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19. *Misconceptions*: Hot dip galvanizing of reinforcing steel for concrete only works if you don’t need it. True or false?
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9. Hot dip galvanizing errors in the “Red Book”.
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11. *Duplex Coatings*: Hot dip galvanizing and the Galvanox® Duplex System.
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14. *Coating Report*: Hot dip galvanized light poles for the N7 Potsdam Intersection.
15. *Case history*: Electrical transmission towers.
16. *Personality profile*: Tom Edwards.
17. *Misconceptions*: The chemical analysis of steel determines the extent to which the Fe/Zn alloy layers in a hot dip galvanized coating grow during immersion in the molten zinc. This can result in a dull grey coating with brittle tendencies and a rough surface finish. True or false?
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5. A paint applicator’s view on duplex coating systems.
6. Surface preparation for duplex coating systems – chemical pre-treatment.
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8. Duplex protection for a transmission line erected in an aggressive environment.
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10. Some miscellaneous duplex coating applications.
11. Zinc primers – an overview.
12. Duplex coatings using powder paints.
13. Re-establishment of the Duplex Committee.
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19. IZASA supports Southern Africa architect's competition.
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28. *Guest writer*: The reciprocal nature of language, by Bob Andrew.

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14. *Personality profile*: Dr. Roderick C.D. Rankine.
15. *Case history*: Hot dip galvanized steel reinforcement in concrete – the truth after 40 years.
16. *Guest writer*: Project management is knowledge management, by Bob Andrew.
17. *Misconceptions*: The HDGASA is not merely a marketing organisation. True or false?
18. *Walter's Corner*: Hot dip galvanized metallurgically bonded protective barrier.

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8. Avlock International – lockbolt fastening systems: a company profile.
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13. New specification covering fasteners for roof and wall cladding.
14. Corrosion in roofing fasteners and seals.
15. Performance of coated self-drilling screws.
16. UPAT S.A. (Pty) Ltd: a company profile.
17. Threaded protection on welded nuts.
18. Impala Bolt @ Nut S.A. (Pty) Ltd: a company profile
19. National Socket Screws: a company profile.
20. Bascol (Pty) Ltd.: a company profile.
21. WLS Fastener Manufacturing Company cc: a company profile.
22. Standardisation of holding down bolts.
23. Fastener Coating Comparisons – a table.
24. Ideal Bolt: a company profile.
25. Types of Fasteners and Availability Matrix.
26. Hot dip galvanized bolts still “shine” while guard rails discolour and corrode.
27. “Zincalume” versus hot dip galvanizing.
28. Increasing the possibility of achieving a quality hot dip galvanized coating.
29. An evaluation of material and coating for railway sleeper shoulders – Pandrol South Africa.
30. Hot dip galvanized coating repair materials – a comparison in terms of the specification requirements.
31. Defects on thread profiles can affect coating quality.
32. Appropriate corrosion protection.
33. SAISC updates the “Red Book”. By Spencer Erling.
34. The effects of temperature on steel with 0.20% carbon content.
35. Introducing SANS 1431 grade 350WA structural steel.
36. *Guest writer*: The indigenous knowledge of bushmen has relevance to modern business management and leadership.
37. *Personality profiles*: Tom Motlhake and John Ngwenya.
38. *Case history*: Mitchelsplein Train Station/ Transport Interchange.
39. *Walter’s Corner*: Fighting the common corrosion enemy (Part 2).
40. *Misconceptions*: Hot dip galvanizing provides both barrier and cathodic protection, which is why small, uncoated steel surfaces are not significant since they will not influence the overall corrosion control life of the coating. True or false?

Volume 2, Issue 1: March 2005 (22)

1. Hot dip galvanizing of sheet metal, including tables of specifications.
2. Lightweight steel construction in the residential market.
3. Corrugated iron has stood the test of time.
4. Hot dip galvanizing of wire: an in-depth study.
5. Meshpack grout support system outperforms timber as stope supports.
6. Protecting bridges with gabion baskets: Rivi-Rivi Bridge, Malawi.
7. New report on performance of zinc coated wires in the South African agricultural industry.
8. 2005 Eskom Hot Dip Galvanizing Awards: criteria and call for submissions.
9. 2004 Awards: prominent projects and category winners.
10. *Personality Profile*: Al Stratford.
11. Zinc appears to improve childhood hyperactivity disorder.
12. *Guest writer*: Productivity is man’s sustained effort to improve, not an index to impress investors, by Steve Jobs.
13. *Misconceptions*: Once rust stains appear on a weathered hot dip galvanized surface you can be sure that the coating has reached the end of its protective life. True or false?
14. *Case history*: Hot dip galvanized steelwork used to widen the Storms River Bridge in December 1986.
15. *Walter’s Corner*: Corrosion the common enemy (Part 1)
16. *Book review*: “HDG Steel Reinforcing in Cone” by Stephen Yeomans.

Volume 1, Issue 2: November 2004 (21)

1. Quality control of a hot dip galvanized coating.
2. Evaluation of a duplex system versus a multiple paint coating system.
3. *Case history*: Eskom's Saldanha Blouwater substation.
4. Training: Hot dip galvanizing plant operators.
5. Steel is also environmentally sustainable.
6. Hot dip galvanizing and the environment.
7. *Project*: Gabion cottage walls at Kwandwe game reserve.
8. Honorary life members: Dave Scott and Professor Denis Twigg.
9. *Misconceptions*: Hot dip galvanized surfaces are extremely difficult to overcoat with paint whether for aesthetic reasons or for additional protection. True or false?
10. *Walter's Corner*: Some thoughts on corrosion and corrosion protection.
11. Managing companies with heart and head, by Bob Andrew.

Volume 1, Issue 1: August 2004 (20)

1. 2004 Eskom Hot Dip Galvanizing Awards, with all the winners and award entries featured.
2. The facts about using hot dip galvanized reinforcement in concrete.
3. Hot dip galvanized poles offer regional opportunities for electrical distribution: a contribution from IZA.
4. Related hot dip galvanizing specifications and the SANS equivalent.
5. *Project*: Mohale feeder roads and bridge.
6. *Project*: Eshowe pedestrian bridge.
7. *Misconceptions*: Specify heavy duty hot dip galvanizing or cadmium electro-plating for superior corrosion protection of fasteners. The mechanical action of a spanner will damage the coating. True or false?
8. *Walter's Corner*: Could we exist without zinc?

Issue No. 19, incorporating Directory for Specifiers and Buyers 2004

1. Organic and Duplex Coatings: their performance and cost-effectiveness.
2. Steel is also environmentally sustainable. This article was contributed by the Industrial Galvanizers Corporation of Australia.
3. In hot dip galvanizing, bath size might not always be the limiting factor when designing a structure: Athlone Stadium, Cape Town.
4. Project: Bellville Taxi Rank, Cape Town.
5. Zinc and you – the importance of a balanced diet.
6. Geodesic structures may provide the key for stability and flexibility in companies, by Bob Andrew.
7. "Hot Dip Galvanized Steel in Reinforcement in Concrete": a book review.
8. *Misconceptions*: Hot dip galvanized coatings provide a surface on which it is extremely difficult to apply paint. True or false?
9. Nelson Mandela Youth Centre in Chatsworth: silicon sealant replaces putty.

Issue No. 18, June 2002

1. Evaluation of the use and performance of hot dip galvanized steel at a PGM concentrator plant facility.
2. Stories from the past. Interesting articles from the Association's journals 1, 2 and 3, dating back to 1980.
3. The Who, What, Why and How of the Southern African Institute of Steel Construction.
4. Zinc protects eyesight. A health issue.
5. Protect Steel under fireproofing by hot dip galvanizing. A study of HDG in industries where fire could be a hazard.
6. *Misconceptions*: The galvanizer can play a major role in preventing the formation of undesirably thick hot dip coatings. True or false?
7. Initiatives good for zinc: the Galvauto Show.
8. A critical evaluation of hot dip galvanizing versus Galvalume in the roof sheeting market.
9. Preventing distortion. Hot dip galvanizing oversize objects (Module 5) and long thin objects (Module 6).

10. 2001 Industrelek Hot Dip Galvanizing Award Winners.

Issue No. 17, September 2001

1. Stratfords Guest House and Conference Centre: an unusual development in Buffalo City, East London. The entire south façade of the building is a stressed skin of corrugated hot dip galvanized steel sheeting.
2. What do architects know about protective coatings? The results of an Australian survey to obtain information on the perceptions and practices of architects with respect to protective coatings and galvanized coatings in particular.
3. The use of hot dip galvanized coatings for architectural features is on the increase: featuring the Vodacom Head Office in Midrand.
4. The use of hot dip galvanized steel as a final finish in architecture.
5. Is this zinc rich paint as good, if not better than, hot dip galvanizing? A report on tests carried out on a brand of zinc rich paint, which is said to exhibit properties equal to or superior to conventional hot dip galvanized coatings.
6. *Misconceptions*: Evidence of rust or black staining is a certain indication that a hot dip galvanized coating has reached the end of its protective life. True or false?
7. Hot dip galvanizing is selected to protect PET resin plant structure. A report on the hot dip galvanized steel structure and PET plant at Belville.
8. Feel a cold coming on? Get galvanized into action. A report on the importance of zinc in human health.
9. The advantages of hot dip galvanizing: this article lists many of the advantages, some lesser known, of HDG.
10. Preventing distortion. Fabrications that lack symmetry (Module 3) and using thick and thin material in an assembly (Module 4).

Issue No. 16, January 2001

1. Galvanizing Award winners for 2000.
2. Cost effective utilisation of hot dip galvanized structural steel for a platinum mining project. The technical and economic reasons why hot dip galvanizing was selected.
3. Hot dip galvanizing rebar – future projections. How can hot dip galvanized rebar assist in the construction industry?
4. *Misconceptions*: The corrosion resistant life of a zinc coating is the same, regardless of the process by which it is applied. True or false?
5. Environmentally sustainable materials for construction. Heavy duty coatings enhance the environmental credentials of steel.
6. Liesbeeck Gardens interchange. Galvanized steel specified for the bridge upgrade.
7. The role of zinc in human health. A new initiative to combat malnutrition.

Issue No. 15, May 2000

1. Wire Galvanizing: a study of the process of hot dip galvanizing wire and the uses of coated wire, including a table showing wire types and their different specifications.
2. Potsdam Taxi and Bus Terminus, Cape Town. How hot dip galvanizing was used in the construction of this terminus.
3. Major Thrust into Promotion of Hot Dip Galvanized Steel Poles. The advantages of using HDG poles in place of wood.
4. Tosawrap: a discussion on this duplex system.
5. Hot Dip Galvanizing 'beefs' up the all-important prospect of enhanced corrosion protection at Karan Beef.
6. The role of zinc in promoting health and combating disease.
7. Fairacres Dairy Farm. Hot dip galvanizing provides for long-term protection.
8. Hot Dip Galvanizing Australia's First International Telegraph Link. A history of the first telegraph line to be constructed in North Queensland, 1885 – 1886.
9. *Misconceptions*: The hot dip galvanizing process has a detrimental effect on the strength properties of steel. True or false?
10. Preventing distortion. A comparison of products shaped by bending and welding (Module 1) and fabrication induced stress (Module 2).

Issue No. 14, November 1999

1. Hot Dip Galvanizing the Bafokeng Rasimone Concentrator Plant: the largest, fully galvanized processing plant in the world.
2. Hot Dip Galvanizing for Structural Steel Work: a discussion of the preparation, process and advantages of hot dip galvanizing structural steel.
3. County Fair Broiler House Project – Romance 2: hot dip galvanizing specified for 10 broiler houses outside Durbanville, Cape.
4. Hot Dip Galvanized Foundation Holding Down Bolts: assisting specifiers to source hot dip galvanized bolts and fasteners.
5. *Misconceptions*: Zinc corrodes in the same way as steel. The only difference is that the corrosion products of zinc are white whereas the colour of steel corrosion products is reddish brown. True or false?
6. Restoring the Wuppertal Overhead Monorail: a report from the UK Galvanizers Association.
7. Association to Investigate Cost-Effectiveness of Hot Dip Galvanized Coatings: fact sheet.
8. "Zincfix": a 3 component, solvent free, zinc rich repair material for rectifying defects on hot dip galvanized coatings.
9. Understanding Distortion: FAQ's and answers.
10. New Standard for General Hot Dip Galvanizing Launched: comparison of general hot dip galvanizing specifications.

Issue No. 13

1. Telkom Hot Dip Galvanizes More Than 100 000 Tons of Steel Structures: Fay Humphries, Telkom's corporate communication media manager, reports on the galvanizing of communication masts, including cellular tree masts.
2. To your Health: health expert Dr. Michael Hambidge of the University of Colorado, discusses zinc research.
3. Steel Bridges: corrosion protection for steel bridges, including case studies around the world.
4. The Relationship between Average Material Thickness and Surface in m²/tonne: showings comparisons of weight and surface area gain with alternative coatings.
5. *Misconceptions*: If I require a thicker and hence more durable galvanized coating, I must specify "double dipping" or, in order to appear technically correct, I should use the term "double spelter". True or false?
6. Clearspan Goes on a Working Holiday: building contracts awarded to Clearspan in the Comores.
7. Stopping off with Galvastop: a solution to the problem of masking areas not to be galvanized.
8. HDGASA Member's plaque introduced.
9. HDGASA's handbook on the Design Inspection and Repair of components to be Hot Dip Galvanized.
10. Accolade for Undergraduate Student at Wits. The HDGASA sponsors physical metallurgy poster.

Issue No. 12, September 1998

1. Hot Dip Galvanized Steel Structure over the First Two Biodomes in South Africa: completing the Transvaal Museum building in Pretoria.
2. Thinly Galvanized Wire Fence: SABS specification no. 675 for fencing wire.
3. Corrosion and what it Costs You: a discussion on corrosion protection during aircraft maintenance.
4. Port Shepstone Erects a 25 Year Maintenance Free Security Fence.
5. Vincent Shopping Centre in East London: perimeter fence hot dip galvanized.
6. What if the Eiffel Tower Had Been Hot Dip Galvanized? A hypothetical comparison on the cost analysis of hot dip galvanizing the Eiffel Tower as opposed to paint maintenance since 1889.
7. Easi-COTE paint system.

8. *Misconceptions*: When hot dip galvanizing holding down bolts or other steel components which are required to be cast into concrete, only the portion of the component which will be exposed should be hot dip galvanized. True or false?
9. Zinc is Essential for Human Health.
10. Zinc is Recyclable.
11. Advantages of Steel Pipe: a study of advantages of steel pipes over pipes of other material.
12. Repairs to Hot Dip Galvanizing: introducing a new product for easy site application.
13. Chequer Plate (Vastrap): wear resistance stair treads.
14. Gymnasium Equipment: hot dip galvanizing bar bells and dump bells.
15. Yacht Mooring Chain in Vaal Dam: photographic comparison of galvanized and non-galvanized yacht chains.

Issue No. 11

1. Design for Galvanizing wall chart.
2. Structatube 300: the launch of graded tubular steel.
3. Hot dip galvanizing and the case for tubular structures.
4. *Misconceptions*: Hot dip galvanizing should not be recommended for use where a structure is to be permanently immersed? True or False?
5. Eskom's tubular microwave towers.
6. The benefits of galvanizing tubular structures.
7. The Vaal Reefs No. 11 shaft project.
8. Choice of rust prevention methods.
9. Hot dip galvanized piping: guidelines for its use.

Issue No. 10, April 1997

1. Steel Protection: a review of the fourth edition of this handbook.
2. Zinc the Friendly Metal: an overview of zinc consumption, uses for zinc and zinc and health.
3. RDP – the HDGA Meaning: Reliability, Dependability, Predicatability.
4. Iscor Vanderbijlpark Galvanized Sheet: a review of Iscor's galvanizing activities at its Vanderbijlpark facility.
5. Zinc Coating Thickness Testing: methods of thickness testing.
6. Hot Dip Galvanizing Expands: looking at the general hot dip galvanizing market, past, present and future.
7. Duplex Protection: gaining popularity in the coal mining industry.
8. Design Hints: removing oil, grease and paint prior to hot dip galvanizing.
9. Unusual Applications for Galvanizing: shark-viewing steel cage; razor-spike security system; lighting pole at Wanderers cricket ground.
10. Galvanizing Fasteners: a study of methods and standards.
11. *Misconceptions*: Good quality hot dip galvanizing can be identified by its smooth and glossy silver appearance. True or false?
12. Can Hot Dip Galvanizing increase the Life of a Mooring Chain? A yacht builder's tale of his search to galvanize his mooring chain, ground tackle and cast iron keel.

Issue No. 9, October 1996

1. Testing of 25 year old galvanized pylon at new Iscor mill site.
2. Galvanized masts for Oman harbour lighting.
3. *Executive Briefs*:
 Duplex Coatings: combining the best to make it better.
 The Cost of Steel Corrosion: calculations by Dutch corrosion expert JFH van Eijnsbergen and ways to reduce 20%-25% of corrosion costs.
 Mine Water Corrosivity Testing: HDGA tests on mine water in the Klerksdorp area.
 Design Hints: common causes of inferior coatings and precautions to be taken in design and fabrication.
4. Duplex Coatings for Extra Protection
5. Galvanized Piping Fights Back: addressing misconceptions in order to ensure galvanized piping becomes the preferred material for water conveyance.

6. Control of Distortion due to Hot Dip Galvanizing.
7. Galvanized Hangar at Plettenberg Bay.
8. *Misconceptions*: Although hot dip galvanized coatings provide barrier protection to the underlying steel, localised discontinuities in the coating will result in corrosion of the exposed steel and eventually to corrosion creep underneath the surrounding protective film when such coated steel is exposed to a corrosive environment? True or false?
9. Galvanizing as a Plant Refurbishing Tool: refurbishing a major structure at Mpumalanga Colliery.
10. Zinc the “Friendly” Metal: How does zinc protect against corrosion? Zinc coatings. Service life. Zinc’s protective method.

Issue No. 8, October 1995

1. The Comparative Properties of Various Zinc Metal Coatings. A comparison of various zinc coatings applied to different surfaces and under various circumstances.
2. 10 Good Reasons for Hot Dip Galvanizing.
3. Book Reviews: Duplex Systems by J.F.H. van Eijnsbergen, Netherlands.
Corrosion Resistance of Zinc and Zinc Alloys by F.C. Porter.
4. Design hints: Drop handles and threaded components.
5. The Economics of Hot dip Galvanizing. Discussing initial costs and lifetime costs of various protection systems.