



**MPE**  
Quality, Reliability, Performance

# Company Bulletin

for EMC, EMP & TEMPEST Protection

## Issue 14



Satnam Singh

### Spotlight on Satnam Singh

As a member of MPE's design engineering team, Satnam Singh conducts the design and development of new and existing products at MPE. In the course of this he evaluates components and builds and tests prototype circuits. He employs PSpice modelling for designing feedthrough capacitors, inductors and chokes so as to fulfil the performance required for each filter. Then he utilises various other CAD software tools to make sure that size and weight constraints are fully observed, for example simulating the measurements of capacitors to calculate their external dimensions.

In recent months Satnam has been heavily involved in MPE's continuous improvement strategy, working closely with shopfloor production to ensure that existing filter designs can be manufactured as efficiently as possible. In addition to this, Satnam's new product development work has included current overload testing for a high-profile export project, as well as assessing the requirements of DEF-STAN 59-411 (Land Class A) for the design and development of a new filter in a UK defence application.

Satnam obtained his HND in Electronic and Electrical Engineering at Loughborough Technical College and boasts over 35 years' experience in electronic engineering. He has extensive knowledge of EMC and EMI issues in circuit design and has supported test house accreditation of newly developed power control electronics products. Before joining MPE in 2017, he worked for three years on power electronics as an electronics hardware engineer in the research and development department of a division of energy company Flowgroup plc at Capenhurst on the Wirral peninsula.

In a long and varied career he was also employed for four years as an electronics test engineer within manufacturing, acquiring in-depth experience of FMEA and Root Cause Analysis for a range of electronic products at Comtek in Deeside, a provider of spares, repairs and support to the telecomms, datacomms and network service industry.

Previously Satnam was a technical support engineer at A1-CBISS in Tranmere, Birkenhead, a distributor of gas detection systems. Prior to that, he was engaged for five years at precision engineers Dieline Rykel in Bromborough, Wirral, variously as head of their electronics department, project manager and finally as quality manager running that department.

Satnam lives at Bebington, Wirral. His main leisure interest over the years has been world travel, chiefly to the Far East, Egypt, and the North and Central Americas, in line with his passion for studying ancient history and early civilisations.

He is also a keen participant in hill walking, badminton and swimming – such as scuba diving in Malaysia. For relaxation he enjoys listening to classical music, particularly Bach and Handel, and attending concerts of the Royal Liverpool Philharmonic Orchestra.