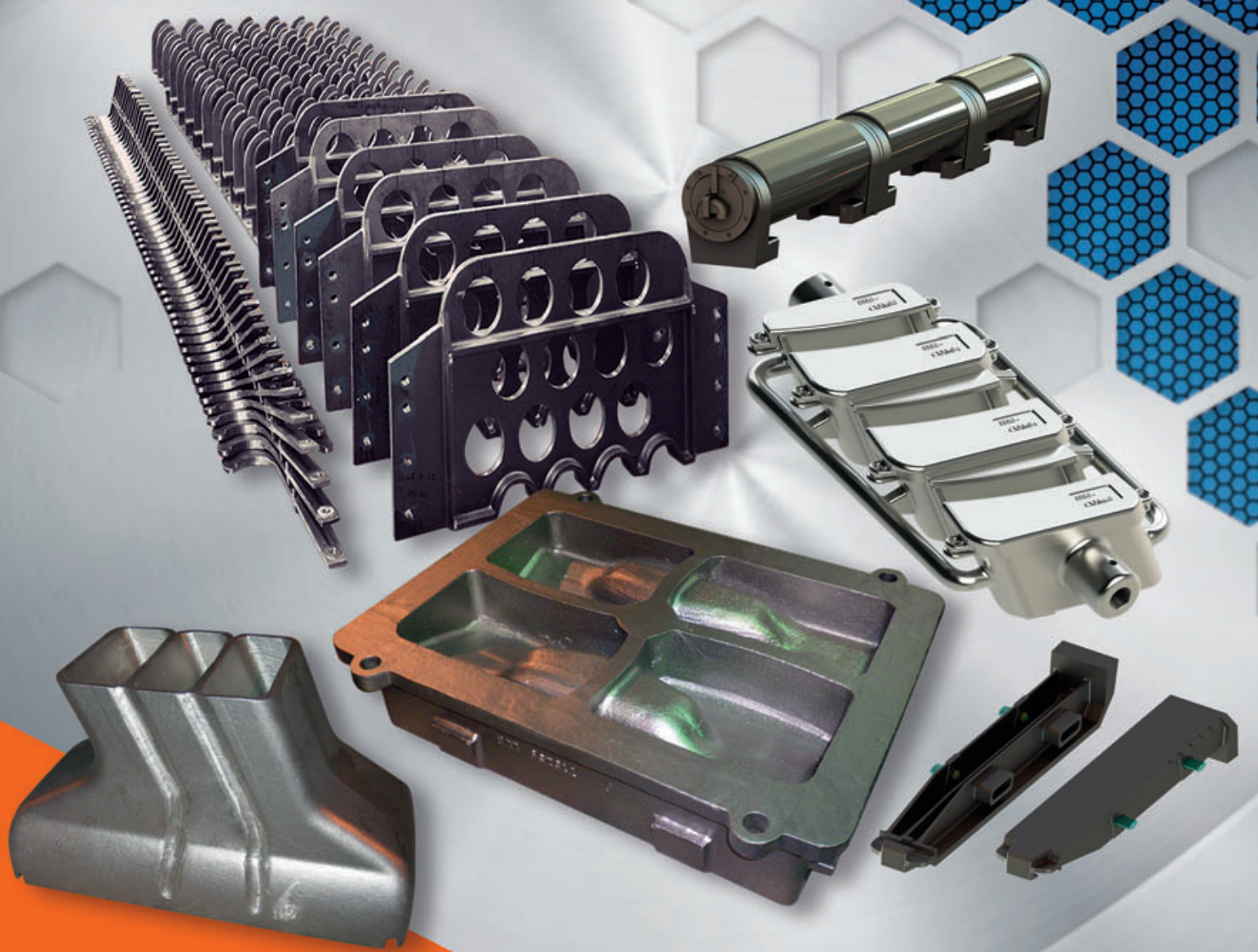


CRONITE

Better by design



Global
Excellence

100 years experience in Heat,
Corrosion & Wear Resistant Castings



Cronite, 100 years experience in Heat, Corrosion & Wear Resistant Castings.

Cronite, with its productions sites on 3 continents and global sales and design network, supplies high quality products for more than 100 years.

We supply different kind of industries

- Heat Treatment
- Steel Industry
- Waste to Energy
- Power Generation
- Aerospace
- Shot Blast
- Petrochem
- Piston Rings & Rings



We make ideas
become reality

New ideas are one of our driving forces to innovate our processes or products, and also introduce new solutions to the market.

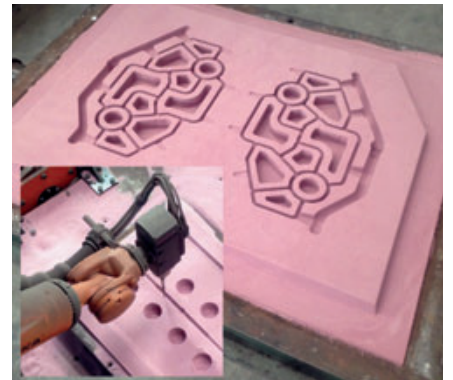
To support this approach, Cronite continuously reinvest over 4% of its turnover in Research & Development. Its Research & Development center, located in Czech Republic, is equipped with high-tech equipment and closely cooperates with universities around the world.

Fast product
development
Rapid
Prototyping

The process and parts development requires fast answers from suppliers. Therefore Cronite has invested and developed over the past years suitable equipment and processes to shorten the development phase.



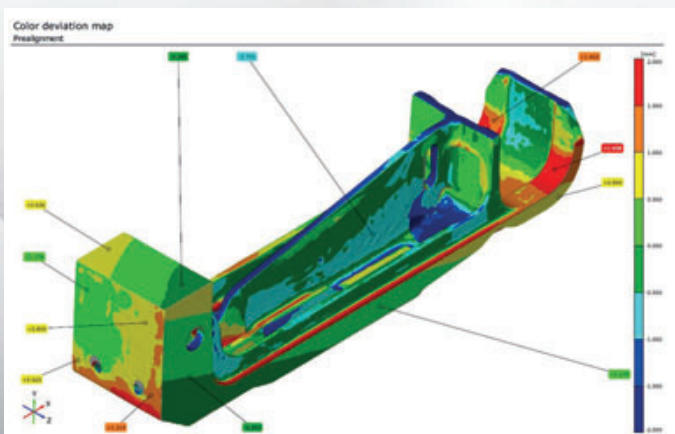
Lost Wax 3D printing (patternless)



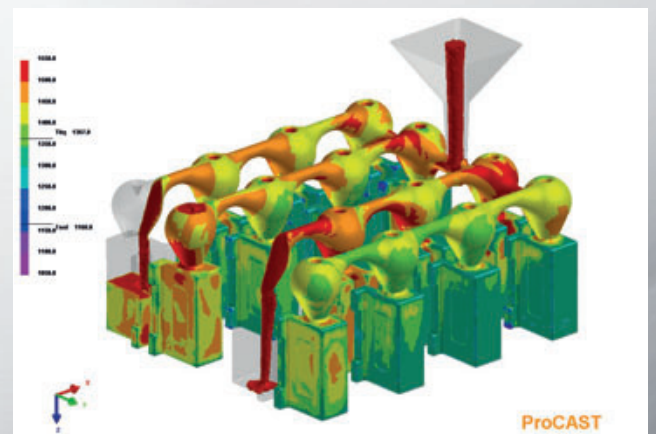
QuickMold Technology (patternless)

Reduce your costs - Product Optimization

We combine the FEA methodology, used at Cronite for almost 20 years, with the most recent topology optimization approach. It results in optimized shapes and smoother section transitions.



Casting simulation for sound castings



3D scan dimensional inspection for accurate results

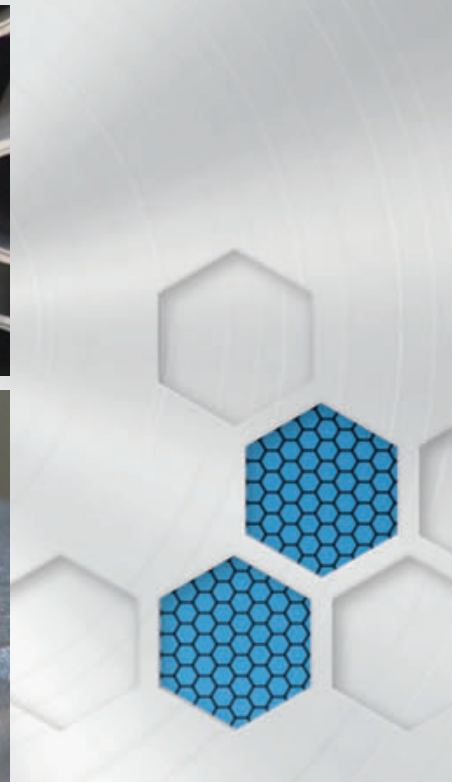
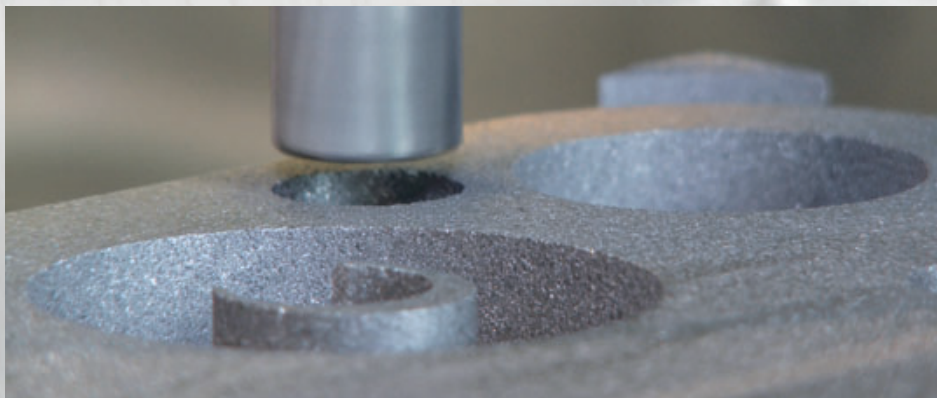
Cronite, the solution for every process

Cronite has always been involved in adjusting the alloying elements in its Irons or Steels to reach the best compromise of specification & price.

Cronite has normalized close to 200 alloys, some being dedicated to a single usage of product.

We have exclusive expertise such as:

- Bimetallic static casting (process patented)
- Bimetallic spun tubes
- Mix CFC & Steel solutions,
- Patternless casting for prototyping
- 0.5mm sand cast networks
- Fabricated products



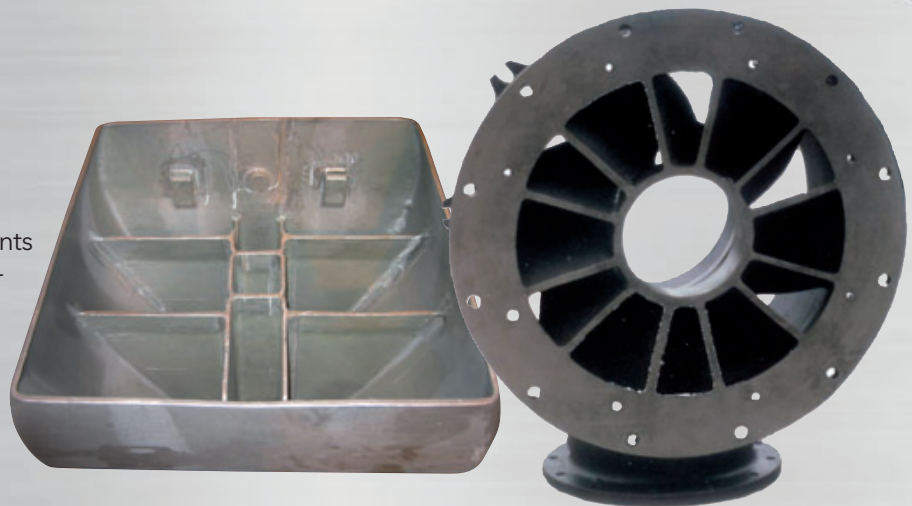
Power Generation

Burner systems and boiler spacers

Cronite is one of the leading suppliers of castings to the Power Generation sector. Cronite started supplying castings in this industry in 1919 and has vast experience of the industry, products and alloys required.

Burner Nozzles

Low Nox burners for Coal applications, larger components are Sand cast with the smaller fluidised bed nozzles made using the Lost Wax process.



Boiler Spacers

Lost Wax cast spacers of various sizes and alloys to suit many different designs

Alloys

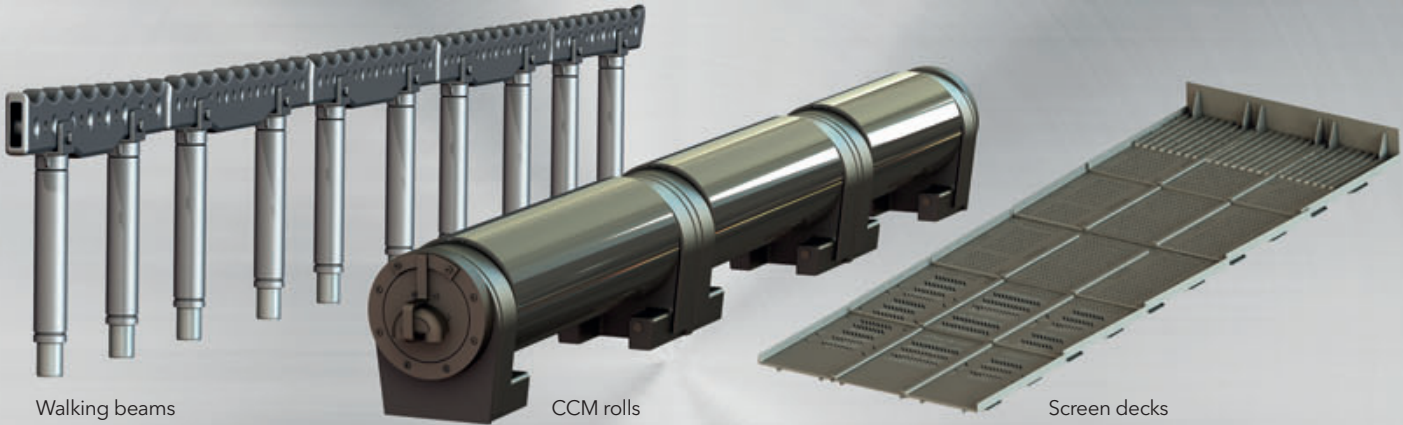
Cronite produces a range of alloys specific to this industry:

- 28Cr and 25Cr/12Ni type alloys for good wear resistance against pulverized coal fuels.
- 52Ni / 18Cr for high strength and high temperatures.
- 50Ni / 48Cr / Nb to resist fuel ash corrosion and vanadium pentoxide containing fuels.

Steel Industry

Heat and corrosion resistant stainless steel castings for installations at every step

We manufacture heat and corrosion resistant stainless steel castings for installations at every step, from the pellet and sinter plants to the final product such as the galvanized coils.



Walking beams

CCM rolls

Screen decks

Better by Alloy - Energy Savings

Over the years **we have developed a new family of super alloys** with high creep and corrosion resistance exceeding 1,220°C (2,230°F) for production of dry rolls for CSP & DST tunnel furnaces, substituting wet rolls and providing to our customers a double advantage: **a relevant reduction in energy costs and better quality on the final product.**



Dry & Wet Rolls

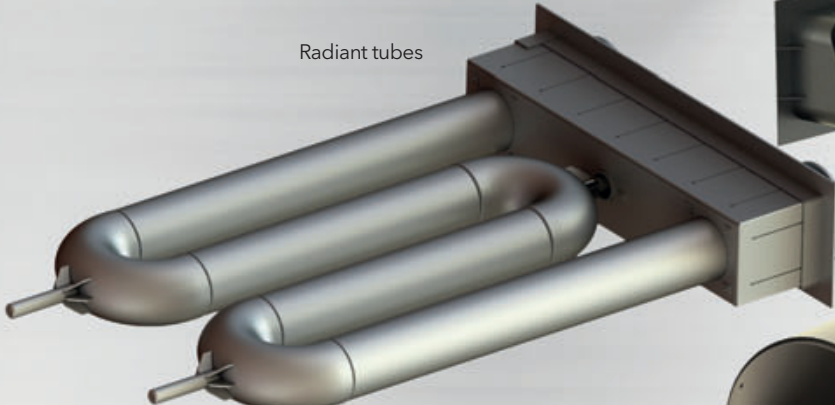


Reduce your maintenance & operational costs

Cronite improves customer's designs by offering innovative solutions to increase energy saving, maximise performance, durability and productivity.

Our **FERRITE FREE** alloys provide results far better than standard stainless grades: customers reported that tremendous advantages in **maintenance and operational costs reductions** have been achieved by using **Cronite products**.

Mono and Bimetallic bushings and sleeves made by centrifugal casting using bimetallic technology and specific alloys developed in our R&D labs. **Cronite alloys provide superior wear resistance** due to greater hardness compared to standard alloys.



Radiant tubes

A 3D rendering of four cylindrical radiant tubes. Each tube has a hemispherical end and a small protrusion at the other end. They are arranged in two parallel pairs, connected to a central rectangular manifold.



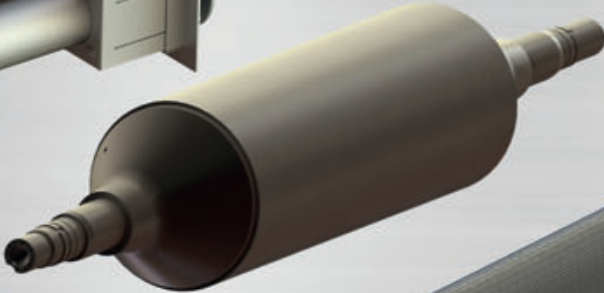
Snouts

A 3D rendering of a rectangular, U-shaped metal component with a central longitudinal slot. It has a slightly flared top edge and a recessed bottom edge.



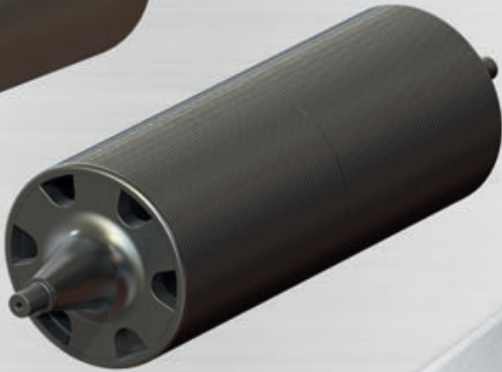
Bushings

A 3D rendering of a cylindrical bushing with a thick outer wall and a smooth inner bore. It is shown in a perspective view.



Furnace rolls

A 3D rendering of a long, cylindrical roll with a tapered end. It has a smooth surface and a central shaft hole.



Rolls for galvanizing lines

A 3D rendering of a cylindrical roll with a textured surface. It has a central shaft hole and several small, circular features around the circumference.



Arms

A 3D rendering of a complex metal arm component. It has a curved, hook-like shape with several mounting points and a central shaft hole.

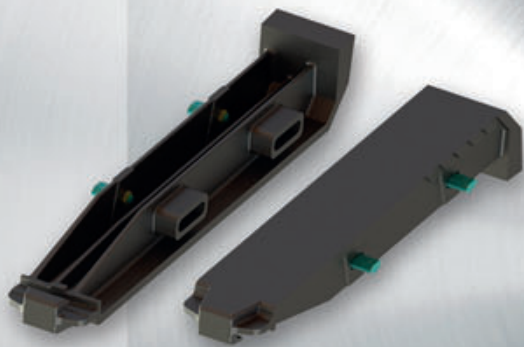
Waste to Energy

An undeniable level of expertise acquired over more than 30 years

Present for over 30 years in the sectors of waste recovery and energy production, Cronite is one of the major players specializing in the production of wear parts used in these processes.

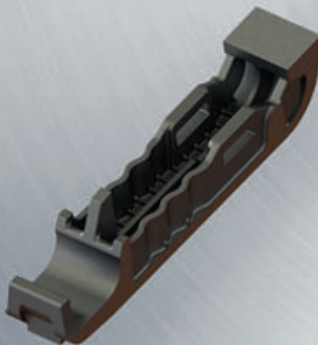
The main components manufactured are:

- EVOLUTION patented grate bar for reverse acting grate systems
- Air-cooled and water-cooled grate bars for WtE stockers & Biomass stockers
- Protection shells for super heater panels
- Other components for stocker grates



Evolution Grate Bars patented solution for reverse acting grates

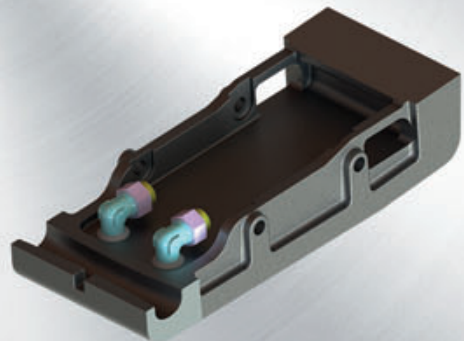
- Double Keying for safety and mechanical
- Double Keying to prevent installation shut down
- Better air distribution
- Elimination of grate jamming (inclusion)



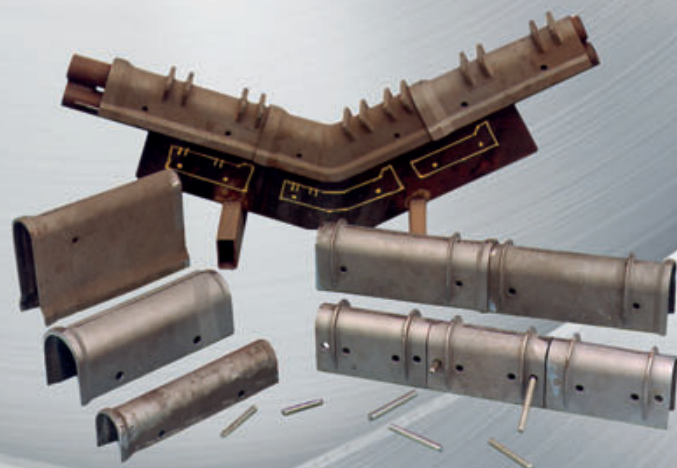
Grate bar for horizontal grate



Grate Bar for reverse acting grate



Water Cooled Grate Bar



Protection Shell



Petrochem

High Quality static castings for Petrochemical Industry

Cronite has a long history of manufacturing a range of heat resistant alloys for the petrochemical industry. Precision statically cast components including tube sheets, hangers, brackets, elbows, return bends, 'Y' pieces, Tee pieces, reducers/cones, end caps and catalyst grids form part of our product range.

Production capability

- Sand Casting up to 3000Kg
- Centrifugal tube castings up to 6m long and 4000Kg
- Lost wax investment castings up to 45Kg
- Machining
- Pressure testing

Quality Control

- Chemical Analysis
- Mechanical testing at room and elevated temperature
- Liquid penetrant testing
- Radiographic testing
- Pressure testing

Alloys

A full range of nickel chrome alloys is produced, from the traditional 25Cr / 12Ni and 25Cr / 20Ni, through to the Sulphur and vanadium resistant 48Ni / 48Cr / Nb types.

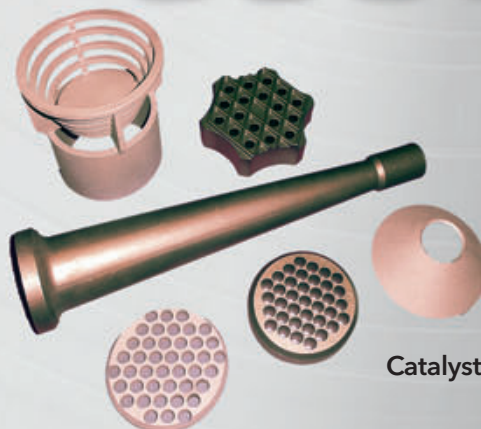
Tube Sheets



Elbows, Bends and Fittings



Catalyst components



Aerospace

Complete solutions for your needs

Cronite is one of the leading players supplying castings for the Aerospace sector. We have extensive experience in this industry, engineering expertise and advanced technologies enabling us to offer suitable solutions for the customer.

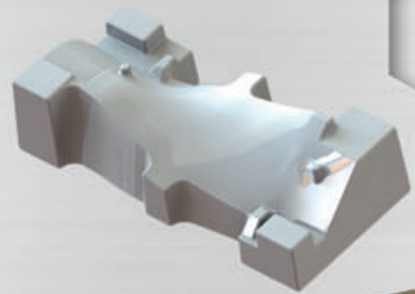
With our partners we are able to offer complete solutions including finished machined ready to use forming tools.

Cronite has developed:

- Austenitic Nickel Iron alloy, our HR21 range with minimal thermal expansion at room temperature and up to about 230 °C.
- Special alloy with low coefficient of expansion at 400 °C.

Titanium Forming Tools

Forming tools used in the Super Plastic, Hot Creep and Twist forming of Titanium alloy components.



Composite Forming Tools

Forming tools used for the laying up and shaping of composite components



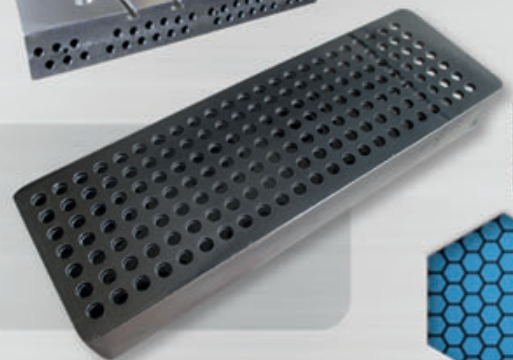
Platens

Critical components of the hot presses predominantly used for Titanium forming



Aluminising baskets

Typically used in the process of Aluminising Aerospace Turbine Blades.



Masking tools

Typically used in the process of Aerospace Turbine blade coating.



Shot Blasting

Wear Resistant Parts for most shot blast machines

Cronite manufactures spare parts for most shot blast machines, made of special irons and manganese steels.

The high-quality parts we provide include:

- Components for turbines, blades, cages...
- Blade holders
- Miscellaneous parts such as liners, brackets

In addition, Cronite designs and makes handling systems for shotblasting equipment.



Piston Rings & Rings

Segment A. B is a specialist in the production of various types of piston rings

Size:

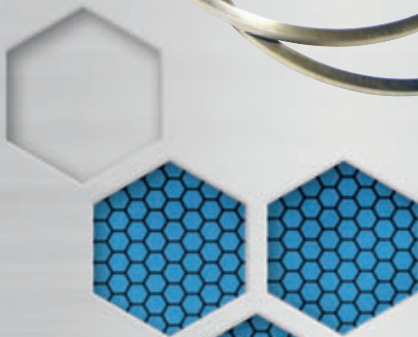
- From 8mm to 3000 mm

Material:

- Cast iron
- Steel
- Stainless steel
- Bronze
- Alacrite

Main supplied industries:

- Aerospace
- Combustion
- Hydraulics
- Compressors
- Maintenance





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