

# ALLGAL

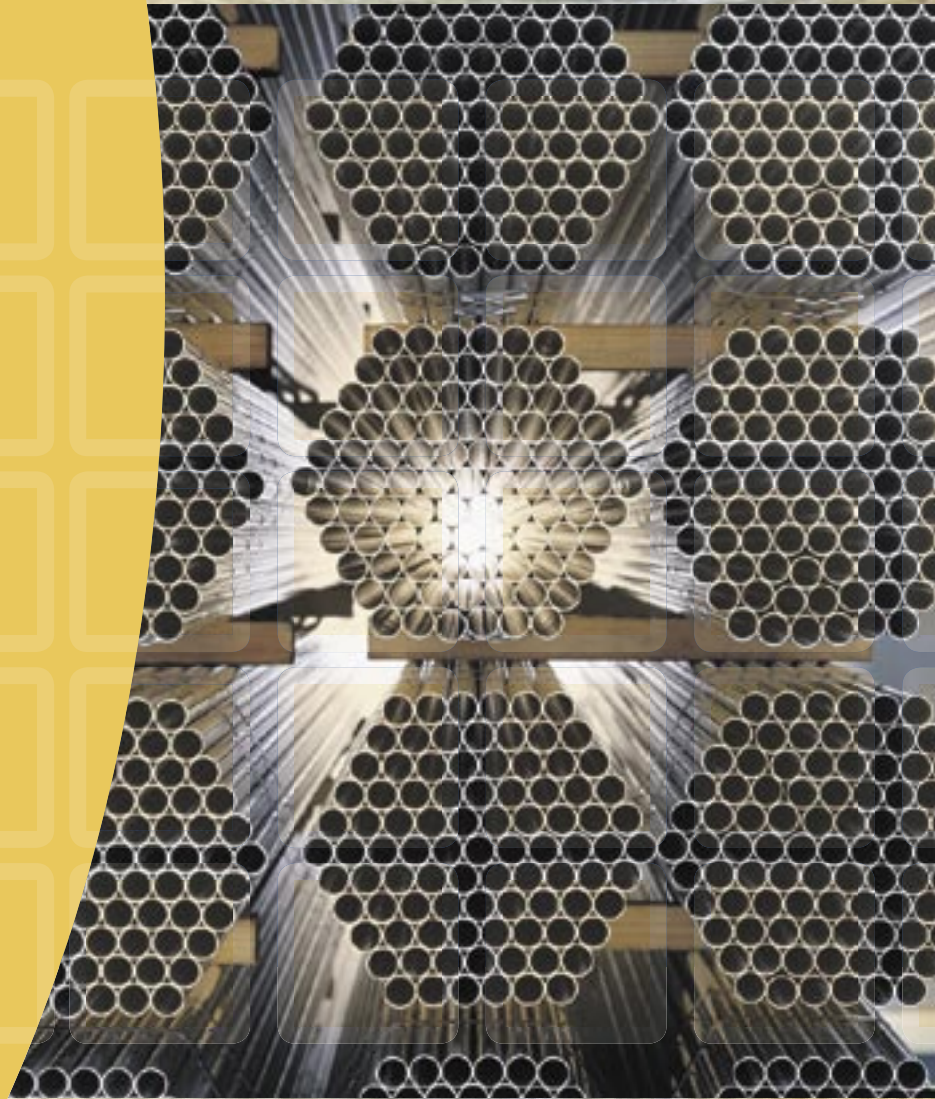
Durable,  
Workable  
& Easy To Weld.

That's ALLGAL.



## ALLGAL

PROTECTION INSIDE AND OUT



Giving Steel A Real Edge.

Yard Rail  
Design Rail  
Pipe  
Square Tube  
Rectangular Tube



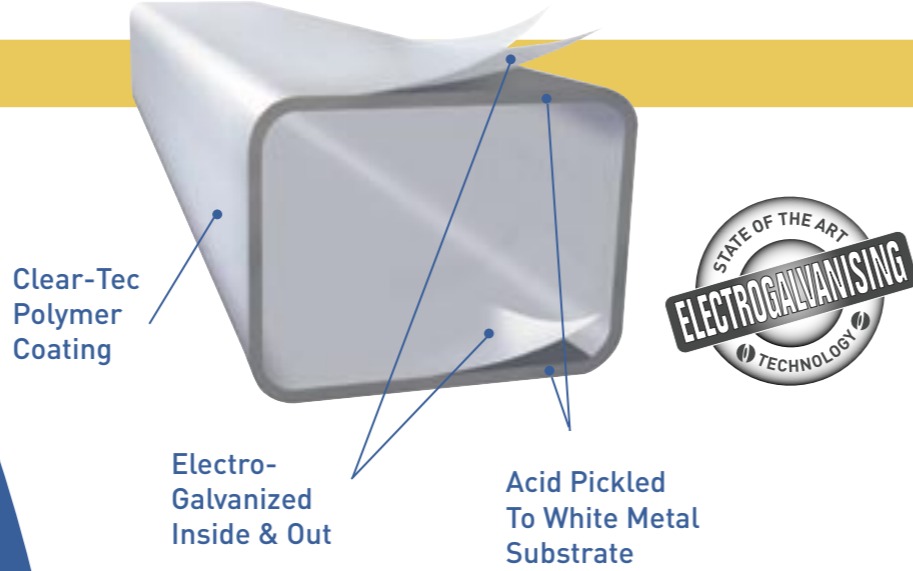
What draws many manufacturers and fabricators to ALLGAL in the first instance is its great durability and strength.

However, it doesn't take them long to discover the many other benefits of ALLGALS' unique protective coating.

And because ALLGALS' zinc coating is electrically bonded, a far more consistent coverage and depth can be achieved. Making its smooth finish easier and safer to weld and an ideal candidate for powder coating.

## The Benefits of ALLGAL

- High purity Zinc coating both inside and out.
- Suitable for most bending processes.
- Smooth consistent surface finish that is ideal for painting and powder coating.
- Clear-Tec coating reduces the time to white rust.
- Easy to weld with minimal weld spatter.
- ALLGAL coating minimises ongoing maintenance costs.
- Clear-Tec coating stops weld spatter adhering to the tube surface.
- All sizes available in MiniPaks & Full Packs.
- Clear-Tec is a suitable primer for most topcoat systems.
- ALLGAL-PCQ now available for those powder coaters using degreasing tanks



Size Range		
SHS		20 x 20 - 125 x 125
RHS		38 x 25 - 150 x 100
Gauge		1.6mm to 5.0mm
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Pipe		20NB extra light to 125 med
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Yard Rail		59 x 30 - 115 x 42
Design Rail		62 x 50 - 80 x 61
Gauge		1.6mm to 5.0mm

(M.O.Q. apply to some sections)

## Method of Manufacture

The ALLGAL family of tube products is made from ElectroGalvanized steel strip. The process first chemically cleans and de-scales the steel strip to a level equivalent to a Class 3 sandblast. A controlled, high purity zinc coating is then applied to both surfaces using state-of-the-art ElectroGalvanizing technology. The zinc coated strip is then roll formed into a tube or pipe and seam welded and repaired externally with zinc and aluminum spray. After the tube is made, it is painted externally with Clear-Tec, a specially formulated eco-friendly clear polymer coating. The combination of the ElectroGalvanised coating and Clear-Tec polymer form a duplex coating system.

## Specifications

ALLGAL is manufactured and tested to the following Australian Standards; • AS 4750 - 2000 ElectroGalvanized (zinc) coatings on ferrous hollow sections. • AS1163 -1991 Structural Steel Hollow

Sections. ALLGAL tube has a total zinc coating weight of 100g/m<sup>2</sup>. The external surface is coated with 50g/m<sup>2</sup> zinc which is sealed with a Clear-Tec Polyurethane primer.

## Ideal for Powder Coating

Automated powder coating lines often incorporate degreasing stages. For these applications ALLGAL can be ordered as ALLGAL-PCQ. This is the Powder Coat Quality member of the ALLGAL family and uses oil to protect the zinc surface rather than Clear-Tec. In this way, ALLGAL-PCQ processes just like other pre-galvanized products.

If you are not using degreasing tanks prior to powder coating then try using ALLGAL. If the Clear-Tec is not exposed to degreasing solutions it can actually provide a good pretreatment to powder coating. This is a real advantage for batch-type powder coating operations.



## Mechanical Properties

RHS, DESIGN and YARD RAIL		PIPE	
Yield Strength	450 MPa min	Yield Strength	350 MPa min
Tensile Strength	500 MPa min	Tensile Strength	430 MPa min
Elongation in 5.65√S <sub>0</sub>	≥16%	Elongation in 5.65√S <sub>0</sub>	≥20%

## Lead Safe & Very Easy to Weld

ALLGAL is very easy to weld. During welding only a small amount of spatter is produced, which bounces off the Clear-Tec coating to leave a clean weld zone. As ALLGAL is made from zinc, it means that the lead oxide fumes generated during the welding process are kept to a minimum. Thus it is 'lead safe' and fume levels from the coating are well below the acceptable short term and time weighted average exposure limits (STEL and TWA) when normal welding practices are followed.



# Typical ALLGAL Applications



ALLGAL is a fit for purpose product that offers good corrosion protection in indoor and mildly corrosive environments. The product is suitable for use in moderate to severe environments when top coated in accordance with the following standard - AS/NZS 2312:2002 Guide to the protection of structural steel against atmospheric corrosion. Careful consideration should be taken when choosing the application for ALLGAL products.

## Tube & Pipe Applications

### AGRICULTURE

- Cattle Crushes & Yard
- Fence Posts & Rails
- Sheep Yards
- Machinery & Equipment
- Sheds

### MECHANICAL

- Box Trailers
- Bus, Caravan Chassis
- Racking Systems
- Conveyors
- Material Handling
- Roller Doors

### STRUCTURAL

- Balustrades & Railings
- Columns
- Playground Equipment
- Pool & Garden Fencing
- Space Frames, Trusses
- Shade Sail Structures

## Yard Rail Applications

- Horse Yards
- Fencing & Gates
- Cattle Yards
- Cattle Panels
- Feedlots
- Loading Ramps

- Cattle Crushes
- Seating

## Design Rail Applications

- Trailers
- Furniture
- Balustrades & Railings
- Columns
- Playground Equipment
- Pool & Garden Fencing



**Quality Endorsed Company**  
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Standards Australia



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Giving Steel A Real Edge



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