

ekabel

OIL & GAS

Cable Accesories and Monitoring



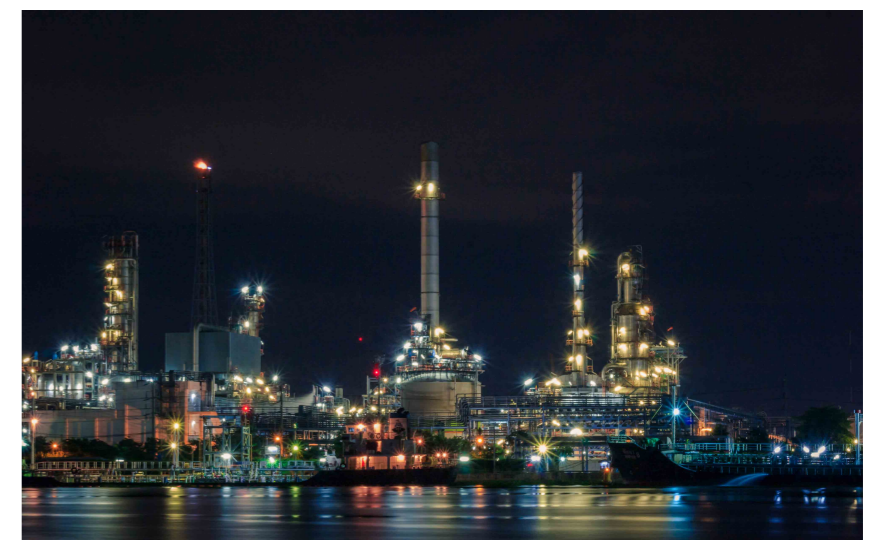
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Solutions for the Oil & Gas Industry

The Oil and Gas industry faces highly corrosive conditions, where the operating equipment must support the characteristics of the environment. This is one of the industry's greatest challenges that must be faced in order to maintain continuous and successful operations. This is why the engineers at Ekabel design and specify that each of our solutions adapt to adverse conditions that may be present.

To achieve this we offer a broad portfolio that seeks to guarantee the integrity of the equipment, monitoring and integrating it through the SCADA systems of each client. Our portfolio offers a range of solutions present in the three segments of the industry (Upstream, Midstream and Downstream)

At Ekabel we have a high commitment to safety and quality; knowing the importance of each process, we offer cutting-edge solutions that start from the support systems, terminals, connectors and conduits, as well as high, medium and low voltage conductors. We also provide control, communication and instrumentation conductors including fiber optic cables for data transmission and asset monitoring, permanent oil well monitoring systems, always integrating each of the solutions to the requirements of our customers.



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Production

1 Instrumentation Cable

For use in instrumentation and control processes in applications where protection against electro-static interference is required. Standard UL type PLTC and ITC, approved for internal or external plant installations, in the outdoors, in conduits, in ducts and cable trays where the circuit does not exceed 600 volts.



2 Control Cable

Cable for general use in power, control and lighting circuits and motors for artificial lift systems, in a wide range of commercial and industrial applications. Approved for circuits not exceeding 600 volts in indoor or outdoor installations, aerial installation, in conduits, cable trays or directly buried.



3 VSD Cables

Cable for circuits that do not exceed 600V, to be used in systems for frequency variation and power control. The three insulated conductors with three symmetrical ground wires are designed to reduce the noise in AC motors controlled by inverters with pulse width modulation.



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Production

1 Electric Submersible Pump Cable

For use in 5Kv power circuits. Suitable for use in Electric Submersible Pump units. Permissible work temperature up to 450° F (232° C). The cable has exceptional performance for oil, heat and corrosion resistance.



2 Fiber Optic Sensing Technology

Monitoring through optical fiber by varying the intensity of the light using only a simple source and interrogators, providing a distributed detection over large distances. This is adapted to obtain a temperature profile in cold or hot production wells (Alternate Steam Injection).



3 Permanent Monitoring System

Through downhole measurement, the Ekabel PCP sensor (Progressive Cavity Pump) allows real-time monitoring of the conditions in the reservoir, providing the opportunity to optimize the production of the well and decrease the number of pump failures.



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Production

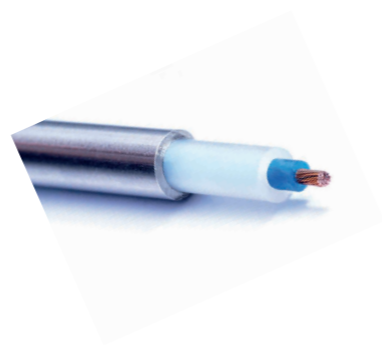
1 Profibus PA/DP Cable

The Profibus PA drivers from Ekabel are ideal for the automation processes in the connection of sensors and actuators; even in areas where there is risk of explosion.



2 Tubing Encapsulated Cables

Armored cable for the monitoring of oil wells, for the acquisition of data such as pressure, temperature and vibration measurements; for identification, diagnosis and analysis of equipment operation problems and changes in reservoir conditions.



3 Fiber Optic Cable

For sending data with a wide variety of materials for different configurations of conductors such as PVC, MDPE, LSZH, among others. They can also be manufactured with metal or dielectric armor, providing a solution for every need. The optical fiber can be manufactured in the Multimode or Singlemode type.



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Production

1 Cable tray solutions and Uni-channels for supports

During the design phase of the pipe and support systems, engineers must consider not only the structural calculations, but also the compatibility of the material to be used to avoid the degradation or galvanic corrosion, therefore determining their useful life, project their useful life. The expertise of the technical team of Ekabel allows us to offer a wide variety of metallic and non-metallic solutions for channeling of support based on the installation conditions. The following are some we offer:

Materials

- Aluminum, Aluminum AA 6063
- Hot dip galvanized steel, or pre-galvanized steel sheet, or machined
- Electro-zinc plated steel, 304/316 stainless steel
- Fiberglass
- Coated with polyurethane, epoxy, or PVC, other specials on request
- Finished with paint

Certificates

- NEMA VE 1 Metal Cable Tray
- CSA C22.2 Specification 126.1 Metal Cable Tray
- NEMA FG 1 Fiberglass Cable Tray
- CSA C22.2 Specification 126.2 Fiberglass Cable Tray
- IEC 61537 Cable Tray and Cable Ladder Systems
- UL 568 Fiberglass Cable Tray
- A-A-52199
- IEC 61537 (UNE/EN 61537)
- NEC - ART. 392

Design

- Tray
- Stairs
- Solid bottom laminate or perforated bottom
- Welded Mesh
- Channel type



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Production

1 Cable Connections Solutions

Ekabel compression or mechanical connectors provide reliability in the connection of the cable. Made in several alloys this minimizes the risk of corrosion. A wide variety of possible designs are available for junction boxes and distribution boards.

Types

- Compression
- Mechanics
- 0.6-69kV

Materials

- Copper or tinned copper
- Tinned aluminum, bimetallic (copper / aluminum)
- Bronze

Design

- 1, 2, 4 holes
- Flared, with peephole, narrow tongue
- Form-c, form-h, form-h bipartite bolt, form-l, pin
- Tubular straight, curved, type t
- For grounding systems, for rod
- Zapata with opposor
- Multi-tap

Certificates

- CSA Certified C22.2 No. 65-13
- ABS Approved
- ASTM B545-97, Class C
- UL Listed 486A-486B



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Production

1 Solutions for Terminations, Inserts, and Joints

The contracting terminals and separable connectors are ideal for the termination of the Medium Voltage cables to the PADs of the transformers or inserts. Made of heat or cold shrinkable materials resistant to weathering and allows reliable termination.

Types

- Cold shrinkage
- Shrinking in heat
- Premolded

Materials

- EPDM
- EPR

Design

- Smooth or with skirt
- Separable
- Breaks elbow
- Body T
- Conical

Certificates

- IEEE48 ANSI 386
- EN50180/50181 CENELEC
- IEC 60099-4



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Production

1 Junction Box Solutions

Ekabel connection junction boxes is a product manufactured and approved under the NEMA features, It is a component that permits the protection of the connections between the instrumentation and control cables ensuring a layer of security while unifying and maintaining the organized systems and managing to carry the information to the control and monitoring room.

Types

- Indoor
- Outdoor

Materials

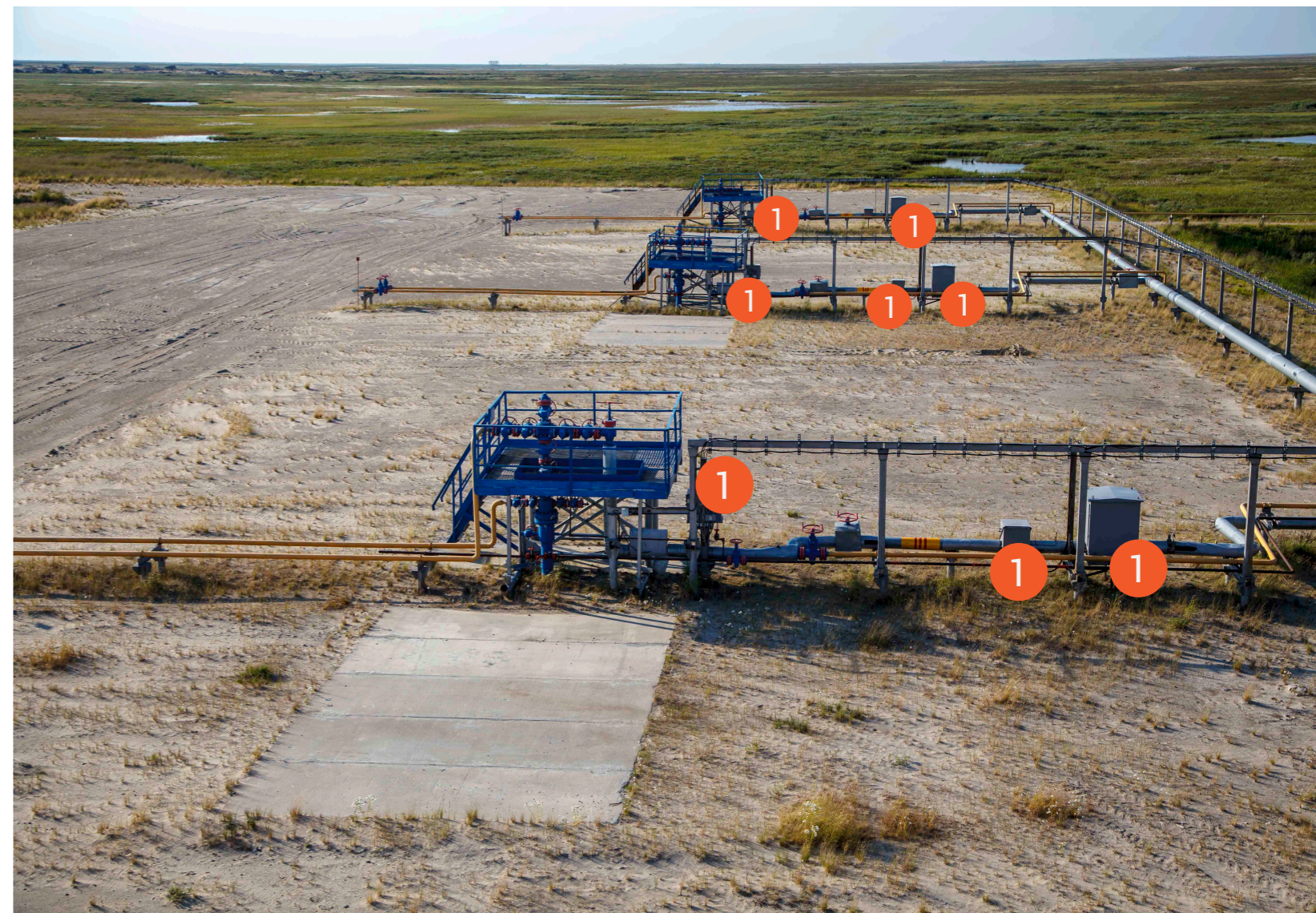
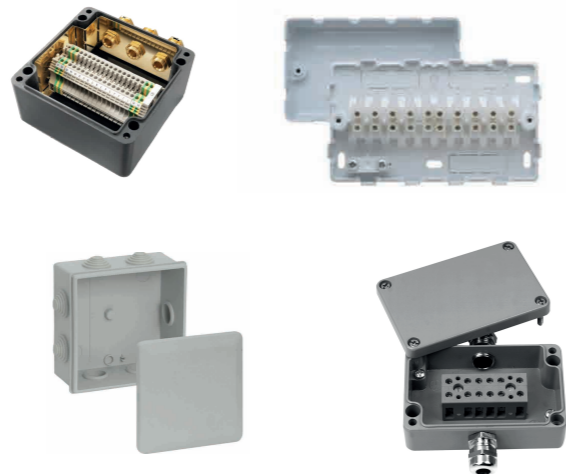
- PVC
- Galvanized steel hot
- Aluminum

Design

- Circulars of two and four connections
- Square of two and four connections
- Octagonal
- Extenders

Certificates

- IEC 60364-1:2005
- UL 1773
- UL 50
- NEMA 1, 3R, 4, 4X, 12, & 12K



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Production

1 Cable Glands Solutions

Designed to fix the cables to the connection boxes providing impermeability in the circuit protecting it from external agents that can deteriorate internal connections and equipment inside cabinets.

Types

- Round or flat cable
- Teck type
- Type mc, aia, sia

Certificates

- Certificado UL, cUL, cULcs
- Certificado CSA
- Clase I, Div. 1, Grupos C, D
- Clase II, Div. 1 & 2, Grupos E, F, G
- Clase III
- Clase I, Div. 1, Grupos B, C, D
- Clase II, Div. 1, Grupos F, G
- Clase I, Div. 1, Grupos A, B, C, D
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- ATEX, IECEx, cULus, CEPPEL, NANIO CCV, NEPSI, CCOE, Bureau Veritas, DNV, ABS, Lloyds
- NEMA 6P (1/2" a 1-1/4" tamaño 1)
- NEMA 4 (1-1/4" tamaño 2 a 4")

Materials

- Stainless steel, galvanized steel
- Aluminum, steel body, aluminum nut
- Nickel-plated brass, bronze
- Iron alloy
- Polyamide 6, thermoplastic polyester



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Storage and Transportation

1 Fiber Optic Sensing Technology



Fiber optic cable is a technology that varies the intensity of light using only a simple source and interrogators, providing a distributed detection over long distances.

This solution responds to the demand for reliability in long-term pipeline monitoring. The distributed fiber optic detection solution is a unique technology suitable for monitoring pipes in oil and gas installations that allows:

- Leak detection: temperature changes together with acoustic anomalies can detect small leaks in a pipeline.
- Third party interference: accidental or intentional third-party activities can be detected, for example, by digging near the pipeline.
- Monitoring of the heat trace: changes in temperature can be detected as a result of a leak of gas or liquid, such as the escape of sulfur in a pipeline.
- Movement on the ground: The solution is sensitive to soil movements along the pipeline that may result from a landslide, a rockfall or a seismic event.



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Refinery

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Refinery

1 Power Cable

For use in power circuits when installed in open air, ducts, cable trays when rated for CT, or directly underground in wet and dry locations.



2 Thermocouples Cable

For uses in instrumentation and control processes in applications for sending and re-adding signals to thermocouples where protection against electrostatic interference is required, it can be for internal or external plants.



3 Fiber Optic Cable

For sending data with a wide variety of materials for different configurations of conductors such as PVC, MDPE, LSZH, among others. They can also be manufactured with metal or dielectric armor, providing a solution for every need. The optical fiber can be manufactured in the Multimode or Singlemode type.



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Refinery

1 X-Bend Cable

Flexible armored cable suitable for use in power, control and lighting circuits in a wide range of industrial applications where mechanical protection and high flexibility are required.



2 Profibus PA/DP Cable

The Profibus PA drivers from Ekabel are ideal for the automation processes in the connection of sensors and actuators; even in areas where there is risk of explosion.



3 Ekafiab Cable - Fire Resistant

For use in instrumentation and control processes in applications where protection against electrostatic interference is required. Cables type PLTC and ITC, approved for internal or external plant installations, conduits, ducts and cable trays where the circuit does not exceed 600 volts. Resistant to direct contact with fire, withstanding temperatures of 2000°F.



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Refinery

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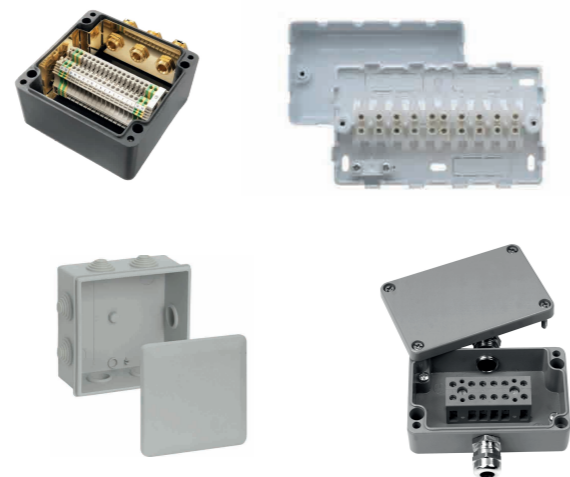
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- Galvanized steel hot
- Aluminum

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- UL 50
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- NEMA 4 (1-1/4" tamaño 2 a 4")

Materials

- Stainless steel, galvanized steel
- Aluminum, steel body, aluminum nut
- Nickel-plated brass, bronze
- Iron alloy
- Polyamide 6, thermoplastic polyester



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Refinery

1 Conduits Solutions

The conduit is an option for the installation of the cables at the same time that it offers mechanical protection to the cables to maintain the integrity of the circuit. EKABEL in its portfolio includes, as an alternative to previously assembled cables, canalization solutions through conduits tubes. According to each application we detail the following:

Types

- Bodyconduits
- Flexible, liquidtight
- Trifurcations
- Splice boxes

Certificates

- NFPA 70:20081
- IEC 60364-1:2005
- NOM-001-SEDE-2005
- NEMA RN 1, 2, 3
- ANSI C80.1
- ANSI C80.3
- ANSI C80.5
- ANSI C80.6
- UL 797; C22.2 NO. 83.1; and NMX-J-536-ANCE
- UL 6A; C22.2 NO. 45.2; and NMX-J-576-ANCE

Materials

- Aluminum
- Hot galvanized steel
- Steel 304/316
- Coated or painted
- Polyurethane



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Refinery

1 Solutions for Terminations, Inserts, and Joints

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Types

- Cold shrinkage
- Shrinking in heat
- Premolded

Materials

- EPDM
- EPR

Design

- Smooth or with skirt
- Separable
- Breaks elbow
- Body T
- Conical

Certificates

- IEEE48 ANSI 386
- EN50180/50181 CENELEC
- IEC 60099-4



Who We Are

A team of professionals with vision of the future and action oriented.

We are passionate about designing solutions that respond to the needs of customers.

Where We Are

With offices in Latin America, the United States, Australia & Spain, Ekabel has consolidated its rapid expansion and has participated in numerous important projects.

What We Do

Based on expert knowledge, we design and integrate energy systems, telecommunications and automation to optimize results for our customer and protect their most value assets.





Our Philosophy

360 Integration

When it comes to energy systems and connectivity networks, we've got you covered.
Our ability to integrate several products in a single proposal is the backbone of our service.

Borderless Logistics

Streamlined delivery is part of our signature service in order to meet client needs.

Brain HUB

Our team of top level engineers from around the world, with heavy expertise in the industries we serve, provides our clients expert advice on most challenging projects.

Global Service Team
Experts devoted to help you.

Technology Transfers
Specific training sessions in latest topics.

Flexibility

Our geographic expansion allows us to offer competitive advantages on both small and large projects.

Global reach with local support.



Contact Information

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