Magna 310 Super-Versatile Electrode for Copper Alloys
Magna 310 is excellent for joining a wide variety of dissimilar metals. It is highly resistant to wear and corrosion. It is excellent for rebuilding Buckeye Alloys, Scott Blower Bushes and Water Pumps Impeller in Boiler Plants.

Magna 303 Gold-Ferrite Balanced Super-Strength Non-Cracking Alloy for All Steels
Magna 303 Solid is a new formulation alloy that welds all steels and dissimilar metal combinations. This electrode provides "Ionised Arch Transfer" that drastically reduces splatter and electrode overheating, especially on small AC machines.

Magna 303 Super-Strength Non-Cracking Alloy for All Steels
Magna 303 is a maintenance weldable that welds all steels including high alloy steels. It provides excellent heat and corrosion resistance. Magna 303 is excellent for rebuilding of Turbine Rotor Shafts, Turbine Housings and Coal Nozzles in Turbine Generators.

Magna 305 Super Tough Alloy for High Strength Steels
Magna 305 is a high alloy electrode for welding T.I.G. and other heavy-duty steels. Magna 305 is ideal for rebuilding Conveyor Screw Flights / Sprockets, Bunker Funnel and Coal Mill Exhauster Blades in Coal Handling Plants.

Magna 301 "Super Ease" High-Strength Alloy for Aluminium
Magna 301 is a non-hygroscopic aluminium electrode. It is recommended for use in building up of worn parts subject to machining later. It is excellent for flame hardening or pack hardening.

Magna 770 High-Strength Non-Cracking Machineable Electrode for Cast Iron
Magna 770 is specially designed to weld all types of cast iron encountered in maintenance applications. It requires little or no preheating. It is ideal for repairing and rebuilding of Ash Exhauster Pipes, Ash Pump Housings and Bell Housings in Boiler Plants.

Magna Welding Alloys Specialties
Magna 904 "Heat Bar" - Insulating Compound
Magna 904 is a potting compound that actually absorbs and dissipates heat. It is safe to use on all surfaces. It has no unpleasant odor nor does it give off irritating or obnoxious fumes.

Magna 905 Rapid Repair Compound
Magna 905 is an instant repair compound that is excellent for "cold" repairs on surfaces made of steel, copper, aluminium, cast iron, stainless steel, brass and chrome.
As the world's demand for electricity increases, existing Power Plants are under extreme pressure to maintain the pace of power generation. Under such pressures and stresses there are frequent breakdowns caused by:
- Wear and tear
- Corrosion and abrasion
- Inability to replace damaged and rejected components due to high cost
- Inadequate maintenance program in areas such as boiler plants and turbine plants.

An inadequate maintenance program invariably results in excessive downtime, during which production equipment is unproductive, and making no contribution to profits.

The conditions for production welding are entirely different from conditions for maintenance welding. In production welding the base metal is known, welding environments are ideal and projects are repetitive. In maintenance welding, the base metal is unknown, welding conditions less than ideal and repairs are carried out on corroded and contaminated parts.

How Magna Welding Alloys Benefits You

Total Solution: Magna 88C is a low temperature solder with excellent wetting action on a wide range of substrates. Its unique formulation produces products which meet the demands and changing needs of Power Plants worldwide. It is used extensively in boiler plants and various other industrial applications to provide a quality and comprehensive product range with complete backup technical service.

Magna's R&D Team: Magna’s Research team is continuously formulating products to meet the demands and changing needs of Power Plants worldwide. Its team is dedicated to working in close partnership with its distributors and customers to provide a quality and comprehensive product range with complete backup technical service.

Environmental Policy: Magna Welding Alloys recognizes environmental protection as an integral part of its business activities. The Company has an environmental policy that aims to minimize impact on its customers, its employees and the community. Objectives set within the policy are directed at conserving natural resources and reducing waste generated in areas of its activities.

Internal and External site:
Magna’s Marketing Consultants located at various cities and its Distributors utilize an information system provided by the Internet Technology in order to respond almost immediately to customer's queries.

Personal Service from our Technical Specialists:
Magna welding does highly trained non-destructive testing (NDT) specialists, Distribution Representatives and Welding Consultants are available to provide technical advice (for details from your local representative) to determine your individual welding needs which include the following:

- Product and complaints investigation
- Product and complaints investigation
- Corresponding to Technical enquiries

Customer Support Service:
- Product and complaints investigation
- Product and complaints investigation
- Corresponding to Technical enquiries

In-house Training Program:
- Trained Representatives can conduct seminars and presentations on a continuous basis covering subjects such as cost savings, product applications and health and safety training.
- In-house training programs are customized on request

For many welding products, Magna uses high purity core wire generally having a much higher content of noble or semi-noble metals such as nickel, molybdenum, columbium, cobalt etc. than ordinary consumable manufacturers.

Also to its electrodes are coated with the stearic acid — Magna Flux Coating technology formulated for maintenance welding.

Check with your local Magna Welding Alloys Distributor for a comprehensive list of products that are available.

**Gas Welding And Brazing Rods**

**Magna 55 Superior Alloy for Aluminum**
Magna 55 is an aluminum alloy that welds all types of aluminum - both sheet and cast. Its unique two-stage melting range is excellent for both thin-brazing and rebrazing applications. It is ideal for rebrazing Pump Screws in Boiler Plants and Tips for Motor Housing in Coal Handling Plants.

Magna 55 is in stock for T.I.G. processes.

**Magna 77F Super Strength Universal Flux-Coated Brazing Alloy**
Magna 77F has a tensile strength double that of most ordinary brazing rods. It can be used on most alloys including cast iron, bronze, brass, monel, stainless steel, nickel and all steels.

**Magna 88C Low Temp High-Strength Solder for Stainless Steel**
Magna 88C contains no lead, zinc, cadmium, or other metals that corrode easily. It is designed for applications requiring higher strength than that obtained from ordinary soft solders.

**Arc Welding Electrodes**

**Magna BH12 Universal Electrode for Nickel Alloys**
Magna BH12 is excellent for joining dissimilar metals. It has high heat resistance and excellent mechanical and physical properties. It is ideal for rebrazing of Heat Exchanger Tubing, Combustion Systems, Thrust Reversal Assemblies, Steam Service Parts and Turbine Frames.

**Magna 100 Superior Chemofering Electrode**
Magna 100 is an austenitic coated electrode ideal for chemofering, grooving and gouging inaccessible areas such as Pressure Parts, Headers and followers in Boiler Plants. No special equipment or skill is needed.

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### Typical Application - Hydroelectric Power Plant

| Item                  | Location       | Equipment Description | Problem       | Magna Product | Competition Advantage
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>A  Link Side Bar</td>
<td>Crack</td>
<td>M 77F</td>
<td></td>
<td></td>
<td>Outstanding restrike characteristics, minimal spatter and self-releasing slag.</td>
</tr>
<tr>
<td>A  Ash &amp; Slurry</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>A  Shaft  Wear</td>
<td>M 307</td>
<td>Excellent for restrictive position welding.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B  Bearing cooling water line</td>
<td></td>
<td>Leak</td>
<td>M 307</td>
<td></td>
<td>Will not spatter even on wet surfaces.</td>
</tr>
<tr>
<td>C  ESP 3 units</td>
<td>Hoist gear box</td>
<td>Wear</td>
<td>M 770</td>
<td></td>
<td>Produces crack-free weld deposits that are machinable.</td>
</tr>
<tr>
<td>D  Cast iron gate valves</td>
<td>Jammed disc</td>
<td>M 770</td>
<td></td>
<td></td>
<td>Designed to weld all types of cast iron. Produces crack-free welds that are machinable.</td>
</tr>
<tr>
<td>E  Connecting Pin</td>
<td>Wear / Corrosion</td>
<td>M 303 Gold</td>
<td></td>
<td></td>
<td>An electrode that welds all steels thereby reducing inventory.</td>
</tr>
<tr>
<td>F  Shut off gate</td>
<td>Hot air</td>
<td>Aluminium cover of cylinder</td>
<td>Crack</td>
<td>M 505</td>
<td>Requires no special skills or equipment to use this electrode.</td>
</tr>
<tr>
<td>F  BHEL Air Fan Motor</td>
<td>Crack</td>
<td>M 303 Gold</td>
<td></td>
<td></td>
<td>Provides excellent resistance to spatter.</td>
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### Typical Application - Nuclear Power Plant

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<tr>
<td>A  Pressure parts, Headers &amp; Valves</td>
<td>Inaccessible Areas</td>
<td>M 100</td>
<td></td>
<td></td>
<td>No special equipment or skill is needed.</td>
</tr>
<tr>
<td>B  Stack Gas</td>
<td>Cleanup</td>
<td>M 88C</td>
<td></td>
<td></td>
<td>Contains no lead, zinc, cadmium, antimony or other metals that corrode easily.</td>
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<td>C  Pressure Parts, Headers &amp; Valves</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D  Pressure Parts, Headers &amp; Valves</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E  Stack Gas</td>
<td>Emitter</td>
<td>M 88C</td>
<td></td>
<td></td>
<td>Contains no lead, zinc, cadmium, antimony or other metals that corrode easily.</td>
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### Typical Application - Hydroelectric Power Plant

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