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1. Introduction

a. About the Group

Energya Industries is a multi-disciplined business group with diversified business operations in:

- 1- Manufacturing.
- 2- Distribution.
- 3- Turnkey projects in electromechanical and telecommunications field.

Energya Industries is one of the biggest players in the electricity business in the Middle East and Africa with operations in Egypt, Algeria, Libya, Sudan, Saudi Arabia, UAE, Qatar, Bahrain, Lebanon, and Pakistan.

b. **BUSINESS DIVISION**





c. Our Locations



d. **Our Business Division**





Energya Cables Saudi Arabia, http://www.cables.energya.com producers of Electrical Wires & Power cables up to 36 KV.

Our range of cable products includes low voltage with copper or aluminum conductor, PVC or XLPE insulated, steel tape or steel wire armored, PVC or PE sheathed. In addition, we manufacture overhead lines and Control/Instrumentation cables. Moreover, we produce medium voltage cables up to 36 kV and Fire Resistant/LSHF Cables with high tech manufacturing equipment and testing.

Facing the current engineering as well as the market challenges, we **Energya Cables/wires** strongly believe that we are absolutely qualified and ready to supply our full product range in addition to your demands with high degree of Excellency and perfection.

We will be more than happy to assist you with your enquiries *I* requirements for the supply of quality Power Cables & Wires. Also, should you need any further information regarding the scope of our high tech processed products, and then please do not hesitate to contact us at your convenience.

Finally, it's worth to mention that in all of our growing areas of activity, we believe that you will find **Energya Cables** as your trust worthy partner.

Energya Cables are manufactured based on International Standards such as IEC, BS and UL. **Energya Cables** also capable of manufacturing according to clients requirements and needs.



2. **COMPANY BACKGROUND**

Energya Cables Saudi Arabia is a leading manufacturer and innovator of a wide range of cable products; and with its extensive design and production capabilities, as well as a long-standing dedication to customer service.

In each of its diverse products, **Energya Cables Saudi Arabia** distinct advantage is portrayed in its relentless commitment to quality, which is complemented by its superior technical expertise and extensive manufacturing capabilities. While we have always been known as a "quality" cable manufacturer, the drive for perfection has accelerated in recent years thanks to our rigorous accreditation process that is currently underway in our Laboratories.

This is in addition to the aggressive quality control programs already in place. Continuous in-process inspections, full Laboratory verifications of product specifications and rigid life testing of finished products are all a routine. Rest assured that our products also meet all applicable international standards such as UL, IEC, and BS in addition to customer requirements.

At **Energya Cables Saudi Arabia** choosing a cable means more than selecting products from a catalogue, it means:

- Working with you, responding to technical problems with innovative solutions.
- Meeting your needs for dependable products, manufactured to your specifications with precision,
- Meeting tight deadlines and showing the kind of leadership and responsiveness that result in dependable service.



Our reputation for excellence has come from meeting the demanding performance needs of industrial control and instrument applications.

We aim to continuously improve our services to our clients, exceed our customer's expectation, create value for stakeholders, provide a great place to work for our employees and serve the communities in which we operate. Our objective is to become the first choice cable supplier, globally.

We are the best partner to our customers in development and growth. We also endeavor to create value for everyone who does business with us.



3. ENERGYA CABLES COMPANY IN BRIEF

<u>Company Name:</u> Energya Cables Saudi Arabia

P.O. Box 31248, Jeddah 21497

Kingdom of Saudi Arabia

Phone: +966 2 6360770

+966 2 6380881

+966 2 6372299

Fax: +966 2 6364695

+966 2 6350909

+966 2 6354754

E-mail Address: info@cables.energya.com

Website: www.cables.energya.com

Firm Classification: Limited Liability Company

Industrial License Number: 532/S

Commercial Registration Number: 4030184194

Date of company foundation: April 2008



Paid Up Capital: SR 65,250,000.00

Bank Reference: Saudi British Bank (SABB)

Total Factory Area: 115,350 m²

Number of Employees: 1200 Persons



4. MANUFACTURING PLANT

Energya Cables Saudi Arabia was established in 2008 as a startup plant in Building wires, currently our Manufacturing facilities produce a full range of Power cables Up to 36 KV, These plants running under the certification of ISO 9001: 2008, which assures quality management and products.



Energya Cables Saudi Arabia is a new brand that has benefited from the extensive, deep rooted experience of its parent company which is Jeddah Cable Company.

Since its inception the company has invested heavily in the Kingdom, in order to establish the most cutting edge and best-engineered complex attainable. The SR65 Million investment will enable the manufacturing and provision of wires and cables with highest quality.

Moreover, the huge industrial complex places **Energya Cables Factory** as the largest and most modernized complex globally. The fully automated manufacturing operations produce all categories of indoor wires & Power Cables, it also houses the first plastics compounding facilities capable of producing pure grade polyethylene cross-linkable for the insulation of Medium voltage cables, in addition to plants capable of compounding semi conductive polyethylene, polyethylene cross-linkable for low voltage insulation capacities as well as low smoke, fire retardant and halogen free compounds and finally PVC compounds all for the cable industry.



Energya Cables Saudi Arabia Manufactures under license from **Furukawa Electric Company** of Japan, A Global leader in the manufacture of High Voltage Energy Cable.

Energya Cables Factories are located in Jeddah & Rabigh Industrial Area, where Energya Cables/Wires & Energya Plastic Located in Rabigh which is almost 140 Km away from Jeddah.







5. OFFICES

Energya Cables Saudi Arabia has a number of offices that are strategically located within the Saudi Arabia to deal with clients within their zone of influence. These offices are equipped with the latest services to ensure optimum client satisfaction. They are manned by highly qualified personnel that liaise directly with the company headquarters.

Branch	Office Address	Contact Person
Headquarter	Energya Cables Saudi Arabia Jeddah. Industrial City Phase III P.O.BOX. 31248 Jeddah 21497. KSA Mob. +966 54 2525 425 Tel. +966 2 636 0770 (Ext. 2300) Fax. +966 2 636 4695 Email.mchmaitilli@cables.energya.com	Mohamad Eid Chmaitilli Sr. Manager Marketing
Headquarter	Energya Cables Saudi Arabia Jeddah. Industrial City Phase III P.O.BOX. 31248 Jeddah 21497. KSA Mob. +966 507798769 Tel. +966 2 636 0770 (Ext 2301) Fax. +966 2 636 4695 Email.fhalawani@cables.energya.com	Farouk Halawani Product Manager
Jeddah	Energya Cables Saudi Arabia Jeddah- Ring Road-KSA Mob. +966 56 6371767 +966 561133334 Email. aqaisey@cables.energya.com	Mohammed Abdu Al- Qaisy Area Sales Manager- Jeddah
Riyadh	Energya Cables Saudi Arabia Riyadh-Malaz District –KSA Mob: +966 5 42525125 Tel: +966 14731219 Email.madheiby@cables.energya.com	Maher El Dheiby Area Sales Manager- Riyadh



6. WAREHOUSES

Energya Cables Saudi Arabia has a number of warehouses in the vicinity of our local & regional offices. These warehouses remain fully stocked at all times to meet local demand on short notice. The warehouses are well ventilated, fully staffed, and subjected to rigorous inspections.

	Warehouse	Location	Number of Employees	Size (m²)	Capacity
	Main Warehouse	Rabigh-Saudi Arabia Yenbou Highway Exit 927,Industrial zone Aramco Road	20	3000 m ²	700 Pallets
spo	Riyadh	Riyadh-Hair Road, behind the warehouses Gosaibi. No. 81/97	15	1800 m ²	230 Pallets
Finished Goods	Jeddah	Jeddah-Palestine Street, heading to the old Sheep Market, AL Nakheel District east of the Makkah High Way. No.106	13	1500 m ²	168 Pallets
	Madinah	6	1000 m2	110 Pallets	
	khamis Mushait		5	1000 m2	110 Pallets



7. ENERGYA CABLES PRODUCTS





- ✓ **THHN/THWN** (EASY PULL): Thermo Plastic heat resistant Nylon Jacket/Thermoplastic High Water-resistant Nylon (Use for wet Locations)
- ✓ **NYA** (SURE WIRE): CU/PVC (single Core)
- ✓ **NYA (S)** (SAFE WIRE): CU/LSHF (low Smoke Halogen Free)
- ✓ **NYA (S)** (POWER SURE): CU/HFFR (Halogen free flame retardant)



- ✓ **NYY**: CU/PVC/PVC, CU/XLPE/PVC (Multi Cores)
- ✓ Flexible Cables (FLEX WIRE): Single CU/PVC & Multi-cores CU/PVC/PVC
- ✓ **Flat Wires** (FLAT WIRE): CU/PVC/PVC, 2 & 3 Cores.
- ✓ **Low Voltage Cables & Control Cables** (Armored AWA, STA, and SWA; None Armored, Copper Screened Tape or wire): PVC or XLPE Insulation, Up to 1 KV.
- ✓ **Medium Voltage Cables** (from 3.6/6 (7.2) KV up to 18/30 (36) KV) Our XLPE leading type of medium voltage cables are custom designed to meet the highest performance standards. All cables are empowered with nonmetallic and metallic shields, water sealing capabilities and water treeing retardant characteristics.
- ✓ **LSHF & Fire Resistant Cables** (Armored & Non Armored) Up to 1 KV Used for wiring and interconnection where it is required to maintain circuit integrity under fire conditions for longer periods than can be achieved with cables of conventional construction.
- ✓ **Instrumentation & Pilot Cables** (Armored & Non Armored) Single & Multi pairs with Screened layer, Pilot cables are used for control, protection, signaling, telecommunications and data transmission purposes associated with power distribution and transmission systems.
- ✓ **Overhead lines & Grounding Cables** (AAC,AAAC,ACSR,ACAR & ACSR/AW) They come as bare conductors and used for earthing electrical systems (when soft drawn copper is used) and in transmission/distribution of high voltage electricity (when hard drawn copper and aluminum is used).







8. PRODUCT CLASSIFICATION

Our wide range of quality **Power Cables** with capacities less than 36 kV provide safe and efficient energy links for Indoor & Outdoor Installation. They are renowned for their protective coatings, new materials, flexibility, color coding, and multipurpose use. All the cables can be jacketed with either PVC or LSHF.

Product	Type	Description	Product picture
Building wires	NYA	Single core, CU/PVC or LSHF	
Building wires	THHN	Single core , CU/PVC/ Nylon Sizes : 18 AWG -8 AWG	
Building wires	Flat	Twin & three core, CU/PVC/PVC Up to 16 mm2	
Building wires	Flexible	Single & Multi Core , CU /PVC or CU/PVC/PVC	
Instrumentation & Pilot Cables	Armored & Non Armored	Multi core (solid Or Annealed Cu), Insulation: XLPE, Screen : AL-Myler Screen Tape with Tinned drain Copper 0.5 mm or Cu Tape , Sheath : PVC or LSHF; Sizes : 0.5 mm ² ·6 mm ² Pairs : 1 to 52	
Control Cables	With copper Screen wires or copper Tape	Multi Core, Insulation: PVC or XLPE ,Sheath: PVC or LSHF Up to 37 cores	



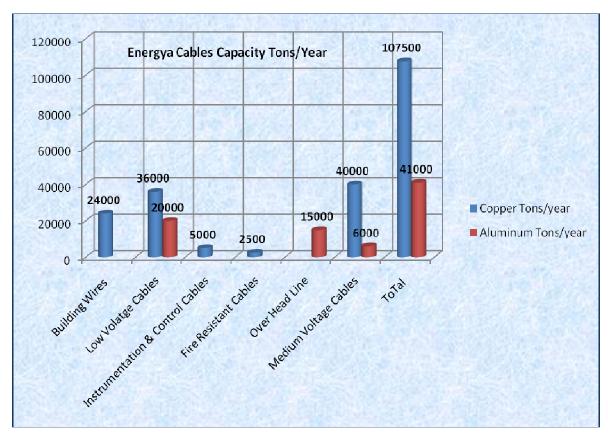
Product	Type	Description	Product picture
Fire Resistant Cables	Armored & Non Armored	Conductor: Copper, Dual Insulation: Mica Glass – XLPE, Bedding: LSHF, Sheath: LSHF	
Low Voltage	Non Armored or AWA	Single Core ,Insulation: PVC or XLPE , Sheath : PVC or LSHF	
Low Voltage	Non Armored	Multi core, Insulation: PVC or XLPE, Sheath: PVC or LSHF	
Low Voltage	SWA or STA	Multi core, Insulation: PVC or XLPE, Sheath: PVC or LSHF	
Overhead Lines	Bare CU, AAC & AAAC	Hard drawn & Soft Annealed	
Overhead Lines	ACSR,ACAR & ACSR/AW	Al Conductor	
Overhead Lines	CU or AL	Insulation : PVC	

Product	Туре	Description	Product picture
Medium Voltage	CU or AL	Single core, Insulation: ISC/XLPE or TR-XLPE/OSC, Non Armored or AWA , Sheath: PVC or PE	
Medium Voltage	CU or AL	Multi cores, Insulation: ISC,XLPE or TR-XLPE,OSC, Non Armored, STA or SWA, Sheath: PVC or PE	



9. Energya Cables Facilities Capacity

Our plant Capacity is continuously improved by installing state of the art machines and expanding our facilities.





10. MATERIAL USED

CONDUCTOR:

Power cables conductors are usually of copper or aluminum material. Selection of conductor material may depend on different factors such as load current, conductor weight, and cables accessories sizes.

The resistivity of copper is less than the resistivity of aluminum. This implies that the conductivity of copper is almost double the conductivity of aluminum.



All building wire conductors are composed of Copper, where the copper having high conductivity and greater flexibility after annealing, can be drawn to small sizes and bunched for excellent flexibility, Easier to make terminations & joints.





Properties of Copper & Aluminum:

Droporty	Unit	Material	
Property	Onit	Copper	Aluminum
Electrical Resistivity at 20°C	Ω.m	1.724 × 10-8	2.826 × 10-8
Temperature Coefficient of Resistance per °C		0.00393	0.00403
Density at 20°C	Kg/m³	8890	2703
Melting Point	°C	1083	659
Ultimate Tensile Strength			
Soft Temper	MN/m²	225	70-90
Hard Temper	IVIIV/III	385	125-205
Elastic Modulus	MN/m²	26	14
Coefficient of Thermal Expansion per °C		17 × 10-6	23 × 10-6
Thermal Conductivity	W/cm.°C	3.8	2.4

INSULATION:

The main purpose of the insulation layers is to prevent conductors from direct contact with each other, and to protect the user from electric shock.

Insulation materials for Power cables are Polyvinyl Chloride 'PVC', Cross-Lined Polyethylene 'XLPE', Polyethylene 'PE', Ethylene Propylene Rubber 'EPR'. However the commonly used insulation materials are PVC and XLPE.

PVC:

Polyvinyl Chloride 'PVC' serves every market where wire and cable is used. When there is a concern about public health, low smoke and fume (LSF) insulation material is used. This material is also known as low smoke Halogen free (LSHF).



PVC Granules



PVC Polyvinyl chloride (-H2CCHCL-)_n intended for electric insulation, is known as a thermoplastic material. This means that the material from changes with increasing temperature and the material can be remelted. PVC as in insulation material is commonly used for building wires & Cables; however PVC for bedding or sheathing material it may be used for different voltage range cables (i.e. low voltage and medium voltage cables). The normal operating temperature range of PVC insulation material is between 70-105 °C, and the emergency operating temperature during short-circuit conditions is 160 °C.



The general properties of PVC which added to its widespread use as wire and cable materials are:

- Flame resistance
- Light in color so that bright colors can be used
- Easy processing by extrusion
- Resistance to oils
- Low cost making large scale use feasible
- Good moisture resistance and retention of electrical properties



Maximum Conductor Temperature of PVC/A Insulation Material as per IEC 60502-1

	Maximum Conductor Temperature °C		
Insulating Compound	Normal Operation	Short-Circuit Conditions	
	Normal Operation	(5 sec Maximum Duration)	
Polyvinyl Chloride (PVC/A)			
Conductor Cross-Section ≤ 300 mm ²	70	160	
Conductor Cross-Section > 300 mm ²	70	140	

XLPE:

Cross-Linked Polyethylene 'XLPE' is a thermoset material; in which this material is incapable of being melted by means of cross-linking. XLPE is produced by compounding of LDPE with a cross-linking agent such as dicumyl peroxide. Polyethylene consists of long carbon hydrogen chains (CH2-CH2)n. The CH2 chains are connected to each other 'cross-linked' through a curing process known as vulcanization to form a material 'XLPE' which is similar to Polyethylene in electrical properties, but with better mechanical properties, especially at higher temperatures.



XLPE Granules

Polyethylene is a thermoplastic material where its maximum operating temperature at normal conditions is 70°C. By cross -linking the CH2 of PE the maximum operation temperature at normal conditions is substantially increased. The maximum operating temperature of XLPE at normal conditions is 90°C, while the maximum operating temperature at short circuit conditions is



250°C; the most important advantage of XLPE over PE is its enhanced heat resistance.

Maximum Conductor Temperature of XLPE Insulation Material as per IEC 60502-1

	Maximum Conductor Temperature °C		
Insulating Compound	Normal Operation	Short-Circuit Conditions	
	Normal Operation	(5 sec Maximum Duration)	
Cross-Linked Polyethylene (XLPE)	90	250	

SCREEN TAPE OR WIRES:

In case of Medium Voltage cables or as required for others cables, screen are usually either of copper wires or copper tape. In case of copper wires, the wires are spun around the previous (i.e. insulation) layer, than a copper tape is wrapped around the wires with a big gap percentage and is usually known as 'Copper Open Helix Tape'. The purpose of this tape is to hold the wires together and have electrical continuity between all the wires as not all wires may be touching each other. The other type of screen are copper tape screen in which the copper tape is wrapped around the previous (i.e. insulation) layer with an overlap percentage.



Copper Wires Screen with Open Helix Copper Tape



Copper Tape Screen with Overlap



FILLERS

Non-Hygroscopic fillers of polypropylene material are used. The purpose of the fillers is to fill in the spaces between the phases to give the cable round shape. This type of material is required to have a high breaking load so that it does not cut when used with heavy duty machinery known as 'drum twisters' that are used for core assembly. The breaking load of polypropylene fillers is 4.8 KN approximately.





Filler Material Used in Core Assembly Process

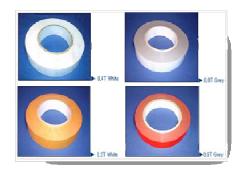
BINDER TAPE

The binder tape used in the core assembly process is either polyester tape known as Mylar Tape or propylene tape. An advantage of polypropylene tape over polyester tape is the breaking load.



Assembly Machine





Binder Tape

BEDDING:

Bedding compounds make cables round for easier pulling by installers. In addition, by protecting the laid-up cores, available in a variety of densities and polymer bases.

Materials: PVC, LDPE or LSHF



Bedding Machine



ARMORING:

We use Aluminum wires or tape for single core cables. The reason behind using Aluminum for single core cables is that Aluminum non-magnetic material (i.e. non permeable material) in which currents will be prevented from being induced in the aluminum armor. In addition the magnetic field lines emanating from the center of the conductor passing current will be blocked. Induced current in the armor will cause unwanted heat losses which will affect the current rating of the cable. However, steel wires or tape armor is used for multi-core cables since the magnetic fields emanating from each conductor cancel each other due the arrangement of the phases. This implies no induced current will flow in the steel armor; in result, no heat losses occur.

In comparison between armor wires and armor tape, armor tape is more cost effective since it is easier and faster to process. The setup time armor tape machinery is much more less than armor wire machinery. As for performance, it has been noticeable that in an effort to hammer a nail in cable with armor wires and armor tape, the nail would penetrate in the armor wires easily due to round shape of the wires. In addition a nail could penetrate easily between two wires next to each other. However, it would be more difficult to get that nail through the armor tape since it covers the whole cable surface



Wire Armoring Machine



SHEATHING:

Sheathing is the visible part of the cable that is extruded over the previous layer (e.g. armoring, or assembly). Sheathing provides the primary source of protection (even in the presence of armor). Jacketing compounds are used in a whole host of cable applications such as flexible cords, power cables, control cables, and shipboard cables. The sheath also contains the cable identification, i.e.: embossing of the manufacturer name, cable type, cable voltage, and other descriptions.

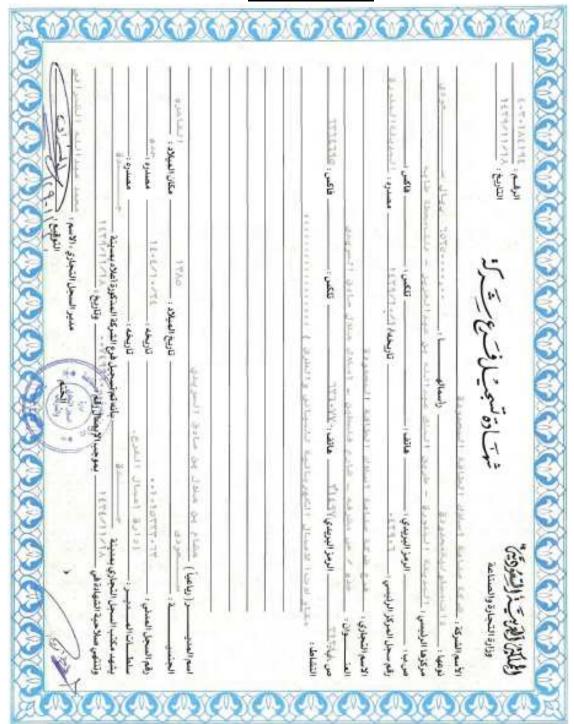
Sheath material can be of extruded PVC, LLDPE, LDPE, MDPE, LMDPE, HDPE or LSHF materials with color (depending on the customer requests).

NB: Flame retardant, ozone & ultraviolet ray retardant, petrol oils retardant, termite retardant available options.

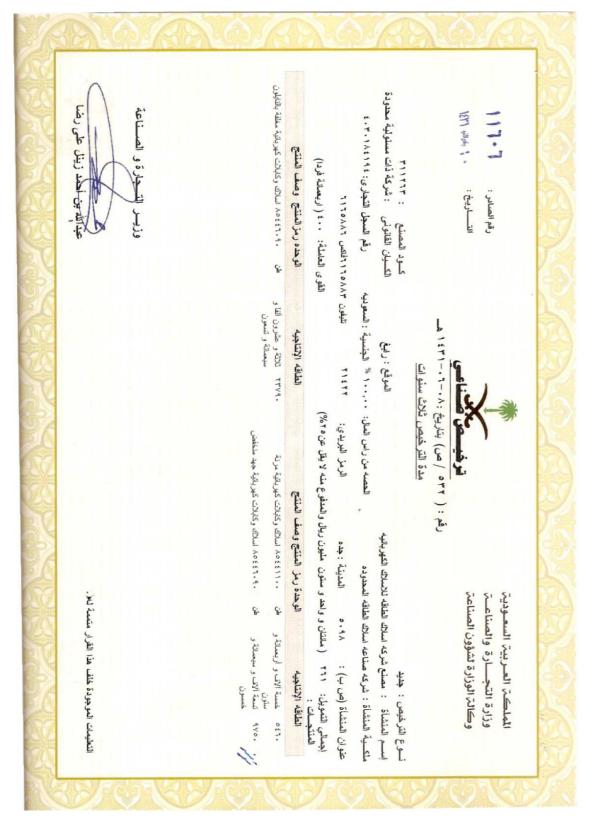




11. TRADE LICENCE & CHAMBER OF COMMERCE REGISTRATION













12. ZAKAT CERTIFICATE

سدالله الرحمن الرحيد

المُمَلِّذُ الْمُحْرِيَّةِ الْمُلْكِمُورُيِّيْنَ وَزَارُنَةِ الْمِلْالِيَّةِ الْمُلْكِمِينَ مصلحة الزياة والذخان



نموذج (ش/۲)

رقم الشهادة : ٢٦٦٩

رقم الملف: ۲٤٥٦٦٠١٠٧

الرقم المالي: ١٠٢٨٩٦٧١٥

شهادة مقيدة

(غير صالحة لصرف الأقساط النهانية)

تشهد مصلحة الزكاة و الدخل بأن المكلف / شركة صناعات اسلاك الطاقة المحدودة.

سجل مدني رقم (لايوجد) و سجل تجاري رئيس رقم ٢٩٠٦ ٤ ٢٥٠٠٤

قدم إقراره عن الفترة المنتهية في ٢٠١٠/١٢/٣٠ م.

وقد منح هذه الشهادة لتمكينه من إنهاء جميع معاملاته ما عدا صرف مستحقاته النهائية عن العقود .

يسري مقعول هذه الشهادة حتى تاريخ ٢٠١٠/٠٣٥ هـ الموافق ٣٠٠٤/٠٠٥ م. (اليوم 'التاسع من شهر جمادى الآخرة سنة الف و اربعمائة وثلاثة وثلاثون' هجري) وفروعه الموضحة أدناه :-

المدينــة	اسم القبرع	رقم السجل/ الرخص	
جدة	فرع شركة صناعة أسلاك الطاقة المحدودة	£ . W . 1 \ £ 1 9 £	

الختم الرسمي

الوظيفة : مدير عام فرع المصلحة بالمدينه المنورة الإسم : عيدالرحمن بن عوض الرحيلي

المحافظة المحروبية المعروبين المعروبين المحروبين المحروبين المحروبين المعروبين المحروبين المحرو



بسدالله الرحن الرحيد



المينا والمنطاع في المنطبط والمنطبط والمنطبط والمنطبط المينا المنطبط والمنطبط والمنطون المنطون المنطو

نموذج (ش/٢)

رقم الشهادة : ٢٦٦٨

التـــــاريخ: ١١ / ٧٠ / ١٤٣٢

رقم الملف: ۲٤٥٦٧٠١٠٧ الرقم المالى: ١٠٢٩٤١٠١٣

شهادة مقيدة

(غير صالحة لصرف الأقساط النهائية)

تشهد مصلحة الزكاة و الدخل بأن المكلف / شركة خدمات صناعة الطاقة المحدود.

سجل مدني رقم (لايوجد) و سجل تجاري رئيس رقم ۲۵۰۰٤۳٤۸

قدم إقراره عن الفترة المنتهية في ٢٠١٠/١٢/٣١ م.

وقد منح هذه الشهادة لتمكينه من إنهاء جميع معاملاته ما عدا صرف مستحقاته النهانية عن العقود .

يسري مفعول هذه الشهادة حتى تاريخ ٢٠١٢/٠٢/٩ هـ الموافق ٣٠/٠٢/٠٢م. (اليوم التاسع من شهر جمادى الآخرة سنة الف و اربعمانة وثلاثة وثلاثون هجري)

V/11

السعود المرتبعان السعود في المستود في المرتبعات المستود في المرتبعات المستود في المستود المست

الوظيفة: مدير عام فرع المصلحة بالمدينه المنورة الإسم: عيدالرحمن بن عوض الرحيلي التوقيع:



13. STANDARD & CERTIFICATION

Energya Cables are custom designed to meet the highest and latest performance standards in the field. Among these standards are:







BS 6004 Electric cables – PVC insulated, non-armored cables for voltages up to and including 450/750 V, for electric power, lighting, and internal wiring

BS 7211 Electric cables – Thermosetting insulated, non-armored cables for voltages up to and including 450/750 V, for electric power, lighting and internal wiring, and having low emission of smoke and corrosive gases when affected by fire.

IEC 60227 Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V

 $\begin{tabular}{ll} \textbf{IEC 60502-1} & Power cables with extruded insulation for rated voltages 1kV \\ & and 3 kV \\ \end{tabular}$

UL 83 Thermoplastic-Insulated Wires and Cable

UL 1063 Machine-Tool Wires and Cables

 $\mbox{{\bf IEC~60502-2}}$ Power cables with extruded insulation for rated voltages from 1kV Up to 30~kV



Energya Cables Saudi Arabia is unleashed in the energy market backed-up with the best and well known **certificates** around the world

















CERTIFICATES



British Approvals Service for Cables (BASEC) is an independent and non-profit accredited certification body. Their mark is synonymous with quality and safety. They provide product certification (approval) services globally for all types of cable and wire, for ancillary products, and also provide management systems certification for the cable sector.



UL is the trusted source across the globe for product compliance. Benefiting a range of customers - from manufacturers and retailers to consumers and regulating bodies – UL has tested products for public safety for more than a century. UL can offer one of the conformity assessment industry's broadest portfolios of capabilities and certification marks. Its unique mix of local expertise in global markets and deep industry knowledge helps bring safer products to markets faster than ever before



Saudi Arabian standards org is the cooperation partner in maintaining the safety and public health protecting the consumer and environment and enhancing the competitive of national products through the application of the best international practices in different standardization fields in accordance with the Islamic law





QA International Certification Limited is a UKAS-Accredited certification body, providing internationally recognized assessment and registration of Companies operating against the requirements of National and International standards. Companies registered by QA International range from large multi-nationals to small businesses and span a wide range of manufacturing and service industries. Based at Darlington - England and operating from a number of regional offices, QA International offers a locally based and cost effective support service throughout the whole registration process. With overseas offices in Europe, the Middle East, Asia and the Far East, QA International is well placed to service the needs of both National and International markets



Founded in 1927, KEMA is a commercial enterprise, specializing in high-grade technical consultancy, inspection, testing and certification. Much of the company's work centers round innovative technology. As an independent organization, KEMA supports clients

Concerned with the supply and use of electrical power and other forms of energy.



DEKRA is one of the world's leading expert organizations. The company currently maintains a presence in 50 countries in Western and Eastern Europe.

The DEKRA Business Units "Automotive", "Industrial" and "Personnel" provide professional and innovative services in the fields of vehicle inspections, expert appraisals, international claims management, consulting, industrial testing, product testing, certification, environmental protection, qualification.



BRE Global works to ensure that fire, security, environmental and other products and services provide the quality of performance and protection that they should.

BRE are an independent, third-party approvals organization, offering certification of products, services



and systems to an international market. Testing and approvals are carried out by recognized experts in world-class facilities. BRE also offer cutting-edge research and consultancy services.











CERTIFICATE OF CONFORMITY

This is to certify that the

Quality Management System

of

Energya Cables/Wires Co. Exit 294 Rabigh Industrial Area Rabigh Kingdom of Saudi Arabia

conforms to the requirements of

ISO 9001: 2008

SCOPE OF CERTIFICATION

The manufacture of:

Low Voltage Power Cables, Wires (Indoor/Outdoor), Instrumentation and Control Cables

Certificate No: CS1-238

Issue date: 11th April 2012

Date of original certification: 11th April 2012

Expiry Date: 22nd January 2015

This certificate is issued subject to and in accordance with BASEC Regulations and continued compliance.

Signed for and on behalf of the British Approvals Service for Cables

Date 17 April 2012



This Certificate and Schedule(s) remains the property of BASEC, and shall be returned when required.

BSF080.002/ A1732 / Issue: 01 / Copy No: 1

23 PRESLEY WAY, CROWNHILL, MILTON KEYNES, MK8 OES, UK, REGISTERED IN ENGLAND NO 1150237 TEL: +44(0)1908 267300 FAX: +44(0)1908 267255 MAIL@BASEC.ORG.UK WWW.BASEC.ORG.UK



the standard in safety

Underwriters Laboratories

File E339475 Vol 1 Issued: 2011-01-19 Revised: 2011-01-19

FOLLOW-UP SERVICE PROCEDURE (TYPE L)

THERMOPLASTIC-INSULATED WIRE (ZLGR)

Manufacturer: ENERGYA WIRES (100559-633) RABIGH EXIT 927 RABIGH SAUDI ARABIA

Applicant: ENERGYA WIRES

(100540-518) OFFICE NO 49 & 50, 2ND FL

PRINCE SULTAN ST, SAAD CENTER

PO BOX 5083

JEDDAH 21422 SAUDI ARABIA

Listee: SAME AS APPLICANT

(100540-518)

This Procedure authorizes the above manufacturer to use the marking specified by Underwriters Laboratories Inc.(UL), or any authorized licensee of UL, only on products covered by this Procedure, in accordance with the applicable UL Services Agreement.

The prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. (UL) or any authorized licensee of UL, upon request.

This PROCEDURE, and any subsequent revision, is the property of Underwriters Laboratories Inc.(UL) and the authorized licensee of UL and is not transferable.

Underwriters Laboratories Inc.

Stephen Hewson Senior Vice President

Global Follow-Up Service Operations

William R. Carney

Director

North American Certification Program

William R. Carrey







Pertificate of Registration



The Governing Board of Q.A. International Certification Limited hereby grants to:

Energya Wires Company Ltd

Registration No.: QAIC / SA / 3008 - A
(hereinafter called the Registered Company) the right to be listed in the Directory of Registered Companies in respect
of the services listed below. These services shall be affered by the Registered Company at or from only the address given below in accordance with the quality management system in compliance with ISO 9001:2008.

Address to which this Certificate refers:

P.O. Box 5083, Prince Sultan Street, Saad Centre, 2nd Floor, Office #49 & 50, Jeddah 21422, KSA

Approved Scope to which this Certificate refers.

Design, Development, and Manufacturing of Single Core and Multi Core Building Wires (Further clarification regarding the Scope of this Certificate and the applicability of ISO 9001:2008 requirements may be obtained by consulting the organisation)

Signed for and on behalf of the Board



A. J. Duffield

SCHEME MANAGER A. Carter

Certificate Issue Date: 16th November 2010 - Certificate Expiry Date: 15th November 2011 Date of Initial Registration: 16th November 2010 - Re-assessment Date: 15th November 2013 This Certificate of Registration is granted subject to the Regulations approved by the Board.

QA INTERNATIONAL

Q.A. International Certification Ltd. Dualley Court Dualley Road Darlington Co Derham BLI 4GG

Tri, +44 (0)1325 384272 Fax: +44 (0)1325 480980











KEMA Quality

TEST CERTIFICATE

Issued to: Jeddah Cables Company

Industrial City Phase III 21497 Jeddah Saudi Arabia

For the product: PVC insulated, non-sheathed general purpose cable, 450/750 V, single core

Trade name: ENERGYA WIRES

Type/Model: H07V-R (CU/PVC) 1x25 mm²

Ratings: 450/750 V

Manufactured by: Jeddah Cables Company

Industrial City Phase III

21497 Jeddah Saudi Arabia

Requirements: BS 6004:2000 Incorporating AMD 14195:2004 and AMD 15636:2005

Remarks: The tested cable meets the requirement

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no 2151135.52-DCC.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 20 February 2012 Number: 2151135.02

DEKRA Certification B.V.

drs. G.J. Zoetbrood Managing Director H.R.M. Barends Certification Manager

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All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group.

DEKRA Certification B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem, The Netherlands T +31 26 356 2000 F +31 26 352 5800 www.dekra-certification.com Company registration 09085396

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BA D DEKRA

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DEKRA

TEST CERTIFICATE

Issued to:

Jeddah Cables Company Industrial City Phase III 21497 Jeddah Saudi Arabia

For the product:

PVC insulated, non-sheathed general purpose cable, 450/750 V, single core

Trade name:

ENERGYA WIRES

Type/Model:

H07V-R (CU/PVC) 1x25 mm²

Ratings:

450/750 V

Manufactured by:

Jeddah Cables Company Industrial City Phase III 21497 Jeddah

Saudi Arabia

Requirements:

BS 6004:2000 Incorporating AMD 14195:2004 and AMD 15636:2005

Remarks:

The tested cable meets the requirement

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no 2151135.52-DCC.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 20 February 2012

Number: 2151135.02

DEKRA Certification B.V.

drs. G.J. Zoetbrood Managing Director

H.R.M. Barends Certification Manager

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KEMA Quality

TEST CERTIFICATE

Issued to:

Jeddah Cables Company Industrial City Phase III

21497 Jeddah Saudi Arabia

For the product:

Single-core non-sheathed cable with rigid conductor for general purposes

Trade name:

ENERGYA WIRES

Type:

60227 IEC 01 (CU/PVC) 1x25 mm2

Ratings:

450/750 V

Manufactured by:

Jeddah Cables Company Industrial City Phase III

21497 Jeddah Saudi Arabia

Requirements:

IEC 60227-3:1993 + A1:1997

Remarks:

The tested cable meets the requirement

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no 2151135.51-DCC.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 20 February 2012

Number: 2151135.01

DEKRA Certification B.V.

drs. G.J. Zoetbrood Managing Director H.R.M. Barends Certification Manager

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TEST CERTIFICATE

Issued to:

Jeddah Cables Company Industrial City Phase III

21497 Jeddah Saudi Arabia

Single-core non-sheathed cable with rigid conductor for general purposes For the product:

ENERGYA WIRES Trade name:

Туре: 60227 IEC 01 (CU/PVC) 1x25 mm²

450/750 V Ratings:

Manufactured by: Jeddah Cables Company

Industrial City Phase III 21497 Jeddah Saudi Arabia

Requirements: IEC 60227-3:1993 + A1:1997

Remarks: The tested cable meets the requirement

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no 2151135.51-DCC.

The examination has been carried out on one single specimen of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Arnhem, 20 February 2012 Number: 2151135.01

DEKRA Certification B.V.

drs. G.J. Zoetbrood Managing Director

Certification Manager

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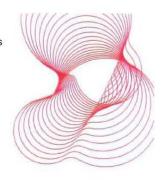
All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group.

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Test report for the fire testing of a Jeddah Cables Company - Energya Cables Saudi Arabia 'AL/XLPE/LSHF/STA/LSHF 8.7/15 kV' 3x300mm² cable

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Prepared of	n behalf	of BRE	Global by	v
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Name

Ewan MacDonald

Position

Consultant

Signature

Approved on behalf of BRE Global by

Name

Dave Hoare

Position

Senior Consultant

Date

19 June 2012

Signature

BRE Global Bucknalls Lane Watford Herts WD25 9XX T + 44 (0) 1923 664100 F + 44 (0) 1923 664994

F + 44 (0) 1923 664994 make opinions and interpretation. Any opinions and interpretations included as www.breglobal.com part of this report are clearly marked as such.

UKAS TESTING

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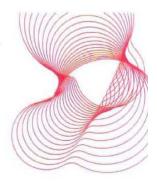
This report may only be distributed in its entirety and in accordance with the terms and conditions of the contract. Test results relate only to the items tested. We have no responsibility for the design, materials, workmanship or performance of the product or items tested. This report does not constitute an approval, certification or endorsement of the product tested.

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Test report for the fire testing of a Jeddah Cables Company - Energya Cables Saudi Arabia 'AL/XLPE/LSHF/STA/LSHF 8.7/15 kV' 3x300mm² cable



Executive Summary

Client

Jeddah Cables Company - Energya Cables Saudi Arabia, Industrial City Phase II, PO Box 31248, Jeddah, Saudi Arabia

Product:

'AL/XLPE/LSHF/STA/LSHF 8.7/15 kV' 3x300mm² cable

Tests Undertaken:

IEC 60332-3-24:2009

IEC 61034-2:2005

IEC 60754-1:2011/BS EN 50267-2-1:1999

IEC 60754-2:2011

IEC 60684-2:2011 Clause 45.2

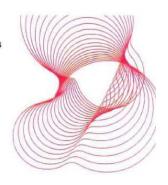
Conclusion:

The cable satisfied the performance requirements of IEC 603323-24:2009 and IEC 61034-2.

The insulation and bedding/sheath materials satisfied the requirements of IEC 60754-1:2011/BS EN 50267-2-1:1999, IEC 60754-2:2011 and IEC 60684-2:2011 Clause 45.2 as given in IEC 60502-1:2009.



Test report for the fire testing of a Jeddah Cables Company - Energya Cables Saudi Arabia 'CU/XLPE/LSHF/STA/LSHF 0.6/1kV' 4x25mm² cable



Prepared on behalf of BRE Global by

Name Ewan MacDonald

Position Consultant

Signature Fundamental

Approved on behalf of BRE Global by

Name Dave Hoare

Position Senior Consultant

Date 19 June 2012

Signature / leve thong

BRE Global
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WD25 9XX
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F + 44 (0) 1923 664994
E enquiries@breglobal.com
www.breglobal.com

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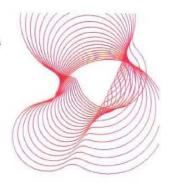
0578

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This report is made on behalf of BRE Global. By receiving the report and action on it, the client accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence). No third party has any right to rely on this report.



Test report for the fire testing of a Jeddah Cables Company - Energya Cables Saudi Arabia 'CU/XLPE/LSHF/STA/LSHF 0.6/1kV' 4x25mm² cable



Executive Summary

Client:

Jeddah Cables Company - Energya Cables Saudi Arabia, Industrial City Phase II, PO Box 31248, Jeddah, Saudi Arabia

Product:

'CU/XLPE/LSHF/STA/LSHF 0.6/1kV' 4x25mm2 cable

Tests Undertaken:

IEC 60332-3-24:2009

IEC 61034-2:2005

IEC 60754-1:2011/BS EN 50267-2-1:1999

IEC 60754-2:2011

IEC 60684-2:2011 Clause 45.2

Conclusion:

The cable satisfied the performance requirements of IEC 603323-24:2009 and IEC 61034-2.

The insulation and bedding/sheath materials satisfied the requirements of IEC 60754-1:2011/BS EN 50267-2-1:1999, IEC 60754-2:2011 and IEC 60684-2:2011 Clause 45.2 as given in IEC 60502-1:2009.



14. APPROVALS

الرقم : \\ (١٦٥) ؟ ٢٢/٤ المرفقات :



الملكَ بُلاَحِيَّ بِلْالْيَنْ عُولَا يَرَّهُ وَزارَة السِنْقِسُ

YAI

الإدارة العامة للدراسات والتصميم

الموضوع: بخصوص طلب اعتماد شركة صناعة اسلاك الطاقـة المحـدودة لصـناعة الأسـلاك والكــابلات الكهربائية إنرجيا.

المحترم

المكرم/مدير عام شركة صناعة أسلاك الطاقة المحدودة

السلام عليكم ورحمة الله وبركاته...

إشارة إلى خطابكم رقم وتاريخ (بدون) بخصوص طلب اعتماد شركة صناعة أسلاك الطاقة المحدودة لصناعة الأسلاك والكابلات الكهربائية إنرجيا.

وبعرض الأمر على سعادة وكيل الوزارة للطرق بنتائج البحث المتعلق بمنتجاتكم من أسلاك الطاقة وكابلات الجهد المنخفض، وافق سعادته بشرحه المؤرخ ١٤٣٣/٠٣/٢١هـ على استخدامها بمشاريع الوزارة.

ولكم تحياتنا،،،

مدير عام إدارة الدراسات والتصميم

المهندس / عبد الغني بن حامد الحريي



Kingdom of Saudi Arabia
Ministry of Health
General Directorate for Project

Supervision on Execution Department



المُمَلَكَةُ العَربيَّةُ السُّعُوديَّةُ وزُّارةَ الصَّحَّة الإدارة العامة للمشاريع إدارة الإشراف علم التنفيخ

الرقم: ۲۲۲۷ / ٤٠١ التاريخ ٩ /٧ / ١٤هـ المشفوعات: ليرعم ن

الموضوع: تأهيل شركة كابلات جدة ماركة الموضوع: تأهيل شركة كابلات جدة ماركة

المحترمين

السادة/ شركة كابلات جدة المعدودة

 ص.ب ۲۱۲٤۸

السلام عليكم ورحمة الله وبركاته ...

إشارة إلى خطالكم رقم بدون وتاريخ (١٤٣١/١/١) اهـ والمتضمن تأهيل منتجات مصنعكم من كابلات الجهد المنخفض والمتوسط ماركة Energya بمساريع وزارة الصحة.

نفيدكم بأنه بعد أن تحت دراسة الملف الخاص بمصنعكم يمكنكم تقديم منتجاتكم من كابلات الجهد المنخفض والمتوسط ماركة Energya بمشاريع الوزارة في حال كانت مطابقة لمواصفات المشروع.

مع أطيب خياتي ...

_دير دارة الإشراف على التنفيد

الهندس/عيد المنعم بين محميد الحسين

Riyadh (11176) Tel. (4033992) Fax (40407997)

الرمز البريدي (١١١٧٦) هاتف (٤٠٣٣٩٩٢) فاكس (٤٠٤٠٧٩٧)

موطابع وسحة الشرقية ١١٥-١٠١١











MATERIALS DEPARTMENT

Qatar Navigation Plaza, P.O.Box 47, DOHA-QATAR Website: www.qp.com.qa (974) 44240200) / Fax (974) 44240351

To: Energya Cables International From: QP SUPPLIER RELATIONS

 Email:
 wshafy@cables.energya.com
 Fax: +974-44240351

 Attn:
 Commercial Manager
 Phone: +974-44240248

Date: 26/02/2012 Email: supplierrelation@qp.com.qa

CC: jccqatar@qatar.net.qa Ref: 6497

Subject:VendorRegistration Notification. (This does not constitute Vendor pre-qualification or product approval).

We are pleased to inform you that your e-registration request with Qatar Petroleum has been processed.

Your Materials SAP Vendor Registration Number is :105868 Expiry Date: 08/18/2012

Please note carefully your registration expiry date and make sure to initiate registration renewal process at least four weeks ahead of the expiry date, Failure to do so may result in removing your company from the QP-Materials Supplier list.

Submission of a completed Supplier registration Form and our acknowledgment does not confer any approval or pre-qualification status on any supplier. The award of any business by QP will follow established procedures for bidding, evaluation and negotiation.

Your company's registered list of commodities based on QP's Materials Department coding system is updated as follows:

 Ser. #
 Material Group
 Commodity

 1
 6800
 Electric Cables & Wires

Should there be any changes in your company's profile (e.g. name, address, telephone, fax, renewal or termination of agency agreement, certification, change of ownership etc), or if you are not satisfied with the above mentioned commodity groups or at any time in the future circumstances change, such that your company is no longer able to comply with the qualification criteria, your company should diligently ensure all required updates are completed on the e-Registration application on QP website.

Should you require any clarification, please contact Supplier Relations by email: supplierrelation@qp.com.qa

QP reserves the right to remove your company name from the registered suppliers list at its discretion and without notification.

Thank you for your interest in doing business with Qatar Petroleum.

Original Signed

Abdulrahman Yousef Abdulla Ahmed A/Manager Purchasing, PS

NOTE: This is a Qatar Petroleum official document which is confidential to the addressee and may also be privileged; you may not advertise copy, forward, disclose, or otherwise use this document without the prior consent of QP Materials Department.





KING ABDULA".IZ UNIVERSITY UNIVERSITY MAIN CAMPUS PROJECT



CONSTRUCTION SUPERVISION CONTRACT FLUOR ARABIA LTD. CERTIFICATE OF COMPLIANCE MATERIAL TRANSMITTAL FORM - TSF-03 Title: Faculty of Environmental Design Contract No. 1.300 Contractor: Al Muhaidib Contracting Co. We understand that approval of the material(s) submitted herein is only intended to determine general conformance with the intent of the project contract documents. By submitting these materialss for approval, we confirm we have performed all necessary on-site dimensional and building utility requirement coordination, and if approval is granted, will further coordinate the information contained within with all other concerned contractors employed by the University. -- 10 MATERIAL SOURCE CODES: (S) Saudi Arabia (G) Gulf Cooperative Council (F) Imported Eng. Assad Al Feghali Transmittal No. E 027-2 Transmittal Date: 20-Jul-09 Subject: Medium Voltage Power Cable Description Subs.Req. Source Action Rev. Comments Div. 16 Medium Voltage Power Cable A Sec. 16121 Manufacturer/Supplier ENERGYA CABLES / ENERGYA CABLES SAUDI ARABIA P.O.Box 5098, Jeddah- 21422 Tel.02 616 5886 / Fax.02 616 5883 The above approval does not relieve the Contractor of any contract obligations, whether for coordination, compliance, or quality with the contract terms and conditions of the contract. (C) Revise and Resubmit Contractor Receipt: 23/57/09 (B) Approved As Noted, Resubmittal Not Required (D) Not Approved 03/08/09 Date





KING ABDULAZIZ UNIVERSITY UNIVERSITY MAIN CAMPUS PROJECT CONSTRUCTION SUPERVISION CONTRACT FLUOR ARABIA LTD.

MATERIAL SUBMITTAL ROUTING FORM - TSF-01 Sheet 2 of 2 (Nev.Date: 00 Apr. 2008)



System Entry I	Date Stores	Sheet 2 of 2 (Nev.Data: 00 Apr. 2008)	
	027-2 naidib Contracting Co	Title: Faculty of Environm	nental Design
Transmittal No.: E 0 Subject: Medium	27-2 Voltage Power Cab	Transmittal Date: 20-Jul-6	99
Document Type:	X Material Submit	ttal OSM Manual	Sample
Reply:			
The N	Palemed is align	pived salphy	



مانف ۲۰۱۱ (۰) ۱۲۰۰ فاکس ۲۸۲۱ (۱۰) ۱۲۰۱۹ iyadh@dargroup.com س.ت: ۷۸ ۱۰۱۰۷۹ ۱۰۱۰ ترخیص رقم: ۱۹۳

الرياض طريق الملك نهد، العليًا مركز الماس رقم ۸۰۲ ص.ب: ۲۱۲، الرياض ۱۱٤۲۱ المملكة العربية السعودية

دار الهنـــدســة ماركوه

الرياض في :- ١٤٣١/٠٣/١٧هـ الرياض في :- ١٤٣١/٠٣/١٨هـ المـوافـق :- ٢٠١٠/٠٢/٠١مـ

إشارتنا: CDP-DAR/ S06060-CT-GEN-1444: المرفقات: (١) صفحة + ٢ كتالوج.

المادة مدير القسم الفني على المنتي

المعترم

الهندس/ ناصر بن عبد الله معمد العريفي

مركز المشروعات التطويرية وزارة الداخلية

السلام عليكم ورحمة الله و بركاته ،،،

الموضوع : دراسة طلب تاهيل نشركة كابلات جلة

إشارة الى خطاب شركة كابلات جدة لمركز المشروعات النطويرية بالوزارة ومرفق به منف مواصفات الكابلات وشهادات الإختبارات وباقي المستندات المطلوبة لطلب اعتماد ذلك المنتج ضمن قائمة الموردين للمركز. نحيط علم سعادتكم أنه بعد دراسة الملفات المرفقة اتضح التالى:-

١ - بخصوص معايير اعتماد مورد ضمن قائمة الموردين:
 نوضح أن الشركة معتمدة مسبقاً ضمن قائمة الموردين لتوريد كابلات ضغوطات مختلفة ضمن القائمة الخاصة بالمركز تحت مسمى "كابلات جدة".

٢ - بخصوص اعتماد المواد التي سيتم توريدها من قبل الشركة:
 تقدمت الشركة بالمواد التالية:

م اسم المواد الموردة رقم المواصفة موقف الموردين ألم المواد الموردين معتمدة المواصفة منخفض بمسمى DEVISION 16132 النوعية الجديدة غير معتمدة ENERGYA CABLES صناعة سعودية بنفس شركة كابلات جدة

وقد اتضح بعد دراسة الملف بالكامل التالي:

أ- تطابق المواصفات مع مواصفات المشاريع بمركز المشروعات التطويرية.
 ب- وجود اختبارات نظامية من مختبر KEMA العالمي المتخصص بالمجال.

\\Qdp1349\s06060\C T\Letters\GEN\S06060-CT-GEN-1444.doc

Mg-Mm/Mswww.dargroup.com





حصول المنتج على شهادات مطابقة المواصفات من ISO 9001:2000 وكذلك الهيئة البريطانية لإعتمادات
 الكابلات BASEC.

ث- اعتمادات من الدوائر الحكومية وعلى رأسها شركة الكهرباء السعودية "سكيكو".

ج- تنتج الكابلات بنفس خطوط انتاج شركة "جدة للكابلات" ويطبق عليها نفس معايير اختبارات الجودة لمنتج شركة 'كابلات جدة" .

بناءً على ماتقدم، فإنه يمكن اعتماد نوعية الكابلات المقدمة تحت مسمى ENERGYA CABLES من انتاج شركة كابلات جدة، وإدراجها ضمن قائمة الموردين بالمركز، شريطة تقديم ضمان للوزارة عند اختيارها بالمشاريع لمدة زمنية قدرها خمس سنوات من بداية التشغيل.

نأمل من سعادتكم التوجيه بما ترونه مناسباً حيال هذا الموضوع.

وتفضلوا بقبول وافر التحية والتقدير،،،

ع/دار الهندسة للتصميم والاستشارات الفنية

(شاعر ومشاركوه)

is 7.7.

المهندس/ هائي إبراهيم يموت



FM MATS 001 Project Manager Office King Abdullah Bin Abdul Aziz ALRAJHI Site Consultant Foundation for Development HOLDING Housing Dedicated to His Parents for Jazan Housing LOCATION: JAZAN PROJECT NO: 7 PROJECT NAME: King Abdullah Bin Abdul Aziz Foundation for Development Housing Dedicated to His Parents for Housing MATERIAL SUBMITTAL KA7-CON-MM-MTS-0155 PREV.SUBMITTAL NO: NEW SUBMITTAL: X1 SUBMITTAL NO: 17-12-11 RESUBMITTAL: PREV.SUBMITTAL DATE: SUBMITTAL REASON INFO M APPROVAL MAJOR ☐ CV □ ST ☐ AC ■ EL ☐ PL OTHER ATTACHMENTS Calculation Broucher Tech. Spec. Sample ☐ Certificate □ Drawing MATERIAL/TOOLS Code Material Name, Number & Description Supplier / Manufacture Specs.Ref Serial Source Status Indoor Cables (Wires) Indoor Cables (Wires) for all Buildings B Energya Wires 16.A 1.5 mm2 ,2.5 mm2 ,4.0 mm2 & 6.0 mm2 CONTRACTOR Engg.Mgr. NAME: Engr. Syed Khalid Riaz SIGNATURE: for CONSULTANT NOTES: CONSULTANT CLIENT NAME: NAME: Khaled Khair -AGNelmining POSITION: S. Elect. 图字 POSITION: SIGNATURE: SIGNATURE: DATE: DATE: APPROVAL SITUATION A APPROVED D REJECTED APP. WITH COMMENTS

APP. AS NOTED/RESUBMITTAL REQUIRED E NO ACTION OUTGOING: SIGNATURE: INCOMING: SIGNATURE: DATE: DATE: Client: Original Consultant: Copy with Stamp Contractor: Copy with Stamp Consultant Site Officer Copy (Authority to proceed with work does not relieve the contractor from contractual responsibilities)

17 DEC 2011

Construction Department

N 8-30 Am

Page 1 of 1





SAUDI CONSULTING SERVICES ENGINEER DR. TAREK M. A. SHAWAF

ocument Transmittal Sheet

Our Ref.

: SCJ/SEC/1876/2009/D-01595

Dated 05-04-1431H (21-03-2010G)

Contractor Ref: ABB/SEC/1876/2009/Jabal Omer/D-EM026 R01 Dated 27-03-1431H (13-03-2010G)

To

: M/s. Saudi Electricity Co.

WOA Jeddah

Total pages: 01

Attn

: Engr. Mohammad Bin Jameel Manan,

Div. Manager, West Projects.

Project

: Jabal Omer 110/13.8 kV S/S Makkah

Contract No. : 1876/2009 (ABB)

Subject

: Energy Cables (MV,LV Control Cables by Jeddah Cables)

We comment hereunder on the following drawing / Document

Item#	Document/Drawing #	L		
	- Counterburawing #	Rev.	Document Title	Status
01	WE-055206	00	Energy Cables #W(MV,LV & Control Cables by Jeddah Cables)	"A"* See Note

Electrical

Civil

☐ Mechanical

NOTE: Only the Cable Manufacturer has been approved, Cable sizes shall be finalized in the Cable sizing Calculations.

LEGEND:

A◀	Approved
В	Approved Except As Noted
C	Approved Except As Noted & Re-Submit.
D	Rejected
E	For Information only

Engr. M Aslam Iqbal Project Manager

page 1 of 1

	Phone	E-mail	P.O.Box	Code	Fax	فسأكس	الرمسير	ص. ب	بريسد الكتسروني	هــاتــف
Jeddah		scw@saudconsult.com	7352	21462	6653587		-		scw@saudconsult.com	77V.o 6.1
		scc@saudconsult.com			4647540	-307373	11801	1377	scc@saudconsult.com	الريساض ه١٩٩٧٥
Dammam	8955004	sce@saudconsult.com	1293	31431	8951722	77Y/¢PK	17317	1797	sce@saudconsult.com	الدمسام ١٠٥٥٠٠



	Proj. No.: S08 Princess Nou Abdulrahman	ra Bint	2	Ministry of Finance -K	SA	Submittal MAT/P1/EL/1303 REV No: 00
es i	ENGINEER :	in der	al-handasah musuk	CONTRACTOR:		Date 08/Dec/2009
		ř. j	taran Properties	ें वैद्यार अन्तर्भे के सिंह विद्यार अन्तर्भे के सिंह	Protestalas	<u> </u>
	Material d Low Voltage wire in Dar Riyadh Sit	escription (on- s, Cables & medium e)	e item only or orvoltage cables as	n this form): s per attached list (Sizes as pe	er approved shop drawing	s) (Sample submitted
	Building Name Item Ref.No Specification Attach all relevant te		Conductors and Ca			ned
	2. Manufact	curer / supplic ame : Jeddah Cab P.O box 312	er	ergya Cables		
	3. Delivery Country of Availability	origin : Kingdom c		○ Overseas	an and sheir and	handasah parlners
"E	Delivery	Ex-works/ to Estimated tir	tal duration ne of arrival (on site	0 8 DEC 20	009 20 prof
, * , * •	Program	Date materia Latest date	l required on for order	site	· ·	Ram Fa
Server and a	strict conform that the mate the submitted Submitted by 4. Engineer's Affice WU Site - Riyadh	inty with the control sources in items in conformation in the conf	ontract drawi dicated abovermity with the hanteloux re comments		s except as othervin detail and that ame timely.	ico etatadi alee
STEINE MAN	ATA TO COUNTY	t relieve Contra		Data ECEIVED Data ECEIVED Long the Contract of the Contract	2009 C	Fests required Additional Information Required Manufacturer's Required Required Required Retailed Retailed Retailed Retailed Retailed



Submittal No. MAT/P1/EL/01303 R0
Electrical Material Submittal / LV CABLES &WIRES / MV CABLES
Manufacturer/ Supplier, JEDDAH CABLE / ENERGYA CABLES

Contractor is an appared for taking the following into consideration.

Contractor is requested for taking the following into consideration:

- 1. Size, Type, Application is to be as per specification/Approved Shop Drawings and system manufacturer recommendations
- 2. Samples are to be provided for the different cables and wires indicated in summary for materials was attached in the submittal which will be used in the project as specified and shown on the drawings. Each cables and wires sample is to have sufficient length to illustrate Embossed information\data on the outer jacket: name of manufacturer, cable description rated voltage, size of conductor, Year of manufacture, (FR) for flame retardant and standard No. according to which cable was manufactured as following table:

SQ	Material Description	Spec Ref	standard No.
1	Single core CU/PVC 450/750 V (FR)	16120	IEC 60227 & IEC 60332-1
2	Multi core PVC/PVC 0.6/1KV (FR) Non Armored	16120	IEC 60502-1 & IEC 60332-1
3	Single core XLPE/PVC 0.6/1KV (FR) Non Armored	16120	IEC 60502-1 & IEC 60332-1
4	Multi core XLPE/PVC 0.6/1KV (FR) Non Armored	16120	IEC 60502-1 & IEC 60332-1
5	Single & Multi core XLPE/LSF 0.6/1KV Non Armored	16120	IEC 60502-1 & IEC 61034
6	MV Multi core XLPE/PVC 8.7/15 (17.5) kV, (FR) Non Armored	16124	IEC 60502-2 & IEC 60332-1

- 3. Approval committed for Samples is to be submitted only, any other material intended to be used, are to be submitted individually for approval.
- MIR (Material Inspection Request) is to be submitted when first dispatch received on site

Submittal is to be considered Code B "Approved as Noted" subject to submit confirmation that embossing will be as above and get Dar's approval prior to start manufacturing as well as compliance with all above comments.

S.SH / E.AA 10 December 2009







Transmission

Engineering & Projects Department Developing Transmission Area Projects Department SEC HQ-II Floor, Jeddah Tel.653-7334. Fax 653-7332 Email: 65171@SE.COM.SA

DOCUMENT TRANSMITTAL SHEET

Our Ref.

SEC/009/2009/D-00705

Dated: 09-02-2010

Contractor Ref.

ABB/SEC/009/2009/D-EM012R2

Dated: 03-02-2010

From

Project Manager, Shamiyah-1 & 2 SS Projects

To

M/S ABB

Attn.

Engr. Badie BenZina

Project Manager

M/S Saudconsult, Jeddah

CO.

Engr.M. Aslam Iqbal

Attn.

Project Manager

Project

Construction of New 110/13.8KV Shamiyah-1 & 2 SS, Makkah

Contract no.

Subject

Base Design of MV, LV & Control Cables for SHM-1&2

Approval Status: 1

Notes:

As per the attached

(Total pages including this page=2)

Engr. OMAR ABDULRAHIM FATTAH

" توشيدتا للكهرباء..... توفير لمواردنا "



Nesma Low

ارامكو السمودية OsmorA ibuo2

REQUEST FOR TECHNICAL APPROVAL

8 Pa	etnera t _{amin} palanjug		REGUEST FOR TECHNICA	E AT T TO TAL				
	desirent des					DATE:	7-Apr- Day Mon	
Through	ngmsa Khalid Jadallah Project Manager	B.I. No. : 10 J.O. No. : PROJECT TITLE : In LOCATION :	600022866 0-00505/00555 tegrated Security Upgrade Program (ISUI	P)		TOTAL LINE ITEM NO. DIVISION NO.	SUBMITTAL CODE:	ECTURAL
	REFERENCE SUBMITTAL NO.	RESU	BMITTAL CTION, REQUIRED INSPECTION LE	VE 1		SPECS. & STD.	E X ELECTR	ICAL M/INSTRUMENT
	1SUP-E-16-029(Alt3)	INSPE	CTION NOT REQUIRED				OOTHERS	į.
ITEM No.	DESCRIPTION	ON	HIANUFACTURER / VENDOR	Catalogues, Specs, P Dwg. No.	arag or	F	OR SAUDI ARAMCO USE COMMENTS	ONLY
	POWER CABLE , MEDIUM VOLTA CU/XLPE/PVC,	GE,12-20KV,	MANUFACTURER: JEDDAH CABLE COMPANY PO. BOX. 31248, JEDDAH 21497 VENDOR ID CODE #503-3255-714	A CERTIFICATES B BROCHURES		+15.50	AMSS 50	52.
	AS PER ATTACHED DATA SHEE	ETS CATALOGUE CUTS	VENDOR/SUPPLIER: 900 09 69 AS PER ATTACHED LIST		×	Appro	oved. Re	ZMSA Sith M
	NOTE: SIZE SHALL BE AS PER DRAWIN	G AND SITE REQUIREME	NTS) CCC CODE: 150005 9COM: 6000000797	G TEST RECORDS H OTHERS (DATA SHEETS)				
	tid Jadallah (Norman)	These documents have been general conformance with the Such review does not relieve of his responsibilities under the contract nor authorized additional contract nor authorized additional contract nor authorized additional from the contract nor authorized from the contrac	contract, the Contractor ne terms of the	NO OBJECTION CORRECT & RESUBMIT	di di	Saudi Aramco Pe	orgect Engineer	04/24/10
George Contrac (NESM	Fayad 2 2/4/15 for Representative A) Date			NO OBJECTION AS NOTED REJECTED AS N		Saudi Aramço R		D 04/24,
NY	F T	The operation Ptc Hill	9dii 4/19/201	ŏ 	₩ .	Sandi 1 to use i sate in sates - 1	travaco hou anavamoured so gult compo Gult compo 2. 104 NFPA < A-M < C . 50	s mo objeticated the licence with the property of the property





SAUDI CONSULTING SERVICES ENGINEER DR. TAREK M. A. SHAWAF

Document Transmittal Shee

Our Ref.

: SCJ/SEC/009/2009/D-00705

Dated: 22.02.1431H (06.02:2010G)

Contractor Ref

: ABB/SEC/009/2009/D-EM 012R2

Dated: 19.02.1431H (03.02:2010G)

: M'S SAUDI ELECTRICITY COMPANY,

JEDDAH

Attn.

: Engr. Muhammad Jamil Mannan, Div. Mgr, West S/S Projects

Project

: Construction of New Substations 110/13.8 kV Shamiyah 1 & 2

Contract No.

: 009/2009(ABB)

Subject

: Base Design of MV, LV & Control Cables for Shamiya 1 & 2 S/S

We comment hereunder on the following Drawings / Documents.

ltem #	Doc/Dwg #	Rev.	Document Title	Status
01	WE-057178 WE-057180	02	Base Design of MV, LV & Control Cables for Shamiya 1 S/S	"A"
02	WE-058178 WE-058180	.02	Base Design of MV, LV & Control Cables for Shamiya 2 S/S	"A"

Status of the drawings/documents is indicated in the last column with the attached sheet of comments if any,

⊠Electrical

□Civil

☐ Electro-mechanical

LEGEND:-

A -4	Approved
В	Approved Except As Noted
C	Approved Except As Noted & Re-Submit
D	Rajected
AS!	As-Built
FI	For Information

Engr. M. Aslam Iqbal

Project Manager

	Phone	E-mail	Р.О.Вфх	Code	Fax	فاكس	الراسو	جن . پ	ينريب الكسروني	13-21-4
Jeddah	\$672082	ściw d saudconsulf.com	7352	21462	6501951	27-1401	11111	YTOY	sow@saudopresulticom	ATRICKT PAR S
							12501	4713	sco@ssudconsult.com	الريسادي و١٩١٧)
Danwam	8955004	sce Osacoconsult com	1293	31431	8951722	MALLYTT	TIETI	1845	see disaudconsulticom	المتعددة في أياستعدا



SOUTH STEEL COMPANY RIYADH



REVIEW OF CONTRACTOR'S SUBMITTAL SOUTH STEEL COMPANY Submittal No. : CP-00079- E-013-Rev01 Date: March 6, 2010 CONTRACT No.: 08-PKI-003/00 CONTRACTOR: ABB Contracting Co. Ltd. PROJECT TITLE: CONSTRUCTION OF SOUTH STEEL PLANT 132/33kV SUBSTATION From : ABB Contracting Co. Ltd. **Head of Electrical Project** P.O. Box 91926, Riyadh 11643, K.S.A. SOLB H.Q.P.O.Box:67159.Riyadh11596 Tel: (01) 265-3030 Fax: (01) 265-2077 Tel: (01) 2176888Ext 306 Fax: (01) 2172727 ACCEPTANCE OF THE FOLLOWING SUBMITTAL IS HEREBY REQUESTED: Check in the Drawings / ☐ Material ☐ Test Reports ✓ Others Appropriate Box: Sketches Equipment Compliance Statement FILL-UP APPLICABLE INFORMATION BELOW: Description : Reply of Comments for Base Design of Medium Voltage, Low Voltage and Control Cables, 01 Hardcopy + 01 Softcopy . For Review and Approval. Reference Specification Manufacturer/Supplier Energya Industries / Al-Sewady Helal Compnay Vendor Address Expected Delivery Time COMPLYING WITH SCOPE OF WORK AND TECHNICAL SPECIFICATIONS? □ NO ✓ YES IF"NO " INDICATE DEVIATIONS : (Provide justification and attach supporting documents) Please refer to "Remarks" (ABB) (SOLB) Submitted by : Project Manager Received by : Head of Electrical Project - subfleces Signature Signature: Name Engr.Jamshed A. Choudhry Name Eng. Abdulaziz Audah Al-Shahrani Date : March 6, 2010 Date FOR SOLB USE ONLY SOLB HAVE REVIEWED THE ABOVE **REMARKS:** SUBMITTAL AND FOUND IT: Approved Approved except as noted Approved except as noted&resubmitt Not Approved and resubmitt with compliance Approved for construction (AFC) AS BUILT(AS) (ABB) Head of Electrical Project Received by Signature Signature Name Eng. Abdulaziz Audah Al-Shahrani Name Our Ref. : Date: 7 March Date Acceptance does not release the Contractor from his responsibilities in performing the work in strict NOTE:

conformance with Contract, Scope of Work and Technical Specifications.





SAUDI CONSULTING SERVICES ENGINEER DR. TAREK M. A. SHAWAF

Document Transmittal Shee

Our Ref.

: SCJ/SEC/1876/2009/D-01595

Dated 05-04-1431H (21-03-2010G)

Contractor Ref: ABB/SEC/1876/2009/Jabał Omer/D-EM026 R01 Dated 27-03-1431H (13-03-2010G)

То

: M/s. Saudi Electricity Co.

WOA Jeddah

Total pages: 01

Attn

: Engr. Mohammad Bin Jameel Manan,

Div. Manager, West Projects.

Project

: Jabal Omer 110/13.8 kV S/S Makkah

Contract No. : 1876/2009 (ABB)

Subject

: Energy Cables (MV,LV Control Cables by Jeddah Cables)

We comment hereunder on the following drawing / Document

01 WE-055206 00 HV(MV,LV & Control Cables by Jeddah Cables) **Cables** Cables** Cables** **A"** See Note	Item#	Document/Drawing #	Rev.	Document Title	Status
			00	Energy Cables IIV(MV,LV & Control Cables by Jeddah	"A"*

Electrical

□Civil □

☐ Mechanical

NOTE: Only the Cable Manufacturer has been approved, Cable sizes shall be finalized in the Cable sizing Calculations.

LEGEND:

A	Approved
В	Approved Except As Noted
C	Approved Except As Noted & Re-Submit.
D	Rejected
E	For Information only

Engr. M Aslam Iqbal Project Manager

page 1 of 1

	Phone	E-mail	P.O.Box	Code	Fax	قساكس	الرمسيز	ص. پ	بريسد الكتسروني	هاتـف
Jeddah	6670500	scw@saudconsult.com	7352	21462	6653587	***************************************	-		scw@saudconsult.com	77V. A 51
									scc@saudconsult.com	
Dammarr	8955004	sce@saudconsult.com	1293	31431	8951722	1451VYY	*15*1	1797	sce@saudconsult.com	الريسان ۱۹۰۹۹۶
			1000	01101	0001124	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1 16 1	31.41	Sca @ Saduconsum.com	٠





New Update: October 2009

Master

ELECTRICAL MANUFACTURER'S LIST

SPec. m Clause Material	Manufacturer	<u>Local Agent</u>
5 1325 Wires and Cables Lighting and Power	a) Ducab (UAE)	Ducab, Dubai Tel : 04-2667400 Fax: 04-2668955
	b) BICC (UK)	Ducab, Dubai Tel : 04-2667400 Fax: 04-2668955
	c) Pirelli (UK)	Ali H. Abdulla Awazi Gargesh Tel : 04-2282151 Fax: 04-2214180
	d) Saudi Cables (S.A.)	Al Khalidia Cables, Dubai Tel : 04-2215581 Fax: 04-2215811
	e) Riyadh Cables (S.A.)	Riyadh Cables & Metals Fax: 04-696871
	f) Delta Cables (UK)	Al Jalal Electric Trad. Est, Dubai Tel : 04-2267335 Fax: 04-2256621
	g) AEI (UK)	Electra Abu Dhabi, Abu Dhabi Tel: 02-6778077 Fax: 02-6776602
	h) Tekab (Sharjah)	Tekab, Sharjah Tel : 06-5352900 Fax: 06-5352260
	i) Sharcab (Sharjah)	Sharcab, Sharjah Tel : 06-5330031 Fax: 06-5337375
	j) Oman Cables	Oman Cables, Muscat Tel : (968)626464 Fax: (968) 626096
	k) Gulf Cables	Gulf Cables, Dubai Tel : 04-2674449 Fax: 06-5742857
	I) National Cables	National Cable Industry, Sharjah Tel : 06-5311888 Fax: 06-5642857
	m) Jeddah Cables (KSA)	Hisham EL Sawedy Trdg. Co Tel : 04-2626605 Fax: 04-2626608
		Energya Cables Intl. Tel: 06-5262887 Fax: 06-5262886

Khatib & Alami (CEC)

Page EML - 14

List of Approved Electrical Manufacturers Local Agents



NOTE:

Ref. 12/ /30501101 dtd.16/03/2012 ACR4SSearthabb004 PROJECTS DEPARTMENT-CENTRAL Support Facility Projects Division REVIEW OF CONTRACTOR'S SUBMITTAL National Grid or 12.03.2012G C-P-00137-CR -0143 R2 Submittal No.: Date: 11031134/00 CONTRACTOR: ABB CONT. CO. CONTRACT No.: BUDGET ITEM No : JOB ORDER No.: Construction of S/S 8832, 8173, 8907 & 9030 Ext. & 8076 Ext. PROJECT TITLE: From: Div. Manager, \$FPD To: ABB CONT., CO. Riyadh, North Office, Takhasosi St. Tel: (01) 464-3333/14404 Fax: (01) 217-1628 ACCEPTANCE OF THE FOLLOWING SUBMITTAL IS HEREBY REQUESTED: Check in the ☐ Drawings / ✓ Materials / ☐ Test Reports Others (Specify) Equipment Appropriate Box: Sketches FILL-UP APPLICABLE INFORMATION BELOW: Description S/S 8832, 8173, 8907 & Ext. of S/S 8076 - Earthing Cable 1 x 240 mm2 for Approval Reference Specification Manufacturer/Supplier Vendor Address Expected Delivery Time ☐ YES COMPLYING WITH SCOPE OF WORK AND TECHNICAL SPECIFICATIONS? IF" NO " INDICATE DEVIATIONS: (Provide justification and attach supporting documents) (SEC) (Contractor) Received by : Project Engineer, SFPD Submitted by : Project Manager Signature : Signature : : Engr. Faisal Nasrat Pharaon Name Engr. A. Ramos Name 12.03.2012G Date 12.03.2012G Date FOR SEC USE ONLY NG HAVE REVIEWED THE ABOVE SUBMITTAL AND FOUND IT: The submittal had been reviewed and our comments are as Acceptable u Acceptable As Noted 1. The reference standard shall be according to IEC60228 Not Acceptable (Resubmit) & shall be mentioned in the TDS. $\overline{}$ Provide Additional Information 2. The number of strands shall be 61. $\boxed{2}$ See Remarks (Contractor) Group Leader, Support Facility Projects Div. Received by Signature Signature : Eng'r/ Eid Ál-Otaibi Name Our Ref. : 12/6419/303013 Date: 21/03/2012G Date Man 26,2012

68

Acceptance does not release the Contractor from his responsibilities in performing the work in strict

conformance with Contract, Scope of Work and Technical Specifications.



f. 12/ /30501101 ⁻ dtd.16/03/2012		
PROJECTS DEPARTMENT-C Support Facility Projects Di REVIEW OF CONTRACTOR'S S	ivision	نقل الكهرباء Hational Grid a
Submittal No.: C-P-00137-CR -0143 R2	. Date;	12.03,2012G
CONTRACT No.: 11031134/00 BUDGET ITEM No: PROJECT TITLE: Construction of S/S 8832, 81	CONTRACTOR: AB JOB ORDER No.: 73, 8907 & 9030 Ext. 8	
To: ABB CONT., CO.	From : Div. Manage Riyadh, Nort Tel : (01) 464-	er, SFPD th Office, Takhasosi St. 3333/14404 Fax : (01) 217-1628
ACCEPTANCE OF THE FOLLOWING SUBMITTAL	IS HEREBY REQUE	STED:
Check in the Drawings / Materials Appropriate Box: Sketches Equipme	/ ☐ Test Repo	
FILL-UP APPLICABLE INFORMATION BELOW:	and the second s	GOACH TO THE TOTAL THE TOT
	7 & Ext. of S/S 8076 - I	Earthing Cable 1 x 240 mm2
for Appro		
Reference Specification		
Manufacturer/Supplier :		
Vendor Address :		
Expected Delivery Time : COMPLYING WITH SCOPE OF WORK AND TECHIF" NO " INDICATE DEVIATIONS : (Provide justification as	INICAL SPECIFICATIOnd attach supporting docu	DNS? ☐ YES ☐ NO iments)
Expected Delivery Time : COMPLYING WITH SCOPE OF WORK AND TECHIF" NO " INDICATE DEVIATIONS : (Provide justification and (Contractor) Submitted by : Project Manager Signature : Name : Engr. Falsal Nasrat Pharaon	(SEC) Received by : Proj Signature : Name : E	ect Engineer, SFPD
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PROJECTS DEPARTMENT-CENTRAL	
Support Facility Projects Division REVIEW OF CONTRACTOR'S SUBMITTAL	نقل الكهرباء National Grid s.
Submittal No.: C-P-08137-0143 R2	Date : Mar. 12,2012
CONTRACT No.: 11031134/00 BUDGET ITEM No: PROJECT TITLE: Construction of Buraydah S/S Jillah S/S 8076	CONTRACTOR: ABB Contracting Co.,Ltd. JOB ORDER No.: 8 8832, Rayyan S/S 8173, Hail S/S 8907 & S/S 9030, Extn.
To: Div. Manager, S <u>FPD</u> Riyadh, North Office, Takhasosi St. Tel: (01) 464-3333/14417 Fax: (01) 217-1628	From: ABB Contracting Co.,Ltd. P.O Box 91926 Riyadh 11643, KSA
ACCEPTANCE OF THE FOLLOWING SUBMITTAL Check in the Drawings / Q Malerials Appropriate Box: Sketches Equipmen	/ Test Reports Others (Specify)
FILL-UP APPLICABLE INFORMATION BELOW:	
	Rayyan 8173, Hail 8907 & Jillah 8076 240mm² Bare Copper Earthing Conductor.
-1 CB Copy.	
Reference Specification :	
Manufacturer/Supplier :	
Vendor Address :	
Expected Delivery Time	
COMPLYING WITH SCOPE OF WORK AND TECHI IF*NO " INDICATE DEVIATIONS : (Provide justification an	
	VICAL SPECIFICATIONS? TES NO d allach supporting documents) (NG) Received by: Project Engineer, SFPD
(Contractor) Sybmitted by Project Manager	d altach supporting documents) (NG)
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(Contraction) Submitted by Project Manager Signature	(NG) Received by: Project Engineer, SFPD Signature:
(Contraction) (Contraction) Submitted by Project Manager Signature Eggr. Faisal Nasrat Pharaon	(NG) Received by: Project Engineer, SFPD Signature: Name: Apolinar Ramos Date:
(Contraction) Symmetric by Project Manager Signature Name Edgr. Faisal Nasrat Pharaon Data FOR SEC U NG HAVE REVIEWED THE ABOVE	(NG) Received by: Project Engineer, SFPD Signature: Name: Apolinar Ramos Date:
(Contraction) Submitted by Project Manager Signature Epgr. Faisal Nasrat Pharaon Data Mar. 12,2012 FOR SEC U NG HAVE REVIEWED THE ABOVE SUBMITTAL AND FOUND IT:	(NG) Received by: Project Engineer, SFPD Signature: Name: Apolinar Ramos Date:
(Contraction) Submitted by Project Manager Signature Name Engr. Faisal Nasrat Pharaon Data FOR SEC U MG HAVE REVIEWED THE ABOVE SUBMITTAL AND FOUND IT: Acceptable	(NG) Received by: Project Engineer, SFPD Signature: Name: Apolinar Ramos Date:
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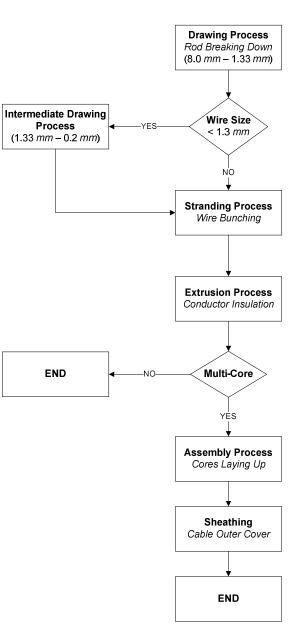


TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIALS SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE FOR APPROVAL				TRANSMITTAL NO : E003 /R1		NEW SUBMITTAL		
				DATE	: 03/07/2012	RE-SUB	MITTAL	
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OWNER:	GENERAL PRESIDENCY OF YOUTH WELFARE	CONSULTANT:	TANMEIAH	-	ONTRACTORS: M&M Un			
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			miscellaneous					
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	2- ALFANAR CABLE & WIRE				Sample & Catalogue		3	15
	3- RIYADH CABLE & WIRE				Sample & Catalogue		3	B
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15. <u>MANUFACTURING STAGES</u> Flowchart of Manufacturing Stages



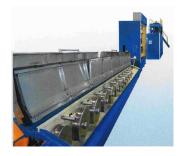




16. Manufacturing Process

a. Rod Break Down

Copper rod of diameter 8.0 mm is an input to first stage in the manufacturing process of building wires & Cables. This stage is called "Drawing Process" which is actually breaking down the copper rod diameter of 8.0 mm into a smaller diameter. This is achieved by passing the copper rod through a series of dies that are present in the drawing machine. The dies are submersed in a suitable lubricant (soapy water & oil) to prevent the dies from wearing out. Drawing process of copper rods run in parallel with a process called "Annealed Process". Annealing is simply heating the copper wires to achieve softer temper (i.e. flexible) wires.

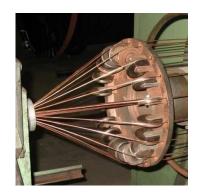


Drawing Machine

b. STRANDING AND BUNCHING

In "Stranding Process" wires are braided together forming the cable's conductor. The process is done by applying several layers of wires on top of each other (in a circular manner). The advantage of doing this over leaving just a large solid conductor is added flexibility.



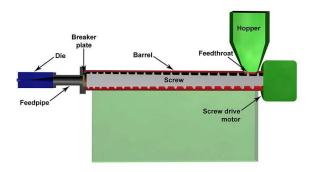


Stranding Machine

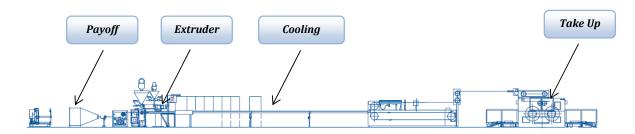


c. EXTRUSION

In "Extrusion Process" conductors are insulated with insulation material such as PVC & XLPE. The insulation layer serves as protection layer for the user, and also prevents phases from being in contact with each other in case multi-core cables. An extruder is the machine used to apply insulation on conductor. The insulation material granules are fed into the hopper that will than enter the barrel that has a rotating screw in it. The material is heated in the barrel and forced out to the die. At the die that material will be extruded on a conductor.



Extruder Basic Components



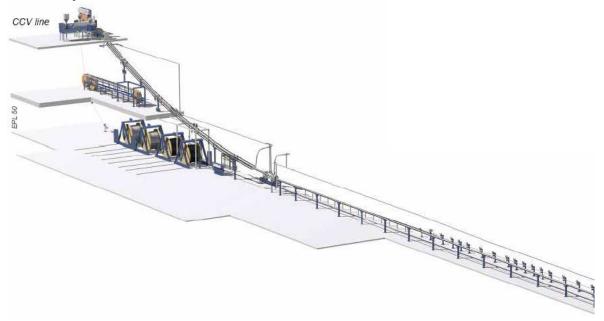
Extrusion Line Layout

Triple Extrusion for MV:

In the extrusion process of Medium Voltage cables three layers of insulation are extruded over the conductor simultaneously by means of triple extrusion. The three layers of insulation are as following, conductor shield (inner-semi conductor), insulation layer (XLPE), and insulation shield (inner semi conductor), respectively. Unlike low voltage cables where one extruder is used for the insulation layer, medium voltage cables are insulated with the presence of three extruders feeding one head. The triple extrusion process and curing



process of XLPE are all done on manufacturing process line known as the "Catenary Continuous Vulcanization LINE" CCV line.



"Catenary Continuous Vulcanization LINE" CCV line

d. Screening:

As mentioned earlier, screen are usually either of copper wires or copper tape. In case of copper wires, the wires are spun around the previous (i.e. insulation) layer, than a copper tape is wrapped around the wires with a big gap percentage and is usually known as 'Copper Open Helix Tape'. The purpose of this tape is to hold the wires together and have electrical continuity between all the wires as not all wires may be touching each other. The other type of screen are copper tape screen in which the copper tape is wrapped around the previous (i.e. insulation) layer with an overlap percentage.





Screening Machine





Copper Wires Screen with Open Helix Copper Tape



Copper Tape Screen with Overlap

e. ASSEMBLY

This is the process of placing several cores or phases together and putting non-hygroscopic "fillers" in the spaces to make the shape circular round. This is done in a spiral manner, with a designated lay length similar to that of stranding, using a laying up machine or drum twister. Everything is banded together with binder tape, which is wrapped around the assembled cores in a helix manner (with a certain % in overlap) to give a more compact shape-form.



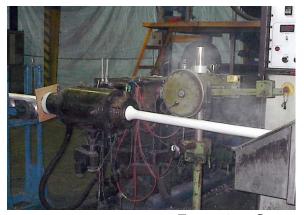




Assembly Machines

f. Bedding

PVC or PE is extruded on top of the binder tape to protect the core insulation from the armoring that comes later on. In case there is no armoring, then there is no need for bedding if the size is small enough. Bedding is also known as "inner covering".





Extrusion Components (PE & PVC)

g. ARMORING

It consists of steel wires or steel Tapes in case of multi-core cable, Aluminum wires & Tapes are used for armoring in case of a single core cable, Both wrapped around the bedding in a helix (for the tape) and with certain lay length for the wires.



Armor Layer Provide a Mechanical protection for the cores against shocks & external stress

- > Steel tape armoring (Preferable to production & reduced cost)
- Steel wire armoring (added flexibility to the cable)
- ➤ Aluminum wire is used for armoring in case of a single core cable
- ➤ Armor can also play the role of the earth in circuit connections when made of steel wires





Armoring Machine

h. Sheathing

Sheathing is the final stage in the manufacturing process of Cables & wires. In sheathing process an outer cover is extruded over the assembled cores giving the cable round shape. The sheathing process is similar to the insulation process in concept. Materials used for outer covering are usually PVC, LLDPE, LDPE, MDPE, LMDPE, HDPE or LSHF material.

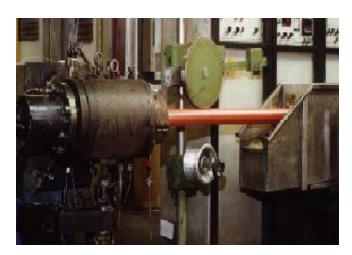
NB: Flame retardant, ozone & ultraviolet ray retardant, petrol oils retardant, termite retardant available options.







Outer Sheath



Sheathing



17. QUALITY POLICY

Energya Cables, in all of its activities is committed to a policy of Total Quality. This is reflected in the Company's Mission and Quality Policy statements

Our Vision:

To become a world class company with a Global brand creating value in Cables manufacturing and Services.

Our Mission:

To become first choice Cables suppliers, globally.

We are the best partner to our customers in development and growth. We also endeavor to create value to everyone who does business with us.

We believe that the future of the company rests with our commitment to Quality. Our customers should know that we offer not only the highest quality products at competitive prices, but also our interaction with them is efficiently and responsibly conducted.

"Customer Satisfaction" is our aim; so all **Energya Cables** employees are responsible to produce high quality products that meet the customer specification and requirements. In doing so each employee is required to adhere to safety standards and maintain a safe working environment. Each employee is also mandated to maintain a very high level of environmental conservation to protect the health of others and prevent any sort of environmental pollutions at all times.

Quality Objectives have been established in each department to measure the efficiency of each process and to identify the areas/processes that need correction or improvement. We are committed to meet the company objectives and retain and satisfy our customers.

The Quality Committee was organized as the authorized fact-finding body composed of top management to conduct reviews and oversee the continuous process of improving the company quality systems as per the requirements of ISO 9001:2008.



18. QUALITY QA/QC

During their long journey in the factory, the cables are subject to a thorough test procedures and qualifications. These tests include

- 1- Raw Material Inspection
- 2- In-Process Inspection (Quality Control)
- 3- Finished Product Tests (Quality Assurance)

Raw Material Inspection

The raw materials are divided into two categories:

- A. New Raw material
- B. Existing Raw material

A. New Raw Material Testing:

To approve the new raw material, a sample must be supplied for lab test and production trial test and must pass the trial tests. If the results are acceptable, product development department approves the new material and the vendor will be provisionally approved. If the provisionally approved Supplier supplies to Energya Cables three deliveries and the results of the inspection and operation are acceptable, the status of this supplier will change from provisionally approved supplier to approved supplier.

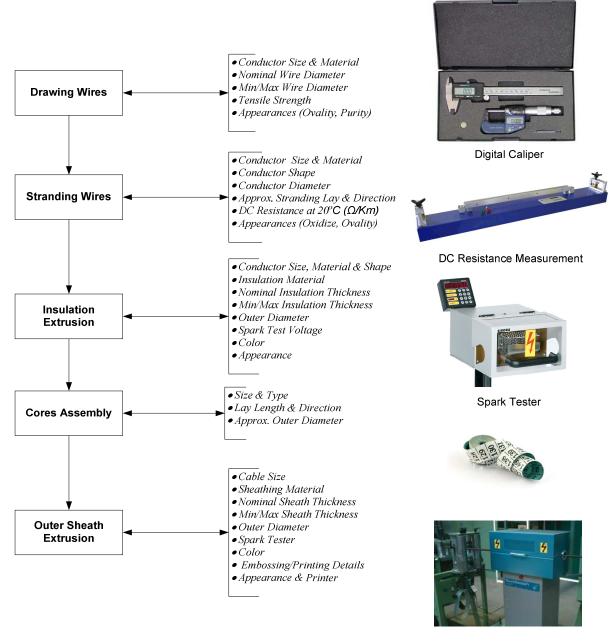
B. Existing Raw Material Inspection:

The existing Raw Materials have been tested and accepted before use in the production process. If the raw material does not meet Energya Cables Raw Material Standards, but the deficiencies (for example packing, weight) do not affect the product quality, the Laboratory head will hold this material. If the test results don't meet Energya Cables raw material standards and the failed test will affect the product quality (for example electrical or mechanical properties), the Laboratory head will reject the material.



In-Process Inspection (Quality Control):

Quality control test are those test performed during the manufacturing process and are compliant with those tests required by international standards such as conductor resistance test and mean overall dimensions test. The following flow chart gives an overview on the quality checks in the manufacturing process.



Spark Tester



Our quality control department has inspection sheets for each stage in the manufacturing process; they keep record of all in process inspection sheets for any future referral.



Finished Product Tests (Quality Assurance)

Quality assurance tests are those tests that are performed on the final product/finished good. The quality assurance tests are compliant with those test requirements of international standards such as voltage test.







Our quality assurance department has cable final test reports that are kept as records that may be referred to in the future.

Based on the IEC and BS standards, 3 types of tests are carried out:

- A. **Routine Tests (R):** Tests made on all production lengths of cable to demonstrate their integrity.
- B. **Sample Tests (S):** Tests made on samples of completed cable, or components taken from a completed cable adequate to verify that the finished product meets the design specifications.
- C. **Type tests (T):** Tests required to be made before supplying a type of cable covered by the standard on a general commercial basis, in order to demonstrate satisfactory performance characteristics to meet the intended application.





High Voltage Test



19. HEALTH, SAFETY & ENVIRONMENTAL

HSE POLICY:

Energya Cables Company constantly places a high priority on both quality and doing the job right the first time. This concept is strengthened thanks to a continuous, companywide program that covers safety, health, environmental protection, quality control and productivity.

Instrument design, research & development and manufacturing all follow the strict ISO 9001 international quality standards. And we are committed to working towards the global ISO conformance, and using Quality Efficiency Indicators as benchmarking tools to track progress and ensure continuous improvement.

Energya Cables Company is committed to the health and safety of our employees, operating communities & locations and the natural environment. Our comprehensive HS&E policy focuses on prevention, accountability, communication and incident control while promoting a safe, healthy and productive working environment.

Energya Cables Company culture promotes respect for all aspects of our environment regardless of the geographic location, and makes every effort to minimize disturbance to natural ecosystems. We strive to decrease the use of hazardous chemicals and emissions in order to minimize our environmental impact. Extensive recycling has also been reinforced at all Energya Cables Company operational facilities and manufacturing units.





HSE OBJECTIVES:

The objectives of Energya Cables/Wires Company Health, Safety and Environment processes include:

Health:

- Providing and maintaining a healthy workplace
- Providing and maintaining equipment that match employee's job description
- Monitoring the employees health in places where their duties pose potential health risks
- Promoting a healthy lifestyle

Safety:

- Preventing accidents
- Providing and maintaining safe equipments
- Providing appropriate safety training
- Monitoring work activities and ensuring they are conducted safely



Environment:

- Minimizing negative impacts on environment
- Using energy efficiently
- Minimizing waste output
- Eliminating the use of ozone depleting substances
- Disposing of waste safely and properly
- Promoting the use of renewable resources
- Promoting the recycling of materials
- Practicing pollution-mitigation techniques

General:

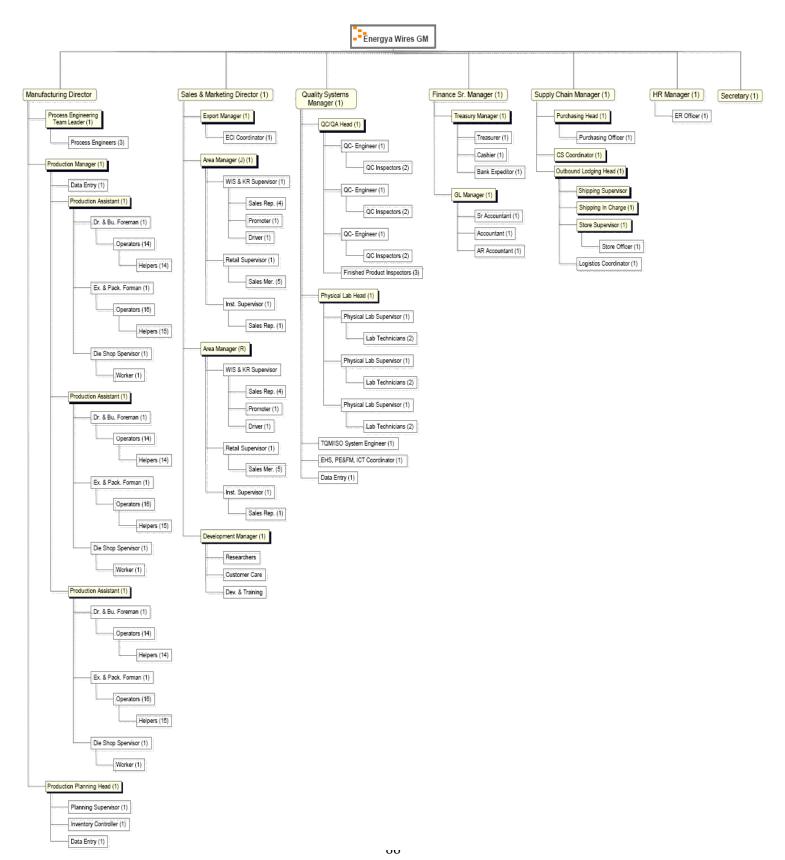
- Complying with applicable legal requirements
- Promoting free and open discussion on HSE matters

Energya Cables/Wires Company operates to a quality-based Health, Safety and Environment (HSE) Management System designed to involve all levels of management within its process. This HSE management system requires the active participation of all Energya Cables/Wires Company employees within its process of preventing illnesses & injuries and of protecting both the local and regional environment. Not to mention continuous improvement and feedback of HSE processes.

The responsibility for HSE issues follows the same organizational structure that controls the Company's day-to-day activities; therefore, HSE considerations are integral part of the nominal planning, implementing, reviewing and auditing processes.



20. Organization Charts





21. <u>Customer List</u>

Item	Name	City	State/Prov	Country
1	AL Rayan Exhibition	Al-Madinah	MADINAH	Saudi Arabia
2	Alkhlioy for electricity	Jeddah		Saudi Arabia
3	AlSukhman Establishment	Makkah	MEKKAH	Saudi Arabia
4	Hassan Saleh Saeed AL HArthi Est	Riyadh	RIYADH	Saudi Arabia
5	Rukn AL Daira For Trading establishment	Riyadh 11411	RIYADH	Saudi Arabia
6	AAMAL AL-KHOZAMI EST	RIYADH 16744	RIYADH	Saudi Arabia
7	ABB			Saudi Arabia
8	ABDUL AZIZ AL NAGAMSHI TRADING EST	Riyadh	RIYADH	Saudi Arabia
9	Abdul Aziz Ayed Rashid Allahibi	Al-Madina	AL-MADINA	Saudi Arabia
10	Abdul Rahman Mohamed Ali AlOwaad EST	Riyadh	RIYADH	Saudi Arabia
11	ABDULATIF MOHD. BAFIL EST	AL- Taif	MEKKAH	Saudi Arabia
12	Abdul-Aziz Al-Atrash Est.	Riyadh 21432	DAMMAM	Saudi Arabia
13	Abdulaziz Mohamed Al-Jouai EST	ALQASSIM	RIYADH	Saudi Arabia
14	Abdul-Hamid Salih Al-Awwad Est.	Riyadh	RIYADH	Saudi Arabia
15	Abdulkader Al-Hosary	Jizan	SOUTH	Saudi Arabia
16	Abdullah Turki AL Turki EST	Riyadh	QASSIM	Saudi Arabia
17	ABDULLAH ABDL RAHIM ALAMOUDI	Al-Taif	MEKKAH	Saudi Arabia
18	Abdullah Ahmed Al Nashreya Est	ALKONFEDA	SOUTH	Saudi Arabia
19	Abdullah Ali AlSeariy Trading	Jeddah		Saudi Arabia
20	Abdullah Hamdi Elharbi	Makkah	MEKKAH	Saudi Arabia
21	Abdullah Safr Al Ghamdi EST	Tabuk	TABUK	Saudi Arabia
22	Abdullah Salih AL Mahdi Est	Al-Madinah	MADINAH	Saudi Arabia
23	Abdul-Rahman Al-Awwad	Riyadh	RIYADH	Saudi Arabia
24	Abdulrahman Motlaq Est.	RIYADH	QASSIM	Saudi Arabia
25	AbdulRahman Saeed Ahmed AlRafaee	Makkah	MEKKAH	Saudi Arabia
26	Aboul-Ezz Helmi	Jeddah		Saudi Arabia
27	Abu Bakar Bin Buna Est	Al-Madinah	MADINAH	Saudi Arabia
28	Abu Faisal Al-Jouf	Tabuk	JEDDAH	Saudi Arabia
29	Abu Zaid Est.	Jeddah	JEDDAH	Saudi Arabia
30	Abu-Khuda'a	Khamis Mushait	SOUTH	Saudi Arabia
31	Adwa AL Amaree	Al-Madinah	MADINAH	Saudi Arabia
32	Adwah Al-Arabia For Trading Est	Riyadh	RIYADH	Saudi Arabia
33	Ahmad Sweleh Al Zahrani	Jeddah		Saudi Arabia
34	Ahmed Abdullah Ahmed Al Agory Alkanany EST	Jeddah	JEDDAH	Saudi Arabia
35	Ahmed Ali Ahmed	Mahayel Aseer	SOUTH	Saudi Arabia
36	Ahmed Al-Nady Est.	Arar	ARAR	Saudi Arabia
37	Al Amoudi for Trading Est	Al-Madinah	MADINAH	Saudi Arabia
38	AL Attas ESt	MAKKAH	MEKKAH	Saudi Arabia
39	AL BELBESY EST	RIYADH KSA	RIYADH	Saudi Arabia
40	Al Gyoum	Jeddah		Saudi Arabia
41	Al Hazmi EST	Ar'ar		Saudi Arabia
42	Al Mansoor	JEDDAH	JEDDAH	Saudi Arabia
43	Al Masyeh Cable Factory	Jeddah		Saudi Arabia
44	Al Nakhbah Trading	Jeddah		Saudi Arabia
45	Al Oksor Est . for Electricity	Jeddah	JEDDAH	Saudi Arabia
46	Al Radadi For Trading Est	Al-Madinah	MADINAH	Saudi Arabia



47	Al Rkaiz Modern for costructions Company Ltd.	Jeddah	JEDDAH	Saudi Arabia
48	Al Rokn AlMashed for Founding and Electricity	Riyadh	RIYADH	Saudi Arabia
49	Al Thajjaj EST	Khamis mushait	SOUTH	Saudi Arabia
50	Al-Amreya	Arar	JEDDAH	Saudi Arabia
51	ALANDLASIA FOR TRADING EST	RIYADH	RIYADH	Saudi Arabia
52	AL-BANDR FOR ELECRICTY EST	JEDDAH	JEDDAH	Saudi Arabia
53	Al-Bourdge co.	Riyadh 30046	DAMMAM	Saudi Arabia
54	Al-Ekhaa Centre for maitenance and cleaning	Jeddah	JEDDAH	Saudi Arabia
55	AIFAHD CO for Trading, Industry & Contracting,	AlQassim	QASSIM	Saudi Arabia
56	Al-Faozan	Jeddah	JEDDAH	Saudi Arabia
57	Algahzih EST	Riyadh	RIYADH	Saudi Arabia
58	Al-Ghosn Est.	Riyadh	RIYADH	Saudi Arabia
59	Al-Gomla Al-Momayaz	Jizan	SOUTH	Saudi Arabia
60	Al-Gomla Al-Togary	Al-Gooz	SOUTH	Saudi Arabia
61	Al-Gomla Al-Togary Konfoda	Konfoda	SOUTH	Saudi Arabia
62	Al-Gouyom	Jeddah	JEDDAH	Saudi Arabia
63	Al-Hamedy Trading Est.	Ar'ar	TABBOUK	Saudi Arabia
64	Al-Haramain Co. for commerce & contracting	Jeddah	JEDDAH	Saudi Arabia
65	Ali Ahmed Ahmed AlZahrani Trading	Jeddah		Saudi Arabia
66	ALI ALSAADY EST	RIYADH	RIYADH	Saudi Arabia
67	Ali Salem Al Hamdy EST	Jizan		Saudi Arabia
68	Alkhaleg Exhibition	Jeddah	JEDDAH	Saudi Arabia
69	Al-Madinah Cables	Jeddah	JEDDAH	Saudi Arabia
70	Al-Madinah Campany	Riyadh	RIYADH	Saudi Arabia
71	Al-Mandomat For Trading Est.	Al-Taif	MEKKAH	Saudi Arabia
72	AL-Mohamady For Trading Est	Al-Madinah	MADINAH	Saudi Arabia
73	ALMORAD FOR ELECTRICTY EST	JEDDAH	JEDDAH	Saudi Arabia
74	Almoseha Wires Company	Riyadh	RIYADH	Saudi Arabia
75	AlMouneer Electricity Est.	Al Taif	MEKKAH	Saudi Arabia
76	AL-MOUSA For Electricity EST	Riyadh	RIYADH	Saudi Arabia
77	AL-MOUSA SPEECIALIZED CABLES	RIYADH 11412	RIYADH	Saudi Arabia
78	AlQuretiya Trading Company	Riyadh 11492	RIYADH	Saudi Arabia
79	Al-Rajhi Construction. L.L.C.	Jeddah	JEDDAH	Saudi Arabia
80	Alrnf Establishment	Riyadh	RIYADH	Saudi Arabia
81	AL-Rodood Trading Est .	Jeddah	SOUTH	Saudi Arabia
82	AL-Samaha Alzahbih For General Constraction EST	Jeddah	JEDDAH	Saudi Arabia
83	Al-Sameh Est.	Al-Kharj	RIYADH	Saudi Arabia
84	Al-Shamal Est.	Tabbouk	TABBOUK	Saudi Arabia
85	Al-Sherif Khedr	Jeddah	JEDDAH	Saudi Arabia
86	ALSOIGH FOR TRADING & ELECTRICTY EST	JEDDAH	JEDDAH	Saudi Arabia
87	Al-Sultan Est. for Electricty	Riyadh	RIYADH	Saudi Arabia
88	Al-Tajhiz EST	Makkah	MEKKAH	Saudi Arabia
89	Althaghr For Trading Est .	Ranyah		Saudi Arabia
90	Al-Thajaj	Khameas Msheat	SOUTH	Saudi Arabia
91	ALthrya For Electric	Jeddah	JEDDAH	Saudi Arabia
92	Amir Mabrouk ALahyany	Makkah	MAKKAH	Saudi Arabia
93	Anarah Al Mamlikah Est Jizan	Jizan	SOUTH	Saudi Arabia
94	Anarah Al Mamlikah Est Sebia	Sebia	SOUTH	Saudi Arabia
95	Anwar Al-Jazeera	Jeddah	JEDDAH	Saudi Arabia
96	Arab Cables Specialized	Jeddah		Saudi Arabia
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97	Arab Engineers Intrnational Ltd .Co. For Industria	Jeddah	JEDDAH	Saudi Arabia
98	Arab Technicians For Trading & Contracting	JEDDAH	JEDDAH	Saudi Arabia
99	Arabian Bemco Contracting co.	Jeddah	JEDDAH	Saudi Arabia
100	Arrab Al Jazeera Contracting Company	Riyadh	RIYADH	Saudi Arabia
101	Ata'ALLAH	Jeddah		Saudi Arabia
102	Att'ALLAH Sudan	Jeddah		Saudi Arabia
103	Awad Rafeyeh AL Fayedy Est	Al-Madinah	MADINAH	Saudi Arabia
104	Bahadiq	MEKKAH	MEKKAH	Saudi Arabia
105	Bait Alnagf Walthoria	AL Taif	MEKKAH	Saudi Arabia
106	Bakhashab- Transport & Trading CO . Ltd	Jeddah	3769	Saudi Arabia
107	Ba-Manaa	Makkah	MAKKAH	Saudi Arabia
108	BAYAN NATIONAL TRADING CO	KUWAIT		Saudi Arabia
109	Bayt AL-Kahrbaa Est.	AL Taif	MEKKAH	Saudi Arabia
110	Bin Aoun	Jeddah	JEDDAH	Saudi Arabia
111	Bin Dajam	Khames Msheat	SOUTH	Saudi Arabia
112	BIN GAAFR FOR ELECTRIC EST	Makkah	MEKKAH	Saudi Arabia
113	Bin Jaber for Electricity Tools and Cnstruction MT	Jeddah	JEDDAH	Saudi Arabia
114	Bin Mahfoz EST	Jizan		Saudi Arabia
115	Business & Trading Company LTD -Watco	Al Kober	RIYADH	Saudi Arabia
116	CABLE FACTORY FUTURE	Riyadh	RIYADH	Saudi Arabia
117	CABLES WORLD	Riyadh	RIYADH	Saudi Arabia
118	Choose HI Quality Trading EST	Dammam	RIYADH	Saudi Arabia
119	Dar Kartaja Trd. Co.	Riyadh	RIYADH	Saudi Arabia
120	Durrat Bilaadi EST.CONT.	Riyadh	RIYADH	Saudi Arabia
121	EID SALMAN AL - AMOUDY EST.	MAKKAH	MEKKAH	Saudi Arabia
122	ELECTRIC WORLD	Riyadh KSA	DAMMAM	Saudi Arabia
123	Energya Plastics	Jeddah		Saudi Arabia
124	Enjaz Al-Rouad	jeddah	JEDDAH	Saudi Arabia
125	EXHIBITION ALHODA		MADINAH	Saudi Arabia
126	Fahd Abdullah Said Al mudaas Est.	Khamis Mishet	SOUTH	Saudi Arabia
127	Fahd Alawad Trading Est	Riyadh	RIYADH	Saudi Arabia
128	Fahd Morad Fahd Alhbshan For Trading Est.	Abha	SOUTH	Saudi Arabia
129	Faisal Hussain Al-Amoud Est.	Al-Taif	MEKKAH	Saudi Arabia
130	Faisal Nasser AL-Tamimi for Construction EST	Alkharj	RIYADH	Saudi Arabia
131	Farooq AL Jabri Shop	Makkah	MEKKAH	Saudi Arabia
132	Fayez Ali Abdo Qusaimi	Riyadh	RIYADH	Saudi Arabia
133	First Specially contracting	jeddah	JEDDAH	Saudi Arabia
134	GARZIZ EST (NADA ABDULLAH)	Al-Madinah	MADINAH	Saudi Arabia
135	GHARBI For Trading & Electricty Est	Jeddah	JEDDAH	Saudi Arabia
136	Gram allah Salem Darwish	Riyadh	RIYADH	Saudi Arabia
137	Gulf for Cables Factory	Riyadh	RIYADH	Saudi Arabia
138	Hachan Al Agami EST.	Al Kharj	RIYADH	Saudi Arabia
139	Hadi Salmen Balhamd Alnahdi Est	Jeddah	JEDDAH	Saudi Arabia
140	Hamah Riyadh	Riyadh	RIYADH	Saudi Arabia
141	Homed Hamed Almohamadi Est.	Jeddah	JEDDAH	Saudi Arabia
142	Ibdaa Cortoba Establishment	Riyadh	RIYADH	Saudi Arabia
143	Ibrahim AL Amaree EST	Al-Madinah	MADINAH	Saudi Arabia
144	Ibrahim Al-Mudaas Co.	Khamis Mushait	SOUTH	Saudi Arabia
145	Ibrahim Al-Nashry	Al-Gooz		Saudi Arabia
146	Ibrahim Khasran	Riyadh	RIYADH	Saudi Arabia



147	Jawdah Cables Factory	Riyadh	RIYADH	Saudi Arabia
148	Khaled Abdul Rahman Al Amoudy for Trading ,AST	Riyadh	RIYADH	Saudi Arabia
149	Khaled Al-Ghosn	Riyadh	RIYADH	Saudi Arabia
150	Khaled Faisal Al-Kathery	Riyadh 113322	RIYADH	Saudi Arabia
151	Khaled Nasr Alhashdi Est	Altaif	MEKKAH	Saudi Arabia
152	Khaled Omer Kahman	Riyadh	RIYADH	Saudi Arabia
153	Khubra Alkahraba Est	Riyadh	QASSIM	Saudi Arabia
154	Kingdom Lighting for Trading Est.	Jizan	SOUTH	Saudi Arabia
155	Kitad Contractors Est	Al-madinah	MADINAH	Saudi Arabia
156	KWABIL SAUDI ARABIA CO	Riyadh	RIYADH	Saudi Arabia
157	Loulou AL Hijaz EST	Riyadh	RIYADH	Saudi Arabia
158	M. Pangandaman		JEDDAH	Saudi Arabia
159	MADAR ALTAREK FOR TRADING EST	RIYADH 35258	RIYADH	Saudi Arabia
160	Mahfooz Al-Dawly	Jizan	SOUTH	Saudi Arabia
161	Mahmoud Hassan Albana	Riyadh	RIYADH	Saudi Arabia
162	Mahmoud Hassan Matwali	Riyadh	RIYADH	Saudi Arabia
163	Manar United For constructuion Est	Makkah	MEKKAH	Saudi Arabia
164	Marai Husin Taleb EST	Riyadh	RIYADH	Saudi Arabia
165	Markaz Al Ja'adabi	Jazan		Saudi Arabia
166	Markaz Alaalame Almumaiez	Jizan		Saudi Arabia
167	Markaz Al-Janoub	Abu Arish		Saudi Arabia
168	Markz Mahfuz Almomayz	Jizan		Saudi Arabia
169	MAWARID ALKAHRABA EST	Riyadh 11541	RIYADH	Saudi Arabia
170	Mefrh Al-Monajam	Najran		Saudi Arabia
171	Middle East Corner For Trading	Riyadh 351112	RIYADH	Saudi Arabia
172	Middle East Corner South	Khamis Mushayt		Saudi Arabia
173	Middle East Electric Meter Factory co.	Jeddah		Saudi Arabia
174	Middle of the Electricity and lighting	Al-Kharj	RIYADH	Saudi Arabia
175	Modern Oceans Est	Jeddah	JEDDAH	Saudi Arabia
176	Mohamed Ali Saeed Ghabichy Al Ghamdi,Blue Electric	Jeddah	JEDDAH	Saudi Arabia
177	Mohamed Al-Mudaas	Khamis	SOUTH	Saudi Arabia
178	Mohamed Al-Zarae	Sakaka	JEDDAH	Saudi Arabia
179	Mohamed Osman Baheg	Tabbouk	TABBOUK	Saudi Arabia
180	Mohammed Bin Ajlan Trede EST	Riyadh	RIYADH	Saudi Arabia
181	Mohammed Hassan AL Ahmdy	Jeddah	JEDDAH	Saudi Arabia
182	Mohammed Mohammed Saleh Mohammed Shaarawy EST	Jeddah	JEDDAH	Saudi Arabia
183	Mohammed Salem Alkathemy Est	Jeddah	JEDDAH	Saudi Arabia
184	Mohammed Salih Ali Twireb Est	Riyadh KSA	QASSIM	Saudi Arabia
185	Mohammed Shikh Aboud Alamoudi	Jeddah	JEDDAH	Saudi Arabia
186	Mohd. Saleem Alharbi EST		JEDDAH	Saudi Arabia
187	mona Al_Attas	Makkah	MEKKAH	Saudi Arabia
188	MONEER ABU AL-SAUD EST.	Riyadh KSA	DAMMAM	Saudi Arabia
189	Najd Est.	Riyadh KSA	QASSIM	Saudi Arabia
190	Nasem Alandlus For Trading Est	Riyadh 1642	RIYADH	Saudi Arabia
191	Nashy Hegely	Al-Madinah	MADINAH	Saudi Arabia
192	National Company For Wries & Cables	Jeddah		Saudi Arabia
193	Noor Al-Shomoe Est.	Khames Msheat	SOUTH	Saudi Arabia
194	Office Abdullah Al olyan	Riyadh 11499	RIYADH	Saudi Arabia
195	Omair Al-Leheany	Makkah	MAKKAH	Saudi Arabia
196	Omar Abdul-Karim - Al-Adeb ctr.	Makkah	MEKKAH	Saudi Arabia



197	Rawad Al Yarrmook Trading Est	Riyadh	RIYADH	Saudi Arabia
198	Riyada AL Salam For Trading EST.	Jeddah		Saudi Arabia
199	Roaze House EST	Riyadh	RIYADH	Saudi Arabia
200	Rokn Al-Sharq Al-Awsat	Khamis Mushait	SOUTH	Saudi Arabia
201	Rwafid AL Alamiayh EST	Riyadh 11682	RIYADH	Saudi Arabia
202	Rweed Algamah	Riyadh	RIYADH	Saudi Arabia
203	SABC ENTERPRISES EST	Riyadh	RIYADH	Saudi Arabia
204	Safa	Jeddah	JEDDAH	Saudi Arabia
205	Sakny Establishment	AlMadinah		Saudi Arabia
206	Salem Said Ba-Fakir Est.	Riyadh	RIYADH	Saudi Arabia
207	Salim BaWazer	Makkah	MEKKAH	Saudi Arabia
208	Salma Belqaysem Al-Gharbi Est.	AL-Qunfedah	SOUTH	Saudi Arabia
209	Sama Al Madinah	Al-Madinah	MADINAH	Saudi Arabia
210	Samer Yousef Ahmed	Riyadh	RIYADH	Saudi Arabia
211	Sand Orouba EST	Riyadh	RIYADH	Saudi Arabia
212	Saud AbdulHameed Al Saeydy Company	Makkah	MEKKAH	Saudi Arabia
213	Saud Alsayedy Est	Makkah	MEKKAH	Saudi Arabia
214	Shabbab Bin Mohamed Bin Shabbab	Riyadh	RIYADH	Saudi Arabia
215	Sherif Khedr	Jeddah	JEDDAH	Saudi Arabia
216	Sighaa Bint Rowaished	Riyadh	RIYADH	Saudi Arabia
217	SOAFY AL RIYADH EST FOR TRADING	Riyadh 270701	RIYADH	Saudi Arabia
218	Suliman Al-Robiaa International Group	RIYADH 11514	RIYADH	Saudi Arabia
219	Transport - Omar Ben Saad OTEX Riyadh	Riyadh	RIYADH	Saudi Arabia
220	Transport - Saudi Catering & Contracting Company			Saudi Arabia
221	Transport- Ibrahim Hassan Al-Idressi Est	Jeddah		Saudi Arabia
222	Transport Shomous			Saudi Arabia
223	Transporter - Omer bin M. A. Saad Est.			Saudi Arabia
224	Tristar	Jeddah	JEDDAH	Saudi Arabia
225	Turky Al-Sherif	Jeddah	JEDDAH	Saudi Arabia
226	Wafaa Al-Anzy Est.	Al-Kharj	RIYADH	Saudi Arabia
227	Wared Transport Co. Ltd	Jeddah	JEDDAH	Saudi Arabia
228	Wholesale Exhibition	GIZAN	SOUTH	Saudi Arabia
229	Yahia Abd Rabh Alsabi	Riyadh 517	RIYADH	Saudi Arabia
230	YAHIA ABDRABOH SALEM AL MASAIBY	Riyadh KSA	RIYADH	Saudi Arabia
231	Yasir for Electricty	Makkah	MEKKAH	Saudi Arabia
232	Yousif Aljhni Est	Makkah	MEKKAH	Saudi Arabia



22. FACTORY LOCATION MAP











Factory Location: Energya Wires Factory is located in Rabigh Industrial Area, which is almost 140 KM away from Jeddah.



23. ENERGYA CABLES IN PICTURES



Building Wire - Rabigh Plant



Plastics (PVC) - Rabigh Plant





Administration Office - Rabigh Plant



