

### **Chlorine Donors**

**Sodium Hypochlorite** – John Turk BA., FISPE

**Calcium Hypochlorite - more than just a sanitiser**

Alan Jones MISPE, FISRM

**Calcium Hypochlorite & the Langelier Index**

Alan Jones MISPE, FISRM

**Cyanurates** – John Shepherd MISPE

**Advances in Trichloroisocyanuric Acid** – R K Taylor CChem, MRSC

**Summary:** Evaluates the attributes of liquid and dry chlorines, their stabiliser and dispensing systems as well as the principle parameters needed for optimum pool water balance. These papers also describe main characteristics for each particular chlorine system, explain the processes involved and seek to highlight their potential advantages.

pp 19    illus 2    infolists 7    £9+p&p

### **Non-Chlorine Biocides in Swimming Pools**

Phil Stainer BSc Hons Chem

**Summary:** This paper examines the enormous number of varying non-chlorine systems available today. Correctly managed, some non-chlorine systems will deliver the water sanitation protection required, as well as produce an odour-free, pleasant environment that positively encourages pool use. Each non-chlorine biocide is discussed and the advantages/disadvantages are listed.

pp16    infolists 11    £7+p&p

### **Swimming Pool Construction - concrete pools**

WB Hales, FISPE

**Summary:** Construction today is much more influenced by current Structural Standards and latest Codes of Practice. This paper investigates blockwork, gunite, shotcrete, dry pack, together with shuttered concrete pool structures.

pp14    illus 10    £7+p&p

### **Swimming Pool Linings & Finishes including preformed panel & insulation choices**

Alan Pugh FISPE

**Summary:** This outline paper offers guidance to builders, self-build enthusiasts and students on the many types of pool linings and finishes available to the industry; it also provides useful background information on some construction and installation methods.

pp 21    illus 6    infolists 4    £13.00+p&p

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# Publications List *Technical Papers*

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## ***Pool Planning Surveys, Statutory Requirements & Safety Considerations***

John Fowler Hon.FISPE with addendum  
by Tony Hall MISPE, MIDiagE, AIMgt

**Summary:** Every client wants a safe and secure pool and planning exists to see that the investment meets the standards, regulations and good practices needed for equipment, systems and services. This paper works through from initial survey to final commissioning to make sure that requirements by different authorities are appreciated and clearly understood in the overall process of making a successful pool.

pp 16      infolists 1                      £8+p&p

## ***Distribution Ductwork Indoor Pools – design, manufacture and installation***

John W G Scott FISPE (*Peter Littlehales Award for the best ISPE Technical Paper published in 1997.*)

**Summary:** This paper in the Environmental Control series examines first the key considerations for human comfort as well as the design of an air distribution system for conditioning an indoor swimming pool: then it explains the types of ductwork scheme available, their system distribution, main features and installation.

pp 15      illus 7      infolists 1      £7+p&p

## ***Principles of Circulation: Freeboard & Deck Level Swimming Pool Fittings & Pipework***

Ian P Betts BSC(Hons), CEng, MICE, FISPE, MIWEM, MCIM  
(Peter Littlehales Award Winner 2005)

**Summary:** An efficient circulation system is essential for safe and effective swimming pool water treatment. This paper offers a step-by-step methodology to designing flow regimes, determining bather load parameters, flow-through capacity and turnover: selection of circulation fittings and pipework, resolving pressure ratings, flow velocities and head losses also form the core calculations.

pp 38      illus 6      infolists 25      £15+p&p

## ***Investigating the Principles, Systems and Equipment of Pool Environmental Control – domestic and light commercial applications***

R A White MISPE

**Summary:** This Environmental Control series paper sets down theoretical parameters and introduces practical needs for systems and equipment in indoor swimming pools. Topics include: evaporation, humidity and condensation, water and air heating, ventilation, packaged control units, pool covers, system designs with running cost analyses, equipment schematics and operating diagrams. Includes a reprint of the author's article Heat Pumps vs Recuperators.

pp 27      illus 15      infolists 5      £12+p&p

## ***PVC & ABS Pipework Design – installation, adhesives & testing***

### ***1. Pipework Design***

Don Wyatt MISPE

### ***2. Pipework Installation***

Jim Johnson Hon.FISPE

### ***3. Pipe Adhesives***

Peter Ferries

### ***4. Pressure Testing of Pool Plumbing Systems***

Selwyn Mindel FISPE

**Summary:** A broad introduction to the basic design and installation of PVC and ABS pipework systems for indoor and outdoor swimming pools: includes friction loss calculations, good practice for pipe-work layout, use of adhesives & pressure testing of swimming pool plumbing.

pp 17      illus 28      infolists 2      £7+p&p

## ***Deck Level Swimming Pools***

### ***1. Domestic installations***

Jim Gale MISPE

### ***2. Commercial installations***

Bryan Williams MISPE

### ***3 Deck Level Pool Designs***

Ron Stempfer Hon.FISPE

**Summary:** A brief résumé with particular reference to the types of deck level overflow system most commonly used: the hydraulics differ totally from those for a typical freeboard type of pool where skimmer weirs are directly connected to the pump suction point. The surface draw-off offers total pool perimeter overflow channelling for efficient, uniform surface extraction. A good design extracts 30 to 90 per cent of the total circulation flow capacity of the filtration plant via the overflow system.

pp 18      illus 17      infolists 5      £11+p&p

## ***Disinfection Fundamentals***

### ***1. An Overview of Pool Water Disinfection***

John Turk BA, FISPE

### ***2. Fundamentals of Pool Disinfection***

Colin Marks FISPE

### ***3. A Guide to Water Disinfection***

Major R E I Reid

**Summary:** Disinfection is perhaps the single most important aspect of pool water treatment. An understanding of the fundamentals of pool disinfection in this perceptive review will be more than helpful when examining the many water disinfection products on the market.

pp 17      illus 1      infolists 1      £9+p&p

## ***Heat Pumps***

Richard Carrington MISPE

**Summary:** The fundamental operation of heat pumps, their applications within the swimming pool industry and comparison of their relative merits against alternative systems. Today's pool industry, in dealing with a wide range of ideal heat pump applications, is set to fully benefit from new technology.

pp 12      illus 7      infolists 2      £6+p&p

## ***Heat Losses from Swimming Pools***

Graham D Kneale BEng(Hons), DipHE, MISPE

**Summary:** *Part 1. Outdoor Pools* explains the principles of energy flow involving the five main mechanisms: convection; evaporation; radiation; conduction; leakage: includes key equations of heat loss and discusses the primary factors which affect heat loss from a pool so leading to solutions and savings.

*Part 2. Indoor Pools* introduces air heating and condensation control, insulation and conservation, cost effectiveness and energy recovery, building regulations and principle problem areas. (Peter Littlehales Award 1998/9)

pp 25      illus 18      infolists 5      £12+p&p

## ***Waterproofing & Crack Repairs to Swimming Pools – In concrete blockwork and gunite structures***

Alan Pugh FISPE (Peter Littlehales Award Winner 2001)

**Summary:** To a large extent, return visits to swimming pools invariably result from misunderstandings at the design and construction stage over dealing with positive and negative water pressure, leading to cracks and leaks. By involving experienced sub-contractors, when choosing to use specialist products to overcome leakage and cracks problems, successful waterproofing can be assured. This paper also explores a selection of specialist product applications.

pp 18      illus 2      infolists 4      £8+p&p

## ***Modern Poolwater Testing Technology***

Geoffrey Shute Hon.FISPE LRSC MIWEM

**Summary:** This paper reviews the techniques and equipment used for monitoring water conditions in public, commercial and private pools; it discusses the main disinfection processes of chlorine, bromine, ozone and organic biocide, as well as water balancing chemistry; it also examines reagent and alternative testing systems; considers parameters for total alkalinity, calcium hardness, total dissolved solids, stabilised conditioning, sulphates, chlorides, copper and iron in poolwaters: several Case Studies and Update Appendices are included.

pp 27      illus 14      infolists 4      £13+p&p

## ***Water Treatment for Pool Operators***

John Lamb Hon.FISPE FISRM

**Summary:** An aide memoire for pool operators giving basic information on the everyday application of good pool practice. The guide explains chemical and filtration systems across a broad spectrum of needs and concentrates upon specific problems and solutions in the management of the quality of swimming pool and spa waters. Includes a Glossary and useful Troubleshooting guide.

pp 23      illus 3      infolists 8      £10+p&p

## ***Filtration – a further study***

Jim Johnson Hon.FISPE

**Summary:** More advanced filtration material following on the Basic Principles of Filtration (Level I Study Course): it includes types and rates of filtration, deals with hard and soft waters, flow and circulation criteria; offers design examples, maintenance suggestions and glossary of terms.

pp 18      illus 28      infolists 2      £9+p&p