

Bespoke to Any Span

Hydraulically Operated

Lloyd's Register Tested

Telemetry Ready

Emergency Hand Pump

PRODUCT SPECIFICATION

Hydraulic Flood Gate

Power-Operated Bespoke Steel Flood Protection — Single & Double Swing



Key Features

■ Push-Button Operation

Hydraulically driven leaves open and close at the press of a button — no manual handling under load

■ Bespoke to Any Opening

Each gate is engineered to the clear span, flood level and loadings — no standard sizes

■ Emergency Hand Pump

Built-in hand pump on each power pack allows manual operation during mains power failure

■ Telemetry Integration

Gate position, flood-alarm and fault status can be relayed to a remote SCADA or telemetry system

■ Automatic Hold-Closed

Electric locking bolt plus automatic hold-closed function keep the gate sealed and secured

■ Stainless Hydraulics

316 stainless power packs and cylinders, 200 bar, with full instrumentation and filtration

■ Safety Detection

Photoelectric beam sensors and safety-edge trip stop the gate on detecting an obstruction

■ Marine-Grade Coating

Blast cleaned to SA 2.5 and finished to an ISO 12944 C4 or C5 protective paint system

CONSTRUCTION

100x5 SHS
S355 / S275

OPERATION

Hydraulic
200 bar

SEAL

EPDM
Compression

PAINT

ISO 12944
C4 / C5

TESTING

Lloyd's
Register

DESIGN

Eurocodes
50-yr life

MM Engineering

Unit 4B Sirius Drive, Baglan Energy Park, Port Talbot SA12 7BR

Technical Specification

MME hydraulic flood gates are bespoke steel structures designed in-house and verified by chartered engineers to Eurocode standards. Each gate is fabricated from a welded structural hollow section matrix with plate cladding, driven by stainless steel hydraulic power packs, and independently leak tested before handover. The details below are typical — exact construction varies with each gate's size, configuration and design loadings.

ITEM	SPECIFICATION (TYPICAL)
Configurations	Single & double swing hydraulic; manual swing also available
Materials	Mild steel or stainless steel up to grade 316L
Leaf matrix	100x5 SHS, EN 10219 grade S355JRH
Cladding	5mm plate both faces, EN 10025 S275, seam welded with puddle welds
Frame / jamb	Steel, cast-in or drill-fixed to structure
Seals	EPDM compression seals (vertical, base & centre), bonded gasket
Hinges	Precision-machined, brass bearings, stainless steel pins, grease nipples
Hydraulic power pack	16 L 316 stainless reservoir, 3 L/min pump, 200 bar, 1 kW motor
Cylinders	80mm bore, 56mm SS rod, 600mm stroke, c/w mounting eyes
Controls	Push-button open/close, electric locking bolt, auto hold-closed
Safety systems	Photoelectric beam sensors, safety-edge trip, fault diagnostics
Paint system	ISO 12944 C4 or C5; blast cleaned to SA 2.5
Colour	Bespoke RAL / BS to client specification
Design standards	BS EN 1990, 1991-2/-4, 1993-1-1, 1993-1-8; SLS & ULS
Telemetry	Volt-free outputs for gate position, flood alarm & fault status to remote SCADA / telemetry
Fabrication	Execution Class EXC2 or EXC3
Design life	50 years (gate) / 25 years (EPDM seal)



Double swing hydraulic flood gate shown in the open position, with stainless steel cylinder, power pack enclosure and sounder beacon mounted to the gate post.

Certification & Quality

Every flood gate is designed by chartered structural engineers to Eurocode standards, with full SLS and ULS analysis, and manufactured under our quality management system to Execution Class EXC2 or EXC3.

Gates are leak tested in situ with independent witness by Lloyd's Register. A full documentation pack is provided: structural calculations, material certificates, test reports, paint inspection records and O&M manual.

Built Bespoke to Your Requirements

Every gate is engineered and manufactured to order. We design, fabricate, paint, test and install — a complete single-source flood protection solution.

[Contact us for a same-day quote](#)