

Title: MATERIALS FOR OIL AND GAS PROJECTS: "TRADITIONAL AND MODERN"

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Preliminary Abstract:

Oil and Gas projects present complex and challenging opportunities for Materials Engineers. Carbon steel is the most commonly selected material for pressure equipment and piping systems. Higher price materials such as chrome-moly steel and stainless steel are selected to meet the more demanding process conditions of higher temperatures, pressures, and corrosion rates. The traditional steels have been "optimized" to target specific process locations. Newer materials such as internally lined pipe, and clad plate are more common along with non-metallics: High Density Polyethylene, Fibreglass, etc. Materials Engineers require awareness, curiosity, and understanding of the materials options currently available or on the horizon. This presentation provides a link between traditional and newer material selections for oil and gas projects.