welded titanium and stainless steel tubes to domestic and international customers. With state-of-the-art technology and quality, Poongsan Valinox is an emerging player in the production and supply of titanium and stainless steel tubes to the global market.

Poongsan Valinox's titanium tubes are lightweight with superior strength and great resistance to heat and corrosion. As a result, they are used in a wide range of plants such as nuclear power, desalination, chemical and petrochemical refining and shipbuilding. These titanium and stainless steel tubes are subject to a comprehensive quality assurance system that has been refined through several decades of experience in the manufacturing of these products. This system is thorough and extensive, overseeing each production stage from cold roll forming, tungsten inert gas welding, annealing, non-destructive testing to product shipping. To further guarantee the specific mechanical and chemical properties and dimension specifications requested by its customers, all of Poongsan Valinox's welded titanium and stainless steel tubes undergo rigorous testing.

In 2007 & 2008 Poongsan Valinox acquired ISO 9001 and ISO 14001 certifications respectively. These two certifications were awarded in recognition of Poongsan Valinox's commitment to environmental protection and excellence in the production of titanium and stainless steel tubes. Poongsan Valinox is committed to meeting the changing needs of the most demanding customers of titanium and stainless steel tubes.

## O Fabricated Non-Ferrous Metal Machinery

## **Stainless Steel Strips**

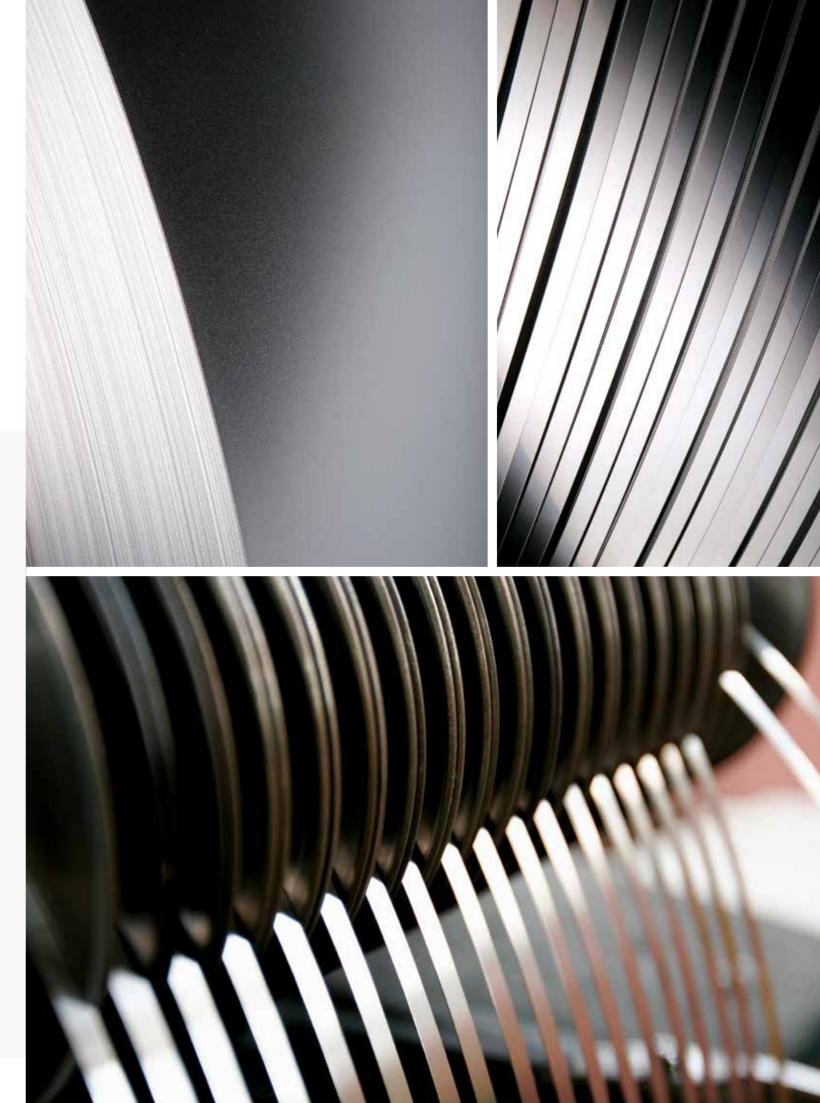
A long history in metal rolling technology combined with new capabilities enables Poongsan Special Metal Corporation to produce superior stainless steel strips.

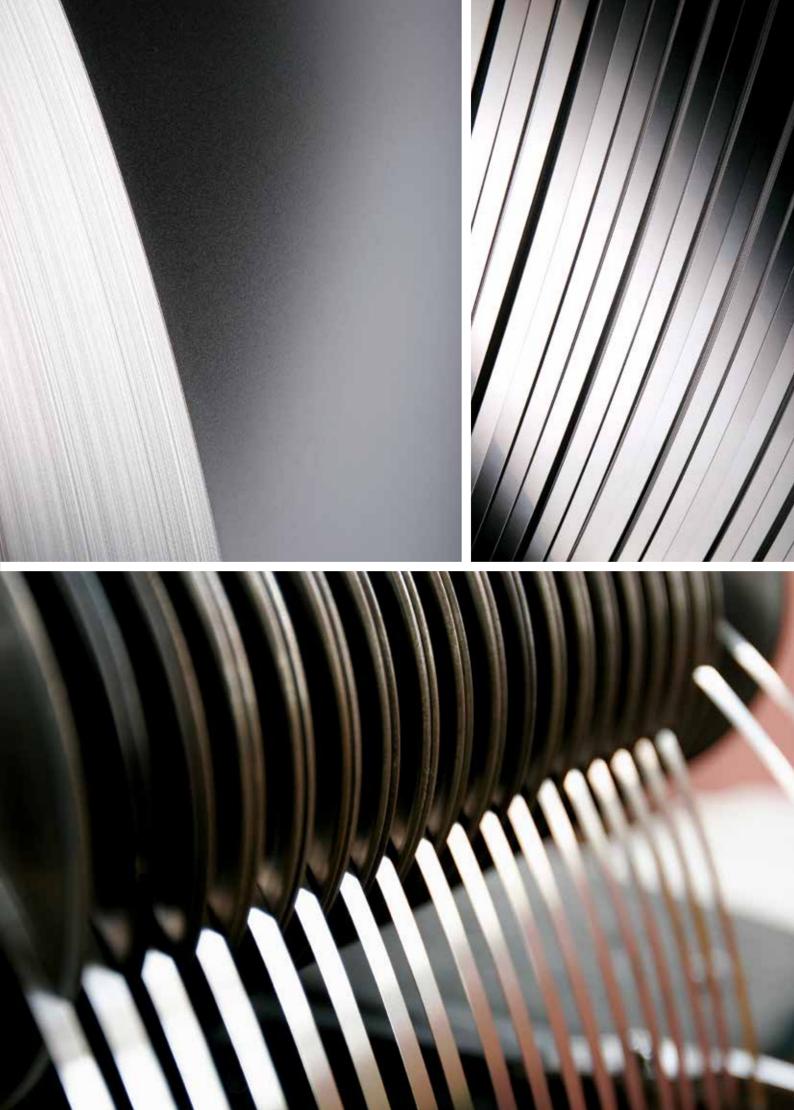


Poongsan Special Metal's precision slitters, tension leveler, tension annealing furnace and computer control systems such as Automatic Gauge Controls and Automatic Flatness Control System all contribute to ensure superior processing of stainless steel strips for a wide range of industrial purposes.

As with all of its other products, Poongsan Special Metal takes pride in its commitment and ability to meet the specific needs of its customers. The thin-gauge, narrow-width stainless steel strips that Poongsan Special Metal produces can be made as thin as 0.03mm and as narrow as 3mm. Poongsan Special Metal's superior rolling and heat-treatment technologies yield a range of desired properties and consistent quality. These Poongsan Special Metal products satisfy standard specifications set by KS, JIS, and AISI. Poongsan Special Metal's stainless steel strips for spring products are particularly popular and widely used in lightweight, high-strength components such as switches, relays and ITs that require strong spring capability.











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# **Precision Forgings**

Through aggressive investment in equipment and technology, Poongsan continues to expand and supply its line of large-scale and precision-forging products to many different industries ranging from shipbuilding and automobiles to high tech, space and aviation.

With the completion of the Angang plant in the early 1970's, Poongsan began operating its own forging facility. Soon thereafter, the Korean government designated Poongsan as a national precision technology plant and calibration center. Today, the Angang plant is globally recognized as an international certification test center.

Over the past four decades, Poongsan has demonstrated that it is a dedicated and dependable supplier of parts to its customers in various industries. It has diligently invested in the acquisition and development of technology in the field of precision forging. Poongsan acquired certification in the ISO/TS 16949 and SQ Mark, enabling it to supply parts to the automobile industry. It has also received similar approval to produce and supply parts to the shipbuilding industry. Additionally, Poongsan has supplied small scale body parts for military weapons to the defense industry. Since the incorporation of two hydraulic presses (with capacities of 6,000 tons and 12,000 tons) into its production line in 2004, the Angang plant has had the capacity to produce larger scale products such as aluminum wheels for tanks, body and metal parts for warheads, guided missiles, and torpedoes. In 2012, Poongsan installed a 4,000 ton hydraulic press in order to enhance medium-sized forging capability. Since Poongsan has obtained certification of the AS9100 quality management system for aviation, space, and defense, it is now able to produce AS9100 compliant turbine blades and aerospace components that are used by aircraft manufacturers.

The Angang plant is fully equipped with a complete quality assurance system required by domestic and global automobile and shipbuilding manufacturers. To that end, the plant is organized to maintain independent production systems for different forging product categories. It is equipped with sophisticated and comprehensive test centers to further ensure the superior quality of its products. In addition, the DEFORM (Design Environment for Forming) system and Material Data Base Software for forging process design have enabled Poongsan to provide superior forging products at reduced costs and to shorten delivery times to its customers.

Poongsan is committed to ensuring a continued supply of high quality, competitive products to its customers. Poongsan's R&D is currently focused on enhancing cold and hot precision forging and other processing technologies in an effort to develop and mass produce essential parts for the transportation industry.

O Defense Products

Machinery

# **Military Ammunition**

With forty years of experience and expertise in utilizing copper and copper alloy production technologies in the manufacture of defense products, Poongsan is a leader in the production and supply of high-tech precision ammunition to the military worldwide.



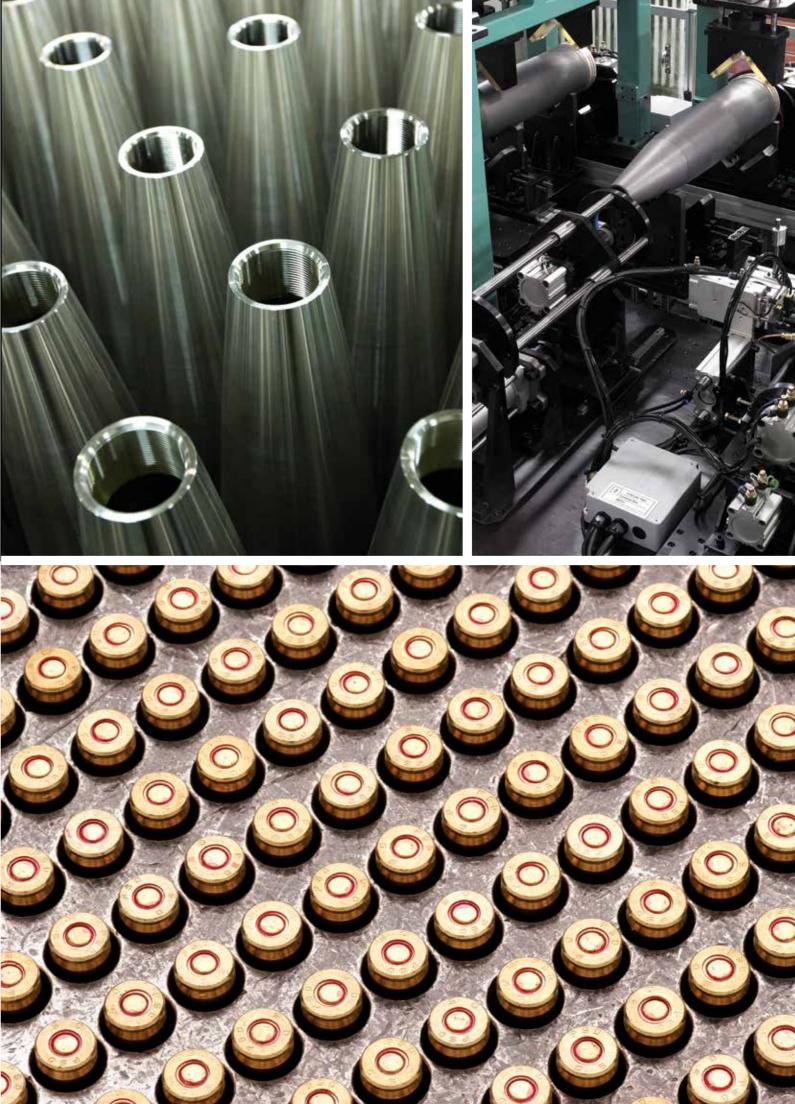
Poongsan operates two defense product plants, one in Busan and the other in Angang. These two plants develop and supply a wide range of small to large caliber ammunition, ranging from 5.56mm cartridges to 155mm projectiles for howitzers. Poongsan's defense products include ammunition used in small caliber arms, anti-aircraft guns, mortars, howitzers, tank guns, recoilless guns and naval guns.

The Busan and Angang plants employ a vertically integrated production system that ensures reliable management of the production process from raw material to finished product, which, as a result, produces superior quality defense ammunition and components. Furthermore, Poongsan's defense products undergo ISO9001-2008 certified performance tests and inspections.













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## Components of Ammunition

In response to the growing market, ammunition components and semi-finished defense products have become some of Poongsan's principal export items.

Poongsan manufactures semi-finished products and components used in the production of ammunition. They include primers, fuzes, bullet jacket cups, case cups, discs, cones, rotating bands, links, tungsten penetrators and shell bodies. Poongsan FNS produces and supplies fuzes for use in naval ammunition, mortar shells and multiple launch rocket systems. In addition to these components, Poongsan produces chemicals, such as nitrocellulose and nitroglycerine, contained in propellants. Today, Poongsan produces and supplies both domestic and international customers with single-, double- and multiplebase propellants.





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## Commercial Ammunition

Poongsan develops and exports over 40 different types of sporting ammunition.



Poongsan's commercial ammunition, PMC (Precision Made Cartridges), is widely used throughout the world for recreational hunting and shooting and has earned a reputation for excellence in quality.

Poongsan is committed to providing high performance, competitively priced commercial ammunition to its customers. Its commercial ammunition plants have vertically integrated manufacturing systems that allow for strict and precise management of the production process from raw materials to finished cartridges. To further ensure customer satisfaction, Poongsan's commercial ammunition undergoes quality inspections and tests that are as stringent as those for its military ammunition.

In addition to providing high quality products at competitive prices, Poongsan is dedicated to developing environmentally friendly ammunition using frangible projectiles and nontoxic primers. These primers contain no heavy metals such as lead, mercury, halogens, boron, barium, bismuth or strontium, and actually exceed current EPA standards. Spectrographic analysis of primer residue shows only trace amounts of potash, which is harmless and actually acts as a fertilizer.









# Machinery

Poongsan builds metal processing machineries and other customized equipments for the steel, automobile and defense industries.

In the early 1970's, Poongsan Machinery began as a maintenance shop for Poongsan Corporation. Over the following four decades, it not only has transformed into a supplier of machinery and customized equipment, but also has become a leading producer of machinery and tools. Poongsan Machinery specializes in rolling related products (such as annealing, pickling, degreasing, buffing, tin plating, and slitting machineries), scalping lines, and rolling oil coolant systems. Currently, it is developing and manufacturing high-capacity Force, Mass, and Torque Standard Machinery in partnership with the Korea Research Institute of Standards and Science. Poongsan Machinery is renowned throughout the industry as the best provider of quality tools, multi-gauge strips, gauges, and fixtures.

Today, Poongsan Machinery continues to maintain strong relationships with prominent domestic companies such as Korea Electric Power Corporation.





Machinery O Research & Development

## **Research & Development**

Dedicated to meet customer needs, Poongsan remains committed to research and development.



From its inception, Poongsan has aggressively pursued initiatives to enhance technology and to develop and improve both new and existing products. Today, Poongsan continues to emphasize and invest in research and development of fabricated copper and copper alloy products used in both the commercial and defense industries.

Through its tireless dedication to research and development over the past forty years, Poongsan takes pride in its ever expanding intellectual property portfolio. To date, Poongsan has registered many patents worldwide that include patents for high performance copper alloys such as PMC102M, PMC26 and defense products. Poongsan invests and strategically allocates resources to develop value-added products, to optimize manufacturing processes and to invest in products with future growth. To this end, Poongsan actively recruits and trains core talent, integrates existing technologies with new ones, and selects and manages projects that meet market and customer demands.

Looking to the future, Poongsan is ever more committed to research and development. Poongsan has built a results-driven R&D organization that benefits from global networking and collaboration among the various research laboratories at Ulsan, Poongsan Special Metal, PMX and Siam Poongsan. In June 2011, it invested more than 30 billion KRW to open its Research Institute in Daejeon to centralize its R&D. In May 2014, Poongsan partnered with the Korea Advanced Institute of Science and Technology (KAIST) to found the Poongsan-KAIST Future Technology Research Center to pursue further development in business and technology.

Armed with the latest ammunition technology, Poongsan is quickly emerging as a global specialist in manufacturing high performance missile warheads and smart ammunition with stronger fire power, longer range, and greater accuracy. Poongsan is working to develop the next generation of high tech materials such as functional materials for information technology and leadframe materials for LED & semiconductors. Poongsan's commitment to R&D focusing on environmentally friendly products is evidenced by its dedication to developing environmentally friendly processes for the manufacturing of these products.





# **COMPANY & FINANCIAL**



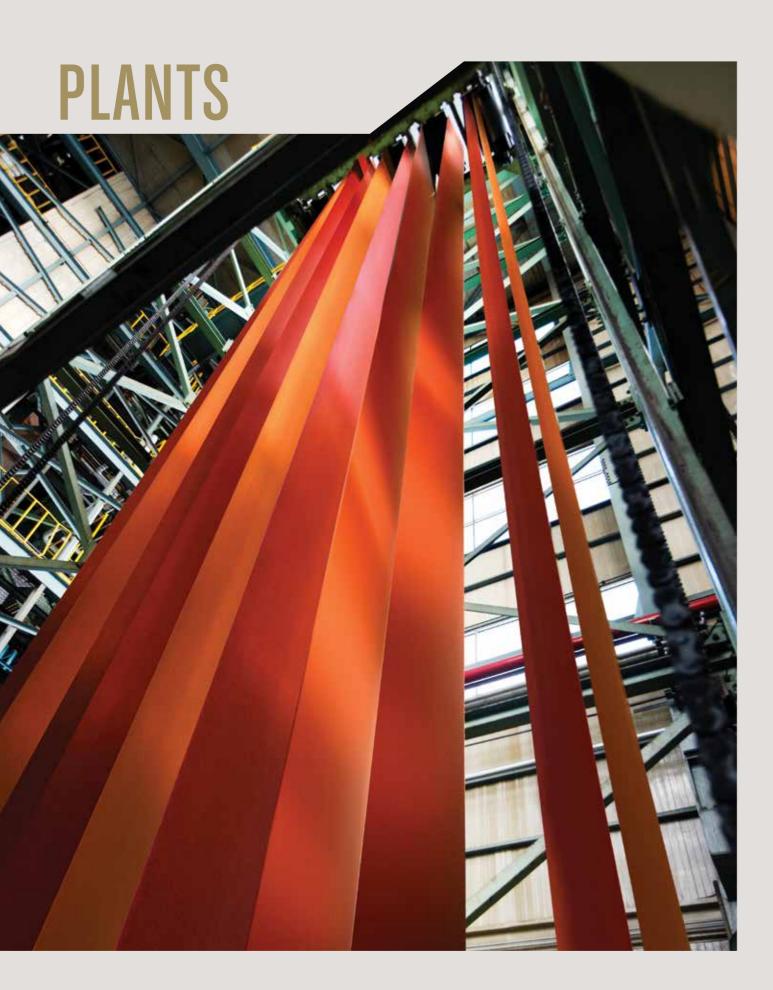
### COMPANY INFORMATION

Plants Domestic Affiliates Overseas Affiliates Company History

FINANCIAL INFORMATION

**ORGANIZATION & BOARD OF DIRECTORS** 

**OVERSEAS & DOMESTIC NETWORK** 



### ULSAN PLANT

Poongsan's Ulsan Plant began operations in 1980. Since then, Ulsan has continually increased its production output. Today, the plant boasts the world's largest production capacity and is unrivaled in product quality. Ulsan continues to be dedicated to efficient production and superior products. To help maximize operational efficiency, the plant has implemented Poongsan's ERP system. It has also completed the installation of a new state-of-the-art shaft furnace to further enhance competitiveness and meet the rising demand for high-value alloy products. In addition, the plant's casting capacity for semiconductor leadframe and automobile connector materials has been improved to allow for increased downstream production capacity and improved product quality. Furthermore, a new breakdown mill, bell furnace and precision CNC slitter have been installed. In order to meet the specific demands of its customers with regard to product quality and service, Ulsan actively enforces the Six-Sigma Initiative.

#### ANGANG PLANT

Established in 1973, Poongsan's 1,068-acre Angang Plant was Korea's very first facility exclusively dedicated to manufacturing ammunition and is regarded as the birthplace of Korea's domestic defense industry. Today, Angang produces an array of military and sporting ammunition, defense components and precision forging products ranging from 5.56mm small arms to 155mm extended range artillery rounds. Since its establishment, Angang has successfully contributed to the strength of the Korean armed forces and self-reliance of our national defense. Angang's manufacturing process is vertically integrated beginning with raw materials and ending with complete rounds of ammunition. Angang's defense and commercial products are superior in quality and competitive in price in the global market. Recently, Angang released new conceptual munitions for the next generation weapon platforms. Currently, the plant is focusing on the production of smart ammunition with selective precision attack capability designed for digitalized future battlefields.

#### **BUSAN PLANT**

Poongsan's Busan Plant is located in the heart of an urban area that is one of the most popular tourist sites in Korea. For that reason, Poongsan in cooperation with the local government manages the plant in a very environmentally conscientious and responsible manner. In 2011, the Busan Plant received a government award commending Poongsan's effort and success in maintaining good labor relations.

Traditionally, the Busan Plant has produced a variety of small-caliber, sporting and hunting ammunition and tracer products. Today, the plant is concentrating on developing environmentally friendly ammunition such as frangible ammunition, green bullet ammunition and EPR (Enhanced Performance Round).

Exports account for more than 80% of the Busan plant's total volume of sales. The Busan Plant has been recognized with ISO9001, ISO14001 and OHSAS18001 certifications.



LOCATION : Ulju-gun, Ulsan PRODUCTS : Copper and copper alloy sheets, strips, rods, wires, raw materials for leadframes, tin-plated strips and coin blanks



LOCATION : Angang-eup, Gyeongju PRODUCTS : A complete line of ammunition for small arms, medium- to large-caliber arms and sporting arms



LOCATION : Haeundae-gu, Busan PRODUCTS : Small arms and sporting ammunition

## **DOMESTIC AFFILIATES**



LOCATION : Changwon, Gyeongnam Haeundae, Busan PRODUCTS : Multi-gauge strips, ammunition parts, machinery, equipment, and metal powders

LOCATION : Gyeyang-gu, Incheon PRODUCTS : Stainless steel strips, nickel alloy strips and precious metal coin blanks

### POONGSAN HOLDINGS CORPORATION

Poongsan Holdings Corporation is the parent company of the Poongsan Group and includes two manufacturing plants—the Changwon Plant produces a wide range of high-quality and high-tech products such as ammunition parts, multi-gauge strips for leadframes and metal powders, while the Busan Plant builds metal processing facilities for the steel, automobile and defense industries.

#### **D POONGSAN SPECIAL METAL CORPORATION**

Drawing on our 40 years of experience and world-class facilities, Poongsan Special Metal Corporation specializes in stainless steel strips, nickel alloy strips and precious metal coin blanks. We take particular pride in our automated production system and superior rolling and heat treatment technologies that enable us to meet the specific needs of our valued customers. Recently, Poongsan Special Metal strengthened its competitiveness in the market by developing core materials, including nickel and nickel alloy products for high-tech electronics products.

LOCATION : Pyeongtaek, Gyeonggi PRODUCTS : Copper & copper alloy sheets, strips

#### D POONGSAN METAL SERVICE CORPORATION

Poongsan Metal Service Corporation was founded in February 2007 to meet the various requirements of our customers. With its modern slitting equipment, Poongsan Metal Service supplies a diverse range of copper and copper alloy sheets and strips in a prompt manner. It also manages warehousing of copper and copper alloy tubes, rods and wires.

#### POONGSAN VALINOX CORPORATION

Over the past decade, the worldwide construction of new desalination plants, the replacement of aging facilities, the construction of new power plants, and the upgrading of industrial materials have greatly increased the demand for titanium and stainless steel tubes. As a result, Poongsan Valinox Corporation was established in May 2004 as a joint venture between Poongsan and Neotiss SAS. In response to the steeply rising demand for titanium tubes, Poongsan Valinox invested in production facilities to dramatically increase productivity. Additionally, product diversification was achieved by the completion of production facilities for stainless steel tubes. By joining its tube-manufacturing technology with Neotiss SAS' material procurement and worldwide marketing, Poongsan created new synergies and economies of scale.

#### **D** POONGSAN FNS CORPORATION

Poongsan FNS Corporation was established in 1973 to produce precision machinery products. In particular, it specialized in fuze products and sensors for the defense sector, as it produced nuclear fuel assembly (WH-type top and bottom nozzle) parts and specialty tools for the nuclear power plant sector. Poongsan acquired Poongsan FNS Corp. in February of 2004 to connect its traditional ammunition production expertise to Poongsan FNS's precision fuze manufacturing and develop state-of-the-art ammunition. Additionally, Poongsan FNS entered the aerospace industry by forming industry-education cooperation agreements with the Agency for Defense Development and the Korea Institute of Science & Technology, enabling research, development and production of precision machinery parts.

#### **PNT CORPORATION**

PNT Corporation is a joint venture established in June 2001 with JX Nippon Mining & Metals Corporation, one of the largest non-ferrous metal companies in Japan. Responding to the rising demand from the various industries such as electronics and information technology, PNT specializes in tin-plated copper alloy strips.

#### **POONGSAN HWADONG**

Poongsan Hwadong is a numismatic company, which has been distributing collectable numismatic items in Korea for over 40 years. Previously established on March 27, 1972 under the name "Hwadong," it joined the Poongsan Group in January 2012 and adopted the new name "Poongsan Hwadong". Poongsan Hwadong has distinguished itself as one of the world's major numismatic powers with an industry-wide recognition as the first and largest numismatic company in Korea. Serving as the authorized distributor of more than 20 major mint bureaus in the world, Poongsan Hwadong also has been designated as the official domestic distributor of the commemorative coins of almost all major world events since the 1988 Seoul Summer Olympic Games.

LOCATION : Gyeyang-gu, Incheon PRODUCTS : Titanium tubes and stainless steel tubes

LOCATION : Nonsan, Chungnam PRODUCTS : Fuze products, accelerometers for inertia navigational systems, and core products for top and bottom nozzle assembly

LOCATION : Ulju-gun, Ulsan PRODUCTS : Tin-plated copper alloy strips

LOCATION : Seocho-gu, Seoul PRODUCTS : Coins, Bank Notes and Medals, Gold and Silver

## **OVERSEAS AFFILIATES**



#### □ PMX INDUSTRIES, INC.



LOCATION : Cedar Rapids, Iowa, USA PRODUCTS : Copper and copper alloy strips

Incorporated in 1989, PMX Industries is a fabricated rolled-copper producer with an annual production capacity of 120,000 tons of copper and copper alloy strips. PMX has earned a strong reputation as a reliable supplier of copper and copper alloy strips for use in ammunition, automotive and electrical connectors, coinage, and high performance alloys, and as a result, plays a crucial role in supporting many different industries in North America. PMX has received patents for EPA-approved alloys under the trademark MicroGuard, with additional patents pending. MicroGuard, strictly governed by U.S. EPA reuglations, kills six types of antibiotic resistant bacteria in less than two hours of contact. This product will be critical in the fight against hospital-acquired infections in the U.S. and overseas. PMX's Production, Sales and Marketing Teams work closely with one another to develop and promote cutting edge products that meet the changing needs of their customers and communities.

#### **POONGSAN (H.K.) LTD.**

Recognizing the importance of a distribution base for the Chinese and Southeast Asian markets, Poongsan established an affiliate company in Hong Kong in 1991 followed by a slitting center in Dongguan. In 2010, Poongsan Hong Kong closed its Dongguan slitting center and opened a newer and larger scale slitting center in Songgang (Shenzhen, China). This new facility will enable Poongsan to expand and increase sales of high value-added products both in Southern China and in other Southeast Asian markets.

#### **POONGSAN (SHENZHEN) CO., LTD.**

Poongsan Shenzhen opened for business in 2010. The slitting center supplies copper alloy strips including leadframe materials as well as stainless steel strips to customers in China and Southeast Asia. This facility is strategically located to be able to provide on-time delivery and better service to our customers in this region.

#### **POONGSAN (SHANGHAI) CO., LTD.**

Poongsan established an office inside the Shanghai Free Trade Zone in order to gain access to the Chinese copper market in 2002. Since its inception, Poongsan Shanghai has steadily grown its sales of high value fabricated copper products to the high-tech and automotive industries. It supplies copper and copper alloy sheets and strips, ACR tubes, brass rods and stainless steel strips to local customers throughout China as well as to U.S. and Japanese companies with operations in China.

#### **POONGSAN (LIANYUNGANG) CO., LTD.**

Poongsan Lianyungang was established in July 2012 to develop new business and to stay closer to existing Poongsan customers expanding into the world's most populous nation. Poongsan Lianyungang also operates its own slitting center to supply leadframe material and general rolled products. It supplies copper and copper alloy sheets and strips, ACR tubes, brass rods, and stainless steel strips to local Chinese businesses as well as to U.S. and Japanese companies operating in China.



LOCATION : Kowloon, Hong Kong PRODUCTS : Copper and copper alloy sheets and strips, brass rods, and stainless steel strips



LOCATION : Yanchuanshequ, Songgang, Shenzhen, China PRODUCTS : Copper and copper alloy sheets and strips, stainless steel strips



LOCATION : Hongkou District, Shanghai, China PRODUCTS : Copper and copper alloy sheets and strips, brass rods, and stainless steel strips



LUCATION : Dapu Industrial Park, Lianyungang, China PRODUCTS : Copper and copper alloy sheets and strips, brass, rods, and stainless steel strips



LOCATION : Laemchabang, Chonburi, Thailan **PRODUCTS** : Copper and copper alloy sheets and strips, coin blanks

#### □ SIAM POONGSAN METAL CO., LTD.

Established in October 2000, Siam Poongsan Metal is the only manufacturer of rolled copper and copper alloy products in Southeast Asia. Products manufactured at Siam Poongsan range from sheets and strips and coin blanks to other copper and copper alloy products. Siam Poongsan is a major supplier of coin blanks to the Thai government. With its completely integrated copper and copper alloy production facilities - from melting and casting to slitting - Siam Poongsan has contributed significantly to the development of the Southeast Asian region by providing alternative sources of fabricated materials for key industries. As a result, it has become a recognized and reliable supplier of copper and copper alloy products not only to Thailand, but also to the other nations in the region. Siam Poongsan is aggressively working to expand its facilities in order to meet the anticipated increase in demand for fabricated copper products in Southeast Asia.



LOCATION : (Head Office) Tokyo, Japan (Kawaguchi Office) Kawaguchi. Saitama, Japan **PRODUCTS** : Copper and copper alloy sheets and strips, brass rods, and stainless steel strips

#### **D POONGSAN JAPAN CORPORATION**

In April 2002, Poongsan Japan Corporation was established in Kawaguchi City, Japan to address the demanding product specifications and service required by the Japanese market. Poongsan Japan processes and sells phosphor bronze, copper, brass and tin-plated strips and high-value copper rolling products. Through prompt delivery, consistent and reliable quality assurance, and effective customer service, Poongsan Japan continues to grow its domestic market share of not only copper rolling products but also copper tubes and stainless steel strips.



LOCATION : Kota Kemuning, Shah Alam, Selangor, Malaysia **PRODUCTS** : Copper and copper alloy sheets and strips, brass rods, and stainless steel strips

#### D POONGSAN (M) SDN BHD

Poongsan (M) SDN BHD, which also operates its own slitting center, was established in November 2001 to promote Poongsan products throughout Malaysia, Singapore and other ASEAN countries. It sells copper and copper alloy sheets, strips, rods, bars and wires as well as stainless steel strips, offering its customers reliable quality, on-time delivery and customer service.



LOCATION : Los Angeles, California, USA

#### **D** POONGSAN AMERICA CORPORATION

Incorporated in 2002, Poongsan America plays a critical role in supplying Poongsan Corporation with copper and copper alloy scraps, machinery and spare parts, and chemicals and other sub-materials. Poongsan America also promotes Poongsan products to overseas customers, especially in the Americas and in developing countries.

Oct.	1968	Poongsan Metal Corp. founded
Dec.	1969	Bupyung Plant completed
Apr.	1970	Poongsan designated as coin blank producer for the
Mar.	1973	Angang Ammunition Plant completed
Jul.	1980	Ulsan Plant Phase One completed
Jan.	1982	Busan Plant completed
Jan.	1983	Precision Dies Manufacturing Shop at Busan Plant c
Aug.	1985	Leadframe Manufacturing Shop at Busan Plant com
Oct.	1988	Ulsan Plant Phase Two completed
Mar.	1989	Poongsan Metal Corp. renamed Poongsan Corporation
Apr.	1992	PMX Industries, Inc. in Cedar Rapids, Iowa, U.S.A. est
Dec.	1993	Quality Standard Certificate ISO 9002 for copper and
Dec.	1996	Quality Standard Certificate ISO 9002 for titanium t
Oct.	1997	Poongsan Metal Plant in Dongguan, China complete
Nov.	1999	Quality Standard Certificate ISO 9001 and ISO 9002
Oct.	2000	Siam Poongsan Metal Co., Ltd. established in Thailar
Jun.	2001	PNT Corporation JV established in Ulsan
Nov.	2001	Poongsan (M) SDN BHD established in Johor, Malays
Jan.	2002	Poongsan (Shanghai) Co., Ltd. established in China
Apr.	2002	Poongsan Japan Corp. established in Saitama, Japan
Jul.	2002	Poongsan America Corp. established in Los Angeles,
Dec.	2003	Environmental Standard Certificate ISO14001 award
Feb.	2004	Acquisition of fuze and precision machinery parts m
May	2004	Poongsan Valinox Corporation JV established in Bup
Jun.	2004	Angang Plant acquires international accreditation as
Nov.	2004	Poongsan honored with Productivity Innovation Awa
Apr.	2005	Hyopchin Industrial Co., Ltd. renamed Poongsan FNS
Oct.	2005	Ulsan Plant obtains KOSHA18001 (Occupational Saf
Apr.	2006	Poongsan designated as the first environmentally fri
Oct.	2006	Poongsan obtains patent for its Lead Free Brass Bars
Feb.	2007	Poongsan Metal Service Corporation established
May	2007	Poongsan honored with Korean System Management G
	2007	Poongsan received Bronze Tower Order of Industrial
Nov.		"\$700 Million Export Tower" awarded on the 44th A
Jul.	2008	Establishment of Poongsan Holdings Corporation
Dec.	2008	Poongsan honored with Korean Ministry of National
Dec.	2009	Poongsan honored with Defense Quality Manageme
Dec.	2010	Poongsan Microtec Corp. sold to a local IT company
Jun.	2011	Poongsan R&D Institute opened in Daejeon
Dec.	2011	Poongsan headquarters moved into the new Poongs
Jan.	2012	Poongsan acquired Poongsan Hwadong
Jul.	2012	Poongsan(Lianyungang) Co., Ltd. established in Chin
Feb.	2013	Angang Plant obtains ISO27001 (Information Securi
		and AS9100 (Aerospace Industry Quality Manageme
Jun.	2013	Angang Plant honored with Total Productive Manag
Dec.	2013	PMC Ammunition Inc. established in Texas, USA
'	2014	Ulsan Plant obtains ISO/TS 16949 (Automotive Indus
May	2014	Poongsan made an agreement with KAIST to found I
Nov.	2015	Angang Plant honored with a Presidential Award at

Mint of Korea

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- nd copper alloy products awarded
- tubes and stainless steel strips awarded
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- 2 for defense industry products awarded
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- California. U.S.A.
- ded to Poongsan for its copper and copper alloy products
- naker Hyopchin Industrial Co., Ltd.
- pyung
- as certification and inspection body
- ard at National Quality Management Convention
- S Co., Ltd.
- fety and Health Management System)
- riendly company among national nonferrous metals industries ſS
- Grand Prix Award at International System Certification Convention I Service Merit at National Quality Management Competition Annual Trade Day
- al Defense Award in recognition of its defense product exports ent Grand Prix Award Hidis
- san Building
- na rity Management System) ent System) gement Grand Prix Award
- stry Quality Management System) Future Technology Research Center National Quality Management Convention

### Results of Operations

In 2016, protectionism and trade barriers that emerged from Brexit and the US presidential election resulted in slow global economic growth. In addition, the Korean economy not only continued to be in a cycle of low growth and depressed consumption, but also was affected by political instability. However, Poongsan Group has demonstrated its ability to grow even in this challenging business environment. We expanded sales by finding new opportunities, increased our competitiveness through cost savings, and increased our profits by expanding exports. As a result, our copper alloy business increased income, due to a turnaround in copper price for the first time in six years and robust demand from the automotive, electric, and electronic industries. Meanwhile, our defense business saw record sales by diversifying its export markets, thereby continuing its growth in revenue.

Poongsan's sales for 2016 totaled 2.0 trillion KRW (US\$ 1.7 billion), a 0.3 percent decrease from 2015. Sales from the Nonferrous Metal Division comprised 60.2 percent of total sales, while sales from the Defense Products Division accounted for the remaining 39.8 percent.

Yearl	v Sales	(Poongsan	Corpo	ration

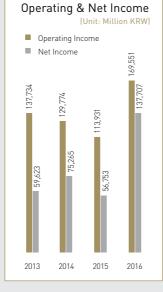
			U	Init: Million KRW
	2016	2015	2014	2013
Nonferrous Metal				
Domestic	459,892	481,392	516,185	579,538
Export	763,884	808,449	994,003	1,059,257
Sub-Total	1,223,776	1,289,841	1,510,188	1,638,795
Defense Products				
Domestic	517,138	526,308	531,333	496,955
Export	293,550	224,668	201,829	236,937
Sub-Total	810,688	750,976	733,162	733,892
Total	2,034,464	2,040,817	2,243,350	2,372,687

#### **Operating Income**

In 2016, the company's operating income was 169,551 million KRW, up by almost 48.8 percent on 2015. The ratio of operating profit to revenue was 8.3 percent, up 2.7 percentage points from 5.6 percent over the previous year.

#### Net Income

Net income for 2016 increased to 137,707 million KRW. The company recognized 27,822 million KRW in equity method income, a increase of 48,651 million KRW from the previous year. Net profit ratio increased from 2.78 percent in 2015 to 6.77 percent in 2016.



#### Operating & Net Income

Operating Income Net Income

#### Capital Expenditure

In 2016, the company recorded from 2015.

#### Capital Expenditure & Deprec

Capital Expenditure Depreciation Expense

#### Financial Position

#### Assets

The company's total assets as of December 31, 2016 were 2,343,381 million KRW, a increase of 4.5 percent from the previous year. Current assets in 2016 were 963,350 million KRW, a increase of 4.4 percent from 2015. Non-current asset increased 4.6 percent over 2015.

#### Liabilities

Loans & Interest Rates

3.26%

3.04%

E.

2015

2016

2.75%

Interest Rates

Loans

3.59%

933,373

2013

2014

Total liabilities as of December 31, 2016 stood at 1,108,573 million KRW, down 3.1 percent or 35,970 million KRW from the previous year. Current liabilities were 667,515 million KRW, a decrease of 0.6 percent from 2015. Non-current liabilities, meanwhile, were 441,058 million KRW, a decrease of 6.7 percent from 2015.

Short-term borrowings for 2016 comprised 37.9 percent of total current liabilities for an amount of 253,248 million KRW. This represented a increase of 22,445 million KRW from the previous year.

Long-term borrowings of non-current liabilities decreased in 2016 to 146,476 million KRW. The balance from bond issues increased by 1 million KRW to close at 199,414 million KRW. The debt to equity ratio was 89.8 percent, a decrease of 14.5 percentage points from the previous year.

#### Loans & Interest Rates

Loans Interest Rates(%) Unit: Million KRW

2016	2015	2014	2013
169,551	113,931	129,774	137,734
137,707	56,753	75,265	59,623

#### In 2016, the company recorded 85,989 million KRW in capital expenditures, a 13.1 percent increase

ciation Expense			Unit: Million KRW
2016	2015	2014	2013
85,989	76,058	65,978	94,018
64,738	62,305	56,377	45,270

			Unit: Million KRW
2016	2015	2014	2013
760,026	833,896	1,018,324	933,373
2.75	3.04	3.26	3.59

#### Shareholders' Equity

The ratio of stockholders' equity to total assets was to 52.7 percent by end of year 2016, an increase of 3.7 percentage points from 2015. Total stockholders' equity was posted at 1,234,808 million KRW, an increase of 136,975 million KRW from the previous year.

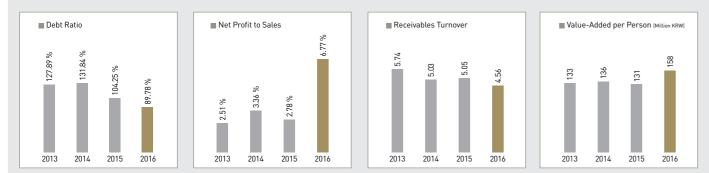
### Key Performance Indicators

		2016	2015	2014	2013
Stability	Debt Ratio(%)	89.78	104.25	131.84	127.89
Profitability	Net Profit to Sales(%)	6.77	2.78	3.36	2.51
Activity	Receivables Turnover(Times)	4.56	5.05	5.03	5.74
Growth	Increase in EBIT Over Last Year(%)	78.30	(18.39)	0.58	7.07
Productivity	Value-Added per Person (Million KRW)	158	131	136	133

### Share Value Analysis

	Unit	2016	2015	2014	2013
EPS	KRW	4,916	2,026	2,687	2,128
EBITDA	Billion KRW	261.0	171.7	192.9	181.0
BPS	KRW	44,062	39,174	37,386	35,334

### Key Performance Indicators



### Non-Consolidated Statements of Financial Position

	Millions of Ko	rean Won	Conversion into of United State	
	2016	2015	2016	2015
Current Assets				
Cash and cash equivalents	7,100	13,547	5,875	11,559
Trade accounts receivable, net	446,397	403,044	369,381	343,894
Inventories	482,978	488,328	399,651	416,662
Other current assets	26,875	17,828	22,238	15,212
TOTAL CURRENT ASSETS	963,350	922,747	797,145	787,327
Non-Current Assets				
Investments	266,510	212,668	220,529	181,453
Invest Property	113,204	114,821	93,673	97,970
Property, Plant and Equipment & Intangible assets, net	998,941	988,662	826,596	843,569
Land	355,011	355,221	293,762	303,090
Buildings	196,159	186,703	162,316	159,303
Structures	37,188	33,854	30,772	28,880
Machinery	311,908	317,096	258,095	270,560
Others	98,675	95,788	81,651	81,730
Other Non-current Assets	1,376	3,478	1,139	2,96
TOTAL NON-CURRENT ASSETS	1,380,031	1,319,629	1,141,937	1,125,96
TOTAL ASSETS	2,343,381	2,242,376	1,939,082	1,913,29
Current Liabilities	2,040,001	2,242,070	1,707,002	1,710,270
Trade accounts payables	79,907	64,903	66,121	55,378
Short-term borrowings	253,248	230,803	209,556	196,93
Other payables	36,074	34,450	29,850	29,394
Current portion of long-term borrowings, net of discount	160,887	256,875	133,129	219,17
Other current liabilities		84,706		
TOTAL CURRENT LIABILITIES	137,399		113,694	72,27
	667,515	671,737	552,350	573,15
Non-Current Liabilities	100 / 1 /	100 / 10	1/5 000	170 1/0
Debentures, net	199,414	199,413	165,009	170,148
Long-term borrowings, net	146,476	146,804	121,205	125,25
Accrued severance benefits, net	39,024	76,120	32,291	64,94
Deferred Tax Liabilities - Non Current	50,417	39,531	41,719	33,72
Other Non-current liabilities	5,727	10,938	4,739	9,33
TOTAL NON-CURRENT LIABILITIES	441,058	472,806	364,963	403,418
TOTAL LIABILITIES	1,108,573	1,144,543	917,313	976,573
Shareholders' Equity				
Capital stock(common stock)	140,121	140,121	115,946	119,55
Capital surplus	494,520	494,520	409,201	421,94
Capital adjustments	(152)	(152)	(126)	(129
Other comprehensive income	13,165	6,655	10,894	5,67
Retained earnings(Accumulated deficit)	587,154	456,689	485,854	389,66
TOTAL SHAREHOLDERS' EQUITY	1,234,808	1,097,833	1,021,769	936,71
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	2,343,381	2,242,376	1,939,082	1,913,290

(Note) These financial statements are made and reported based on K-IFRS(Korean International Financial Reporting Standards). These financial statements include equity method income and loss.

Exchange Rate : ₩1,208.50=US\$1(End of 2016)

### Non-Consolidated Statements of Operations

### Non-Consolidated Statements of Cash Flows

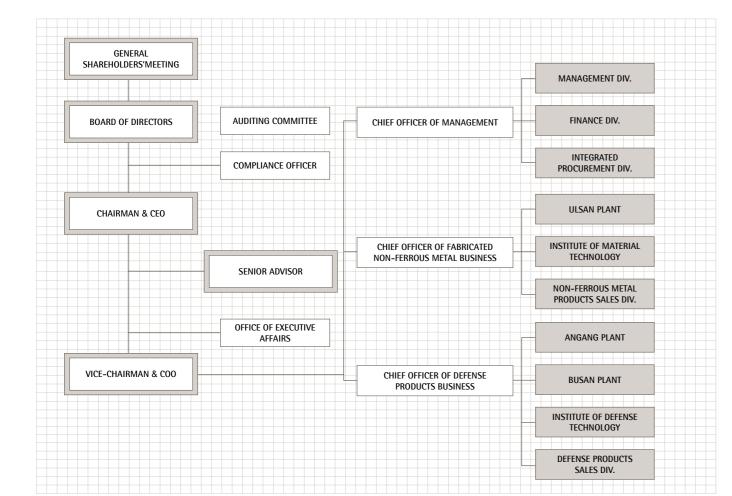
			te : ₩1,208.50=US te : ₩1,172.00=US	
	Millions of Ko	rean Won	Conversion into of United State	
	2016	2015	2016	2015
Sales	2,034,464	2,040,817	1,683,462	1,741,311
Cost of Sales	1,761,474	1,842,977	1,457,570	1,572,506
Gross income	272,990	197,840	225,892	168,805
Selling and administrative expenses	103,439	83,909	85,593	71,594
Operating income	169,551	113,931	140,299	97,211
Other income	70,572	77,025	58,396	65,721
Gain on foreign currency transactions & translations	38,589	31,290	31,931	26,698
Gain on transaction of derivative instrument	16,482	28,726	13,638	24,510
Gain on valuation derivative instrument	3,513	3,602	2,907	3,073
Others	11,988	13,407	9,920	11,440
Other expenses	69,205	58,783	57,265	50,156
Loss on foreign currency transactions & translations	34,211	26,251	28,309	22,398
Loss on transaction of derivative instrument	20,460	18,705	16,930	15,960
Loss on valuation derivative instrument	7,424	3,066	6,143	2,616
Others	7,110	10,761	5,883	9,182
Net financial expenses	23,365	30,256	19,334	25,816
Equity method Income(Loss)	27,822	(20,829)	23,022	(17,772)
Gain(Loss) before income tax expense(benefit)	175,375	81,088	145,118	69,188
Income tax expense(benefit)	37,668	24,335	31,169	20,764
Net income(loss)	137,707	56,753	113,949	48,424
Other comprehensive income(loss)	17,636	10,183	14,593	8,689
Total comprehensive income(loss)	155,343	66,936	128,542	57,113

(Note) These financial statements are made and reported based on K-IFRS(Korean International Financial Reporting Standards). These financial statements include equity method income and loss.

	Millions of K	orean Won	Conversion into of United Stat	
	2016	2015	2016	2015
I. Cash flows from operating activities	180,443	313,955	149,311	267,880
1. Operating Cash Flows	240,301	383,801	198,842	327,475
1)EBT(earning before tax)	175,375	81,088	145,118	69,188
2)Addition of expenses of non-cash transactions	152,121	180,813	125,875	154,275
3)Deduction of revenues of non-cash transactions	(69,749)	(45,618)	(57,715)	(38,923
4)Changes in assets and liabilities from operating activities	(17,446)	167,518	(14,436)	142,933
2. Income tax paid	(22,959)	(23,336)	(18,998)	(19,911
3. Interest paid	(23,135)	(29,978)	(19,144)	(25,578
4. Interest received	20	25	17	21
5. Dividend paid	(14,005)	(16,806)	(11,589)	(14,339
6. Dividend received	221	249	183	212
II. Cash flows from investing activities	(110,335)	(119,984)	(91,299)	(102,376
1. Cash inflows from investing activities	4,051	11,479	3,352	9,794
2. Cash outflows from investing activities	(114,386)	(131,463)	(94,651)	(112,170
III. Cash flows from financing activities	(76,555)	(185,941)	(63,347)	(158,652
1. Cash inflows from financing activities	2,212,459	2,870,701	1,830,748	2,449,404
2. Cash outflows from financing activities	(2,289,014)	(3,056,642)	(1,894,095)	(2,608,056
IV. Net increase(decrease) in cash and cash equivalents(I+II+III)	(6,447)	8,030	(5,335)	6,852
V. Cash and cash equivalents beginning of period	13,547	5,517	11,210	4,70
VI. Cash and cash equivalents end of period	7,100	13,547	5,875	11,559

(Note) These financial statements are made and reported based on K-IFRS(Korean International Financial Reporting Standards). These financial statements include equity method income and loss.

Exchange Rate : ₩1,208.50=US\$1(End of 2016) Exchange Rate : ₩1,172.00=US\$1(End of 2015)





Ryu, Jin Chairman & Chief Executive Officer



Senior Advisor and Vice-Chairman & Head of Global Operations and Chief Operating Officer Strategic Planning



Hong, Chul Gun Ryu, Shi Kwan **Outside** Directo **Outside Directo** Advisor, Law firm Kim&Chang



Choi, Han Myung Park, Woo Dong President



Kim, Myoung Joong **Outside Director** Attorney, Law firm Kim&Chang Certified Public Accountant Samil PwC Accounting firm



Koh, Won Do Outside Director Former Vice Chairman Heerim Architects & Planners

## **OVERSEAS & DOMESTIC NETWORK**

### POONGSAN CORPORATION

Fax: 82-41-741-7780

Fax: 852-2-730-7396

Fax: 86-21-5868-0882

Poongsan Bldg., 23, Chungjeong-ro, Seodaemun-gu, Seoul Phone : 82-2-3406-5114 Fax: 82-2-3406-5400 http://www.poongsan.co.kr

Ulsan Plant 94, Sanam-ro, Ulju-gun, Ulsan Phone : 82-52-231-9114 Fax: 82-52-231-9400

2606-10, Hoguk-ro, Angang-eup,

230, Seonsuchon-ro, Haeundae-gu, Busan Phone : 82-51-520-8114 Fax: 82-51-520-8400

266, Techno 2-Ro, Yuseong-Gu, Daejeon Phone : 82-42-609-7777 Fax : 82-42-609-7870

California Office 456 Oakmead Parkway Sunnyvale, CA 94085, U.S.A Phone : 1-408-733-1910 Fax : 1-408-733-1922

The Energy, 9th Floor Jl. Jend. Sudirman Lot 11A SCBD, Jakarta, Indonesia Phone : 62-21-2995-1615 Fax: 62-21-2995-1616

Villa #26, Abdullah bin Khamis Street, Olaya Tahila Street, Riyadh, 11497, KSA Phone : 966-11-462-4040 Fax: 966-11-462-4040

## Kemuning, Seksyen 31, 40460 Shah Alam, Selangor, Malaysia Phone : 60-3-5122-0001 Fax: 60-3-5122-0002

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Gyeongju-si, Gyeongsangbuk-do Phone : 82-54-760-6114 Fax: 82-54-760-6400

54, Dongtansandan 5-gil, Dongtan-myeon, Hwaseong-si, Gyeonggi-do Phone : 82-31-374-8042 Fax: 82-31-374-8011

RM708, 21Century Bldg., No.207 Tun Hwa North Road, Taipei, Taiwan Phone : 886-2-2545-5311/2 Fax : 886-2-2546-0081

Poongsan Japan Corporation Rune Yotsuya Building 3rd floor 2-4-1, Yotsuya, Shinjuku-ku, Tokyo, 160-0004, Japan Phone : 81-3-5269-6570 Fax : 81-3-5269-6571 (Kawaguchi Office) Angyo-Kitaya 628, Kawaguchi, Saitama 334-0054, Japan Phone : 81-48-297-6931

Fax: 81-48-297-6933

Phone : 66-38-400-056 Fax : 66-38-490-328

Thailand

No. 16, Jalan Anggerik Mokara, 31/59, Kota

893, Deugandae-ro, Nonsan-si,

Chungcheongnam-do Phone: 82-41-740-5500

PNT Corporation 94, Sanam-ro, Ulju-gun, Ulsan Phone : 82-52-231-9981 Fax : 82-52-239-9940

5300, Willow Creek Drive S.W., Cedar Rapids, Iowa 52404, U.S.A Phone : 1-319-368-7700 Fax : 1-319-368-7701

Unit1907B 19/F Exchange Tower 33 Wang Chiu Road Kowloon Bay Kowloon, Hongkong Phone : 852-2-735-6330

8 Dahualu, Yanchuanshequ, Songgang, Baoan, Shenzhen, China Phone : 86-755-3323-8916

Fax: 86-755-3323-8912

Room 1325, No.289, Wujin Road, Hongkou District, Shanghai, 200080, China Phone : 86-21-5868-0881

Poongsan (Lianyungang) Co., Ltd. 20-3, Jinqiao Road, Dapu Industrial Park, Lianyungang City, Jiangsu, China Phone: 86-518-8108-9568 Fax: 86-518-8108-9778

Siam Poongsan Metal Co., Ltd. 38/14 Moo 5, Laemchabang Industrial Estate, T. Tungsukhla, A. Sriracha, Chonburi 20230,

Poongsan America Corporation 601 South Figueroa St. Suite No.4600, Los Angeles, CA 90017, U.S.A Phone : 1-213-236-0300 Fax : 1-213-236-0308

## PMC Ammunition, Inc. 10777 Westheimer Road, Suite

1101 Houston, Texas 77042, U.S.A Phone : 1-281-407-5655 Fax: 1-281-407-5654

## POONGSAN HOLDINGS CORPORATION

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Poongsan Bldg., 23, Chungjeong-ro, Seodaemun-gu, Seoul Phone : 82-2-2278-6700 Fax : 82-2-2278-6790

Changwon Plant 670, Gongdan-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do Phone : 82-55-239-0700 Fax : 82-55-267-0701

230, Seonsuchon-ro, Haeundae-gu, Busan Phone : 82-51-520-8900 Fax: 82-51-522-0117

57, Anaji-ro, Gyeyang-gu, Incheon Phone : 82-32-540-7114 Fax : 82-32-540-7400

Poongsan Valinox Corporation 57, Anaji-ro, Gyeyang-gu, Incheon Phone: 82-32-556-4424 Fax: 82-32-556-4429

134, Pyeongtaekhang-ro 156beon-gil, Pyeongtaek-si, Gyeonggi-do Phone : 82-31-650-7500 Fax: 82-31-650-7511

Poongsan Hwadong 351, Hyoryeong-ro, Seocho-gu, Seoul Phone : 82-2-3471-4586 Fax: 82-2-597-8741



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