



LEAK DETECTION

Process description



Leak detection with VPS-units and vacuum boxes acc. to DIN EN

Procedure

When using VSP-units, the area to be tested (the welding seam or the casting surface) is moistened with a foam-forming inspection material.

Suitable materials are aqueous solutions as used for testing of compressed air and/or gas equipment, like e.g. **MR® 99 Leak detection spray**. Soap water should not be used for leak detection.

Then the area is covered with a vacuum box adapted to the test area. The vacuum box is connected to the leak detection unit by a vacuum hose and is evacuated in seconds when the valve is pressed.

Under the inspection glass of the evacuated vacuum box a through-going discontinuity is made visible by foam building. This method allows easy location of possible leakages to be corrected or repaired.

Under practical test conditions, the realizable leak detection limit of the bubble test procedure lies approx. 10^{-5} and 10^{-4} Pa*m³/s (10^{-4} to 10^{-3} mbar*l/s). s). To ensure that even tiny leaks become visible the vacuum under the box must be maintained for at least 30

Examples of welds to be examined:

