

MANDERSTAM INTERNATIONAL GROUP

Expert Engineers
in Process and Industrial Engineering

Niche consultancy prospers in the "CSI" role within engineering.

There is evidence that the way to defend the U.K.'s global position in engineering consultancy is to provide a quality of service and speed of response that reflect our national education and character.

Manderstam International Group are expert engineers in process and industrial engineering, established in 1941, that provides independent, bespoke engineering and investigative services. Our specialised team comprises talented, well-qualified chartered engineers who perform the "CSI" role within the engineering sector, particularly in the process and industrial engineering industries: oil/gas, petroleum refining, gas to liquids and biofuels, petrochemicals and gas technology, power generation pharmaceuticals, fertilisers, pesticides, salt based industries, steel and nonferrous manufacturing and processing, coating technology, food processing, cement, glass manufacture and vegetable oils and fats.

We have a varied workload of investigative and forensic engineering that provide some of the most demanding and intellectual challenges. These roles take "no prisoners", but our engineers find that if they can meet the challenges the rewards are there.

The 30 second appraisal of your companies performance in the process industries !

Manderstam carries out global benchmarking studies in process industries enabling our client's management to critically review the performance of its asset against its industries top performers. Manderstam holds a global data-base of cost and operating performance indices for all process equipment that has been maintained and compiled from over 200 process plants in the last 15 years.



Aftermath of Buncefield explosion 11th December 2005

Our reports permit top management immediately (in 30 seconds!) to ascertain its asset performance against its industry's top performers that enable identification of the "low hanging fruit", for process operating and maintenance improvements.

Our methodology of using normalisation using equipment complexity factors enables different types and sizes of process plant to be normalised and compared directly.

Our benchmarking methodology can be used to estimate operating and maintenance costs, not only of existing plants, but of projected plants in order to accurately model the sensitivity of future operational costs and manpower. This approach was used by BP in the Azerbaijan offshore fields prior to commitment of project costs. Our methodology was used by British Gas in the Morecambe Bay offshore fields for an assessment of their operating costs and manning levels as part of an independent assessment for discussion with the unions. A further use of our benchmarking methodology was the estimating of a client's suppliers operating and maintenance costs in a dispute over supplier pricing.

Eur. Ing. **Peter Lumley**
B.Sc., C.Eng., I.Mech.E., A.S.A.B.E.

Expert Engineer in Process and Industrial Engineering in the fields of Oil and Gas, Petrochemicals, Pharmaceuticals and Manufacturing.



Manderstam's expert engineers are involved in some of the largest civil litigation cases in the UK:-

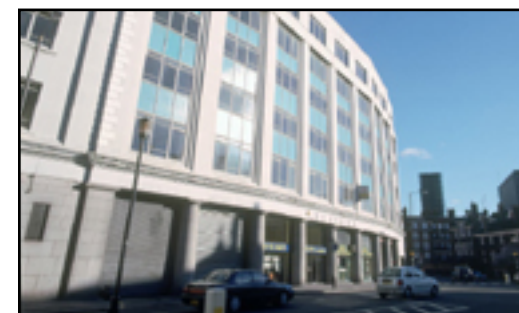
Our experts have prepared expert reports and advised strategy and given evidence in extremely complex cases on behalf of both independent UK and multinational companies. Manderstam acted as expert witnesses in the largest civil litigation case in the UK, providing expert evidence in oil storage design and construction following the explosion at the Buncefield¹ oil storage depot in December 2005.

We have been instructed by most of the leading international and domestic law firms. We have received over 60 instructions by the leading UK and international law firms and given oral evidence 24 times in the UK High Court and International Arbitration.

Engineering Clinic

Manderstam has a wealth of market and technical information which is not readily accessible from the public domain. Such data, allied to our talented forensic style analysis and approach to problem-solving, has enabled us to offer an "engineering clinic" service. Much as when the individual has a medical problem, they visit the doctors- here we are offering a service when a company has an engineering problem it visits the experts to seek a solution.

Manderstam will answer questions on market and technical matters, within 48 hours.



Manderstam International Group
Email: plumley@manderstam.com
Tel: 0207 730 9224
MIGL@manderstam.com
Web site: www.manderstam.com



**Federation of
Forensic & Expert witnesses**

MANDERSTAM INTERNATIONAL GROUP



Founded in 1941

CONSULTING ENGINEERS IN PROCESS AND INDUSTRIAL ENGINEERING

PRINCIPALS: Eur.Ing.P.D.Lumley, B.S.c, C., Eng.,I. Mech.E.
Dr.J.A.Rakestraw, B.sc.,ARCS,phD, Dic

EXPERT WITNESSES FOR:

- **Mechanical and Process Engineering**
- **Manufacturing Industries**
- **Oil and Gas Industries**
- **Petrochemicals and Chemicals**
- **Pharmaceuticals**
- **Fertilizers and Pesticides**
- **Metallurgic Industries**
- **Safety and Environmental**



10 Greycoat Place
Westminster,
London
SW1P 1SB

T: 020 7730 9224

F: 020 7823 3058

E: plumley@manderstam.com



**Federation of
Forensic & Expert witnesses**

WWW.manderstam.com