



Contribution ID: 18

Type: **Oral Presentation**

## Vital Role of Molybdenum in Oil/Gas Production

*Friday, 15 November 2024 10:45 (25 minutes)*

In the half-century since the high-molybdenum concept first provided a quantum leap in SSC resistance, low-alloy steels with 0.75% Mo (and 0.035% Nb) have become firmly established worldwide as the premier tubular product for assuring reliable service in deep sour oil/gas wells. In arriving at this alloy chemistry, molybdenum concentrations up to 2.5% were examined and SSC test results are shown. The superiority of this alloy was confirmed by various H<sub>2</sub>S tests of plate supplied to a dozen companies. Then testing of full-sized commercial heats verified the excellent performance, and widespread commercial use followed. High Mo concentrations are now specified for sour grades in API document 5CT. The mechanism of the marked improvement afforded by the high molybdenum content is described.

### Speaker Country

USA

**Primary author:** Dr SPONSELLER, David (OMNI Metals Laboratory, Inc., President)

**Presenter:** Dr SPONSELLER, David (OMNI Metals Laboratory, Inc., President)

**Session Classification:** SUSTAINABLE PERFORMANCE WITH MO ALLOYED STEELS