We provide:

- In-house Design - with Eastern European manufacture
- Flexible Line Configurations - to suit your business
- Site Supervision - installation and commissioning
- Training - a full training package for operators and production personnel
- Quality Guarantee - of product and equipment
- Solid Equipment - built to last
- Partnerships - over 65% is repeat business
- On-going Operational Support - our expertise becomes your expertise
- On-going After Sales Support

About Bronx
Bronx are experts in the field of coil processing solutions.

Founded in 1940 Bronx has supplied Coil Processing Lines globally.

The Bronx Brand is well known throughout the industry as a high quality supplier of coil processing equipment.

Quality Suppliers of:

- Colour coating lines
- Galvanising lines
- Tension levelling lines
- Precision levellers
- Cut to length lines
- Upgrades to existing lines
- Galvanising coating control equipment
- Pattern coating
- Paint & chemical coaters
- Tension levellers
- Process line equipment & upgrades

A Wealth of Knowledge in Coil Processing

We provide:
Providing the right solution for your business

Success is based on cooperation and collaboration. We maintain a proactive presence from conception of your idea to full line start-up and beyond.

A professional team of engineers and technologists at your service. Bronx recognises that the needs of our customers vary. Bronx’s experience and engineering expertise give us the flexibility and know-how to supply process lines and equipment, tailored to your needs.

We’re passionate about helping you grow your business. At Bronx we pride ourselves in working in partnership with our customers to ensure their on-going needs are met. We conscientiously develop a strong, long term relationship. In fact, more than 65% of our current business is from repeat customers.

Sharing Your Vision. At Bronx our motto is ‘Sharing Your Vision’. This means we want to get to know you, and find out what matters to you and your business, both short term and long term. More than just an equipment supplier, Bronx has a wealth of knowledge in coil processing, to share with you.
Providing Global Solutions and Support To Our Customers

The Bronx Group

Bronx Engineering
West Midlands, United Kingdom

Bronx Thermal Solutions
West Midlands, United Kingdom

Bronx Office
Chicago, USA

Bronx Process Technologies
Kosice, Slovakia

Bronx Office
Moscow, Russia

Bronx Office
Kiev, Ukraine

Bronx Office
Istanbul, Turkey

Bronx International
Sydney, Australia

Bronx is proud to be the equipment supplier for a wide range of companies.
Why Choose Bronx?

Quality Equipment
Established global supplier of quality engineered products

Knowledge & Professionalism
Operated as main contractor in over 90 countries

Support
Ongoing engineering after sales support & service

Teamwork
Training and Know-how transfer to ensure your success

Bronx IP
Line Equipment designed & manufactured in-house

Products Development

1949 Slitting Lines
1970 Colour Coating Lines
1975 Press Feed Lines
1994 Coil Packaging Lines
2011 Warehouse Lines
1960 Cut to Length Lines
1972 Tension Levellers
1979 Multi Blanking Lines
1995 Inspection Lines
2013 Ovens & Oxidisers
1979 Multi Blanking Lines
1995 Inspection Lines
2013 Ovens & Oxidisers

1994
Coil Packaging Lines

1975
Press Feed Lines
Galvanising Lines

1972
Tension Levellers

1979
Multi Blanking Lines

1979
Multi Blanking Lines

1995
Inspection Lines

2013
Ovens & Oxidisers
CONTINUOUS COLOUR COATING LINES

Innovative Designs

Coil Coating

Coil coating is a term used to describe the application of a decorative and/or protective organic coating to metal supplied in coil form.

Bronx has been designing and building organic coating lines for over 40 years with more than 50 references worldwide.

The type of metals coated include:

- Steel
- Galvanised Steel
- Aluminium
- Steel/Aluminium composites

For standard designs, metal thicknesses vary from 0.20 - 1.6 mm and in widths up to 1600mm.

The type of products typically made from ‘prepainted’ steel include:

- Roofing & wall cladding
- Guttering
- Fences & Walls
- Whitegoods (appliances)
- Cool room panels
- Roofing tiles
- Drum ends
- Housings & casings
- Industrial furniture & racking
- Office furniture

Maximum Flexibility

Selecting a Colour Coating Line

Capacity

Bronx offers Colour Coating Lines with output from 10,000 – 250,000 tonnes per annum.

Bronx lines are designed to apply either a superior quality three coat system or an economical two coat system.

Bronx offers a variety of lines including:

- Conventional High Speed, High Capacity
- Warehouse - Modular
- Warehouse - Compact
- Satellite
- With Pattern Coating
- With Embossing

Design

To design a line to meet the customer’s capacity requirements, Bronx requires a reference strip width and thickness, together with maximum/minimum thickness and widths. The reference strip is the strip size most commonly processed by the customer.

With this information our designers are able to determine:

1. The thermal capacity of the oven and the strip contact time in the oven and/or
2. The maximum process section line speed

The initial selection of these parameters must be suited to the desired output. To purchase a line with excess capacity would be over-capitalising, and one with insufficient capacity means losing market share.
The 'Conventional' high speed, high capacity lines produce output up to 250,000 tpa.

Conventional Colour Coating Lines are single pass continuous high speed, high output lines capable of producing up to 250,000 tpa for the construction and appliance markets.

For standard designs, metal thicknesses vary from 0.20 - 1.6 mm and in widths up to 1600mm.

The 'Satellite' lines are a unique Colour Coating Line designed to work with a Continuous Galvanising Line.

All Bronx Colour Coating Lines can be configured for Satellite operation.

Satellite reduces the line equipment required by the removal of the cleaning and pre-treatment sections. The pre-treatment function is carried out at the exit end of a galvanising line, prior to the coil entering the Satellite Colour Coating Line.

Bronx can modify the galvanising line to offer suitable pre-treated material for subsequent colour coating on a Satellite line. This modification involves adding a chemical coater and dryer to the exit section of the galvanising line.

Many coater and dryer options exist to suit your line layout. These include Horizontal, Vertical (space saving), Quick Colour Change with 'S' Wrap, 'C' Wrap and 'U' Wrap available.

Drying of the coating can be by gas or electric (Infrared or Induction).

The Bronx 'Warehouse' lines are a family of Colour Coating Lines designed to fit into existing factory buildings.

Proven technology, innovative designs and many years of process experience have resulted in a family of line designs that can be installed in buildings with clearance as low as 5 metres, without pits, and with minimal additional foundations.

The 'Warehouse' lines allow low investment entry into coil coating for processors wishing to backward integrate, or manufacturers looking to add value to existing products.

Modular and Compact Warehouse Lines are popular choices for those entering the coil coating market or those wishing to do short runs or niche colours or patterns.
Bronx is a world leader in the design and manufacture of high quality lines. Bronx Conventional Colour Coating Lines are high speed, high capacity single pass lines designed for the construction and appliance markets. Bronx conventional lines are individually designed to meet the needs of the customer. Bronx offers a choice of both Gas or Infrared curing ovens and has extensive references in both curing technologies, ensuring our customers can select their preferred option. Both ovens are proven technology, operating in many lines worldwide.

**Services Offered by Bronx**

With over 40 years of experience in Colour Coating Line design, operation and manufacture, Bronx is able to offer much more than quality equipment.

**We offer the following services to our customers:**

- Project Feasibility
- Equipment Design
- Installation & Commissioning
- Technology Transfer
- Training of Operators & Production Personnel
- Operator & Maintenance Manuals
- Product Testing
- Downstream Equipment
- Ongoing Technical Support
- Ongoing Customer Support

### Conventional Single Pass Lines

<table>
<thead>
<tr>
<th>Type</th>
<th>Gauge</th>
<th>Width (mm)</th>
<th>Max Speed (m/min)</th>
<th>Reference Strip</th>
<th>Output (tpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>0.25 - 1.2/1.6</td>
<td>1250mm</td>
<td>150</td>
<td>0.5 x 1250</td>
<td>250,000</td>
</tr>
<tr>
<td>Steel</td>
<td>0.2 - 0.8</td>
<td>1250mm</td>
<td>120</td>
<td>0.4 x 1250</td>
<td>140,000</td>
</tr>
<tr>
<td>Steel</td>
<td>0.12 - 0.6</td>
<td>1250mm</td>
<td>120</td>
<td>0.24 x 1100</td>
<td>78,000</td>
</tr>
<tr>
<td>Aluminium</td>
<td>0.2 - 0.8</td>
<td>1600mm</td>
<td>40</td>
<td>0.5 x 1600</td>
<td>15,000</td>
</tr>
</tbody>
</table>

A Sample of recent Bronx designs
WAREHOUSE COLOUR COATING LINES

The Bronx Warehouse Lines are a family of Colour Coating Lines designed to fit into existing factory buildings.

Benefits

- Low capital cost entry to coil coating
- Designs available for both two and three coat systems
- Innovative design allows lines to fit into most existing industrial buildings, reducing capital cost
- Small factory footprint, ensuring minimal foundations
- Continuous operation providing high prime yield
- Choice of Gas or Infrared (IR) ovens
- Cost effective manufacture of small tonnages from 5,000 tpa to 60,000 tpa

Bronx Warehouse Lines

<table>
<thead>
<tr>
<th>Type</th>
<th>Gauge</th>
<th>Width (mm)</th>
<th>Max Speed (m/min)</th>
<th>Reference Strip</th>
<th>Output (tpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact Double Pass</td>
<td>0.14 - 0.80 (Steel)</td>
<td>1250mm</td>
<td>Prime: 40rpm</td>
<td>0.45 x 1250</td>
<td>22,500tpa</td>
</tr>
<tr>
<td></td>
<td>0.30 - 1.20 (Aluminium)</td>
<td></td>
<td>Finish: 30rpm</td>
<td>(Steel)</td>
<td></td>
</tr>
<tr>
<td>Modular Double Pass</td>
<td>0.14 - 0.80 (Steel)</td>
<td>1250mm</td>
<td>Prime: 40rpm</td>
<td>0.45 x 1250</td>
<td>29,000tpa</td>
</tr>
<tr>
<td></td>
<td>0.30 - 1.20 (Aluminium)</td>
<td></td>
<td>Finish: 40rpm</td>
<td>(Steel)</td>
<td></td>
</tr>
<tr>
<td>Modular Single Pass</td>
<td>0.14 - 0.80 (Steel)</td>
<td>1250mm</td>
<td>Prime: 40rpm</td>
<td>0.45 x 1250</td>
<td>60,000tpa</td>
</tr>
<tr>
<td></td>
<td>0.30 - 1.20 (Aluminium)</td>
<td></td>
<td>Finish: 40rpm</td>
<td>(Steel)</td>
<td></td>
</tr>
</tbody>
</table>
Bronx Print

Bronx print provides an opportunity to expand your market share with innovative pattern coating designs that are capturing the market in style and creative flair.

Bronx are world leaders in pattern printing technology and employ engineers to continually expand and develop machinery and innovative designs that are proving popular in the marketplace. Furthermore, the quality of the final print provided by Bronx pattern printing systems is of the highest quality.

Customers come to Bronx for design and technology as they look for modern ways to enhance and build their market share. 'Bronx Print' is one way to do this, and the patterns whilst complex are easy to print on a quality coating line.

Although some of these effects can be achieved by utilising specialty paints, others require special equipment to be incorporated into the line. When designing a line, consideration needs to be given to the products that are to be offered, so this equipment, or provision for it, can be made in the design phase.

Metal Embossing Machinery

Bronx embossing equipment is precision designed and engineered to offer an array of patterns and strength to the substrate, increasing rigidity and reducing coil waste. Bronx embossing equipment is available for embossing steel, aluminium and stainless steel. All Bronx embossing machines are fitted with Standex embossing rolls.

Special finishes:

Decorative finishes are rolled on one side to create a decorative surface with a high resistance to wear and scratching. These finishes are highly formable.

Double sided pattern:

Double sided patterns are produced by rolling coils between special imprinted rolls. The strength and rigidity of the material is increased and this means you can use a thinner sheet whilst having strengthened material.

Typical applications include wall panels and cladding for buildings; interior of lifts and doors; stairs and walkways, sinks and counter tops, protective shields.
Bronx designs and manufactures a range of high quality Coil Roll Coater Machines designed to meet specific customer requirements.

These are included in Bronx Coil Coating Lines or can be installed into existing coil coating lines.

**Typical uses for Bronx Roll Coater machines are:**

- Pretreatment Coaters
- Prime Coaters
- Finish Coaters
- Passivation Coaters
- Resin Coaters

**A number of configurations are offered by Bronx. These include:**

- ‘S’ Wrap Roll Coater
- ‘C’ Wrap Roll Coater
- ‘U’ Wrap Quick Colour Change Roll Coater
- Horizontal Paint and Chemical Coaters
- Vertical Paint and Chemical Coaters

All Bronx coaters include many innovative features designed to ensure a safe working environment, ease of use for operators and minimum downtime for maintenance.

**Added Features of Bronx Coaters:**

- Quick Colour Change Prime and/or Finish Coaters
- Precision linear guiding for top and bottom head
- Load Cells for consistant/repeatable paint thickness
- Adjustable eccentric offset on backup drum for light gauge material
- Excellent off-line position for cleaning or removal of applicator rolls
- Off-line backing coater head position
- Roller type paint tray
**GALVANISING COATING LINES**

**Knowledge, Experience & Expertise**

**Cost Effective Process Lines**

**Bronx NOF Lines**

Bronx supplies NOF (Non Oxidising Furnace) Galvanising Lines capable of applying both Zinc and Zinc/Aluminium coatings.

Depending on the coating and process, the following grades can be produced on Bronx Process Lines: FH, CQ, DQ.

**Benefits:**
- Guaranteed quality product
- Bronx expertise in thin strip galvanising
- High quality surface finish suitable for post painting
- Heat to Coat or Full Annealing Process

**Wet Flux Galvanising Lines**

Bronx has been designing and building Wet Flux Galvanising Lines since 1975.

The Bronx modified Wet Flux Technology produces Tight Coat to provide a product of 'Guaranteed Lock-Form Quality'.

**Benefits:**
- High quality surface finish suitable for post painting
- Stop-start operation, providing economical running costs
- Modified Flux process results in 'Top Dross'
- Lines capable of product down to 0.12mm thickness

**Standard Specifications**

**Bronx supplies NOF (Non Oxidising Furnace) Galvanising Lines capable of applying both Zinc and Zinc/Aluminium coatings.**

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**Benefits:**
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- Stop-start operation, providing economical running costs
- Modified Flux process results in 'Top Dross'
- Lines capable of product down to 0.12mm thickness

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**Galvanising Lines**

<table>
<thead>
<tr>
<th></th>
<th>NOF Lines</th>
<th>Wet Flux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strip width</td>
<td>1250mm</td>
<td>1250mm</td>
</tr>
<tr>
<td>Process Speed</td>
<td>120 - 185mpm</td>
<td>80 - 120mpm</td>
</tr>
<tr>
<td>Thickness Range</td>
<td>0.6 to 1.6mm</td>
<td>0.6 to 1.6mm</td>
</tr>
<tr>
<td>Coil Mass</td>
<td>20 - 25t</td>
<td>10-20t</td>
</tr>
<tr>
<td>Typical Capacity</td>
<td>100 - 350,000tpa</td>
<td>50 - 100,000tpa</td>
</tr>
</tbody>
</table>
**Benefits on all lines:**

- Bronx designed and manufactured strip transport
- Bronx designed and manufactured air knives and pot equipment with fully motorised adjustment and feedback monitoring
- Full training package for operators & production personnel by the Bronx Technology Department
- Supervision of Installation and Commissioning by qualified Bronx engineers
- Post commissioning support

All technology, training and post commissioning support is provided by Bronx staff, with many years combined experience as managers and operators of Metallic Coating Lines.

**In-line Levelling**

Bronx designs and manufactures Tension Levellers (4 high and 6 high) and Surface Correction Mills that can be installed as part of a galvanising line.

**Surface Correction Mill**

The Surface Correction Mill is a unique Bronx mill designed to provide a smooth surface for subsequent painting. It is a much lower cost solution than traditional mills and does not require extensive foundations.

**Air Knives & Pot Equipment**

Bronx is a leading designer and builder of Air Knives and Pot Equipment for continuous galvanising lines.

Continuous development of our Coating Control equipment has ensured Bronx is a well-respected supplier of Air Knives and Pot equipment for new installations, as well as upgrades to existing lines. Bronx Coating Control Equipment is also supplied to other metal coating line manufacturers for their projects worldwide.
Bronx provides engineering and manufacturing of high-quality Recuperative and Regenerative Thermal Oxidisers. Bronx manufactures its highly efficient oxidisers at Bronx Process Technologies s.r.o. in Slovakia.

Bronx Oxidisers are used to destroy Hazardous Air Pollutants (HAPs) and Volatile Organic Compounds (VOC’s) from industrial air streams. The oxidiser decomposes the hazardous gases at a high temperature before releasing them into the atmosphere.

Bronx Oxidisers are individually designed to ensure your system is perfectly matched to your requirements. Bronx Oxidisers are designed and manufactured to provide a highly energy-efficient system that meets required high levels of VOC destruction.

Recuperative Thermal Oxidiser

The Recuperative Thermal Oxidiser uses an air-to-air heat exchanger of metallic construction (usually referred to as the primary heat exchanger) to pre-heat the curing oven exhaust gases before they enter the VOC destruction chamber.

Pre-heat temperatures can vary dependent upon the size of the primary heat exchanger used and typically range from 300°C to 500°C.

The higher pre-heat temperatures, although requiring more capital expenditure, do reduce fuel consumption and overall plant running cost. After pre-heating the oven exhaust gases in the primary heat exchanger, the exhaust enters the oxidiser VOC destruction (or dwell) chamber via the burner chamber where it is heated to 760°C and held for the required dwell time, before being released to the atmosphere.

Regenerative Thermal Oxidiser

In a Regenerative Thermal Oxidiser (often referred to as an RTO) the oven exhaust gases flow over hot refractory media prior to entering the VOC destruction chamber. The direct contact between the exhaust stream and the hot refractory media provides a very efficient method of pre-heating the oven exhaust gases and pre-heat temperatures above the minimum oxidation temperature of 760°C can be achieved.

On a typical coil coating line application there will be sufficient solvent within the oven exhaust air stream for the auto-ignition of the solvent to generate sufficient energy to maintain the minimum required oxidation temperature without the burner being switched on. This is referred to as the Auto-Thermal condition.

After passing through the combustion / dwell chamber of the regenerative oxidiser the gases then exit via a second canister full of refractory media identical to the first. As the exhaust gases flow over the refractory media, heat will be transferred from the exhaust gases into the media.

After a period of about 90 seconds the media in the first canister will have reduced in temperature and the media in the second canister will have become hot and therefore the direction of the flow of the exhaust gases is reversed such that the media in the second canister are used for pre-heating the oven exhaust gases whilst the heat generated by the oxidation process is used to start re-heating the media in the first canister.

This cycle will continue to repeat itself during the operation of the regenerative oxidiser.

Due to the strict method of stack emission sampling used in some regions such as Europe and Australia, a third canister of media has to be added to the regenerative oxidiser to avoid the ‘spike’ of VOC contaminated exhaust that occurs during the flow reversal process.
Bronx works with its customers to tailor the best and most cost-effective solution for your coating line.

 Bronx specialises in Catenary Convection Ovens for Coil Coating Lines. Catenary Convection Ovens are designed to use external bridles to tension the strip at both ends as it passes through the oven. The level of tension is controlled to maintain a pre-determined strip catenary position through the oven.

Because the strip is supported externally, the jet nozzles within a Catenary Convection Oven only have a single function, which is, to provide the hot air jet that cures the coated surface of the strip. This allows the jet velocities to be selected to better suit paint surface finish quality.

The main products included in the Bronx Thermal range are:-

- Paint Curing and Chemical Drying Ovens
- Recuperative and Regenerative Oxidisers
- Heat Recovery Systems
- Coil Cleaning and Pre-treatment Sections
- Strip Cooling Sections
TENSION LEVELLING SOLUTIONS

Bronx Tension Levellers are well known for producing the very best flatness in high quality surface sensitive products.

Materials processed include:

- Paint and metallic coated steel and aluminium
- Decorative and construction aluminium alloys
- Automotive steel for both internal applications and exposed skin panels
- Architectural and decorative stainless steel
- Pre and post pickled hot rolled steel

Applications

Tension Levellers can be installed in continuous process lines, inspection lines and in dedicated tension levelling lines.

Technology

Bronx are at the forefront of technology for tension levelling and our machines include features such as:

- 6 Hi or 4 Hi work roll cassettes
- Multi station curvature correction for line bow and crossbow
- Quick cassette changeover
- Auto pre-set system
- On-line flatness measurement
- Bronx tension levellers are designed for best quality and long life.

Bronx use tried and tested work roll cassette components of the highest quality together with proven preventative maintenance programmes to ensure each of our customers can maintain the highest quality and performance from our machines.

Bridle Drive and Elongation Control Systems

An important part of the tension levelling system is the bridle drive and elongation control system which utilises entry and exit bridles to generate the tension required to achieve the necessary strip elongation through the tension leveller.

Bridle drive system

- Independent electric drive

<table>
<thead>
<tr>
<th>Speed</th>
<th>Thickness</th>
<th>Width</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 300mpm</td>
<td>0.15mm - 3mm</td>
<td>1830mm</td>
<td>4 and 6 high</td>
</tr>
</tbody>
</table>

Our team of specialist design engineers will select the optimum drive system for each application.
PRECISION LEVELLING SOLUTIONS

Bronx have been making Precision Levellers for over 55 years and have over 500 in operation worldwide processing all types of ferrous and non-ferrous materials. The Bronx range of Precision Levellers are designed to give the optimal flatness improvement to a wide range of materials. They are available in different sizes and roll combinations and are selected by our experienced technical team to suit each type and range of materials to be processed.

Bronx can provide a Precision Leveller solution suitable for the following range of material parameters:

<table>
<thead>
<tr>
<th>Strip Thickness</th>
<th>Strip Width</th>
<th>Max Yield Stress</th>
<th>Material Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.15mm - 12.7 mm</td>
<td>200mm - 2500mm</td>
<td>1280 N/mm²</td>
<td>Hot or Cold Rolled Steel, Stainless Steel, Aluminium Alloys</td>
</tr>
</tbody>
</table>

**High Strength Materials**

New materials are being developed for the Automotive Sector which have a significantly higher Yield Stress. In order to meet the need to process these materials Bronx have developed a new Precision Leveller with the capability to level strip of thickness 2mm and Yield Stress 1280MPa. Bronx have the technology to upgrade existing machines or to design new machines to suit your requirements for processing high strength materials.

**Precision Levelling Technology**

Bronx are at the forefront of Precision Levelling Technology and are continually developing new analytical models in this field which are used for both Tension Levelling and Precision Levelling. Recent work on strip curvature prediction enables Bronx to analyse any roll configuration and to calculate the optimum mesh settings required to level strip with the lowest energy.

**Benefits of Low Energy Settings:**

- Flat strip
- Reduction of surface degradation
- Lower energy consumption
- Consistent results

**Active Levelling**

Bronx have installed an Active Levelling System to a Precision Leveller in a Rotary Shear Line. Active Levelling provides the operator with a system to monitor flatness through the coil and to make adjustments to the Leveller to maintain consistent flatness through the coil. A distance measurement laser scans the strip at the exit of the Leveller and measures any out of flatness. The measurements are used to display a 3D image of the strip and to make corrections to the leveller settings in order to control the strip shape. This technology will reduce the amount of operator supervision and will produce consistent results.

Flatness reports can also be provided for each coil. Bronx have developed this technology jointly with Scantron® which can also be retro-fitted to existing machines.
CUT TO LENGTH LINES

Bronx is a world leader in the design, manufacture, installation and commissioning of high quality coil process equipment. Whether your product is 0.15mm thick surface sensitive aluminium, coated material or 16mm thick hot rolled steel, Bronx has the solution.

Features:
- Automatic coil loading and feeding
- Automatic pre-setting of machine adjustments
- Computer controlled precision levelling
- High speed precision shearing
- Stacking systems for single or multiple blanks
- Inspection system with sheet classification facilities
- Drop sheet stacking
- Air floatation stacking
- Magnetic, belt type stacking
- Vacuum, belt type stacking
- Bomb door stacking
- Single or multi position stacking

Continued product improvements through research and development, with investment in people and up to date technology, has given Bronx a competitive edge.

Bronx concepts for cut to length lines are the result of many years of experience and co-operation with ferrous and non-ferrous industries throughout the world.

To meet the high specification and JIT (Just in time) requirements of industry throughout the world, Bronx has designed and developed the ‘Kombi II’ high speed multi blanking line.

This type of line enables single or multiple precision levelled blanks of extreme close tolerances on both length and width to be produced in one operation direct from coil stock.

Line speeds up to 100 metres per minute and a shearing capacity up to 150m cuts per minute, producing 750 blanks per minute will improve your production rates, reduce your overheads by eliminating labour intensive guillotining and increase your profitability.

The ‘Kombi 11’ has been designed with the JIT principle in mind, through quick and easy changing from one production requirement to maximise the equipment’s usability.

The flexibility of this equipment also allows it to be used as a conventional cut to length line with or without edge trimming.
AUTOMOTIVE STEEL RECOILING & INSPECTION LINES

Proven Technology

Bronx are recognised as a specialist supplier of Automotive Steel Recoiling & Inspection Lines and have supplied lines to many of the leading producers in recent years.

Each Automotive Steel Recoiling & Inspection line is specified to suit the requirements of the customer and can take many different forms depending on the specific material type and condition.

The main function of these lines is to provide final inspection of the finished product before shipment and as such it is important to carry out this task without causing surface finish damage or defects during the process. Bronx engineers fully understand this requirement and take great care during all stages to enable us to include a non-marking guarantee with each line.

Specialist Supplier

In addition to the minimum requirement of inspection and recoiling, other main features can be added such as:

- Edge Trimming and scrap removal
- Coil dividing
- Reclamation – Non-prime removal and Prime Coil Build Up
- Tension Levelling
- Strip Cleaning
- Coil joining
- Width and thickness measurement
- Electrostatic re-oiling

Technology

Bronx have proven in-house technology for the main equipment and work with industry recognised suppliers for specialist equipment.

Innovative technology included as standard on Bronx lines include:

- Automatic coil loading
- Auto-set trimming
- Auto feed up scrap baller
- Roll cleaning
- Custom designed inspection station
- Tension Levelling with optimum pre-set system

Electrical Drive & Control System

A critical element of this type of line is the Electrical Control System.

Our experienced electrical team work together with the chosen equipment supplier during design and commissioning to make sure that the required performance is achieved by this system to enable us to meet our non-marking guarantee.
Since 1940 Bronx has been developing special partnerships with all of its customers that result not only supplying complete lines but working with them on enhancements to their existing production plant. Whether these enhancements are to increase production, to reduce downtime, to increase safety, to satisfy current European regulations or to increase product quality Bronx will work with its customers to achieve the results they are aiming for.

Bronx are available to discuss an application or can carry out a line audit, engineering study or conduct an inspection visit, relating to:

- Increased capacity coil cars
- Increased capacity uncoilers
- Precision levellers
- Tension levelling sections
- Increased capacity recoilers
- Storage & loading systems
- Strip joining units
- Chemical coating units
- Thermal drying & cooling sections
- Slitting & edge trim units

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### Providing the right solution for your business

**Cooperation and collaboration:** We proactively work with you to upgrade your line.

**Expertise:** Bronx’s experience and engineering expertise give us the know-how and flexibility to supply tailored equipment to suit your needs.

**Sharing your vision:** At Bronx, we share your vision. We work with you and your business, both in the short and long term to enhance your business and meet your needs.

**Experience:** Over 70 years coil processing knowledge to share with you.
To maintain output and product quality ‘year in year out’ on your Bronx, or other equipment, it is necessary to service it on a regular basis.

Bronx has the expertise and knowledge to keep your equipment running efficiently.

Machine drawings and records of every Bronx machine built are held, so we can manufacture replacement parts to the original specification.

Spare Parts:

- Assessment of your equipment backed up by a detailed report
- Complete spare parts service for Bronx and non-Bronx equipment
- Fast turn-around of replacement and spare parts
- Advice on holding spares

Service:

- Operator & maintenance training
- Refurbishing / rebuilding of machines
- Scheduled service visits
- Emergency breakdown service
- Machine inspection
“... It was vitally important for Ace to pick a partner who could deliver the quality in machinery for us to continue to compete in the Australian market with a product that would measure up to benchmark. Bronx engineering and technical experience coupled with the capability to meet deadlines has certainly achieved that for Ace. I would have no hesitation based on my own experience to recommend to anyone looking to install a state of the art wet paint line that they use Bronx....”  *Ace Gutters Pty Ltd, Australia*

*“...The vast experience and references of Bronx, combined with the skilled Project Management of Tezcan, guaranteed the success of this modern Paint Line facility.... We will have no hesitation to work in partnership again with Bronx on future projects and congratulate Bronx and other companies involved with this highly successful project. *Tezcan Galvaniz Yapi Elemanlari, Turkey*

“... the Bronx line and overall package has more than met our expectations and we are now working with Bronx to add pattern coating to the line, to further enhance our position in the local and export markets*.  *Alcoat, Turkey*

The Bronx Sales, Engineering, Production Technology & Customer Relations Staff are committed to working with you from inception to total completion of your project.

**DEIGN - CREATE - DELIVER**
So Why Buy Bronx?

**Training & Supervision:** Bronx provide on-site training of operational staff, including technology know-how transfer. On-site training of maintenance staff in all technical disciplines is included. Detailed maintenance manuals are included for on-going support.

**Expertise:** All Bronx equipment is designed and engineered in-house.

**Manufacture:** All Bronx equipment is manufactured within Europe.
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