

Co-sponsored by:



# The Engineering Integrity Society

## Servo Hydraulics & Testing to achieve Accurate, Meaningful & Economic Results

Star Hydraulics, Tewkesbury  
14 September 2017



This one day event is to look at the challenges faced by engineers to deliver reliable and efficient testing with a focus on servo-hydraulic equipment and rig design. Presentations covering a range of topics will be provided by experienced engineers and there will be the opportunity to see test laboratory demonstrations.



### Programme

9.30am	Registration, Tea and Coffee
10.00am	Introduction to Star Hydraulics & The EIS - Paul Shillam (Star Hydraulics) & Graham Hemmings (EIS)
10.15am	Challenges posed by a new test request – Graham Hemmings The Test - Objectives / Specification / Types of Test Test System - Servo Hydraulics or Alternative Test Rig Design – Reproducing the vehicle installation, FE Model Validation Examples – A range of component and test rig designs
11.00am	Tea and Coffee
11.15am	Example – Considerations on a component test - Norman Thornton (EIS) Choosing actuators and servo valves to achieve loads, displacements, frequency Sizing the pump flow requirements – Power Requirements Other system considerations – Pipework, Accumulation, Cooling Optimising test time – Adaptive control methods
12.30pm	Lunch and Networking
1.15pm	Fundamentals Ignored – Design, Prediction, Production, Test - Norman Thornton Materials, Test Specimens, Residual Strain & Thermal Gradients
2.00pm	Practical Equipment Demonstrations
3.15pm	Question and Answer Session - Open forum
4.00pm	Closing Comments & Feedback

### Booking Form

	EIS Member	Non EIS Member
Delegate	£100+VAT	£125+VAT
Student/Apprentice	£25+VAT	
	UK	Rest of the World
Personal Membership of the EIS	£25 per year	£30 per year
I enclose a cheque for £_____ made payable to the Engineering Integrity Society. Payment can also be made by BACS.		
Name:		
Company:		
Address:		
Telephone:		
Email:		
Any Special Dietary Requirements		

Please return completed forms to the following address:  
Engineering Integrity Society, 17 Harrier Close, Cottesmore, Rutland, LE15 7BT, UK  
Telephone: +44(0)1572 811315 Email: info@e-i-s.org.uk

Please tick this box if you do not wish to hear about future events

The **Engineering Integrity Society** is an independent not-for-profit organisation which aims to inspire all engineers, both experienced and newly qualified, across a broad spectrum of technologies. The Society is committed to promoting events and publications, providing a forum for engineers to discuss present industrial needs, new technologies and to stimulate both company and personal development.

The annual subscription rates are £25 for UK residents and £30 for non-UK residents. Upon joining the Society you will also have the additional advantages of preferential attendance rates at EIS events, together with selected events held by some of the associated organisations. In addition you will have access to CDs containing archived copies of EIS presentations.

**Star Hydraulics** design and manufacture high quality electro-hydraulic servo valves and ancillary equipment, which are used in a wide variety of market sectors.

The **Engineering Integrity Society** is pleased to acknowledge the support of the following organisations:

AcSoft	Interface Force Measurements	Svern Thermal Solutions
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