**A5052**

**Overview:**
Aluminium A5052 contains nominally 2.5% magnesium and 0.25% chromium. It has good workability, medium static strength, high fatigue strength, and very good corrosion resistance. Especially in marine atmospheres, A5052 is most suited to forming operations, with good workability and higher strength than that of the 1100 or 3003 alloys that are commercially available.

**Application:**
5052 is often used in high strength sheet metal work, marine components, appliances, fuel and oil tubing, signs, trucks bodies and electrical cabinets.

**Chemical Composition:**

<table>
<thead>
<tr>
<th></th>
<th>Silicon</th>
<th>Iron</th>
<th>Copper</th>
<th>Manganese</th>
<th>Magnesium</th>
<th>Chromium</th>
<th>Zinc</th>
<th>Other</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5052</td>
<td>0.4</td>
<td>0.4</td>
<td>0.1</td>
<td>0.4-1.0</td>
<td>4.0 - 4.9</td>
<td>0.05 - 0.25</td>
<td>0.10</td>
<td>0.15 total</td>
<td>Aluminium</td>
</tr>
</tbody>
</table>

**A5083**

**Overview:**
Alloy 5083 aluminum plates have higher strength than 5052 plate and has exceptional thermal conductivity. In tempered condition, it retains good formability due to excellent ductility. Because Alloy 5083 exhibits excellent resistance to general corrosion and is commonly applicable in marine applications.

**Chemical Composition:**

<table>
<thead>
<tr>
<th></th>
<th>Silicon</th>
<th>Iron</th>
<th>Copper</th>
<th>Manganese</th>
<th>Magnesium</th>
<th>Chromium</th>
<th>Zinc</th>
<th>Other</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5083</td>
<td>0.4</td>
<td>0.4</td>
<td>0.1</td>
<td>0.4 - 1.0</td>
<td>4.0 - 4.9</td>
<td>0.05 - 0.25</td>
<td>0.25</td>
<td>0.15 total</td>
<td>Aluminium</td>
</tr>
</tbody>
</table>

**A1100**

**Overview:**
Aluminium 1100 is soft, low strength and at 99 % aluminium composition is the commercially pure grade among aluminium alloys.

**Application:**
A 1100 is commonly used to make many household items, such as cooking utensils, household foil, and food containers. It is also used in a wide range of industrial applications, involving both thermal and electrical conductivity.

**BRONZE BARS**

**Overview:**
Gunmetal Bronze or commonly known as Leaded Red Brass offers excellent machinability, excellent wear resistance at normal lubrication, high resistance to corrosion and seizure.

**Application:**
Pressure tight requirement, valve and pump bodies, pump impeller, fittings for gasoline and oil lines, bushings and general engineering applications etc.

**Chemical Composition:**

<table>
<thead>
<tr>
<th>Copper (Cu)</th>
<th>Tin (Sn)</th>
<th>Zinc (Zn)</th>
<th>Lead (Pb)</th>
<th>Phosphorus(P)</th>
<th>Aluminium (Al)</th>
</tr>
</thead>
<tbody>
<tr>
<td>84 - 86 %</td>
<td>4 - 6%</td>
<td>4 - 6%</td>
<td>4 - 6%</td>
<td>0.05%</td>
<td>0.005%</td>
</tr>
</tbody>
</table>

**ALUMINIUM BRONZE**

**Overview:**
Aluminum bronze is the highest strength standard copper based alloy. The alloy offers high resistance to wear and corrosion, strong resistance to oxidation as well as good strength elevated temperature. The Aluminium in conjunction with iron and nickel act as strengtheners in these alloys.

**Application:**
Industrial bushings, bearings, machine parts, marine hardware, etc.

**Chemical Composition:**

<table>
<thead>
<tr>
<th>Copper (Cu)</th>
<th>Tin (Sn)</th>
<th>Zinc (Zn)</th>
<th>Nickel (Ni)</th>
<th>Iron (Fe)</th>
<th>Aluminium (Al)</th>
<th>Manganese (Mn)</th>
<th>Lead (Pb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>79% Min</td>
<td>0.1 %</td>
<td>0.5 % - 5%</td>
<td>4 - 5%</td>
<td>3.5 - 4.5%</td>
<td>8.5 - 9.5%</td>
<td>0.8 - 1.5%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>
CAST IRON

Overview:
Cast iron is a ferrous alloy. It is heated until it liquefies and then poured into a mould to solidify. Carbon (C) and silicon (Si) are the main alloying elements, with the amount ranging from 2.1–4 wt% and 1–3 wt%, respectively. Iron alloys with less carbon content are known as steel. The principle of cast iron solidification is understood from the binary iron–carbon phase diagram.

Applications:
Due to its excellent machinability, good resistance to deformation and high wear resistance, cast irons have become an engineering material with a wide range of applications in pipes, machines and automotive industry parts.

COPPER PLATES & RODS

Overview:
C11000 copper alloy possesses high electrical and thermal conductivity, good corrosion resistance and solderability. PT. Indomakmur Inti Lestari carries stock ranging from round bar, squares, flat rectangular (bus bar), and certain profile shapes.

Applications:
Welding fixtures, anodes, bus bar in electrical power installations, ground straps, commutators and current carrying hardware. Its inherent fabrication qualities readily permit it to be bent, soldered, drilled, peened, riveted and formed to fit almost any design specification.

International Standard Guideline:
JIS 3250: EN 13601: ASTMB 187: TIS 1567

STAINLESS STEEL

SS304

Overview:
The basic composition of austenitic stainless steel is 18% Cr and 8% Ni, codified in 18 / 8. A percentage of 2-3% of molybdenum allows the formation of molybdenum carbide better than chromium and ensures a better resistance to corrosion by chlorides (sea water).

SS316

Overview:
Type 316 is an austenitic chromiumnickel stainless steel containing molybdenum. This addition increases general corrosion resistance, improves resistance to pitting from chloride ion solutions, and provides increased strength at elevated temperatures. Type 316L is an extra-low carbon version of Type 316 that minimizes harmful carbide precipitation due to welding.

Chemical Properties SS304:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Manganese</th>
<th>Phosphorus</th>
<th>Sulphur</th>
<th>Chromium</th>
<th>Nickle</th>
<th>Molybdenum</th>
<th>Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.08</td>
<td>2.00</td>
<td>0.05</td>
<td>0.03</td>
<td>18.00 - 20.00</td>
<td>8.00 - 10.00</td>
<td>2.00-3.00</td>
<td>Balance</td>
</tr>
</tbody>
</table>

Chemical Properties SS316:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Manganese</th>
<th>Phosphorus</th>
<th>Sulphur</th>
<th>Chromium</th>
<th>Nickle</th>
<th>Molybdenum</th>
<th>Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.08</td>
<td>2.00</td>
<td>0.05</td>
<td>0.03</td>
<td>16.00 - 18.00</td>
<td>10.00 - 14.00</td>
<td>2.00-3.00</td>
<td>Balance</td>
</tr>
</tbody>
</table>
**COPPER BUS BAR**

**Overview:**
Copper Busbar is made of high purity copper (99.99 %) with electrical conductivity of at least 100 % IACS (International Annealed Copper Standard). High purity of copper busbar can endures excellent thermal conductivity and superior formability, in which it can be bent without cracking.

**International Standard Guideline:**
JIS 140; EN 13601; ASTM B187; TIS 1567

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**ENAMELLED COPPER WIRE**

**Overview:**
Typical Properties & Applications:
The Enamelled copper wire exhibit strong character of a highly tensile nature and work efficiently in high temperature conditions. Under strict quality requirements of international standards our signature brands like Britton Electric exhibit unmatched efficiency among others.

<table>
<thead>
<tr>
<th>Type</th>
<th>Size</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRITTON ELECTRIC EIW-180</td>
<td>0.30 - 3.50 mm</td>
<td>Work continuously under 180°C. Key Performance is for its heat shock resistance and cut through testing endurance.</td>
</tr>
<tr>
<td>BRITTON ELECTRIC EIAIW-200</td>
<td>0.35 - 5.00 mm</td>
<td>This particular EI-AIW-200 class performs consistently under 200°C. Product has been widely used for high temperature air motor and transformer, air conditioner compressor and high quality power tools and light fittings.</td>
</tr>
</tbody>
</table>

---

**FISH PAPER POLYESTER FILM**

**Overview:**
Polyester film / fish paper flexible laminate is a two-layer flexible laminate in which polyester film is bonded with fish paper. This is a class E insulation material and it has excellent dielectrical property and high mechanical property.

**Applications:**
Suitable for slot insulation, interphase insulation and liner insulation in electric motor and electric apparatus.

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**EPoxy PHENOLIC GLASS CLOTH LAMINATED SHEET**

**Overview:**
Epoxy phenolic glass cloth laminated sheet is made of alkali-free E-glass cloth impregnated with epoxy resins and phenolic resins by processing under heat and pressure. It's a class F insulation with high dielectric properties and low water absorption.

**Application:**
As insulating structure parts for different electrical machines and appliances used in transformer oil and other humid environment.

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**PRE-COMPRESSED PAPER BOARD**

**Overview:**
Press Paper or more commonly known as Presspahn Red is a special product on the basis of the purest wood cellulose fibres. These cellulose fibres are produced by compression method without any additional binding agents.

**Application:**
Presspahn Red is particularly suited as an insulating material in electric machines, capacitors, motors and especially in oil-cooled transformers.
PHENOLIC PAPER LAMINATED SHEET

Overview:
Phenolic Paper Laminated sheets is made of insulation paper impregnated with phenolic resin by processing under heat and pressure. It is strong, rigid and very economical with good electrical insulating properties.

Application:
Phenolic Paper Laminated sheets are used in a wide range of electrical installations, in equipment where rigid electrical insulation is required.

PHENOLIC COTTON CLOTH LAMINATED SHEET

Overview:
Phenolic Cotton Cloth Laminated Sheet material is the workhorse grade for general mechanical applications. It’s strong and tough with very good wear resistance and they are easy to machine into finished components.

Application:
Insulating structures or components for electrical machines and equipments.

ULTIMEG VARNISH - AEV

PT. Indomakmur Inti Lestari offers broad range of AEV Varnishes for various applications. One of the most commonly used product range is the solvent based Ultimerg 2000 varnishes which is designed to impregnation of transformers, motors and electronic components.

In addition to the Ultimerg 2000 series we also provide stock for customers who might need some of the Epoxy Resin under the Ultifil series from AEV.

COPPER TUBE & PIPE

Overview:
Copper Tube or Pancake coils is the general purpose copper tube for above ground services. Its ease of manipulation in half-hard condition and relatively light weight, combined with its ability to withstand high internal pressure, makes copper tube the ideal product for most hot and cold water, central heating and gas services installations.

Application:
Plumbing, Refrigeration and HVAC industries.
MONOMER CASTING NYLON (MC)

Overview:
MC NYLON has improved Nylon properties by being polymerized and molded under atmospheric pressure, which extruded or injected materials cannot provide. It has good mechanical strength and resistive to abrasion, as well as strong impact resistance.

Applications:
Meant for use in dry environments due to its ability to absorb water. Also good for use in wearing situations with bearings and gears, wheel, roller, slide plate, stirring wheel, etc.

POLY OXY METHYLENE (POM)

Overview:
Poly Oxy Methyline (POM) or also called Acetal resins is a hard material that is resistant to fatigue and cips and it has low friction coefficient. POM retain much of their toughness through a broad temperature range. They are highly workable and and stretchable.

Applications:
Bushings and bearings, rollers, gears, wear strips or pads. POM is also very suitable for jigs and fixtures, electrical components and parts which operate in water between 60 to 90C. Bushings and bearings, rollers, gears, wear strips or pads. POM is also very suitable for jigs and

POLY ETHYLENE (PE)

Overview:
Poly Ethylene (PE) is a type of polymers with strong chemical resistance and wear resistance. It is mainly divided into the low density PE (LDPE), High Density PE (HDPE), and Ultra High Molecular Weight PE (UHMWPE). The most common use of those three is HDPE.

Applications:
HDPE has strong resistance to almost all acids and bases, detergents and hot water. HDPE is very suitable to be used in various conveyors roller and liners application due to its highly slippery properties, high wear resistant and excellent shock absorbent.

POLY PROPYLENE (PP)

Overview:
Poly Propylene (PP) has characteristics that are extremely similar to those of the HDPE. PP is often divided into the Homo PP and the Co PP. Although the PP density is extremely small (between 0.9 and 0.94), it is mechanically much stronger and harder than the HDPE. PP plastics has better electro insulating properties and strong chemical resistant properties.

Applications:
Plating, chemical tank lining, gears, poller guides, foodholds and cutting boards.

PVC RIGID SHEET & PVC RODS

Overview:
Poly-vinyl-chloride (PVC) mostly comes in dark grey color and off white. Good quality PVC has a standard gravity of 1.35 g/cm3 (Higher density often gives lower grade). PVC has excellent chemical resistance and dielectric properties, good tensile, flexural and mechanical strength, and low moisture absorption, as well as exceptional dimensional stability. The maximum service temperature for PVC is 140°F (60°C).

Applications:
Anti chemical erosion storage tank mainly used is chemical engineering, fertilizer, petroleum, electroplating and water treatment, special factory floors, electrical device mounts, insulation material and many more.
NYLON 100

Overview:
NYLON 100 (NN100) is the most widely used fabric in rubber industry for its outstanding merits are its high abrasion resistance, high tensile strength and good fatigue resistance. Conveyor belts with Nylon canvas inside possess the characteristics of thin belt body, good shock resistance, good toughness, splendid flexibility and long working life.

Applications:
Nylon conveyor belts are suitable for medium, long-distance and heavy-load transportation of materials, widely used in mining, metallurgical industry and architectural industry, ports and etc.

Chevron Conveyor Belt:

Overview:
The most common carcass materials are polyester, nylon and cotton. The cover is often various rubber or plastic compounds specified by use of the belt. We provide you with the most strength versatile belt in Nylon and Polyester canvas conveyor belts.
Our Chevron conveyor belts are mostly in NN100 series. The chevron cleats (V pattern) increase the quantity of granular materials in heavy duty incline applications.

Applications:
Chevron conveyor belt is used to carry coal and mineral core, grains material such as sand.
Company Overview

PT. Indomakmur Inti Lestari is an Indonesian based trading company, located at the capital city of Jakarta. We offer products on Ferrous and Non Ferrous Metals, Engineering Plastics and Electrical Equipments to procurements from diverse range of manufacturing industries.

With a dedicated team of sales and marketing we strive ourself in maintaining high customer satisfaction.

We believe in long partnership between two business entities. Our dedicated team of sales and management are always ready to commit ourself in providing the highest quality products and services according to our customers expectation and also maintaining a stable chain of supply, domestic and internationally.

In summary, PT. Indomakmur Inti Lestari is an established entity in this business of Ferrous & Non-Ferrous Metal, Engineering Plastics and Electrical Equipments. Our company is growing steadily through these years. We stand firm to our business philosophy, earning strong support from our esteemed customers and suppliers.

This is our commitment to our partners and we believe it will always be in many years to come.

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E- mail: sales@indo-makmur.com
www.indo-makmur.com
• ENGINEERING PLASTIC

• ELECTRICAL EQUIPMENT

• RUBBER & BELT

• FERROUS - NON FERROUS METAL