

The analysis presented in this article indicates that there is no justification for attempting to induce 100% dent coverage. At the suggested measurable maximum of 98% dent coverage virtually none of the peened surface has received fewer than three overlapping hardened zones. At 98% dent coverage, the area that has received fewer than nine overlapping stress-generated zones is astronomically small—far less than a pinprick for an area equivalent to the Earth's total surface area (510 million square kilometers).

It is delusional to believe that at 98% dent coverage a component contains 2% of unprotected surface as that 2% between the dents is well-protected by a combination of work-hardening and compressive residual stress zones. Practical studies have shown that optimum property improvement for some components often occurs well below 98% dent coverage. As always, "the proof of the pudding is in the eating." Property tests should aim to establish the optimum level of coverage for specific situations, avoiding the fallacy that "more is always better." ●

10th International Conference On Residual Stresses

*July 3 -7, 2016
Sydney, Australia*

The Tenth International Conference on Residual Stresses (ICRS-10) continues a series of essential conferences on the prediction, evaluation and control of residual stresses in materials. Equal emphasis is given to the measurement, modelling and application of residual stress data.

Both engineering and scientific aspects of residual stress are considered, including: the influence of residuals stress on the physical and mechanical properties of materials; complementary techniques for residual stress measurement; stress-induced damage evaluation; and numerical techniques for the prediction of residual stress development in components.

Topics

- Residual stress measurement methods
- Residual stress modelling methods
- Residual stress management and control
- Residual stress engineering
- Residual stresses in manufacturing processes
- Residual stresses in advanced materials
- Residual stresses in components and structures
- Residual stresses in life assessment

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Early registration
(by 1 April 2016): \$900 Australian Dollar

Regular registration
(by 1 June 2016): \$1100 Australian Dollar

Student registration
(by 1 June 2016): \$750 Australian Dollar

To register, go to <http://www.ansto.gov.au/Events/ICRS2016/index.htm>

Venue

The conference will be held at the Novotel Hotel at Sydney Brighton Le Sands Beach, Australia. The Novotel Sydney Brighton Beach offers premium accommodation, overlooking the beautiful white sandy beaches of Brighton Le-Sands and Australia's famous picturesque Botany Bay. For more information, go to www.novotelbrightonbeach.com.au. ●

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