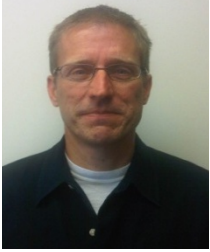


DISCUSSION GROUP P12
IMPROVING MEAN TIME BETWEEN PUMP FAILURES



Mike Smith is Pipeline Industry Manager working for Flowserve US Inc., in West Chicago, Illinois. He has 22 years' experience designing, manufacturing and selling various types of pumping equipment within the oil and gas, water, power and general industry market segments. He has spent the majority of his career working directly with end users in designing and selecting engineered pumping equipment, maintaining and troubleshooting existing assets and assisting end users with asset management and reliability improvement programs. Mr. Smith holds a B.S. degree in Mechanical Design Technology from Northeastern State University (OK) and is currently working to obtain his M.S. degree in Engineering Management (MSETM) at Oklahoma State University.



John P. Joseph II is an independent consultant with Rotating Equipment Systems Technical Associates, in Houston, Texas. He was previously with BP Amoco where he provided technical and maintenance support for rotating equipment systems to existing asset organizations in BP Amoco, and to Project Management on new projects. Prior to that, Mr. Joseph was with the Amoco Petroleum Products Refinery, in Texas City, Texas. He supervised the rotating equipment engineers and the rotating equipment specialists for the refinery. Mr. Joseph spent six and one half years as Superintendent of Central Shops and three years in Amoco's Refining and Transportation Engineering Department, in Chicago, Illinois. Previous assignments at the Amoco Texas City refinery also included the Rotating Equipment Consulting Group, the Project Engineering Group, and as a Maintenance Engineer on the Hydrocracking Unit. Mr. Joseph received his B.S. degree (Mechanical Engineering, 1972) from the University of Texas at El Paso.



William R. (Bill) Litton is the Pump Initiative Manager with Magellan Midstream Partners, LP, in Tulsa , Oklahoma . He is an experienced professional engineer with 25 years of experience in the petroleum industry. He has ability and experience in mechanical equipment, prime mover economics, power optimization, and pipeline system hydraulics. Mr. Litton also has project engineering ability and experience in handling pipeline expansions, pipeline pump stations, refineries, fractionators, gas and processing facilities and crude oil, refined products, NH₃, and propane terminals (brine cavern and excavated caverns). He also has experience in maintaining mechanical equipment company-wide to provide reliable and economical service. Mr. Litton has a B.S. (Mechanical Engineering, 1979) from Kansas State University and a higher degree (Mathematics, 1978) from Emporia State University . He is a registered Professional Engineer in the State of Oklahoma.



Morgan M. (Morg) Bruck is an independent consultant with Hydraulic, Measurement, and Inspection Consulting, LLC of Dayton, Ohio. Before retiring to form HMIC, LLC, Morg was with Marathon Petroleum Company in the Engineering Standards and Technical Support Group. Morg wrote standards related to rotating equipment and measurement systems and provided tech support in these areas for Marathon Pipe Line and Marathon Terminals. Prior to his position at Marathon, Morg worked in plant, project, and reliability engineering with The Dayton Power & Light Company and Sohio/BP Pipe Line Company. Morg is an active member of API Sub-committee on Mechanical Equipment and also API measurement standards. Morg is Chairman of API 675, Vice-chairman of API 674 and API 676; and a member of API 610, API 682 and API 687 task forces. Morg is a graduate of Rose-Hulman Institute of Technology (BSME 1969).
