

Water Quality Recommendations

Water quality is one of the most important factors in the longevity of a dynamometer. Whether you are using an open or closed circuit, the dynamometer water should meet or exceed the following recommended quality standards.

Servo Controlled Load Valves

Total Hardness: 250 ppm or less.

PH: 7.0 – 8.5

Particulates: 25 micron maximum. Water should be filtered before entering water pressure regulator. To monitor filter blockage, water pressure should be monitored before and after filter.

Non-Servo Controlled Load Valves

Total Hardness: 500 ppm or less.

PH: 7.0 – 8.5

Particulates: 420 micron maximum. Water should be strained using a 40 mesh screen before entering water pressure regulator. To monitor strainer blockage, water pressure should be monitored before and after strainer.

Bacteria & Algae Concerns

In addition to the above specifications, provisions should be made to prevent the growth of algae and bacteria, mainly to prevent the spread of waterborne disease.

Closed (Recirculated) Water Systems

If local tap water achieves the minimum water quality specifications, a bleed-off circuit should be able to maintain the water quality. The cooling tower system should bleed-off water at a rate equal to that which will be lost to evaporation from the tower (generally 1% of cooling tower flow rating).

Open Water Systems

If local tap water does not meet the above water quality specifications, consult a water system specialist.

Power Test Inc. offers a variety of water filtration options. Contact your Power Test representative for more information.



Standard Particulate Filter



Electronic Centrifugal Filter