



<b>Course title</b>	<b>PUMPS' MAINTENANCE AND RELIABILITY EXCELLENCE</b>	
<b>Course overview</b>	<b>Your Key benefits; our course objectives</b>	
<p>Pumps make more than 90% of plant machineries and maintenance issues. Unacceptably large number of pumps fail unnecessarily or sometime catastrophically every year. The over-riding aim of pumps and system training course is to reduce the costs associate with owning, running pumps, while increasing efficiency and capacity.</p> <p>Organizations spend millions running and repairing pumps. Nine out of ten pumps fail early. If we can improve reliability we can reduce the cost of owning pumps considerably. Power is a major cost for any organization. If we can reduce the amount of power required to run our pumps, we can reduce the cost of owning them considerably. Appropriate selection and operating at BEP, World class practices provide great reliability and availability.</p> <p>This 3-day course will give attendees practical techniques for optimizing pumps performance, achieve high reliability and availability and therefore make a huge difference to the organization's profitability.</p> <p>The attendees are led through the road to high Pumps reliability and availability through failures analysis for Pumps' failure avoidance; Pumps' failure analysis and troubleshooting</p>	<p><b><u>Top learning objectives:</u></b></p> <ul style="list-style-type: none"> <li>▪ Become aware and sensitive to failures and tale tellers of ever elusive, overlooked, undocumented, and hidden more proactive culture and failure elimination strategies and techniques</li> <li>▪ Explain and map out practical remedies and preventive and proactive actions to pumps' unreliability and availability to be taken by operators, technicians, engineers and managers</li> <li>▪ Discover the balanced view between pumps' design, procurement, and practical use, based on mechanical and hydraulic loads and stresses distribution</li> <li>▪ Provide Guidelines and details that must be considered by reliability-focused pumps' users</li> <li>▪ Become aware of a number of risky omissions or shortcuts by designers, manufacturers, and</li> <li>▪ Users-operators that must be processed into specifications that ultimately result in procuring more reliable pumps</li> <li>▪ Comprehend how the system controls the pump</li> <li>▪ Learn how to read pump curves and how pumps really operate</li> <li>▪ teach how the flow rate impacts on pump reliability – what is the reliable operating range</li> <li>▪ Design better systems and select better pumps, leading to improved reliability</li> <li>▪ Avoid operational problems that lead to pump failures; why pumps vibrate and why seals and Bearings fail</li> <li>▪ Understand what causes cavitation and what it is, why it occurs and how to avoid it.</li> <li>▪ Master how pumps should be installed and commissioned – avoid those common commissioning failures</li> </ul>	
<b>3 days</b>		<b><i>Training in house or out of Canada may require more days</i></b>
<b>Target audience and industries</b>	<p>This course is very relevant to technical engineers and professionals who handle and are responsible for their organisations' maintenance; as well as the overall smooth operations and processes of their organizations' plants and machineries. These include Superintendents, Managers, Supervisors, Team Leaders, Heads of Department, Engineers, Foreman, Planners, Directors of the following departments: Maintenance</p> <p><b>From the following industries:</b> Mining, Manufacturing, Power &amp; Utilities, Oil &amp; Gas, Petrochemicals, Chemicals, Food &amp; Beverage; Automotive; Construction; Aviation; FMCG; Support Services; Pulp and Paper</p>	