

Case Study

Shear artistry in treated steel



Armoured suits may never have been made from steel wool in times gone by, but a stunning ram sculpture of freshly galvanized steel by Fremantle-based artist, Greg James is turning heads today for its intricate and shimmering form.

The work comprises 400kg of steel 'punchings' individually welded together by the artist and the finished form hot dip galvanized (HDG) over four days by GAA member, Hartway Galvanizers at Naval Base in Perth.

The artist initially modelled the 2:3 scaled design in 600kg of clay on which he painstakingly overlaid each medallion-sized steel component over four months,



firstly MIG welding each in place on the outside and then TIG welding inside edges.

Whilst the artist has spent 25 years mainly specialising in life-size bronze figures, he said he found working with steel somewhat easier to work with as he didn't have to keep cleaning up the surface as with working in bronze, knowing the steel surface only had to be treated once by the galvanizers.

"With steelwork, you make the piece and when it's done, it's done," Mr James said.

The work has been designed to be lit from within to help get the best out of the galvanized finish of internal surfaces.

So impressive has the galvanized finish proven that he decided not to go with his initial plan to coat the exterior with a rustic finish, but retain the original HDG appearance.

Works Manager at Hartway Galvanizers Naval Base, Paul Edmondson said that the 'sheep dip' in the galvanizing bath went very smoothly even though it was the first time they have worked with the artist.

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“The sculpture itself is about two-thirds air so its weight did not pose major lifting challenges, although we were careful to use soft straps for most handling of the elegant form and secured it for the dip with two large lifting chains around its belly,” he said.

Mr Edmondson said that the artist’s fabrication approach was also a boon.

“His decision to weld each piece from both sides also helped maintain the structural integrity of the artwork during treatment and intermittent spaces between each



‘medallion’ helped to minimise any potential pooling issues.”

He added that the work was also environmentally responsible from being essentially composed from scrap pieces.

Acknowledgements

Sculptor: Greg James

(www.gregjamessculpture.com)

Hot Dip Galvanizer: Hartway Galvanizers

Photography: Greg James & Hartway Galvanizers

Eight Reasons to Choose Hot Dip Galvanizing

1. No hold ups due to weather – steel can be galvanized in any weather conditions
2. Speed – modular design compatibility to speed up construction
3. Tough coating system – reduces transport damage & minimises on-site repairs
4. Inbuilt durability – minimises “in-service” damage
5. Withstands UV – the surface is immune to damage from the extreme Australian sun
6. Superior corrosion protection – provides initial and lifetime cost savings
7. Aesthetics – natural good looks
8. Sustainable – Zinc and steel are 100% recyclable

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