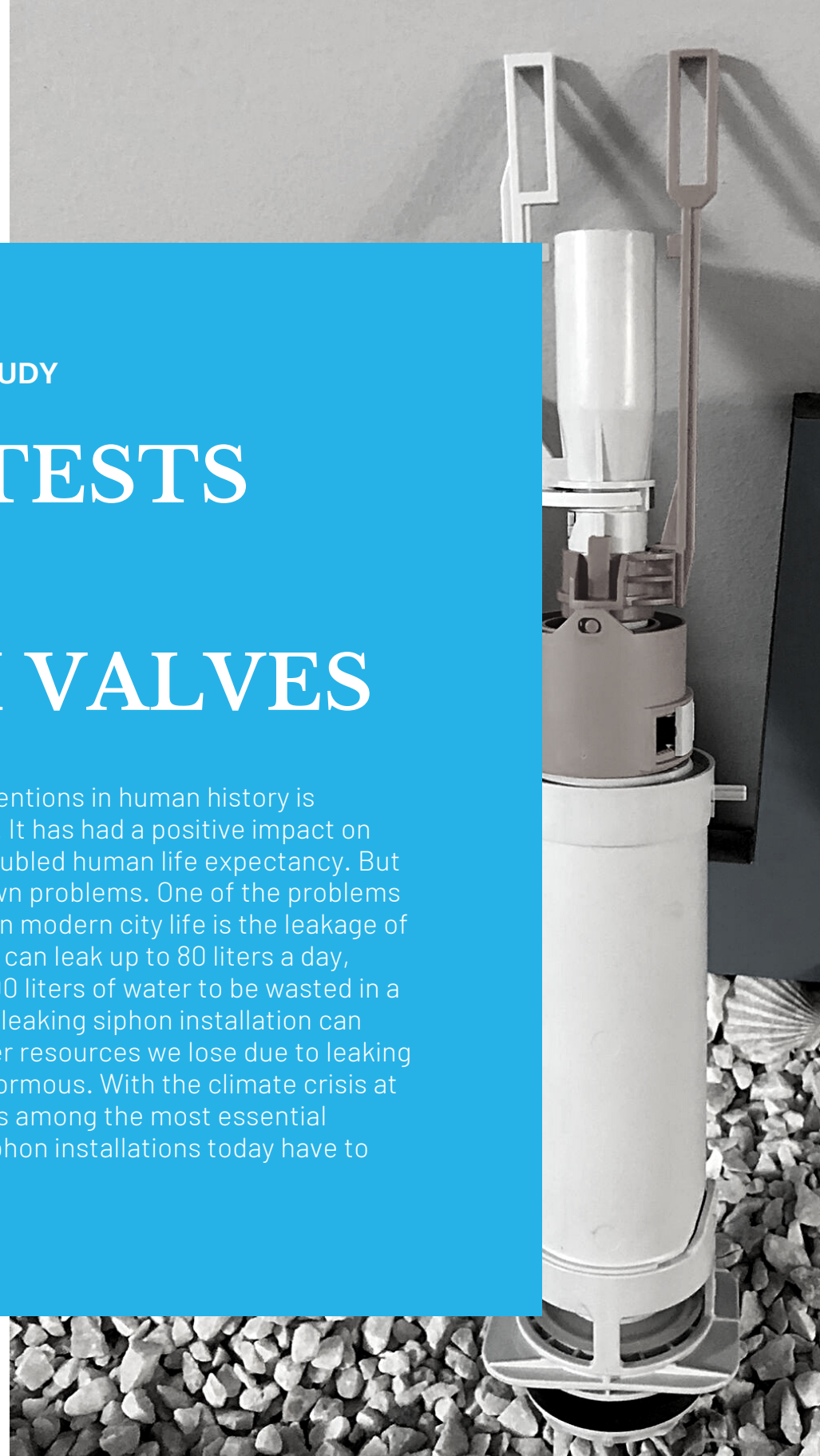


JULY 2022 | CASE STUDY

LEAK TESTS OF FLUSH VALVES

One of the greatest inventions in human history is perhaps toilet plumbing. It has had a positive impact on public health and has doubled human life expectancy. But all progress brings its own problems. One of the problems that we may encounter in modern city life is the leakage of siphons. Siphons, which can leak up to 80 liters a day, cause more than 300,000 liters of water to be wasted in a year. While only a single leaking siphon installation can cause huge losses, water resources we lose due to leaking siphons worldwide is enormous. With the climate crisis at the door, sustainability is among the most essential concerns. That's why siphon installations today have to pass leak tests.



1

TEST METHOD

While testing the Flush Valve, the product is placed in the Adlema test station at the bottom. Press the start button on the remote control block to start the test. By pressing the start button, the CZ Quick Connector is pushed into the product with the help of a piston. The product is now sealed leakproof by CZ Quick Connectors. The product is exposed to a pressure of 50 mBar from the water in the reservoir during its normal operation.





2

TEST PARAMETERS

150 mBar vacuum is applied to the product in the leak test using the Adlema BT4000 Series Advanced Level Leak Testing Device. The leak-proof property is checked in a pressure that is 3 times bigger than the operating pressure. The pressure change of the vacuum during the test is monitored with 0.1 Pa sensitivity. The test result is automatically decided by BT4000. Depending on the result "OK or NOK" products are ready for shipment.

