

## **High Pressure Overlapping Flat Sprays Nozzles**

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### **Abstract**

Descaling of oil and gas well pipes has proved to be a major problem to oil and gas companies, as scale formation significantly reduces well productivity and costs the industry millions of pounds a year. Current scale removal methods involve the use of chemicals, which can be harmful to the environment and mechanical methods, which can affect the integrity of the pipe.

The use of high pressure overlapping sprays provides a potential solution to this problem and one which has significant advantages over traditional methods. The overall aim of this paper is to investigate the characteristics of a novel, overlapping fan spray nozzle arrangement and examine its affect on scale removal for potential use in oil and gas pipe descaling applications.

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