ROCKERHILL

PRODUCT BROCHURE
EN · 2026



HYDRAULIC STEEL STRUCTURES

Sluice Gate

Industrial-grade gates for flow, level and shut-off control in water conservancy, municipal, power and industrial projects. Designed and manufactured by ROCKERHILL.

N. America	N. America	Europe	SE Asia	Oceania	West Asia
Mexico	**Canada**	**Croatia**	**Singapore**	**Australia**	**Middle East**

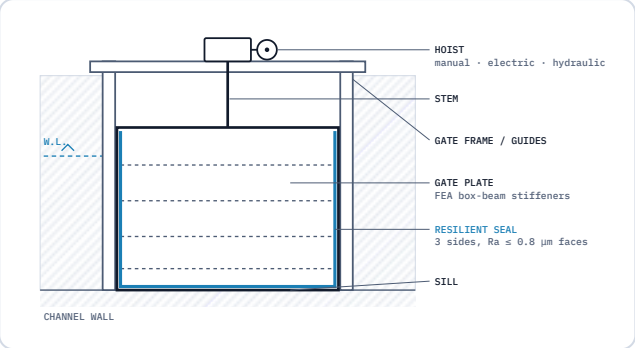
OVERVIEW

Precise control of every channel

A sluice gate controls the flow rate, water level and open or closed state of water, sewage, slurry and other fluids.

A gate plate travels vertically in a fixed frame to open, throttle or seal the channel. ROCKERHILL sluice gates serve water conservancy works, municipal water supply and drainage, sewage treatment, power generation, mining and industry, where strong sealing, high pressure resistance and simple operation keep the fluid system safe and stable.

Choose manual, electric or hydraulic operation, resilient or metal seals, and a rising or non-rising stem to suit the site.



Front elevation. The plate seals against the frame on both sides and the sill; the hoist lifts it on a threaded stem.

100–3000 mm
Standard opening (DN), larger sizes to order

18 m
Widest gate leaf delivered

≤ 0.01
L/(s·m) leakage with resilient seal

±1 mm
Positioning accuracy, electric drive



River sluice for flood control, with gate piers and hoist bridges.

TECHNICAL ADVANTAGES

Sealed tight, built to last

SEALING

Triple-seal, leak-proof design

Gate plate, resilient seal and frame stop work together. Sealing faces are precision-ground to Ra ≤ 0.8 µm, so the gate stays tight under high pressure and with solids in the medium.

DURABILITY

Corrosion and wear resistance

Duplex stainless steel, or carbon steel with a heavy-duty coating to ISO 12944 C5, for sewage, seawater and acid or alkali media. Wear-resistant rubber seals last more than 30% longer.

STRUCTURE

FEA-optimised box-beam design

Gate plate and frame are optimised by finite element analysis. The box-beam design raises bending strength by 25%, with no deformation on openings of 2000 mm and above.

CONTROL

Intelligent control (optional)

Electric gates report flow, water level and gate opening, and connect to SCADA for automatic start and stop, fault alarms and data logging.

DRIVE SYSTEMS

Manual, electric or hydraulic

DRIVE	MECHANISM	PERFORMANCE	BEST FOR
Manual	Handwheel or chain, optimised gear ratio	Operating force ≤ 50 N	Small openings, infrequent operation
Electric	AC 380 V / 220 V geared motor and reducer	Stable torque, overload protection, PLC linkage, ±1 mm positioning, remote control	Pump stations, treatment plants, automated sites
Hydraulic	Double-acting hydraulic cylinder	Travel speed ≤ 0.5 m/min, pressure loss ≤ 5%	Large openings, high pressure, dusty or humid sites



Manual handwheel hoists on installed gate frames at a treatment plant inlet.

DESIGN AND MANUFACTURING CAPABILITY

Designed in house. Built in our own workshops.

ROCKERHILL engineers each gate, fabricates it, tests it and supports it on site. You deal with one team that is responsible for the result, from the first calculation to commissioning.

01 · ENGINEERING

Hydraulic and structural design

We size the plate, frame, stem and hoist to your water levels and site. FEA on every critical member; drawings to ASTM, EN or GB as your project specifies.

02 · FABRICATION

Our own workshops

Cutting, welding, machining and precision grinding of sealing faces under one roof. Coatings applied to ISO 12944, up to C5.

03 · TESTING

Tested before it ships

Every gate passes a hydrostatic test at 1.5 × nominal pressure, a sealing test and a no-load operation test.

04 · DELIVERY

Export and site support

Export packing, installation drawings and guidance from the engineers who designed the gate.

What our capability means for your project

DN100–3000	Standard range, with non-standard gates designed to order. Our widest delivered leaf is 18 m.
5 material families	Stainless 304 / 316L, duplex and super duplex 2507, carbon steel Q235B, cast iron HT200.
3 drive types	Manual, electric with PLC and SCADA, or hydraulic for large, high-pressure openings.
–40 to 200 °C	Special materials and seals for low-temperature and high-temperature service.
1.5 × PN	Hydrostatic test pressure on every gate before shipment.
12–24 months	Warranty, with lifetime technical support.



Twin sluice gates and hoist house on an irrigation channel.

GLOBAL TRACK RECORD

Trusted on water projects across four continents

From our engineering office and fabrication base in China, ROCKERHILL delivers sluice gates to municipal, water conservancy, power and industrial projects in Mexico, Canada, Croatia, Singapore, Australia and the Middle East.

ASIA · HOME BASE **China**	NORTH AMERICA **Mexico**	NORTH AMERICA **Canada**	EUROPE **Croatia**
SOUTHEAST ASIA **Singapore**	OCEANIA **Australia**	WEST ASIA **Middle East**	SOUTH ASIA **Sri Lanka**

OVERSEAS PROJECT HIGHLIGHTS

MIDDLE EAST · SAUDI ARABIA

Seawater backflow protection

Check gates for a petrochemical park cooling water system, stopping seawater backflow that would corrode equipment and interrupt the process.

2000 × 2500 mm · Super Duplex 2507 · 12 sets

SOUTH ASIA · SRI LANKA

Power plant water supply

Sluice gates for a Colombo power plant, keeping cooling water and river water supply stable and reliable.

18 m × 1.5 m · 3 leaves

NORTH AMERICA · MEXICO

Channel control gates

Sluice gates for the REP. 27+016 C. Reforma works, contract signed in 2021 and completed.

6 m × 3 m · 2 leaves

CODES

Designed to your standards

ASTM, ASME, EN and GB specifications, so our gates fit tender documents in the Americas, Europe, Asia-Pacific and the Middle East.

SERVICE

Harsh and corrosive duty

Seawater, cooling water and sewage service with duplex stainless steel and C5 coating systems.

EXPORT

Ready for overseas sites

Export packing, English documentation and remote or on-site installation guidance.



TECHNICAL DATA

Specifications

PARAMETER	VALUE
Opening size	DN100 – DN3000 mm standard; non-standard sizes designed to order (delivered up to 18 m wide)
Nominal pressure	PN 0.1 – 2.5 MPa
Operating temperature	–20 °C to 120 °C standard; special materials for –40 °C or 200 °C
Leakage	Resilient seal ≤ 0.01 L/(s·m) · metal seal ≤ 0.1 L/(s·m)
Structural types	Manual / electric / hydraulic · resilient / metal seal · rising / non-rising stem
Factory tests	Hydrostatic test at 1.5 × nominal pressure · sealing test · no-load operation test
Warranty	12 – 24 months, with lifetime technical support

Materials

COMPONENT	MATERIALS	OPTIONS
Gate plate	SS304 · SS316L · Duplex / Super Duplex 2507 · Q235B · HT200	Epoxy or polyurethane anti-corrosion coatings
Gate frame	Welded carbon steel · integrally formed stainless steel	Acid, alkali and erosion resistant
Seals	NBR · FKM · Silicone	Selected for medium and temperature

Standards

STANDARD	SCOPE
ASTM A36 / A572	Structural steel
ASTM A240 / ASME SA240	Chromium and chromium-nickel stainless steel plate
EN 10025	Hot-rolled structural steel products
ISO 12944 (C5)	Corrosion protection of steel structures by paint systems
CJ/T 3006 · GB/T 1220 · GB/T 13927	Water supply and drainage gates · stainless steel · pressure and leakage testing

QUALITY ASSURANCE

Tested on every gate

Before leaving the factory, every ROCKERHILL sluice gate undergoes a hydrostatic test at 1.5 times the nominal pressure, a sealing performance test and a no-load operation test. Each gate is covered by a 12 to 24 month warranty and lifetime technical support.

REFERENCES

Completed sluice gate projects

PROJECT	CLIENT / SECTOR	GATE SIZE	SIGNED	LOCATION
Moat ring project: sluice gates and miter gate	Xuchang Housing and Urban-Rural Development Bureau	Lift gate 10.8 m × 2 m Miter gate 9.2 m × 2.5 m	2024.05	Xuchang, Henan, China
Wuwei County south sluice gates	Key Project Management Bureau of Wuwei County	3 leaves	2022.07	Wuwei, Anhui, China
Yuhuan liberation north gate reconstruction	Taizhou Water Conservancy and Hydropower Construction Co., Ltd	10 m × 2.5 m (2 leaves)	2023.05	Yuhuan, Zhejiang, China
Lengshui Town Yuhe River sluice gate	People's Government of Lengshui Town, Luanchuan County	8.6 m × 1.9 m (1 leaf)	2023.01	Luanchuan, Henan, China
Xuhe drainage pumping station flood-control sluice, Binhu New Area	Wuxi Tuochuang Environmental Engineering Equipment Co., Ltd	9.0 m × 4.7 m (6 leaves)	2021.03	Hefei, Anhui, China
Shuangji River Shuanglongba sluice gates	Henan Water Construction Group Co., Ltd	18 m × 1.5 m (3 leaves)	2025.10	Xinzheng, Henan, China
Seawater check gates for a petrochemical park cooling water system	Petrochemical industry	2000 × 2500 mm, Super Duplex 2507 (12 sets)	2021.07	Saudi Arabia
Colombo power plant: cooling and river water supply gates	Power generation	18 m × 1.5 m (3 leaves)	2022.10	Colombo, Sri Lanka
Chengnan River water quality improvement, Pukou District	China Construction Installation Group Co., Ltd	15 m × 2.5 m (2 sets)	2024.08	Nanjing, Jiangsu, China
REP. 27+016 C. Reforma	—	6 m × 3 m (2 leaves)	2021.09	Mexico

All projects completed. Details of our projects in Canada, Croatia, Singapore and Australia are available on request.

Applications

Water conservancy
Level regulation and interception in reservoirs, rivers and irrigation canals.

Municipal water and drainage
Waterworks and sewage treatment inlets and outlets, pump station flow control.

Power generation
Cooling water systems and river water intakes.

Mining
Tailings transport and process water.

Chemical and paper
Acid and alkali lines, pulp flow control.

Special service
–40 °C to 200 °C, highly corrosive or high-solids media.

REQUEST A QUOTE

Send us your project data

- Opening width and height, or DN size
- Medium: clean water, sewage, seawater, slurry or chemical
- Mounting: wall or channel, rising or non-rising stem
- Design water head or pressure, one-way or two-way
- Drive: manual, electric, hydraulic, SCADA connection
- Quantity and delivery location

Specifications may change without notice. © ROCKERHILL