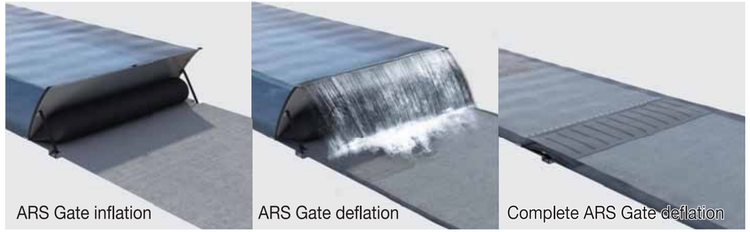
Precise Water Level Control : ARS Gate

YOOIL

Introduction of ARS Gate

ARS Gate regulates headwater level and spillway discharge capacity via real time monitoring of individual gate panel height.

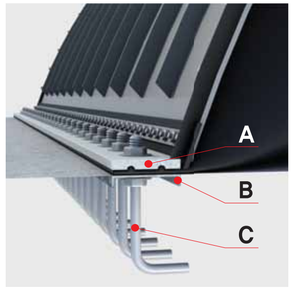
ARS Gate inflation & deflation


ARS Gate inflation

ARS Gate deflation

Complete ARS Gate deflation

ARS Gate Components



A. Clamping plates
B. Embedded plates
C. Anchor bolts

Steel Panel

Non-corrosive steel panels made with stainless steel, galvanized steel or patented Ceramic silicone coating (equivalent corrosion resistance as stainless steel)

Leveling sensor

Individual tilt sensors control angle of each gate for precise water level control

Air bag

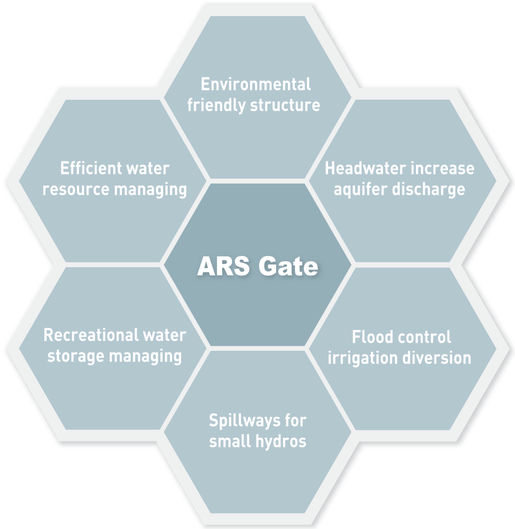
Multiple layers of reinforced materials molded into single membrane to operate air pressured inflation and deflation

EPDM side sealant

EPDM side sealant to prevent water leakage from end of gate and side walls.

Deflactor

Prevents cavitation caused by overflow of water



YOOIL
3rd & 4th Floor YOOIL building Dongjak Daero 72, Seocho Seoul/Korea
Phone : 822-583-2394 **FAX :** 822-583-2396
Email : YOOIL@YOOILENG.CO.KR **Website :** www.YOOILENG.CO.KR

YOOIL ENGINEERING
www.yooileng.co.kr

ARS Gate

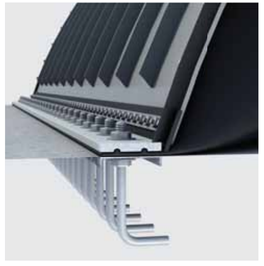
(Air-inflatable Rubber and Steel Gate)

Precise Water Level Control : ARS Gate

ARS Gate construction steps

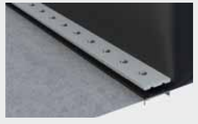
1. Foundation work
2. Installation of embedded fixings and pipe lines
3. Concrete pouring and curing
4. Installation of air bags
5. Installation of gate panels
6. EPDM side sealant installation
7. Installation of sensors and control panels
8. Testing and commissioning of ARS gate system

Advantages of YOOIL ARS Gate system



Structurally advanced

Precise measurement and engineering to assure maximum capacity withstand against all aspects



Drift prevent and individual gate control

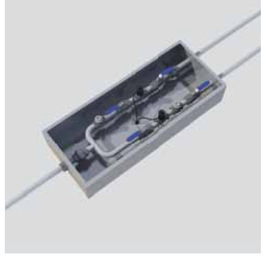
Individual pressure and level control of each air bags/gates to prevent one sided drift overflow. Individual operation of each gate panel provides necessary control of water storage.

Real time water flow calibration

State of art gate panel sensors and headwater level sensor calculates to provide spillway water overflow algorithm which leads to precise control of water resource.

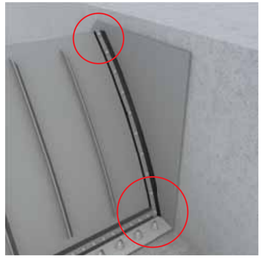
Simple yet effective

High tensile EPDM anti-inversion resist band located at simplest and effective position.



State of art air supply/exhaust valve system

Precise and rapid control of air pressure inside air bags. MOV, manual inflation/ deflation valves and emergency mechanical fail-safe valves all incorporating in synchronized operation for most accuracy.



Water tight sealant

EPDM side sealant prevents water leakage from side walls.