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HISTORY

Based on the responsible construction for customer satisfaction, HANKYUL secure technology capability through systematic R&D, and are opening the future of clean and convenient water resources.

Challenge For The Better Tomorrow

Responsible company that has kept its principles for more than 40 years.

A manufacturer specializing in groundwater materials based on advanced technology

Although the total amount of water available for use due to economic development, population growth and climate changing is decreasing, the need for clean and healthy water is increasing.

Therefore, the value of groundwater utilization is growing and the usage is steadily increasing.

Korea recognizes groundwater as a valuable resource for creating future value as a water resource. In order to maximize its utilization value, Korea has established a Groundwater Basic Management Plan(2012). It is planning to create infrastructure and advance ground water management.

We will show you growth grow up not only in Korea but also globally through constant R&D and innovation from communication and harmony.

Technology up
Service up
Customer impression u

Young Thought! Young Company!

CEO Z





Kim Jun Yeong

CONSTRUCTION 1975 · Established the Geological Features of Yeongnam 1989 Changed the name to Gyeongbuk Groundwater Developmen 2013 Mar. · Established HANKYUL Industrial Development, Inc. · Obtained main-biz certification 2014 Sept. Established HANKYUL E&G, Inc. 2016 Nov. · Confirmed Female-owned Business Register R&D dedicated departments < Korea Industrial Technology Promotion Association> MANUFACTURE 2012 Dec. · Established GID and site composition Nov. · Changed the name of HANKYUL Technics and built Auto welding system facility. Applied for Flange/Socket type patent and design registration · Applied for Flange/Socket type lift riser "Line Lock" trademark right 2016 Feb. · Obtained quality certification(Q mark) in Korea for groundwater exclusive materials <Groundwater lift riser> at the first Mar. · Converted to corporation, HANKYUL Technics, Inc. Apr. · Certificated information Management System(IMS-16-002, Korea Technology and · Register R&D dedicated departments < Korea Industrial Technology Promotion Association> May. Registered as a venture company (No. 20160400645, Small and Medium Business Corporation) Jul. · Awarded the Minister of Environment award for construction Environment Technology · Registered patent < Upper protection machine room system of tube well and small scale water supply system> Aug. · Applied for patent < Development and applied for patent of automatic surging device for groundwater bedrock tube well> Acquired ISO 9001 certification Oct. · Established enterprise attached R&D Institute Certificated Inno-biz 2017 Mar. · Selected Start-up Company from Public Procurement Service Jul. · Acquired certification(KC Certification) for suitability of the hygiene safety standard in the groundwater, the industry's first

VISION

Based on high quality and technology, HANKYUL is making a new future for water industry. As a company that creates precious value for our customer's future, we will make a better tomorrow than today.

VISION OF CONSTRUCTION RESPONSIBLE FOWWLOW-UP CONSTRUCTION **SERVICE RESPONSIBLE BEST FOLLOW-UP** Realize customer Realize the best effect CONSTRUCTION **SERVICE** satisfaction through through new construction responsible construction methods which are applied that observes principles for new technology



SPECIALIZIED COMPANY FOR WATER INDUSTRY, NO 1

GID HANKYUL

DIFFERENTIATED PRODUCTS & SERVICES

PRODUCT FEATURES

- Minimization of escape phenomenon for certified underwater cable and water level measurement pipe with patented joint guide part design
- Prevention of cable and underwater motor damage by improving twist phenomenon of cable and alignment function of joints.
- Integration of welded parts and assurance of quality stability by developing Auto Welding System
- · Corrosion prevention and life span improvement by using corrosion resistant stainless material
- . Securement of suitability for hygiene safety standards by acquisition of KC certification in the groundwater industry's first and uniquely
- Certification of product performance and technology by acquiring performance certification from Small and Medium Business Administration



AUTOMATIC PRODUCTION PROCESS OF GROUNDWATER PUMPING PIPE (AUTO WELDING SYSTEM)





1. Improvement of product quality and standardization promotion by introducing automation system of production process using automatic welding robot

Produce the best quality products by precision welding

3. Reduced bending due to thermal deformation

4. Maximize stability and efficiency of construction by improving straightness function









Supply of groundwater Groundwater pum pumping pipes Jig mount

Groundwater pumping Pipe First automatic welding between groundwater







Finished Products

Loading welded Finished Goods

Second automatic welding between groundwater pumping pipe and joints

TOTAL CARE SYSTEM

Diagnostic Consulting	Proceeding to license	Installation & Construction	Follow-up service
Total cost perspective Economicanalysis	Application for Groundwater Development Permit	Supply of materials for Groundwater facility	Precision cleaning and water quality inspection
Survey of groundwater effects	5 year extension license application	Installation and construction of pumping system for groundwater	Consumable material supply and After service support

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BUSINESS AREA

HANKYUL realizes customer satisfaction by constructing the best groundwater facilities suitable for purpose of use(agriculture, industry, living, drinking water) through responsible construction

USING AND CONSTRUCTION PROCEDURE FOR GROUNDWATER



Setting the equipment



Installing lift riser



Digging a well



Setting motor pump



installing outside casing



Securing aquifer

Construction industry of using groundwater	Groundwater development, equipment replacement, follow-up service, abandoned well, and hot spring development
Groundwater influence assessment institution	Groundwater influence assessment, extension of permitted period, pumping test
Construction industry of boring grouting	reinforcement constructions for ground and slope failure, water insulation and water stops
Mechanical facility and construction business	New regeneration geothermal heat energy construction, plant construction
Soil and geological engineering services	Ground and geological feature investigation, resistivity survey, in-hole shoot



Construction industry of using groundwater



Groundwater influence assessment institution



Construction industry of boring grouting



Mechanical facility and construction business



Soil and geological engineering services

Set up the best geothermal heat system of new regeneration energy field with environment-friendly, new technology



BUSINESS AREA

GEOTHERMAL HEAT SYSTEM

Geothermal system is divided into underground facilities and ground facilities. The soil heat exchanger, which is underground facilities, repeats the function of transferring energy from ground to heat pump and changes geothermal heat to air conditioning and heating energy. Classified as open type and close type depending on structure and characteristics of the soil heat exchanger. HANKYUL has an opened system technology that is advantageous in the downtown area where the amount of groundwater is abundant or the utilization area is narrow.



- 1 Develop groundwater well of 300~500M deep
- 2. Install lift pumping facilities based on groundwater law
- 3. Use as a heat exchange medium through circulation of groundwater
- 4. Secure 30RT geothermal energy from one place [Can cool and heat about 992 m²]





- 1. Vertical excavation of the stratum at a depth of 150 ~ 200M
- 2. Insert fluid circulation pipe and bury grouting
- **3.** Use as a heat exchange medium through circulation of antifreeze
- 4. Secure 3RT geothermal energy from one place (Can cool and heat about 97 m²)



BUSINESS AREA-PRODUCT

Securing innovative technology is competitiveness of company right away HANKYUL Technics will continue to grow into a global company based on its excellent technology through continuous challenge, investment and R&D reinforcement.





DEVELOPMENT BACKGROUND





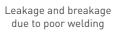


product



customer service







Reduce life due to degradation of welding quality



Break due to underwater cable twisting phenomenon

- No groundwater-only joints[Flange/Socket] fit for specification of groundwater development construction ${ ext{--}}$ Use products with no certified as standardized specification and quality
- ullet No standardized joints -ullet Produce with unprofessional production method
- Use products with not considered for groundwater lift pumping equipment[water level measuring pipe, water level control line, under water cable] --> impossible water level measurement due to twisting phenomenon and occur sheath damage of underwater cable
- Due to the difference in technology level among welding operator, product quality is not uniform, problems occur such as leakage and shortened life span.

CERTIFICATIONS AND PATENTS

CERTIFICATIONS

7 Certifications



Start-Up company from Services of Korea



First Q-mark in Korea







ISO 9001



Certification



Venture Company



for Water Supply



APPLY PATENTS

Apply 7 Patents (6 Registered, 1 Apply)

Patents Registered Number	Patents
10-1626727	Flange Assembly for Tube Well
10-1625806	Socket Assembly for Tube Well
10-1651376	Machine Room System for Protect Upper side of Tube Well & Small Scale Water Supply System
10-1702294	Underground Water Collecting Device that surging efficiency make higher
10-2015-0082481	Connecting Socket for Development of Deep Tubular Well
10-1718503	Welding System of Socket for Tube Well & Pipe
10-1718506	Welding System of Flange for Tube Well & Pipe

APPLY DESIGN/TRADEMARK

Apply 5 Designs, 1 Trademark

Patents Registered Number	Trademark / Design
Trademark 40-1183328	Linelock
30-0807484	Ground Water Exclusive Flange for Connecting Pipe
30-0807485	Ground Water Exclusive Flange for Connecting Pipe
30-0807486	Ground Water Exclusive Socket for Pipe
30-0810744	Socket for Connecting
30-0880482	Flange for Ground Water Tube Well[Overhang Type]

PRIZE GIVING DETAILS



Korea Construction Environment Technology Prize

Environmental friendly Materials Field Minister of Environment Prize

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