PETER C. BRUST, Ph. D., PE (Principal Consultant and Founder)

Mr. Brust is a Senior Manufacturing / Industrial Engineer with project management, start up, six sigma black belt, lean manufacturing, NPI and R&D expertise. He possesses business savvy and is technically astute with a Ph.D., a Professional Engineering license and over 30 years of experience. He has worked on and managed productivity improvement projects in a wide variety of industries, literally everything from semiconductor chip fabrication to tortilla chip production.

In 2006 Mr. Brust founded Advanced Productivity Engineering and completed projects for clients as a solo practitioner and as a sub-contractor to other consulting firms in various manufacturing and service industries. e.g.: He designed several facilities layouts for a major O&G company's site masterplan, Documented "as is" operations and planned efficiency and PCB yield improvement projects for recent PE acquisition, Provided support for discreet simulation modeling of Naval Shipyard operations, Produced travel path optimizations, staffing levels and standards for maintenance & cleaning operations at The Dubai Mall, and Led multiple improvement projects and designed a full facility layout for a compounding pharmaceutical house.

Prior to founding his company Mr. Brust was employed as a Senior Industrial Engineer by Kulicke & Soffa (K&S) Test Division. In this role, he planned and implemented a variety of cost reduction and productivity improvement projects such as increasing first pass yields of precision machined components and enhancing machine shop and labor efficiencies for high tolerance electro/mechanical assembly operations. He was also involved in training engineers for China start-up operations and factory relocation & shut down efforts.

Prior to his employment at K&S Mr. Brust was the Senior Industrial Engineer for Optical Switch Corporation, a start-up company involved in optical networking, microphotonics, and interference lithography systems. In that capacity, he participated in creating the company's manufacturing infrastructure for 4 different product lines. Typical activities included designing clean room factory layouts, implementing Kanban systems for front and backend assembly lines, creating production capacity and cost models for new products and developing work methods and standards.

During his tenure at Southwest Research Institute, Mr. Brust participated as a consulting engineer and as a project manager in a variety of manufacturing projects for large and small companies in a variety of industries, as well as for the federal government. These projects included: designing assembly and manufacturing cells, developing concepts for the automation of an aluminum foundry, planning manufacturing facility layouts, and, performing manufacturing audits for military repair depots and automotive OEMs.

While a Fellow of Concurrent Manufacturing at Iowa State University, Mr. Brust participated in several manufacturing-oriented research projects. e.g. A feasibility study of automated conformal coating processes for defense electronics and providing concurrent engineering and project management support for DOE Ames Laboratory. His doctoral research investigated and quantified the process parameters and the resulting surface finish produced by a novel "mass" finishing process.

During his Master's program, Mr. Brust worked at AMP,Inc's Manufacturing Technology Center where he was assigned to various manufacturing automation projects. In addition, Mr. Brust completed a study of the investment justification and performance evaluation (both financial and productivity) of advanced manufacturing systems.

Mr. Brust is active in the Industrial Engineering profession and serves as chair of the NCEES committee to develop and score the National Professional Engineering Licensing Exam for Industrial Engineering and he served as an inaugural member of the IISE Body of Knowledge Governing Board.

PROFESSIONAL CHRONOLOGY:

Fellow of Concurrent Manufacturing at Iowa State University, 1991-6;Southwest Research Institute, (research engineer, 1996-8, senior research engineer, 1998-2000), Optical Switch Corporation, (Senior Industrial Engineer, 2000-2002), Kulike & Soffa (Senior Industrial Engineer, 2003-2005), Advanced Productivity Engineering (Founder and Principal Consultant, 2006- Present.)

EDUCATION:

B.S. Industrial Engineering, Lehigh University, 1988
M.S. Manufacturing Systems Engineering, Lehigh University, 1990
Ph.D. Industrial Engineering, Iowa State University, 1997

PROFESSIONAL CREDENTIALS:

Senior Member, Society of Manufacturing Engineers (SME) Certified Manufacturing Technologist, Senior Member, Institute of Industrial Engineers (IIE), American Society for Quality (ASQ) Certified Six Sigma Black Belt (# 4237), Licensed Professional Engineer in Texas (#97202), California (#4339) and Hawaii (#15961)