

## PROJECT: Idiada- Pressure Regulation with Condor and 300 Series - SPAIN

### Premises

In 2008, Idiada built a 1.56 km wet, automotive testing-track, which is the largest facility of its kind in Europe. To conduct these tests, a film of water of constant depth needs to be maintained on top of the road pavement. This film must be adjustable in each segment of the loop.

### The Challenge

The 1.56 km of wet automotive testing track needed to have a film of water of constant depth maintained on top of the road pavement. This film must be adjustable in each segment of the loop.

### The Solution

To accomplish this, the track's water distribution network uses over **50 Dorot 300 Series valves**, each equipped with a Condor controller. These valves control the input pressure to a grid of sprayer nozzles. Extremely accurate pressure regulation is required to keep the film of water at the correct and constant thickness.

The pressure is controlled through a centralized SCADA unit that sends a remote signal to each Condor controller.

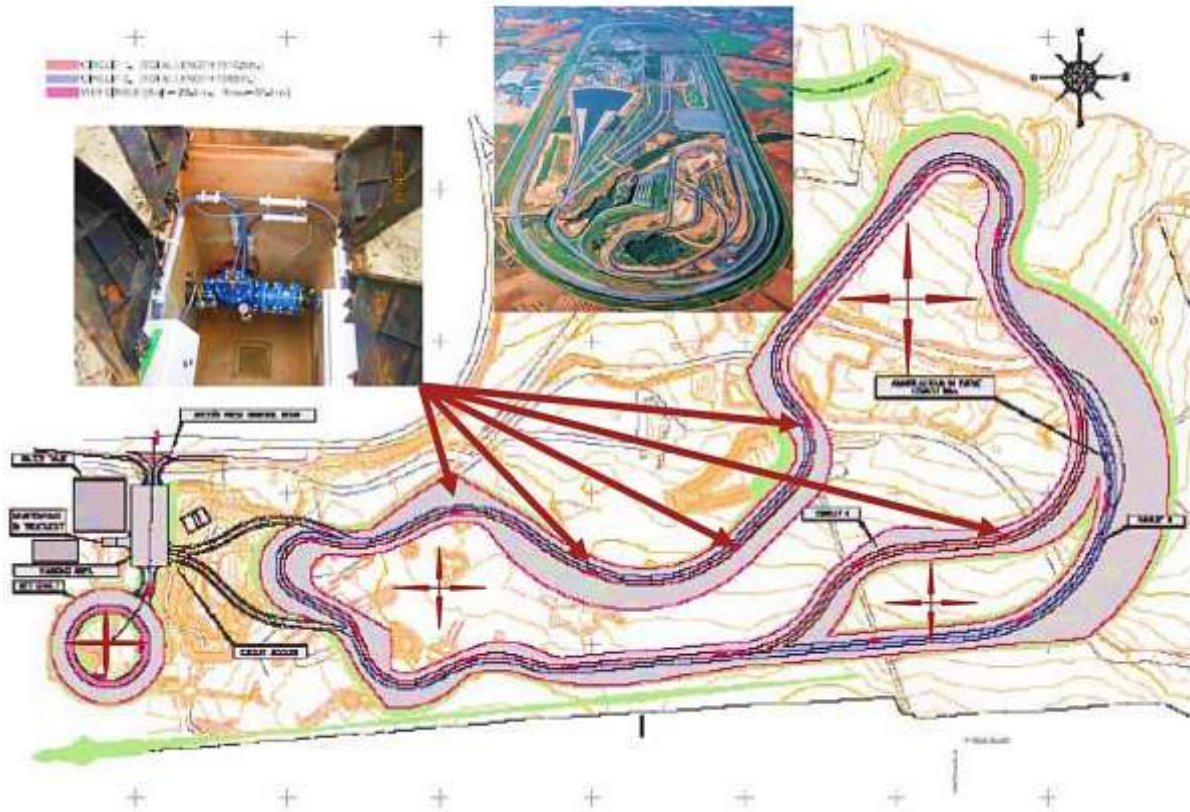
**HIDROGLOBAL, Dorot's representative in Spain, has been the supplier for this equipment – 300 Series valves and Condor controllers – and has been in-charge of technical advising and fine-tuning the system. This system has been chosen for its stable regulation capabilities, including near-zero flows (LTP® standard feature of the Series 300 valves), its ease of integration with the SCADA system, and its high regulation precision.**



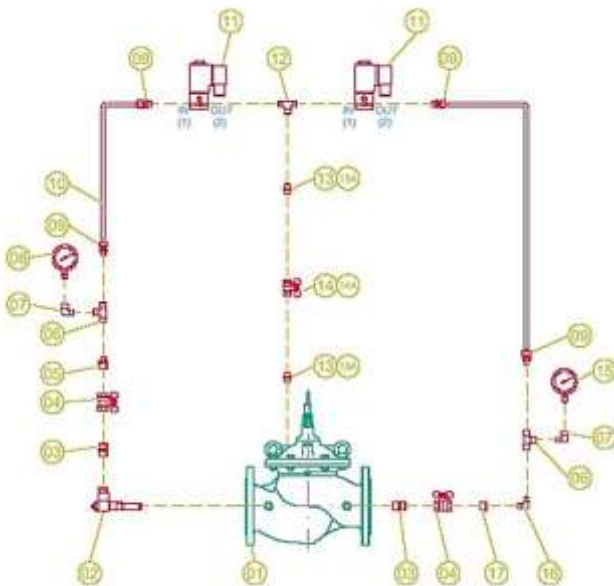
Testing on some of the sections of the Wet Handling Track, and valve chamber detail:



General layout of the track, with regulation points:



Exploded diagram of control system:



#### ADVANTAGES

- Precise regulation at any flow. - Low pressure losses.
- Integrable through remote control (SCADA).
- Very flexible sensitivity settings.