



### How can we improve water evacuation from the boiler?

With an ever-increasing demand on customer quality a common concern has arose among boilers manufacturers regarding the amount of water left in the boiler prior to packing. This has then the ability to damage the cardboard packaging if water leaked passed the retaining caps or always leak at the installation stage when the caps are removed.

The problem is mainly due to the design of the waterways throughout the boiler system retaining water after the drain cycle.

In Microplan test benches water is drained off the boiler, once the test is finished, by means of compressed air inflation automatically managed by the test sequence.

There are some solutions to overcome the issue of water trapped inside the boiler after automatic evacuation:

- make sure the 3-way valve of the boiler is switched to CH position when power supply is turned off just before the draining begins;
- inflate air from both the flow and return side of the boiler, one time or even more alternately;
- inflate air by pulses rather than continuously;
- tilt the boiler with designated systems;
- increase the emptying time, but with a limit over which you won't have significant improvements: perhaps a small volume of water finds some places where the compressed air is not able to remove it from;
- use the diagnostic panel of Parseq software for troubleshooting this issue: by opening and closing the compressed air valve we suggest you try to find a procedure that properly empties the boiler. You can experiment with extending the time of compressed air open, adjusting the emptying pressure, and so on. If you find an effective manual approach, then we can translate it into Parseq test sequence. If you can't use the diagnostic program, you can conduct the same attempts by connecting a manual compressed air tube to the boiler and you can open or close with a manual valve.

It is clear that it is all related with the nature of the issue, in other words only the experience can say which method is the most effective under certain conditions with a certain boiler.