



# Safety Alert

From the International Association of Drilling Contractors

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ALERT 99-22

## CATASTROPHIC FAILURE OF 50 CC RETORTS

### WHAT HAPPENED:

There have been two catastrophic failures of 50 cc Retorts. The failures occurred during routine oil on cuttings checks. Investigation into the root cause of the problem has been hampered by the excessive damage caused when the Retort burst.

### WHAT CAUSED IT:

It appears that the bursting failure occurred as a result of overpressurisation. The Retort separated across the screw thread. Though it cannot be proved, the consensus of opinion is that the spout must have become blocked with a mixture tars/solids/emulsifiers.

### CORRECTIVE ACTIONS:

The following guidelines should be followed to ensure the safe operation of Retorts.

1. It is essential that all Retorts be thoroughly cleaned after every test, particularly the spout. Pipecleaners/fine wire brushes should be used to scrape any residue out of the spout.
2. The steel wool should be changed out after every test to prevent solids building up.
3. The threads on the Retort should be visually inspected before use. Operators should look for signs of "belling" of the Retort around the threads. Another early warning sign of thread damage is movement (or rattling) during threading.
4. Retorts used offshore should be changed out every six months for cleaning and thorough examination.

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**The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.**

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