

## Iris Valve

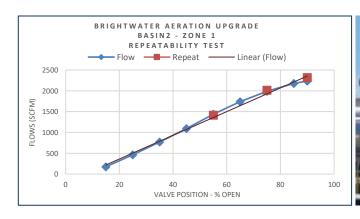
## Repeatability Test

Brightwater Treatment Plant – Woodinville, WA. (Aeration Basin Upgrade)
Brown and Caldwell Engineers, Seattle

Three (3) tests were run on Basin 2 – Zone 2 (8" Iris valve)

- Repeatability test at 90% Open
  - o 1<sup>st</sup> Measured 1,800 SCFM at 90% Open
  - o 2<sup>nd</sup> Closed valve to 30% for 1-minute
  - $3^{rd}$  Opened valve back to 90% observed 1,791 SCFM (1,800 1,791 = 8 SCFM)
- Repeatability test at 75% Open
  - o 1st Measured 1,588 SCFM at 75% Open
  - o 2<sup>nd</sup> Closed valve to 30% for 1-minute
  - o  $3^{rd}$  Opened valve back to 75% observed 1,575 SCFM (1,588 1,575 = <u>13 SCFM</u>)
- Repeatability test at 55% Open
  - o 1st Measured 1,190 SCFM at 55% Open
  - 2<sup>nd</sup> Closed valve to 30% for 1-minute
  - o 3<sup>rd</sup> Opened valve back to 55% observed 1,173 SCFM (1,190 1,173 = 17 SCFM)

## **RESULT: Less than 1% Flow Variation**





WHY? ANSWER: Precise Movements

## Egger's unique Iris valve uses a robust "Spindle" control assembly:



- Spindle assembly rotates an external drive nut to precisely open and close the valve.
- Spindle actuation is mounted externally for easy maintenance.
- Spindle uses a rigid bearing support (other valves, this work is done by the actuator).
- Spindle mounted pointer provides exact valve position.
- Quality multi-turn actuator is hard-mounted to our flange.
- The Spindle on an 8" Iris valves travels 62 turns to Full Open & 62 turns back to Full Close or a length of 7.3 inches.