Langemann® Gate

Created by Peter Langemann, the Langemann Gate was developed through a cooperative effort between St. Mary River Irrigation District, Peter Langemann, and Aqua Systems 2000. The Langemann gate used in conjunction with one of our controllers provides solutions to a host of water control issues. The patented design has gained recognition due to its simplicity, overshot technology and low power requirements.

Application Suitability:
- Maintain constant upstream water level (such as in a check structure)
- Provide a pre-determined constant flow to downstream users (such as a turnout)

Features:
- 3CR12 Stainless Steel
- Stainless steel gate pin
- Tuffcast rollers
- Nylon idlers
- 1045/1050 IHCP hinge pin
- Water-proof roller chain (omega config.)
- Efficient helical worm speed reducer
- NEMA 4 electrical panel
- Overload relay
- Limit switch
- Motor starter
- 12 or 24Vdc operation for reliability
- Inconspicuous solar panel
- Independent high-level emergency assist

Advantages:
- Precise Positioning: Positive linear movement in either direction. Convenient staff gauge placement and the linear relationship of the gate and water level provides reliable operating information
- Ease of Installation: All but the extra-large gates are fully assembled for shipping. A small crew and suitably sized crane can install a gate within a couple of hours
- Low power requirements: Unique distribution of water pressure and low friction operating components provide for remarkably low power requirements
- Superior trash management

Control Applications:
- Irrigation check structures
- Turnout structures
- Spillway structures
- Diversion structures
- Water and sewage treatment plants
- Flood control structure

Options:
- 304 Stainless Steel components where aggressive water is encountered
- Operation modes:
  - Manual (cordless drill operated)
  - Manual Electric
  - Automated – Upstream level or flow control
- Integrated stilling well
Langemann® Gate Details

CLOSED GATE - UPSTREAM VIEW

CLOSED GATE - DOWNSTREAM VIEW

OPEN GATE - UPSTREAM VIEW