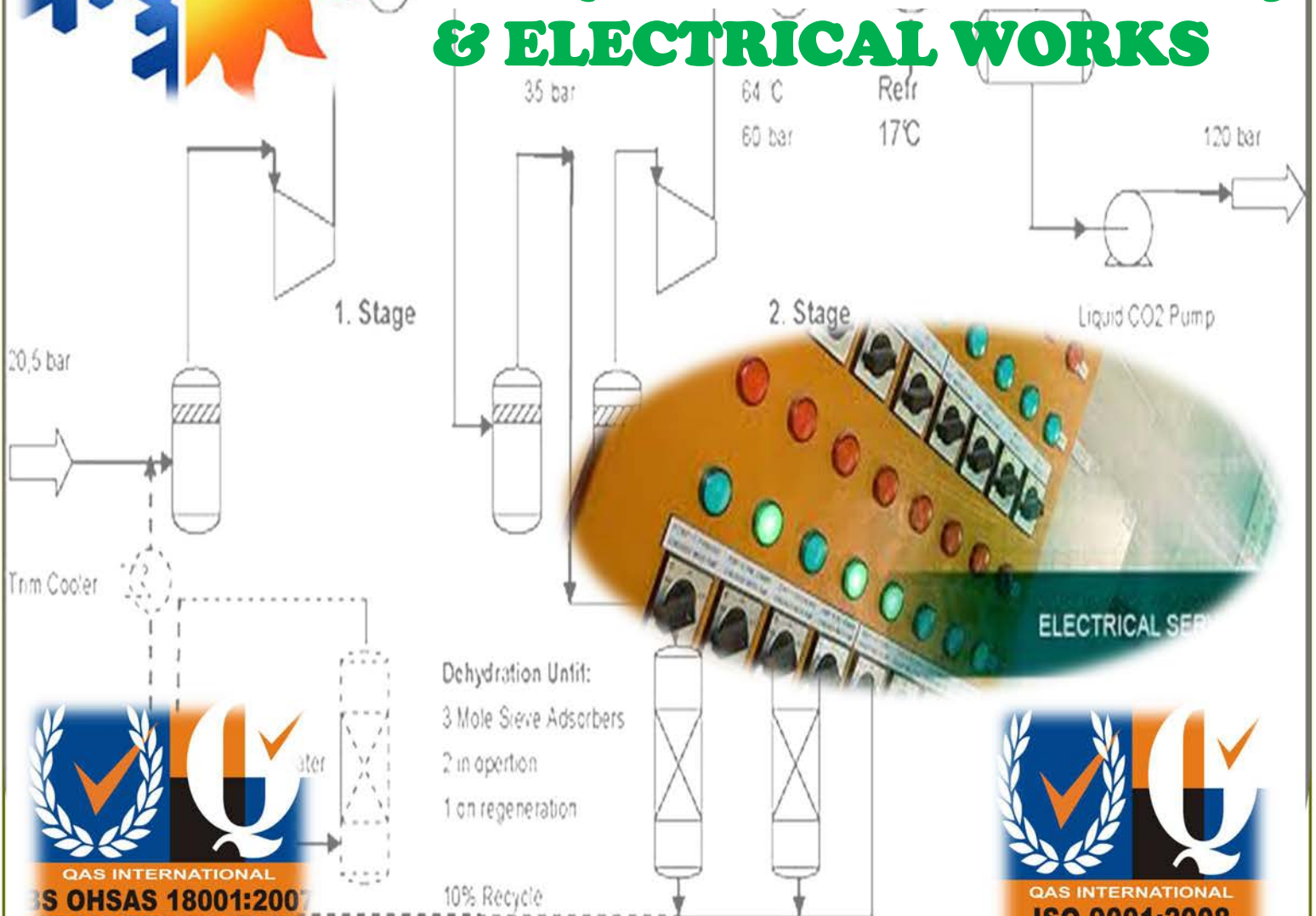


Outsource Technique Limited

COMPANY PROFILE



HVAC (AIR CONDITIONING) & ELECTRICAL WORKS



Outsource Technique limited

P.O. Box 12702-00100

Nairobi, Kenya

Business Type: HVAC and Electrical Contractors (Supplies, Installations and Maintenance Works)

Telephone No. : +254 (0)20 4349245/(0)20 2461136/7

Fax No: +254 (0)20 4349249

Physical location: Riverside Lane, Off Riverside Drive, Nairobi Kenya

E-mail: info@otl.co.ke

Web site: www.otl.co.ke

Statutory Registrations

VAT No. : 0162287x

Pin No. : P051189364M

ERC: Class A1 Reg. no. A1001118

CAK: License No. TL/TEC/00223 /01

NCA 2. : Reg. No 6659/E/0216 -
Electrical Works

NCA 2. : Reg. No 6659/M/0216 -
Mechanical/Air Conditioning Works

Others

ISO 9001:2008 Registered Firm

BS OHSAS 18001:2007

Memberships

UN GLOBAL COMPACT NETWORK KENYA

UNITED BUSINESS ASSOCIATION

KENYA FEDERATION OF MASTER BUILDERS



Our Mission is..

“To provide a world class differentiated service, focused on adding value to customers in a professional and dynamic manner.”



Our Vision is..

Obtain a leader position in the engineering industry, by identifying and satisfying the requirements of all stakeholders.

Our Values..

- Commitment to excellence, quality and innovation
- Development of long-term relationships with customers and employees
- .Conduct business in a responsible and sustainable way
- Value and respect the contribution of team members
- Encourage collaboration in every action
- Maintain company principles with strong emphasis on team effort.

We achieve this by:

Innovation and modern technology
Making quality and excellence as hallmarks of the way
we do business Attracting and motivating the best team
A strong emphasis on safety



Company History

Outsource Technique Limited (OTL) is a one stop shop for quality service in the field of Air-conditioning, Electrical and Telecommunication contracting. established in the year 2006 .The main goal of the company is to provide our clients with high quality installations and products, consistently bearing in mind the client's budget and requirements. We provide a full in house engineering and contracting service for all our customers and all work is carried out by our qualified and experienced staff, thereby ensuring customer peace of mind.

We pride ourselves on our flexibility, professionalism, experience and safety record, gained over the years we have been in business

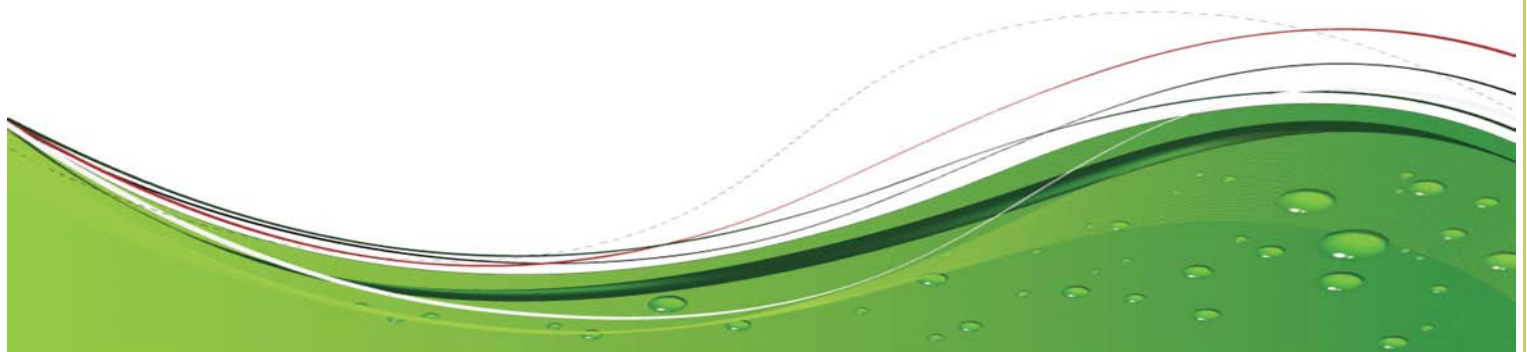
Professional Management Systems

Being fully aware of our corporate responsibilities and in order to ensure the highest level of professionalism in the day to day running of the company, OTL has a number of Management Systems in place. They include a Quality Management System, Occupational Health and Safety Programme, Safety Management System, and Environmental Protection Systems.

Safety Culture and Safety Systems

Safety is of the highest importance to our company as we not only believe that Health and Safety of our employees is of the highest importance it is our commitment to ensure that after work every employee goes home to their family and friends in same health that they came to work.

OTL is committed in the development of safety systems, hazard identification and risk management. OTL recognizes the importance of Occupational Health and Safety systems and undertake job safety analysis and hazard identification as a mandatory step prior to undertaking any work. Our staffs are experienced in establishing site safety policies and site inductions throughout various industries. OTL employees are trained to be able to participate in Job Safety and conduct Hazard Identification checks. OTL provides a commitment to setting up site safety policies as an integral step into the safe completion of the project. These policies will be communicated to all team members and sub-contractors for sign off to ensure a safe and successful completion of all work.





Due to the inherent risks involved in the electrical industry we are committed in continuous training of all OTL employees from the CEO to the field employees and office staff in First Aid. To identify the risks and develop risk management strategies OTL will use one of our experienced safety advisors to work with the project manager and the engineers during the pre-construction period. Our joint experiences have shown that whilst developing the work methodology is essential the establishment of safe work practices are an important consideration. This then leads to the development of risk management strategies that provides the basis for the safety culture onsite and drives all of the JSA's (Job safety Analysis) and hazard identification checks during the construction period.

OTL is a leader in the enforcement of a drug and alcohol policy. The policy is enforced to ensure no employees are impaired whilst at work.

Employment Criteria

All OTL employees undergo a rigorous pre-employment background check to ensure only the most trustworthy and capable personnel are employed, this ensures our clients have competent staff attending there site. These background checks may include intensive reference and industry checking, qualification checking and a police and security check.

Interaction with Other Contractors

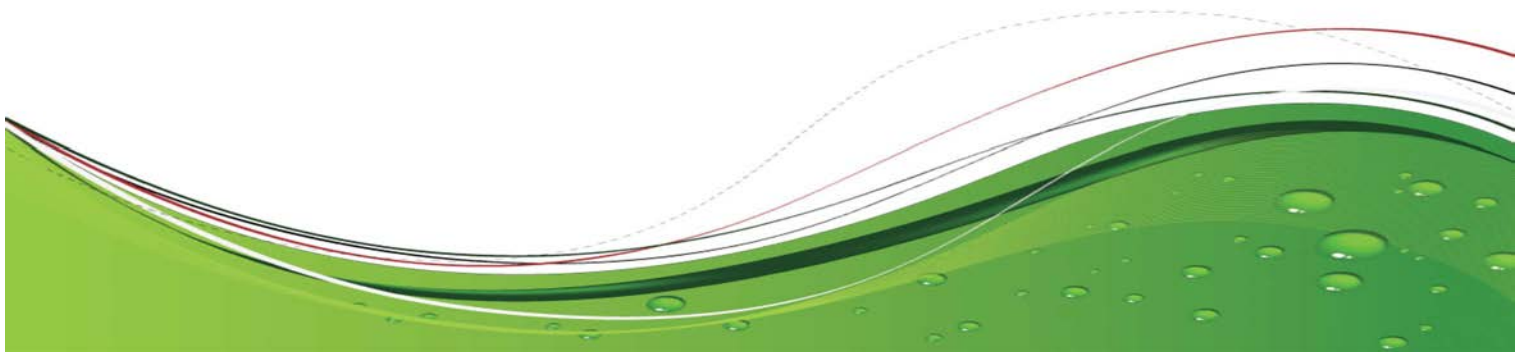
OTL has successfully completed many projects with detailed and complex interfaces with other contractors not only on the same site but also carrying out similar works on the same project. Regularly we may be required to work side by side with other contractors in major shut down works and on various projects.

Quality

Outsource Technique Ltd is committed to developing and maintaining our **ISO 9001:2008** registered Quality Management System. The consistent application of the quality system will be a demonstration of the company's commitment to compliance.

The main objectives of the quality system are to:

- Provide products and service matching business and customer needs.
- Develop and maintain close liaison and good working relationships with clients.
- Promote an environment of continuous improvement in all aspects of the company's operations



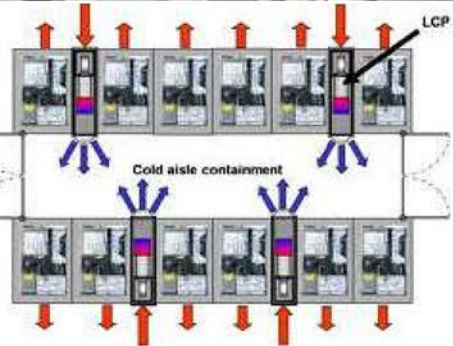


At OTL we believe the true test of a HVAC company is its capability to self perform all aspects of HVAC work. This self performing skill set requires a significant organizational investment to create a team of skilled professionals both in the field and office. we provide this comprehensive self performing skill set that adds significant value to our clients.

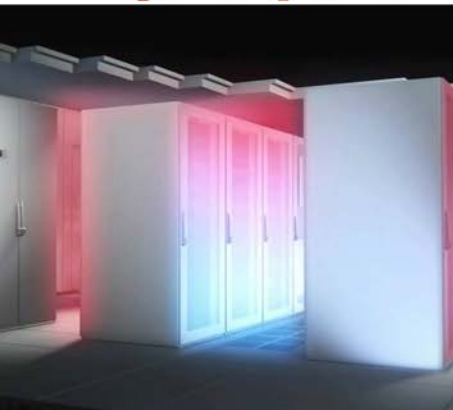
Existing buildings air conditioning systems



- HVAC Maintenance and repair
- Retrofits and replacements
- Automate temperature controls
- Commissioning
- On-going system monitoring
- Full service and maintenance contracts



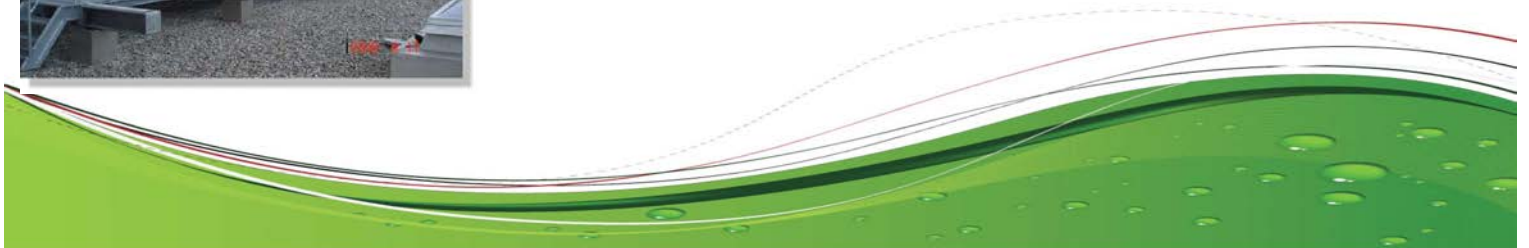
- Indoor air quality solutions
- Cooling tower testing, cleaning, decontamination and refurbishing
- Mechanical and chemical tube and coil cleaning
- DX & Chilled Water Piping/Welding
- Professional engineering services



Data Centre Cooling

At OTL we specialise in cooling solution applications for varied business and industry sectors. Apart from supplying the cooling equipment, our **data centre cooling** engineers can install the complete package, including pumps, tanks, filtration and pipe work .

Our main services include **air conditioning**, water chillers, **cooling towers**, **free cooling**, **server cooling** and much more



AIR-CONDITIONING

OTL has extensive experience and knowledge of all types of air conditioning systems, from Comfort single and multiple split systems to ducted air handlers, VRF/VRV, Chiller Systems installations. Vast skills and experience has been concentrated on the precision cooling systems for specialised and unique installations such as Telecommunication Environments, Data Centres, Server Rooms, etc.

We partner with several OEMs in similar field such as Carrier, Multi Denco, Rittal, Canovate, Samsung, LG, Daikin e.t.c. to provide our clients with the specific requirements for their particular needs. Our team of in-house air conditioning experts provide key project solutions to enable the fast, effective and reliable installation of any design requirement. From the initial concept, whether provided by the client or through site surveys, our design team formulates the very best solution for the required application. Our specialist installation teams delivers a project to the satisfaction of the customer fully completed on time and within budget.

OUR DATA CENTRE COOLING SOLUTIONS

1. Cold & Hot Aisle Containment Systems + In-Row Coolers



1. The Cold & Hot Aisle Containment System coupled with In-Row Cooler system ensures ultimate cooling capacity enabling highest levels of energy efficiency for your Data Centres

2. It is a highly modular, scalable, expandable, and retrofitable system

3. It is highly recommended for optimum cooling solutions for big and medium scale Data Centers coupled with CRAC units to increase efficiency of cooling system

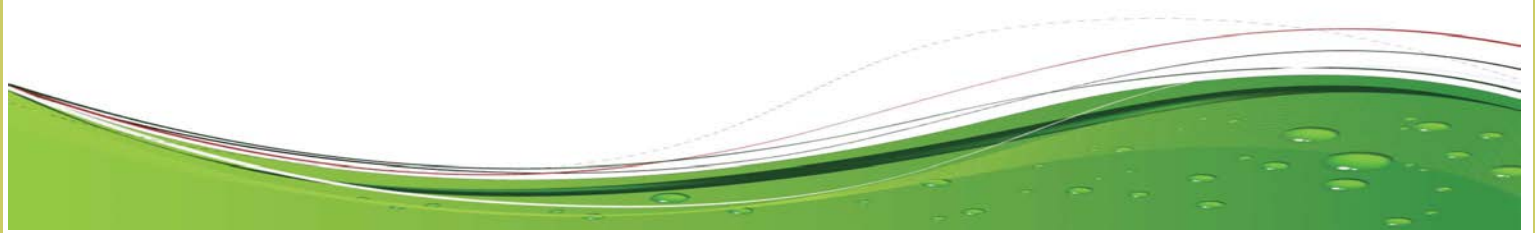
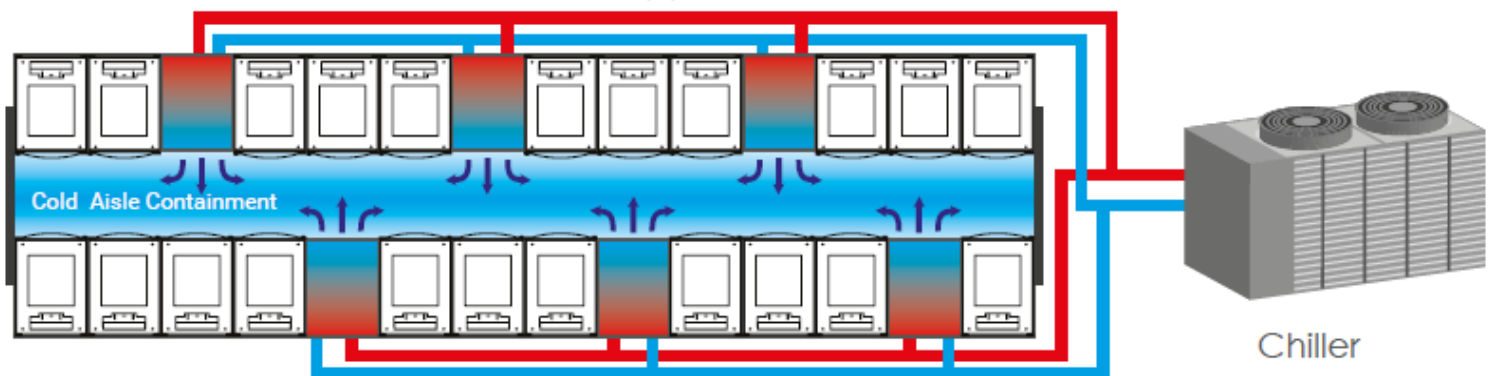
4. It provides moderate efficiency, energy saving and free cooling capabilities

5. It is more efficient than traditional central CRAC cooling technologies up to 50% energy savings

6. The solutions come in both in Chilled Water Based Cooling and DX (Refrigerant R 410A) Based Cooling

7. A chilled-water based technology bringing cold air right to the server racks where heat dissipation is maximum, eliminating raised floor requirement in contrast to CRAC cooling systems.

OTL'S Cold & Hot Aisle Containment Application



OUR DATA CENTRE COOLING SOLUTIONS

2. Mini Data Center Server Rack with Integrated Side Cooler DX or Water Based

- It comes with Integrated monitoring system
- Install Data Center where you want and need it
- Rapid deployment in 4-6 weeks from plan to start-up
- Low total cost of ownership
- Up to 50% less space required
- No raised floor required
- Full turnkey Data Center including cooling, structured cabling, monitoring, Power management and protection
- Scalable from 1 rack to hundreds of racks
- Standalone Data Center
- Individual rack cooling up to 30 kW
- High level security within rack fire protection and monitoring systems
- Advanced power management with IP PDU and UPS systems
- Internal redundancy achieved by using 3x fans.
- External redundancy achieved by using N+1 side coolers
- Structured cabling solutions with overhead cable channels
- Access Control options with either keypad, RFID card reader or fingerprint reader to open the cabinet doors

Applications: High density servers exceeding 10 Kw

- | | | |
|----------------------------|---------------------|------------------------------|
| Mobile Containers/Shelters | Branch Offices | Disaster recovery operations |
| Small clinics/hospitals | Warehouses | Remote installations |
| Temporary installation | Mobile applications | |



Chiller Unit

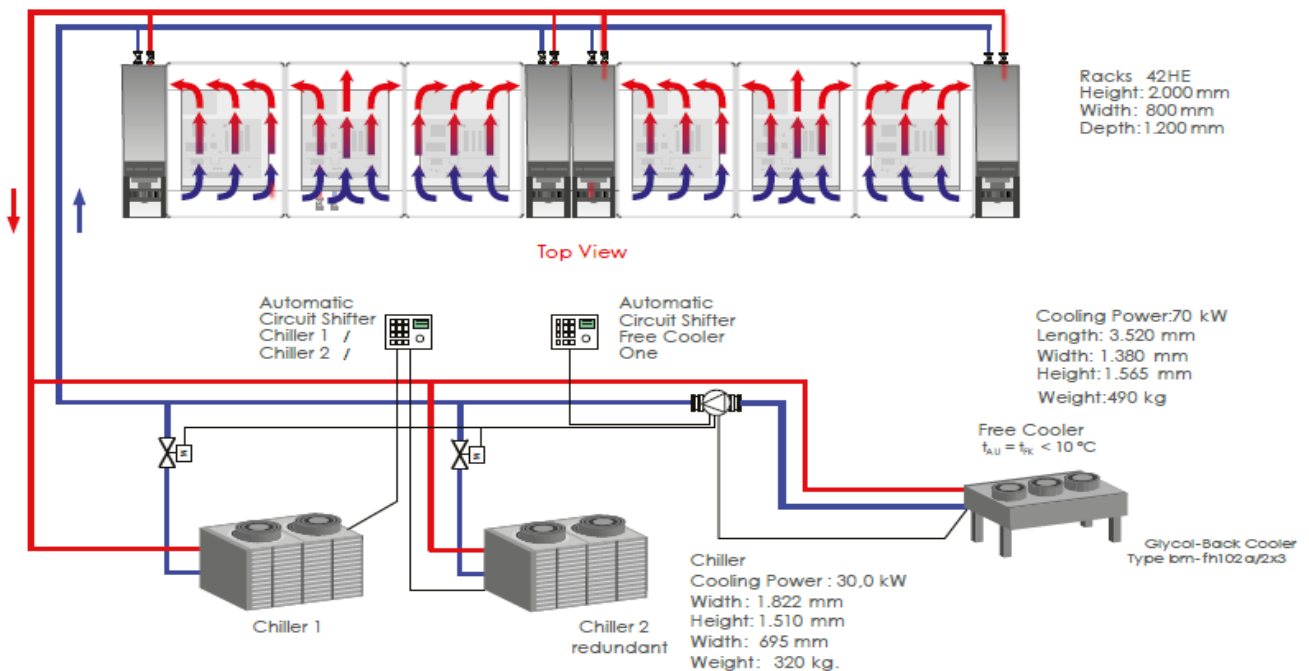
OR



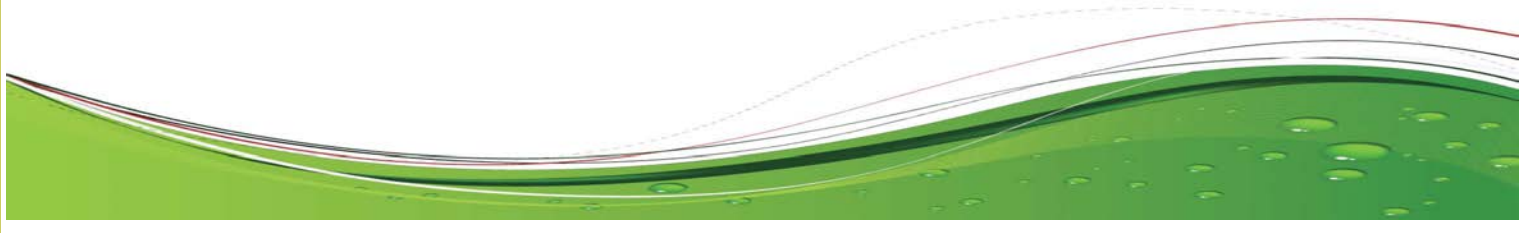
Outdoor DX Unit

Mini Data Center Configuration

A Reference Side Cooler Application Layout



A Snapshot from Side Cooler Control & Monitoring System



OUR DATA CENTRE COOLING SOLUTIONS

3. Micro Data Center Solutions

- Micro Plug & Play Data Center including cooling, fire suppression, monitoring, power management and protection
- Stand-alone Data Center
- Eliminates raised floor and external cooling equipment requirements
- Individual rack cooling with from 2 kW up to 4 kW
- High level security with in rack fire protection and monitoring systems
- Advanced power management enabled by IP PDU and UPS systems
- Install Data Center where you want and need it
- Rapid deployment in 4-6 weeks from plan to start-up
- Low total cost of ownership
- Up to 50% space savings
- EMS (Environmental Monitoring System)
- DCIM option
- IP PDU
- UPS
- Fire Detection/Extinguisher System (2U)
- Protection Grade: IP54

Applications

- Small and Medium Size Enterprises (SME's)
- Branch offices of financial institutions (Banks, Insurance Companies)
- Instant data center
- Branch offices of government institutions and utilities (Police, Army, Schools, Electricity, Water companies etc)
- Companies who want to connect the cloud instead of investing in a big data center
- Exchange offices & Hubs of Telco's and GSM companies
- Remote locations where there is no available dedicated IT personnel
- Manufacturing companies for automation control and IT services
- Disaster recovery Sites

Benefits of Our Micro Data Center Solution

Accelerated Deployment: Deploy turnkey rack-level infrastructure in max. 1 hour time.

Lower CAPEX: Significantly lower initial investment and construction cost compared to classical Data Centers.

Increased Energy Efficiency: Dramatically lower your cooling and power OPEX costs

Customizable: Can be customized easily according to your cooling and power requirements.

Significant Energy Savings: You don't need to cool the entire IT room, just cool the Micro DC. Green IT.

Modular: Additional Micro DC units can be added according to the growth of your IT requirements. Pay-As-You-Grow!

Portable: Micro DC can be installed on wheels making it easy for it to be moved to different locations.

Security: Keeps mission critical data in a secure environment, increases data and hardware protection and guarantees 24/7 business continuity via integrated fire suppression and EMS systems

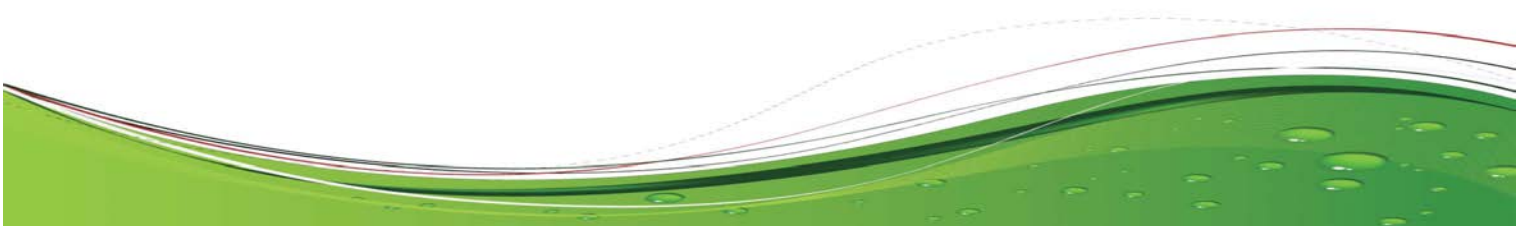
Facility Maintenance: The ability to minimize IT infrastructure maintenance to lower overall Data Center maintenance labor costs.

Limited Operation Risk: The complete system is coming as factory tested and ready to install. Plug and Play.

Standardization: Same standard solution in all your branch offices limits risks of human failure and lowers operating & maintenance costs.

No need for skilled IT personnel: You don't need to maintain IT personal in every location, hundreds of Micro DC's can be controlled remotely from your Head Quarters.

Affordable by Small Businesses: You don't need to worry for a complex DC design and installation work.



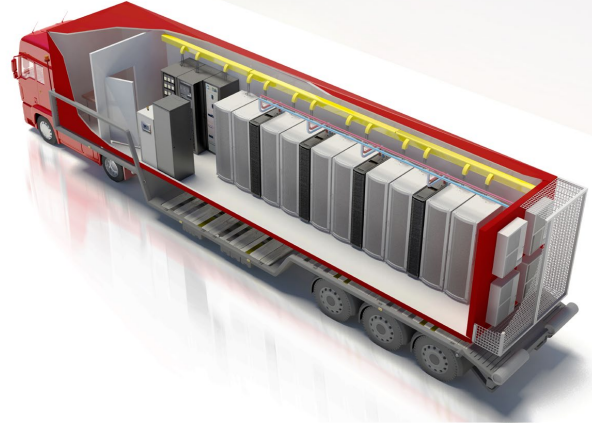
OUR DATA CENTRE COOLING SOLUTIONS

4. Container & Mobile Data Center Solutions

The mobile container provides a protected housing for the server cabinets, power distribution system, cooling system, monitoring system, fire control system, and lighting system.

The container performs the following functions:

- Houses the container components which can be interconnected inside in a centralized manner.
- Provides a protected environment to protect the container from external impact

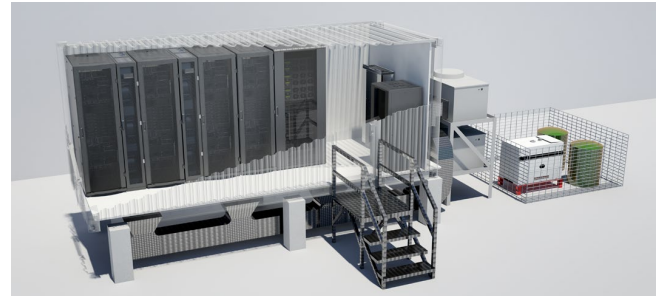


Technical Specifications:

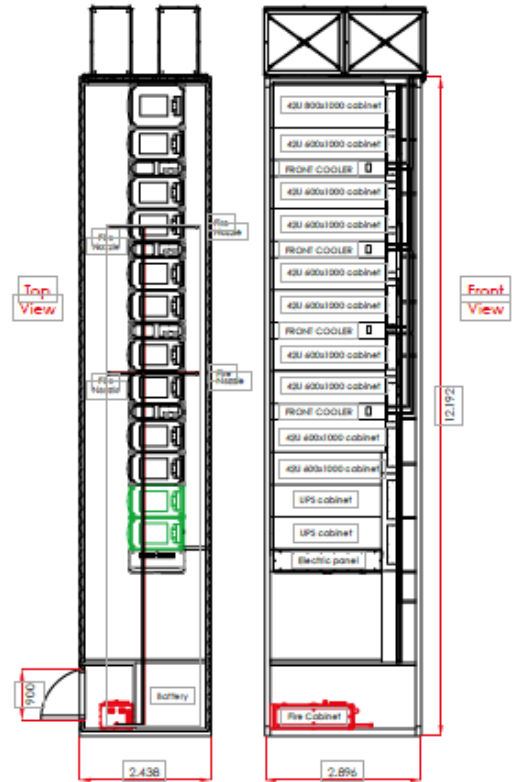
1. Container / Shelter size: 12.192 mm x 2.438mm x 2.896mm (high cube : 40 ft)
2. Outer / Inner sheet: Pre-painted Galvanized GI Sheet
3. Sheet Thickness: 0.6mm
4. Rockwool insulation thickness: 50mm overall
5. Floor Panel: 100 mm thickness (19mm plywood with 80 mm rockwool insulation and 0.6 mm sheet thickness)
6. Primary roof
7. 1.2 m Condenser Cage (Optional)
8. Cable Tray
9. Door lock system

Container Dimensions & Components:

- 12.192 x 2.438 x 2.896mm (LxDxH)
- Server Racks
- DX Based In-Row Coolers
- Outside Compressor & Condenser Units
- Modular UPS Systems
- Battery Racks
- Modular Power Distribution Panels
- Fire Suppression Units
- Cable ducting
- Piping
- Protection Grill for Outdoor Units
- Admin Room



Internal Layout of Container



OUR DATA CENTRE COOLING SOLUTIONS

5. Chiller Systems (Air-Cooled & Water Cooled Chillers)

Intelligent Solutions for All Applications

Our chiller product range expands from data center & IT room to industrial applications.

Green & Environmental Friendly Solutions

Refrigerant Options: R410A, R407C, R134A

All our chillers use environmental friendly refrigerants that do not damage the ozone layer. In addition, they have lower global warming potential than conventional refrigerants.

Suitable for both Indoor and Outdoor Installations

Our chiller units are designed for both indoor and outdoor installation. The electronic components within the electrical cabinet are protected in accordance with protection type IP54.

Low Noise

Our air cooled chillers are also available in a low-noise version. This version works particularly quiet due to sound insulation of the compressors. Depending on operating conditions, the noise level of the chiller can be reduced by up to 10 dB.

Compressor

Scroll or screw type of compressors are used in our products depending on capacity requirements. High efficient and eco friendly refrigerants are used in our products. Efficiency of compressors are among the best in the industry.

Tandem — Trio Installation

Depending on the size of the chiller, the compressors are installed in tandem or trio combinations.

Tandem models (2 + 2 compressors)

Trio models (3 + 3 compressors)

Dual refrigerant circuit in all types depending on client requirements.

V Geometry In Condensers

V geometry is applied in free cooling type chillers to reduce air disturbances and to balance both refrigerant circuits.

Energy Saving with Ec-Fans

The high efficiency EC Fan reduces both noise levels as well as energy consumption, and assures a variable air flow at part loads. Operational costs are reduced by -15% if compared to traditional EC-Fans, and 25% if compared to plug fans.

The use of EC technology even on the remote condenser fans assures a further average reduction of noise levels by 10%, together with a strong energy consumption reduction by 45% when compared with traditional condensers with AC technology.

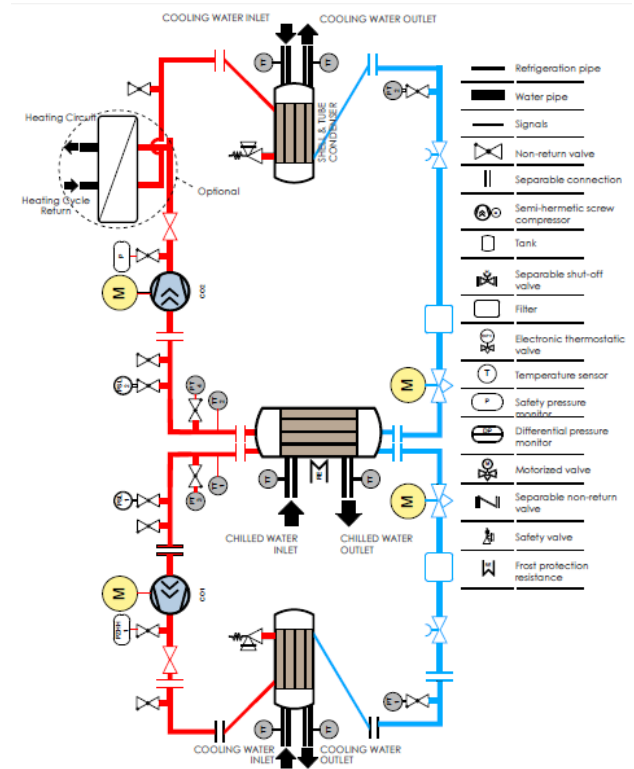
Maximum Energy Efficiency with Free Cooling Option

The Free Cooling Chillers use the outside temperature, which offers the greatest potential savings of all, especially in cold and temperate climates.

When outside temperatures are low, Free Cooling can completely replace energy-intensive compressor cooling.

Energy Efficient Cooling

Our free cooling chillers enable customers to make significant savings in energy consumption. Thus you can reduce your PUE levels dramatically and achieve your ultimate target for a real green datacenter. The ROI time of the free cooling chiller unit is maximum 2 years compared to standard chiller units.



Electronic Expansion Valve

Evaporation of the refrigerant is precisely controlled by finely-regulated expansion valves. Controller to optimize heat exchange between the refrigerant and chilled water in the evaporator.

Evaporator

Brazed Plate Heat Exchanger

Exchanger with brazed plates comprises stainless steel plates and copper solder joints. Externally, it is fully jacketed with special thermal insulation.

There is a dual refrigerant circuit and a single water circuit, arranged in accordance with the counterflow principle. This means that it is possible to maximize the heat exchange between the refrigerant and chilled water. Integrated differential pressure monitors and anti-frost sensors protect the evaporator from the possibility of freezing.

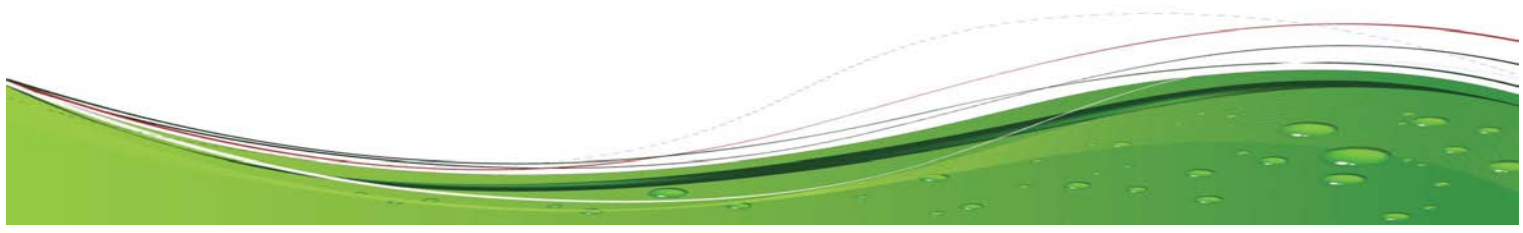
Brazed Plate Heat Exchanger

The shell and tube evaporator comprises copper pipes and a steel outer jacket. The evaporator comprises two completely separate refrigerant circuits and a chilled water circuit that are arranged in accordance with the counterflow principle.

Work Experience

IBM Africa

In the year 2013 Outsource Technique ltd was contracted to supply install and commission cooling system(chiller),data center racks including accessories(PDUs,busbars),stabilizer,power boards the IBM research center datacenter(located in CUEA,Karen)

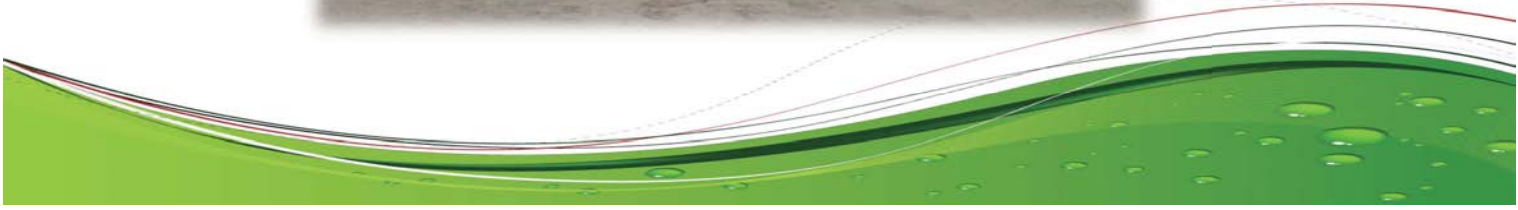


Safaricom Thika Data Center

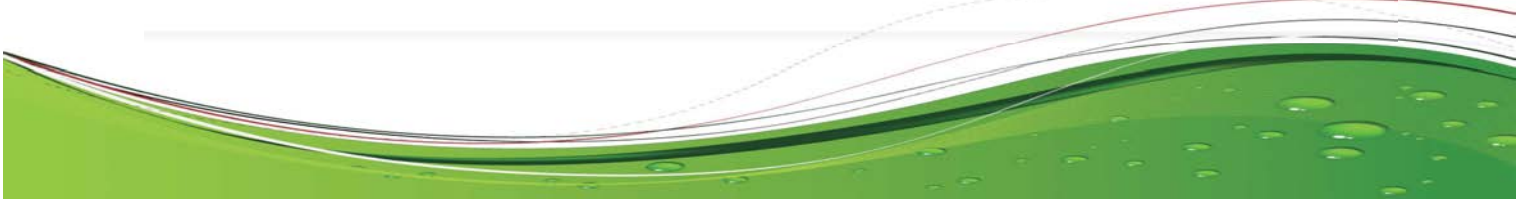
In 2015 Outsource Technique ltd supplied,installed and commissioned two chiller systems at the Safaricom Thika Datacenter



Safaricom Thika Data Center

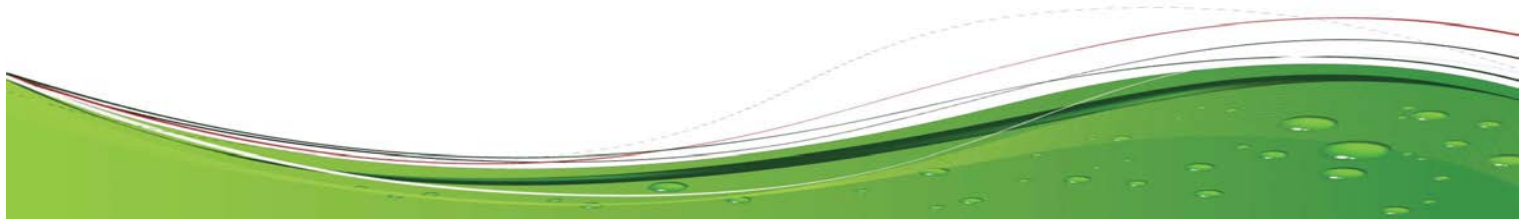


Safaricom Thika Data Center

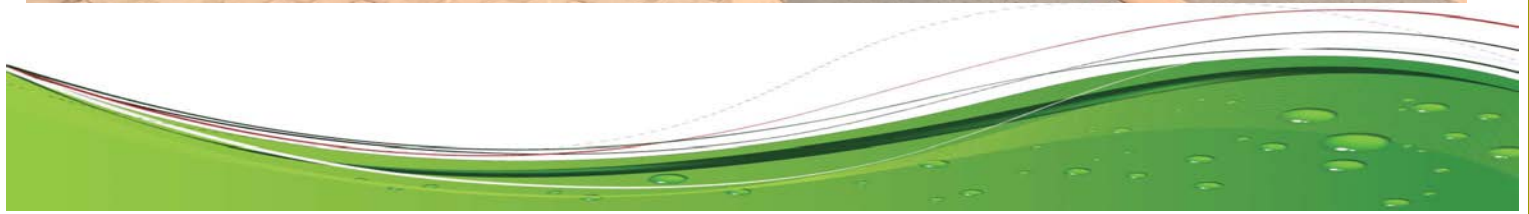


Safaricom Thika Data Center Phase Two

In 2018 Outsource Technique Ltd was again awarded the tender to supply, install and commission the second phase of the project.



Safaricom Thika Data Center



Work Experience

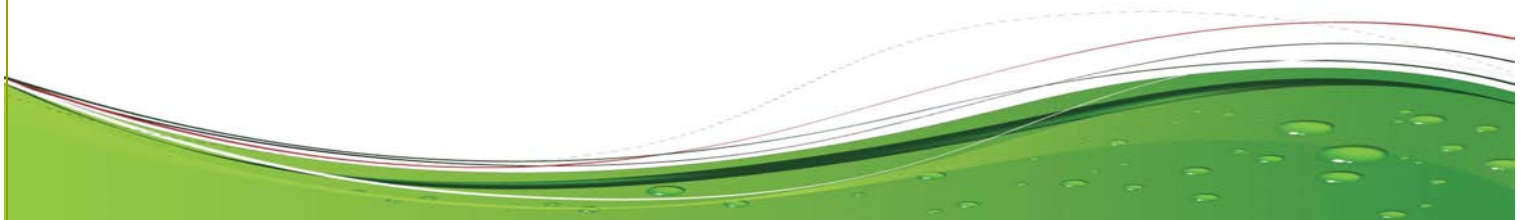
Safaricom Limited

Since 2008, we have been offering maintenance services for Safaricom mobile switch rooms (MSR), media gateways/soft switch stations (MGW/MSS) and major Hub sites power and plant services. Outsource Technique Ltd was contracted to carry out maintenance services to all Safaricom mobile switch rooms (MSR) countrywide namely

1. Safaricom care center MSR's 1 & 2-Nairobi
2. Safaricom HQ 1 datacenter -Nairobi
3. Queen of Apostles (QOA) MSR-Nairobi
4. Thika MSR-Thika
5. KBC Nakuru MSR-Nakuru
6. Kiboswa MSR- Kisumu
7. Government Chemist MSR- Mombasa
8. Nairobi Gospel -Nairobi
9. Avenue Park- Nairobi

Scope of work includes

1. Planned/Emergency maintenance of
 - ◆ Safaricom owned transformers, PFC, stabilizers
 - ◆ Power supply checks
 - ◆ switchboards
 - ◆ Lightning protection & earth circuits
 - ◆ Load, control and functional tests
 - ◆ Cooling/Air conditioning
 - ◆ Generators
 - ◆ Electrical riser ducts
 - ◆ Fire alarm & suppression systems



Delta Centre Nairobi - World Bank Offices

Since 2017 to date, we have been offering maintenance all HVAC and Power Systems.

Our scope includes

- Daily Roving and Inspections of the site to detect faults
- Daily support of all installed equipment both HVAC systems and Power Equipment
- Daily reports of Events
- Quarterly PMs of All installed HVAC systems e.g.

Chiller Plants

Cooling Towers

Split Units

High Wall Units

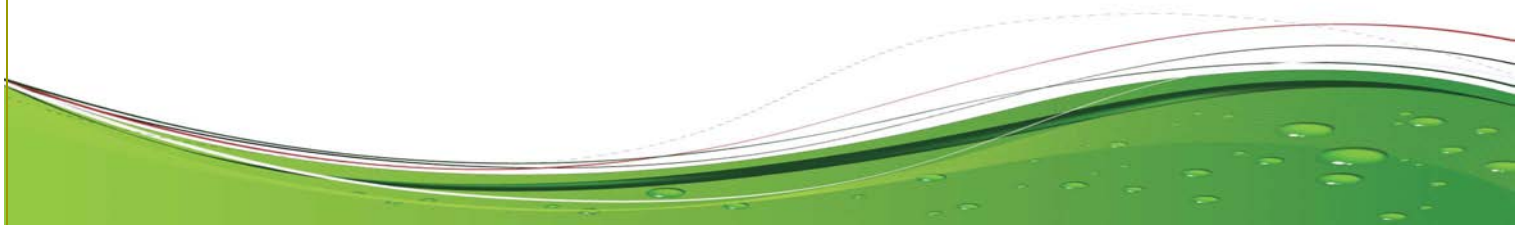
Air Curtains

Cassette Units












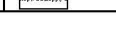
Fan Coil Units










Ducted Units

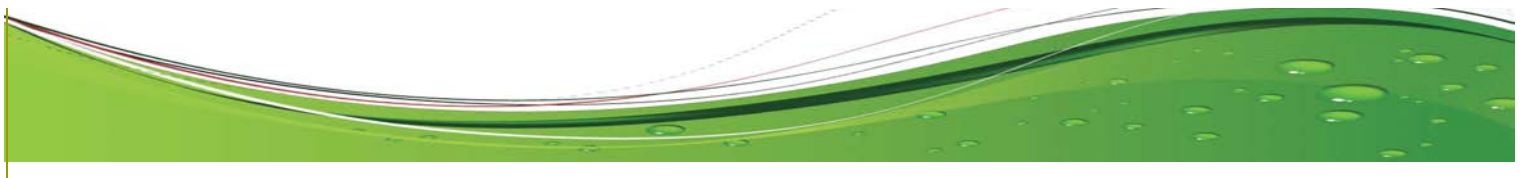
VRF Systems



FEW OF THE PAST AND ONGOING PROJECTS / CONTRACTS

#	Client Name	Name, Location & Type of Project	Name and or Contacts of Client Rep / Consultants	Contract Value	Contract Period		Project Completion Status	Evidence of Contact Existence
					Start	End		
1	Safaricom	<ul style="list-style-type: none"> Maintenance Contract for ALL MSRs and Data Centres country wide – All Electrical and Air-Conditioning equipment. Maintenance Contract for BTS sites Country wide, BTS Power Support(All Electrical, Communication and Air-conditioning Equipment) Small Projects, Supplies e.g. of APS, Dual Generator Control Panels, e.t.c and Installations in MSRs 	Samwel Ngare, Tel: +254723603994	Averagely Ksh. 220m per year	2008	To date	In Progress	
2	Safaricom Ltd	Supply and Install Chiller Systems and Air Conditioning Units for Thika Safaricom Data Centre and Maintenance during DLP	Archscan Associates Ltd / Norkun Intakes Daniel Obonyo - +254721721520	Ksh. 118,848,142.30	Jul-14	Aug-16	100%	
3	Safaricom Ltd	Contract for Installation of Automated Meter readers in Sites Across the Country	Samwel Ngare, Tel: +254723603994	Over Ksh. 25M so far	Sep-10	To date	In Progress	
4	National Housing Corporation	Supply and Install 630KVA Automatic Voltage Stabiliser at NHC EPS Factory at Mavoko	Eng. M. Kirimi Mbae Tel: 0721659899	Ksh.8,291,216	May-14	Jul-14	100%	
5	Telkom Kenya Ltd	Supply and delivery of 12V/170AH Enersys Powersafe SBS Batteries to Telkom Kenya	Wesley Rutto +254 (0) 772 767360	Ksh 16M	Sep-16	Dec-16	100%	
6	Geothermal Development Company	Design, Supply Construction and Commissioning of Power Substation at Menengai, Nakuru	Dr. Silas Simiyu 254719715777 and 254733602260	Ksh. 26.1M	Apr-10	Aug-11	100%	
7	IBM East Africa	Supply and Install Chiller Systems and Racks at IBM Africa Research Centre / Data Centre at Catholic University and Maintenance	Design Partnership Ltd Rajan Acharya - +254205221099	Ksh. 70,378,749.78	May-13	To date	Maintenance in Progress	
8	IBM East Africa	Supply, Install 630KVA Automatic Voltage Stabiliser at IBM Africa Research Centre / Data Centre at Catholic University and Maintenance	Design Partnership Ltd Rajan Acharya - +254205221099	Ksh. 9,013,664.00	May-13	To date	Maintenance in Progress	
9	Seven Seas Technologies Ltd	Power and Airconditioning Installations for GE/MOH Radiology Equipment in L4 - L6 Hospitals Country wide	Rufus Mara +254721275849	Averagely Ksh. 4m per site	May-15	To date	In Progress	
10	Kenya Broadcasting Corporation	Supply, Installation, Training and Commissioning of 42No. 24,000 Btu Air Conditioners	Davis Muriithi +254722469809	Ksh.7,788,182	Jan-17	To date	In Progress	
11	Safaricom Ltd	Power Upgrade at Webuye and Ritongo: Supply, Installation and commissioning of Cahngeover Panels, Cables and others	Daniel Obonyo - +254721721520	Ksh. 33M	Mar-16	Aug-16	100%	
12	Safaricom Ltd	Supply of Boards for Safaricom Hub Sites	Daniel Obonyo - +254721721520	Ksh. 28M	Sep-15	Feb-17	100%	

13	Safaricom Ltd	Supply and Install Chiller Systems and Air Conditioning Units for Thika Safaricom Data Centre and Maintenance during DLP - Phase 2	Remax Consultants Daniel Obonyo - +254721721520	Ksh. 101,008,572.32	Jun-18	In Progress	95%	
14	Safaricom Ltd	Supply of Low Voltage APS (LVAPS)	Daniel Obonyo - +254721721520	Ksh. 22.3M	Feb-18	In Progress	75%	
15	Reddot Distribution Ltd	Electrical Fitouts, Mechanical Ventilation and Air-Conditioning Works at the new office and warehouse at Lemac Plaza Westlands	Binefi Shavia +254722986896	Ksh. 13.6M	Dec-18	Complete	100%	
16	Titan Glass Ltd	Electrical Installations and Fitouts at the Glass Cutting Factory located at Athi River	Imran Ibrahim +25471077786	Ksh. 7.5M	Jan-19	Complete	100%	
17	Liquid Telecommunications Kenya Ltd	Supply and delivery of 12V/190AH Enersys Powersafe SBS Batteries	Kelvin Mututi +254734573419 kelvin.muturi@liquidtelecom.com	Ksh. 2.65M	Oct-18	Complete	100%	
18	Hadassah Prime Ventures	Supply and delivery of 12V/92F Enersys Powersafe SBS Batteries for KPA	Lucianah Malembo +254729176486 hp.ventures@yahoo.com	Ksh. 594,917.14	Apr-18	Complete	100%	
19	Liquid Telecommunications Kenya Ltd	Supply and delivery of 12V/190AH Enersys Powersafe SBS Batteries	Kelvin Mututi +254734573419 kelvin.muturi@liquidtelecom.com	Ksh. 4.5M	Jun-19	In Progress		
20	Telkom Kenya Ltd	Data Centre Audits	Wesley Rutto +254 (0) 772 767360	Ksh. 4.45M	Nov-18	Mar-19	100%	
21	American Towers	Recoveries and Installation of Data Centre Batteries in Telkom / ATC Sites	Eric Maina +254(0)701632270	Ksh. 3.6M	Jun-19	Jul-19	100%	





Electrical Services

Outsource Technique Limited undertakes all aspects of industrial, commercial and residential installations and maintenance services. Our core business is:

- Lighting and power installations
- Substations
- MV and LV switchgear
- Street lighting systems and flood lights
- Design services
- Energy Audits power quality checks and reports



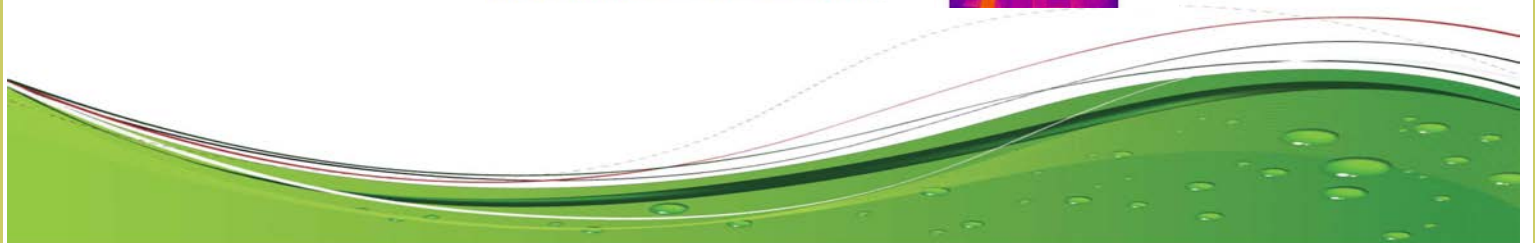
Specialist Services

Thermal Imaging

Thermal Imaging Surveying is ideal for carrying out electrical safety inspections, be it to source that loose connection or an overloaded component in your electrical panels.

We all understand the consequences of electrical system failure, with the costs associated not often being obvious until it is too late. Whilst the fault observed may only cost less to repair, if left to fail that same fault may cost millions in lost sales, downtime, wages, insurance excesses, injury claims etc.

Accidents are commonly caused by loose connections, weakening of insulations, obstructed cooling and mechanical damage. Insurance providers may ask for evidence that you completed a thermal imaging survey of your electrical equipment, when renewing or commencing insurance cover. A thermal imaging survey is a fast and cost-effective way to locate faults with no disruption to the running of your business.





Power Quality Surveys

We offer our clients power quality surveys to ensure that all our installations are fully completed and free from any hidden problems. A written report is then generated and issued as a record. We measure true-rms and peak voltage and current, frequency, dips and swells, transients, interruptions, power and power consumption, peak demand harmonics, inter-harmonics, flicker and unbalance. System-Monitor puts a multi-parameter power quality health check on one display.



Energy Audits

The need to reduce energy costs is a crucial business practice for successful organizations, and energy audits have begun to play a more significant role in managing energy expenses. We offer our clients energy audit service through analysis of energy usage followed by a report which will detail ways of reducing energy costs. Intelligent lighting, including occupancy and daylight level sensors.

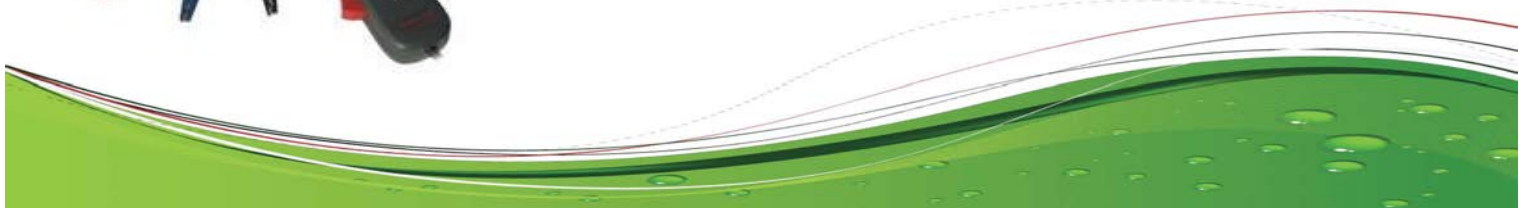


TOOLS AND EQUIPMENT

OTL has built up on its support system by investing in tools and auxiliary equipment which include various test equipment. A few of the test equipment is mentioned hereunder:



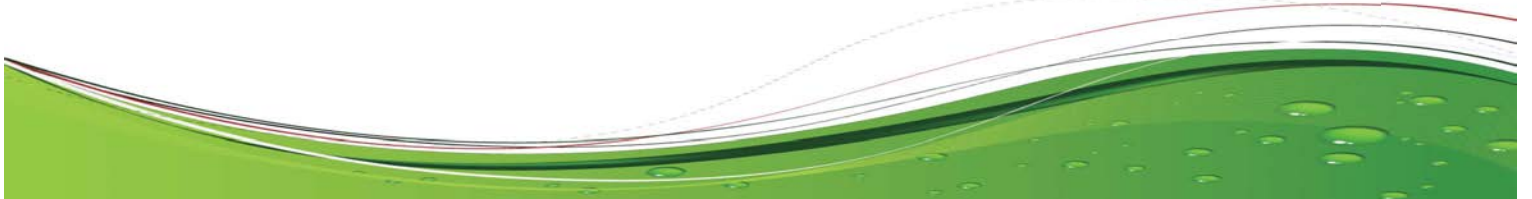
- Megger BM402/2 - Analogue/Digital Insulation Continuity Testers
- Megger LCB 2500/2 - Premium Loop & Circuit Breaker Testers
- Megger MFT 1502 - Combined Insulation, Loop & RCD Tester
- Megger DCM 24R - True RMS Digital Clampmeters
- Megger DET 5/4D - Digital Earth Tester
- Megger DCM 2000P - Power Clampmeter
- Midtronics Advanced Conductance Battery Tester
- Circutor AR5 3 phase Network Analyser
- Infrared Camera – This can be used to locate hot spots without touching any equipment.
- Phoenix contact Bluemark printer with UV technology for cable, equipment and connector marking
- Phoenix Contact Thermomark S1 printer for cable, equipment and connector marking.
- Anritsu Site Master model S331D
- Fluke Ti200 thermal imager



Geothermal Development Company

Design, supply and commissioning of a Power Substation at Menengai Geothermal Prospect

Menengai geothermal prospect is approximately 210km from Nairobi. The power substation was expected to serve the power needs for high-lift water pumping station and boreholes pumps. The scope of the work included design, supply, and pre-site commissioning tests which included Transformer Voltage Ratio Test, Vector Group Test, Winding Insulation Resistance Tests, Transformer Oil Tests and other Transformer Functional Tests of a 33KV line substation of one outdoor ground mounted transformer, one H –pole mounted transformer and switchgears





WHY USE OTL?

We give our clients a dedicated team for their project. Our staff and senior employees have experience in working on major projects with strict deadlines and tight time frames. Our teams pride themselves on being able to meet all challenges and excel above and beyond the norm. As such their knowledge of their trades is unmatched and the pride that they show in each and every job is easy to see. The safety of all our team members is the key driver to our business and therefore we have established safety benchmarks that we can confidently proclaim will set us ahead of the rest. All of our team members are encouraged to make a valuable contribution and all have an equal opportunity to propose alternative work methods to achieve a more efficient method of completing the project



**YOU CAN
Depend
on Us!**

- >We are proud of our long association with prominent local companies.
- >We continue to provide electrical services, tailored to their requirements, which are second to none.
- >Whether it is a casual enquiry or an emergency call out we can do it, saving local industry and commerce customers considerable down time ensuring productivity is maintained.
- >All our engineers are well qualified and able to undertake a wide range of electrical installations throughout a variety of different types of buildings. Use our resources to solve your problems and you will not be sorry.
- >Our machine breakdown/electrical failure experience and response time is second to none, covering a diverse spectrum of distribution assemblies and circuit arrangements.
- >We are reliable and do arrive when we say we will arrive.
- >You can depend on us.
- >We are approved and authorised to conduct electrical inspections and tests to installations and appliances to ERC Requirements. Class A1
- >Enhance each other's growth and profitability
- >A commitment to seeing that both partners come out as winners
- >Offer a more secure and complete solution to customers

We have been around and intend, with our customers' continued support, to be here a lot longer still, providing the kind of service we feel our customers' deserve. Your electrical services are safe in our hands.

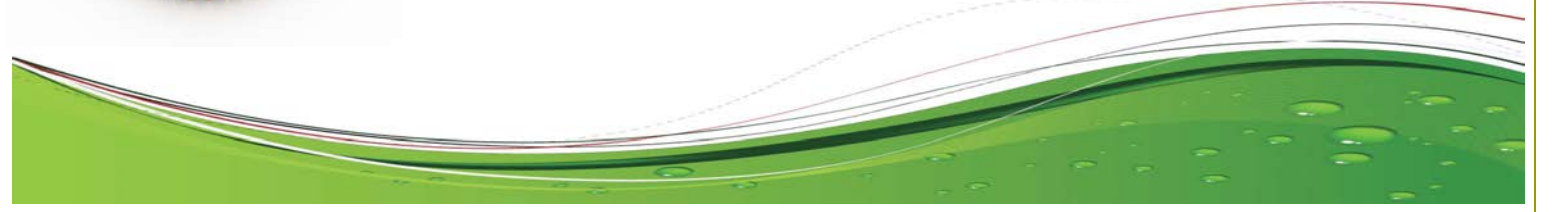
If prospective new clients wish to receive additional details of our services, or references as to the standard of work and service we provide, this can be arranged on request.



info@otl.co.ke

Contact us to day! On (020)2461136/7

info@otl.co.ke



Managed Services

- Our Preventive / Predictive Maintenance will help you begin the process of not only preventing equipment failures, but also creating a system of predicting when they are going to occur.
 - Multi-vendor Experience
 - Certified Resources
 - Authorized Services Provider
 - Proven Track Record
 - Large number of resources



Testing & Measurement Equipment



- Mobile Networks
 - a. Site Masters
 - b. SDH Analyzer
 - c. PCM Analyzers (E-1 Tester)
 - d. Drive Test Kits
- Fixed Networks
 - a. Splice Machines
 - b. OTDR
 - c. Power Meters
 - d. Laser Source Meters

Projects



Since 2008, we have been offering maintenance services for Safaricom mobile switch rooms (MSR), media gateways/soft switch stations (MGW/MSS) and major Hub sites power and plant services. Outsource Technique Ltd was contracted to carry out maintenance services to all Safaricom mobile switch rooms (MSR) countrywide



Contract Agreement for the performance of Civil Works/Telecom Installation construction. 2006- To date



3G Implementation for Safaricom 2009/2010



In the year 2013 Outsource Technique Ltd was contracted to supply install and commission cooling system (chiller), data center racks including accessories (PDUs, busbars), stabilizer, power boards the IBM research centre datacentre (located in CUEA, Karen)



Subcontracting Agreement for Provision of Telecommunication Engineers

OTL is the local appointed Partner / agent for:



{Global leader in stored energy solutions (batteries) for industrial applications}



INSPIRING INNOVATIONS

(Germany-based and Global market leader and manufacturer of components, systems, and solutions in the fields of electrical engineering, electronics, automation, interconnection, and interface solutions, hand tools, testing and measuring equipment, e,t,c.)



(Carrier is the world leader in heating, air-conditioning and refrigeration solutions. They also formed JVs with Toshiba and Multi Denco thereby enlarging the products ranges from Comfort to Precision units)



Expert In ICT Cooling

AIRSYS is an international well known cooling air-conditioning equipment supplier for ICT, medical imaging and diagnostic equipment. Its main products include air-conditioning unit for telcom, data centers, computer rooms and cold rooms, chiller units fe.t.c..



(German Based and Global Manufacturer and expert in Data Centre Configurations, Server racks, IT Power Distribution Systems, IT Infrastructure, Data centre Cooling, Automation, Software and Services, e,t,c.)

EnerSys Reserve Power Brands

Global market leader with world-renowned reserve power brands:



PowerSafe[®]

TELECOM



data safe[®]

UPS



genesis[®]

COMMERCIAL



ODYSSEY[®]
Extreme
SERIES[™]

SPECIALTY



Cyclon

SPECIALTY



EnerSys
Power/Full Solutions



Our Clients



Get in touch

Outsource Technique Limited
P.O.Box 12702-00100 , Nairobi, Kenya

info@otl.co.ke

+254 20 2461136/7

www.otl.co.ke

THANK YOU