

We are challenging to build a better future as an experts group of “Soil, Water & Structure” with environmental friendly technologies.

Service

Soil& Groundwater Contamination

■ATK provides customers the optimum solutions for soil& groundwater contamination in terms of compliance, economy and environment with advanced technologies and our knowledge.



Removal of Contaminate Soil



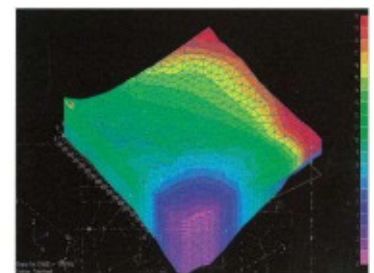
Air-Sparging Remediation

Geotechnical Survey &Design

■ATK provides customers the required geotechnical data to evaluate safety and cost of design with various survey methods, i.e. core drilling, in-situ & laboratory testing and analysis.



Core Drilling



(AC-UNSAF3D)

Groundwater

■ATK have developed the unique devices to identify a water flow under the ground and reveal the mechanism of ground water behavior, especially at the great depth, i.e. a thousand meter below the surface, to know its tightness of rock fracture. The technologies are necessary to design an adequate storage design for radio activated wastes.



Hydraulic Testing Devices

Disaster Prevention

■Combination of ATK's analytical knowledge and advanced monitoring technologies provides the solution of disaster prevention field. We are the experts of identifying root causes of disasters, such as landslide, liquefaction and subsidence, and designing the optimum counter measures.



Design of Slop Stability Measures

Water & Hot Spring Development

■ATK's knowledge accumulated for decades provides the best site-specific plan to develop water & hot spring. From plan to maintenance, ATK always supports customers.



Hot Spring Drilling



Foot Bath Facility

ESCO, Self-Water Supply System

■ “ Self-Water Supply System” promise to reduce your cost of water use by using groundwater instead of tap water. ESCO provide clean& low-cost water as well as security in emergency. Since ATK is responsible for installation, operation & maintenance, customer can reduce water cost without risks.



Water Treatment Plant

Health Diagnosis & Evaluation of Seismic Capacity of Structures

■ Seismic capacity must be evaluated for old structures built on the old seismic resistance code to prevent collapses during earthquake.
■ ATK provides various services, i.e. field survey, structural analysis and design for seismic strengthened.



Design of Vibration Control Braces

Demolition, Environmental Monitoring

■ ATK provide environmental friendly demolition of buildings with vibration & noise monitoring around the site with schedule & safety management system.



Demolition Work in Urban Area

Renewable Energy

■ ATK is aiming for clean& sustainable environment to provide small scale hydropower system, geothermal heat pump system and geothermal power generation projects.



Hydropower Plant Design

Company's Profile

Name	ASANO TAISEIKISO ENGINEERING Co.,Ltd.
President	ICHIRO ENDO
Paid-in Capital	US\$ 4.5MILLION
Incorporated	November 13 th ,1962
Certificate	Issued by Ministry of Land, Infrastructure, Transport and Tourism for Geotechnical & Land survey, Civil engineering Consultants, Measurement Certificate Business and Construction
Address/ TEL, E-mail	8-7, Kitaueno 2Chome, Taito-ku, Tokyo, Japan, 110-0014 +81-0-5246-4172 atk-info@atk-eng.jp
Branchs	Hokaido, Tohoku, Kita-shinetsu, Chubu, Kansai, Chushikoku, Kyushu
Group Company	Oriental Consultants Holdings Ltd. “100% Parent Company” (JASDAQ Listed) Oriental Consultants Co.,Ltd., Oriental Consultants Global Co., Ltd., A-TEC Co.,Ltd., Chuou Sekkei Engineering Co. Ltd., Reserch & Solution Co., Ltd.

Geological & Groundwater Survey

ATK contributes to better society with our knowledge & technologies.

Better understanding of geotechnical conditions is essential for better planning or construction projects in terms of safety, economics and engineering. ATK dedicates our technologies to affluent life and dream all over the world.

Geotechnical & Geological Survey

Service Items

- Boring Works : Soil, Rock, Off-shore and inside tunnel etc.
- Soil & Rock Sampling
- In-situ testing : SH Type Penetration Test, Permeability Test, Lateral Load Test, Plate Load Test, Infiltration Test etc.
- Laboratory Testing : Physical Properties, Mechanical Properties, Chemical Properties, Dynamic Properties of soils & rocks
- Borehole Logging : PS Logging, Electrical Logging, Caliper, Magnetic, etc.
- Physical Exploration : Seismic, Electrical, Ground Rader, Geo-thermo, Magnetic, Geo-tomography, Micro tremor etc.
- Field Reconnaissance : Topography, Geology, Hydrogeology, Landslide, Debris Flow, Rock Falling, Damaged Retaining Wall etc.
- Document Survey : Reference Papers, Categorical Map, Disaster Records, Construction Records etc.



Boring Works, Off-shore, Steep Site



SH-type Penetration Test

Groundwater Survey

ATK's "Technical Institutes" has developed unique equipment in regard to groundwater flow detection and had many patents on them.



Groundwater velocity & direction Probe

The probe identifies velocity & flow direction of groundwater in one borehole. This is applicable for slow flow rate groundwater precisely.



Flow Meter Logging Probe

The probe detects water path developed under the ground with borehole camera observing borehole condition directly.

Technical Institutes,
Uenohara-city,
Yamanashi Prefecture

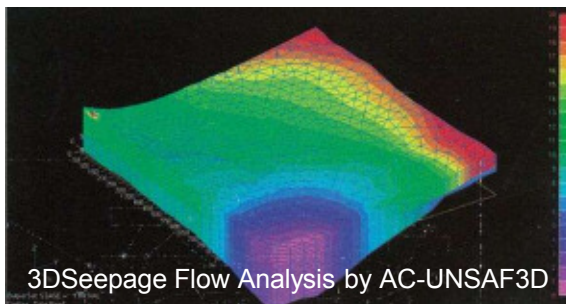


Analysis & Design

ATK provides various analysis & design services with our knowledge & technologies accumulated for 50years.

Field & laboratory data are interpreted for analytical process from professional perspectives, and that gives customers the better understandings of phenomena.

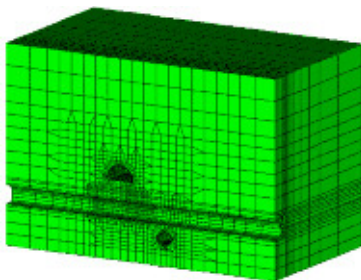
Seepage Flow Analysis



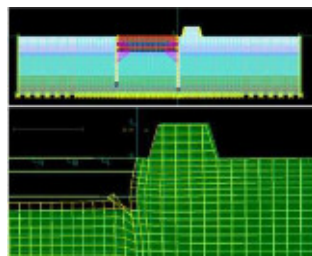
The analysis uses “Finite Element Method” to simulate groundwater flow with rainfall, groundwater level, hydraulic conductivity or other factors. ATK has improved the program to pursue better reproducibility of the field phenomena

Static/Dynamic Analysis

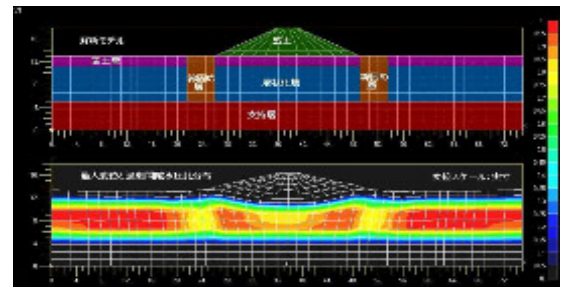
ATK provides Static/Dynamic analysis services with FE Method toward geotechnical media and structures, solving customers problem properly.



Tunnel 3D Elastic Analysis



Elastoplastic Analysis for Adjacent opening

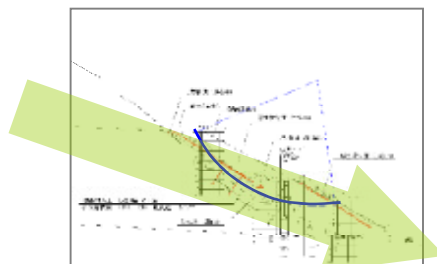


Liquefaction Analysis by FLIP

Slope Protection Design

ATK provides optimum solution for slope stability with proper geological survey and interpretation for design.

Before prevention



Detail subsurface geological condition is identified with SH-type penetration test to design reasonable countermeasure, reducing construction cost.



After prevention

Water/ Hot Spring Development

Success Rate of water development is 95%!

ATK provides water developing services for drinking, industrial use and emergency well. Planning, drilling and maintenance are included in the services, supporting to add high value to existing facility, to vitalize region & community.

Water Drilling



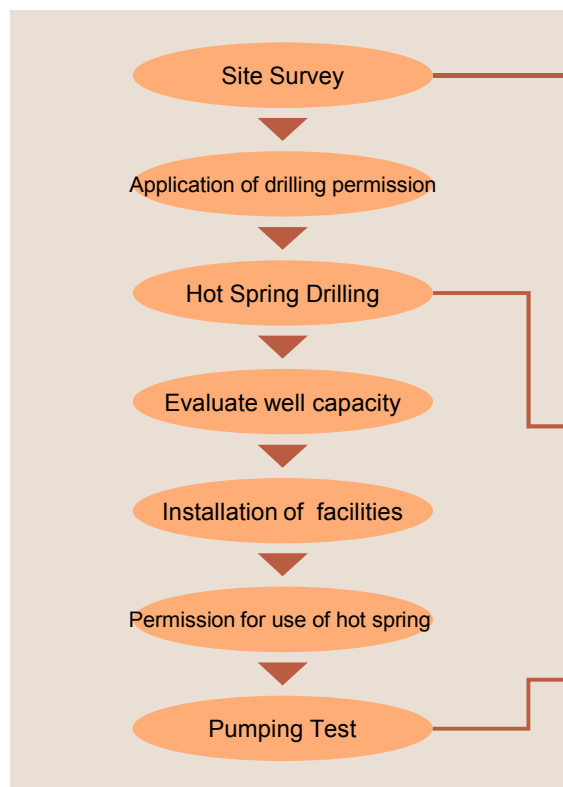
ATK has its unique & profound knowledge on well drilling & water treatment through over 80 years experiences. Success rate of water development for our projects, over ten thousand drillings, is **95%**!

Service Items

- Well Drilling
- Facility installation and piping for water well
- Self Water Supply System, ESCO
- Submersible Camera Observation for maintenance
- Well Performance Improvement Service
- "ABC" Screen Sales/Supply
- "Sand Separator" Sales/Supply

Hot Spring Development

Procedure of Hot Spring Development



■ Site Survey

- Hydro Geological Survey
- Topographical Analysis
- Electrical Exploration
- CSAMT Exploration



CSAMT survey devices



■ Hot Spring Drilling

Optimum drilling method due to site condition will be applied based on our knowledge and experiences.



■ Installation of Pumping Facilities

Optimum specification of the facilities will be chosen due to the site condition.



Clean/ Renewable Energy

Solution for Our Future Environment & Society

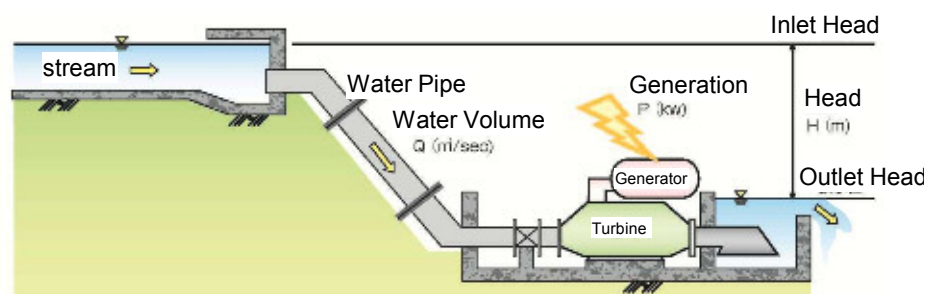
ATK is aiming for “Clean, Efficient & Renewable Energy” providing small scale hydropower system, geothermal heat pump system and geothermal power generation projects.

Solar power, Wind power, Geothermal, Hydropower and Biomass are called renewable energies which are sustainable in terms of their resources. Less emission of carbon dioxide is also one of the benefits for those energies.

Small Scale Hydropower

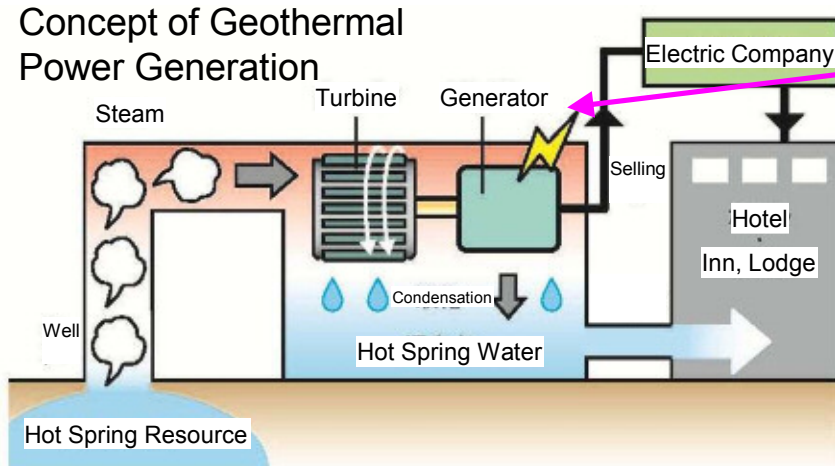


Small scale hydropower generates electricity in small river or canal with steady stream and small water head. The power is not beneficial only for economical profit, but also for securing power supply, reduction of green house gases and vitalizing region & community.



Geothermal Power

Concept of Geothermal Power Generation



1.2m width is enough to install turbine & generator, generating 100kW/h of electricity with 20cm dia. Turbine. Vacuum effect by condensation improve efficiency of the turbine.

This steam direct method needs only small investment, i.e. survey & facilities, unlike conventional geothermal plants.

ATK can provide both steam direct method and binary method due to conditions. Condensed hot water can also be used for various use.

Self-Water Supply System (ESCO)

“Self-Water Supply System” provides reduction the corporative cost.

“Self-Water Supply System” dose not only provide safe water by an advanced treatment technology but reducing the corporative cost.

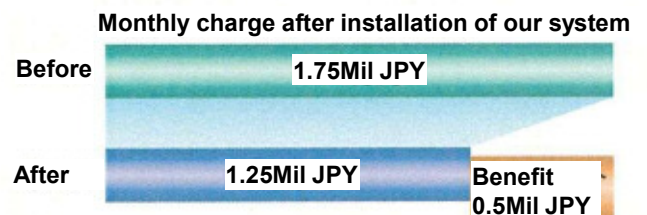
“ESCO System” provides benefits without any initial cost of customers.

Benefit of “Self-Water Supply System”

- Secure water resources in case of emergency
- Cost reduction of water charge
- Three kinds of warranties and insurance system
- 24hr-7days monitoring system
- Taste water with an advanced technology of filtering treatment
- No initial cost, only benefits

■ Sample Monthly Charge 1.75Mil JPY/month
Consumed Volume 5,000m³/month
Unit Rate 350JPY/m³

Unit Rate with ESCO:250JPY/m³

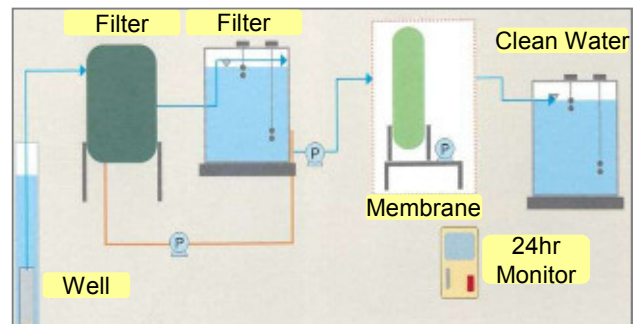


Customers can obtain a lot of benefits in case the current water charge exceeds 200 JPY per cubic meter, or 60,000 JPY per month

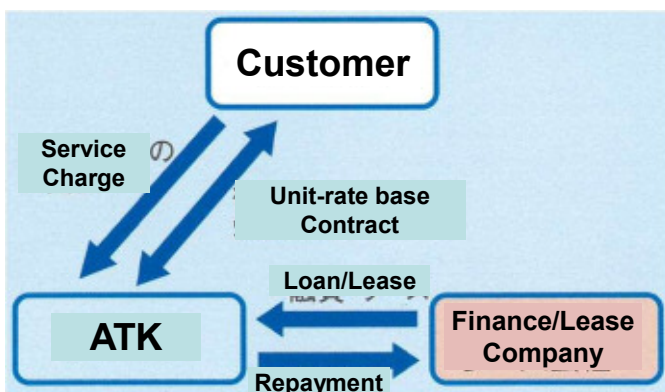
Water Treatment Technology



Water quality would meet the required quality with our advanced membrane technology. Subsidence, water shortage by draught by extracting water is out of concern because of taking groundwater from great depth.



ESCO System



“ESCO” stands for “Energy Service Company”, providing comprehensive services of technologies and facilities for energy savings.

Stable benefits will be provided to customers without taking various risks with our comprehensive services, i.e. well- drilling, installation and maintenance. You only need space for plan installation!

※Purchasing the system or flat-rate system is acceptable.



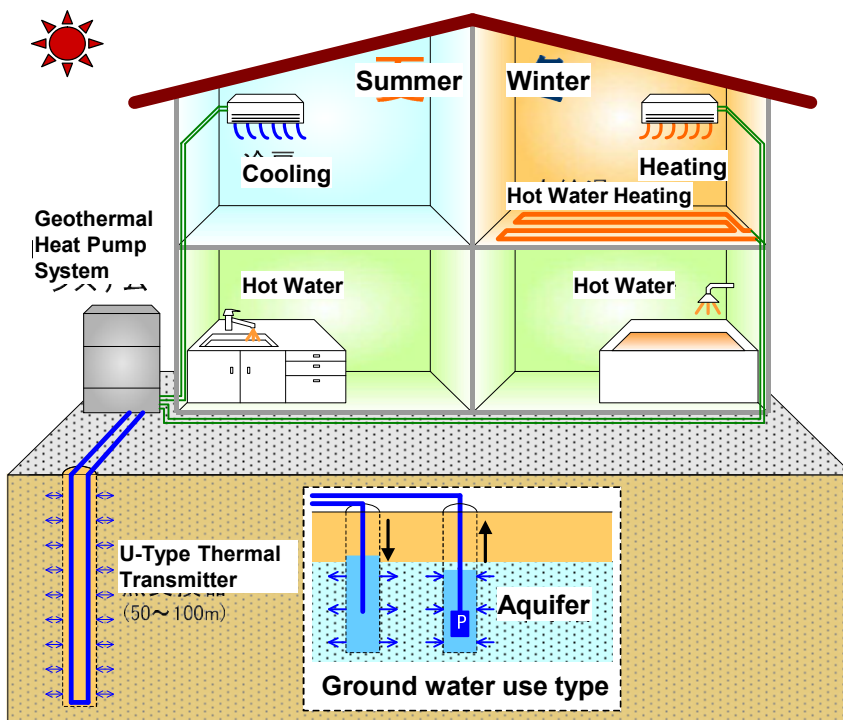
Use of Ground & Groundwater's Heat

Solution Services with effective & Practical Use of Potential Thermal resources under Ground

Reducing cost of Air- Conditioner with “Heat Pump System” based on the geo engineering technologies accumulated.

ATK provides answers to environmental challenges, such as “Heat Island Phenomena”.

Geothermal Heat Pump



■ Customize the System to the Best

- The Best System designed to meet customer's demands in terms of cost and environment

■ Assistant Services for administration

- Assistance for subsidy application

■ Geotechnical Survey/Design

- Customize the best system in accordance with Geotechnical condition known through professional survey

■ Maintenance, User Support

- Evaluation and Maintenance of the system after installation

Geothermal Heat Pump provides many benefits to customers in terms of electric cost and environmental policy through the use of stable, rather than atmosphere, geothermal heat energy as source for air-conditioning system.

Support for Eco-Campus Projects

ATK supports Eco-Campus Projects thorough consulting and provision of Geothermal Heat Pump System, Planting Roof System and Solar Panel System

