



**Active
Alliance LLC**
pipeline engineering

ISO 9001:2015
ISO 29001:2010
ISO 37001:2016
ISO 45001:2018
ISO 14001:2019

aau.com.ua



Our clients

We are proud to offer high quality onshore support services to clients, which include major international oil companies, and engineering, procurement and construction contractors



Our vision Be the leading global provider of professional services for pipeline transportation systems

Our mission Provide modern, innovative and sustainable solutions to our partners in the pipeline maintenance sector

Our distinguishing features

- Individual and business relationships with major clients
- Broad relationships with suppliers and partners
- Flexible pricing policy
- Maximum customer satisfaction
- Adherence to current technologies and trends

About us

Active Alliance was established in 2016;

AAU executed over 2000 km of pipeline inspection;

AAU is a full member of Ukrainian chamber of Commerce and Industry.

Quality policy:

AAU quality policy complies with the standards confirmed by the following certificates: ISO 9001: 2015, ISO 29001: 2010, ISO 37001: 2016, ISO 45001: 2018, ISO 14001:2019.

Our maintenance activity:

Internal pipeline cleaning by specially designed cleaning pigs;

Detection of a pig passage and location of the pig stuck;

Geometry inspection by «FAGOT» tool;

In-line inspection by MFL tool.



Certificates



ATEX Certification

Certificate of Conformity



Active Alliance LLC
Andriushchenka str. 4D, Kyiv, 01135, Ukraine

This is to certify that the Requirements of the above organisation has been assessed 2014/34/EU Directive by Pyramid Certifications LLP applicable to following products for

ATEX

Product : In-Line Inspection GEO & MFL Tool (4"- 56")

Description of product:
In-Line Inspection Tools are used for detection, measurement and categorisation of metal loss, corrosion, cracks and geometry features within the pipe wall of high pressure steel pipelines. The tools are pushed by the product stream and scans the wall of the pipeline with specific sensors. Data is processed and stored in electronics sub-systems inside the tool. These section include: battery section, electronics sections and sensor carrier sections, which can be combined. Standalone battery section or combined battery/electronics sections of the tool are considered explosion protected sections. Explosion protection is provided by hermetically sealed container filled and pressurised with inert gas and intrinsic safety system that prevents emerging any part of the tool in potentially explosive zones.

Certificate No. : FATINT157921
Initial Certificate Date : 02.06.2021
Certificate Date : 23.09.2021 (Reissue)
Valid Until : 01.06.2024



II 2G Ex pxb Ib IIB T4 Gb

N. B. Mykhailo
DIRECTOR



The certificate of conformity is issued against sample meeting the Essential Safety Requirements for the above directive. The Sample is tested against IEC 60079-1:18 and has been registered on the request of the manufacturer by Pyramid Certifications LLP. The Certificate is the result of Tests carried out on samples and does not represent the serial production of these products. The certificate remains valid until the manufacturing conditions or the quality system are changed.

This certificate is the property of Pyramid Certifications LLP and must be returned on request. The status of this certificate mail to info@pyramidcertifications.com.

Pyramid Certifications LLP
www.pyramidcertifications.com

Certificate of Conformity



Active Alliance LLC
Andriushchenka str. 4D, Kyiv, 01135, Ukraine

This is to certify that the Requirements of the above organisation has been assessed 2014/34/EU Directive by Pyramid Certifications LLP applicable to following products for

ATEX

Product : Low Frequency Signaller AAU.S Series with Low-Frequency Detector AAU.D Series. (Degree of Protection of Casing-IP68 Under Pressure 12 MPa)

Certificate No. : IATINT159121
Initial Certificate Date : 23.09.2021
Certificate Date : 23.09.2021
Valid Until : 22.09.2024



II 2G Ex pxb Ib IIB T4 Gb

N. B. Mykhailo
DIRECTOR



The certificate of conformity is issued against sample meeting the Essential Safety Requirements for the above directive. The Sample is tested against IEC 60079-1:18 and has been registered on the request of the manufacturer by Pyramid Certifications LLP. The Certificate is the result of Tests carried out on samples and does not represent the serial production of these products. The certificate remains valid until the manufacturing conditions or the quality system are changed.

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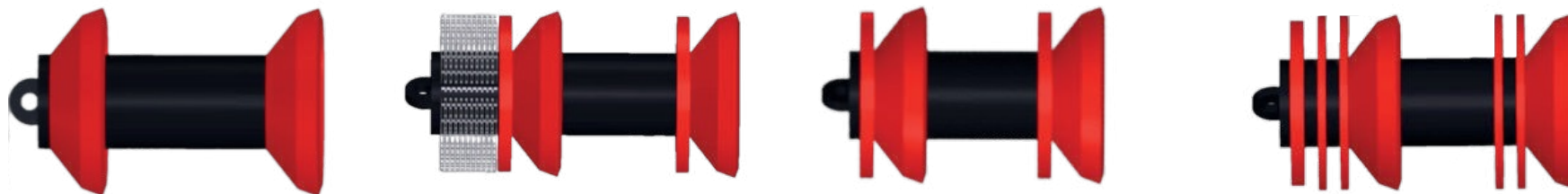
Cleaning pigs

Pipeline pigs are tools for – cleaning inner walls of the pipeline from deposits, scale, dirt, moisture, etc., which moves in the pipeline in the flow of the transported product. The configuration of cleaning pigs depends on their purpose and operating conditions.

Our Company produces cleaning pigs for oil and gas industry

Our cleaning pigs can be used for:

- cleaning after construction to remove debris from the pipeline and determine its possibility;
- cleaning before inline inspection for the best inspection results;
- Preventive cleaning of aggressive deposits in order to reduce corrosion;
- periodic cleaning from associated sediments that create constrictions, in particular, release from sand and clay, paraffin, etc., in order to maintain the design flow rate



Foam and polyurethane foam pigs

Polyurethane foam pigs are versatile and usually one of the cheapest types of cleaning pigs.

They can be made unidirectional or bidirectional.

The polyurethane foam pig can be made in different densities and additionally covered with polyurethane for increased wear resistance, as well as equipped with metal brushes for more efficient cleaning.

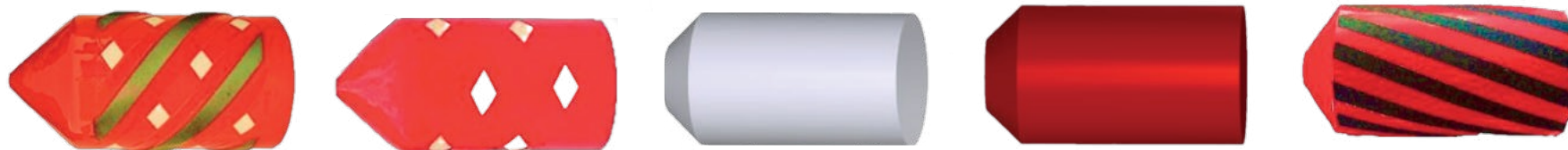
Application area:

Cleaning of pipelines for various industrial purposes from mobile contaminants and moisture (condensate);

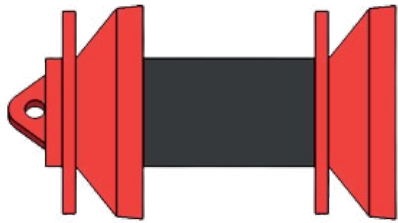
Cleaning the pipeline from loose contamination, in particular for cleaning the pipeline after installation work;

Determining the nature of pipeline contamination in order to clarify the cleaning program;

Control of the possibility of using polyurethane cleaning pigs and quality control of cleaning.



Basic modifications of cleaning pigs



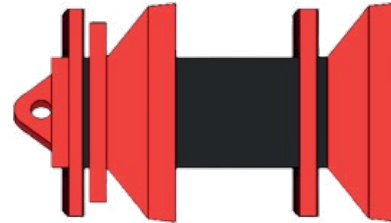
CLUN - type

Cleaning pig CLUN has high maneuverability and is universal. This pig can be equipped with a soft and hard cleaning discs, or a disc with magnets to remove ferromagnetic contaminated particles, or a calibration plate to detect critical constrictions. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.



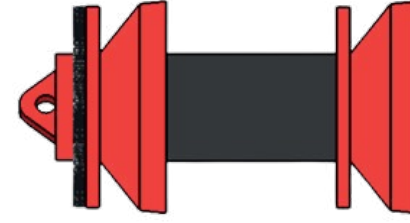
CLSF-type

A CLSF-type cleaning pig with soft cups is used to remove a variety of mobile deposits. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.



CLMS - type

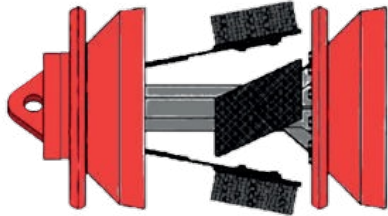
A CLMS-type cleaning pig is used during an aggressive cleaning program to remove solid deposits and / or large amounts of oil and paraffin-like contaminants. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.



CLBR-type

The cleaning pig of the CLBR type with radial brushes is designed to remove soft moving sediments and tear off deposits of medium density from the inner wall of the pipeline. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.

Basic modifications of cleaning pigs



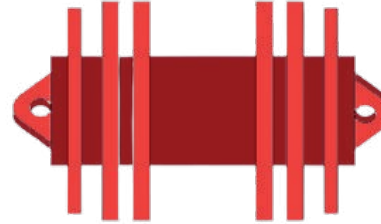
CLBS - type

Lightweight cleaning pig with segment brushes is designed to remove soft deposits and tear off hard deposits from the inner wall of the pipeline. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.



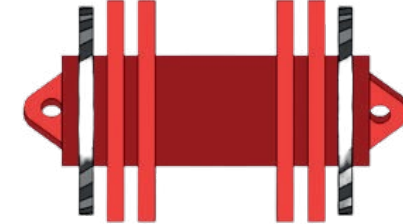
CLFP - type

Foam pigs have wide usage on the first stages of cleaning program. Foam pigs depending on density are used for removing of air, moisture, condensate and dehydration. Also, they can serve as indicator of pipeline narrows and/or amount of debris in pipeline. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.



BDSF - type

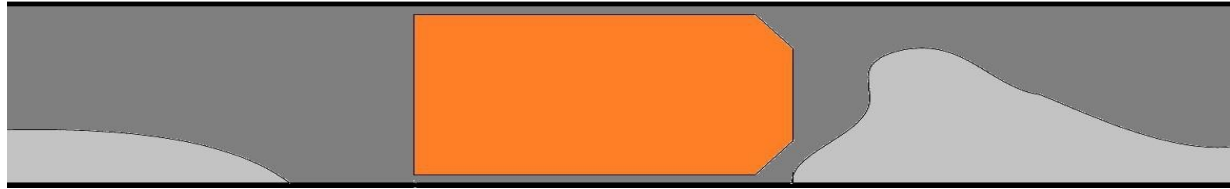
Cleaning pigs are used for mid-density debris removing. This type of pig is able to run in both forward and opposite direction. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.



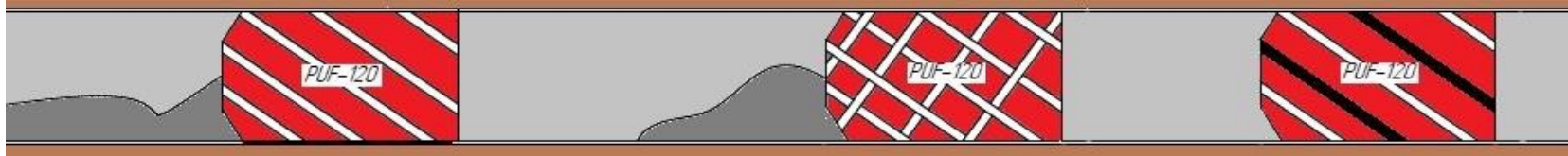
BDCR - type

Cleaning pigs are used for mid- and high-density debris removing. This type of pig is able to run in both forward and opposite direction. The configuration of this cleaning pig is made for the passage of 1.5D radius bends.

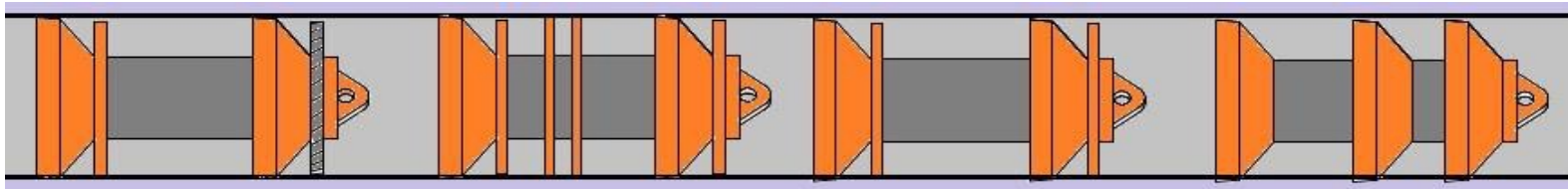
Pipeline cleaning program



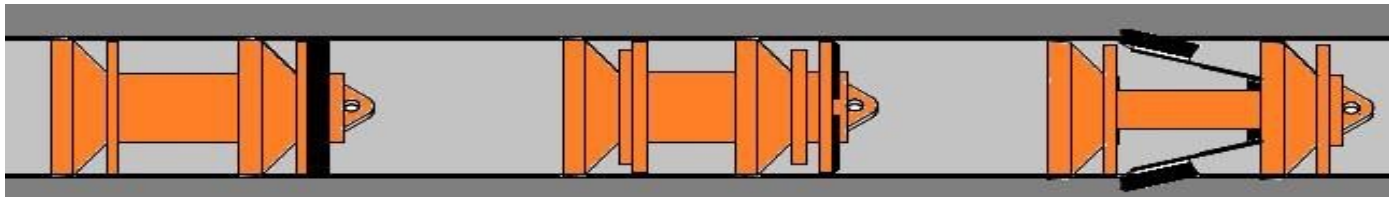
2. Soft cleaning. (4 levels with different inner diameters of the pipeline) .



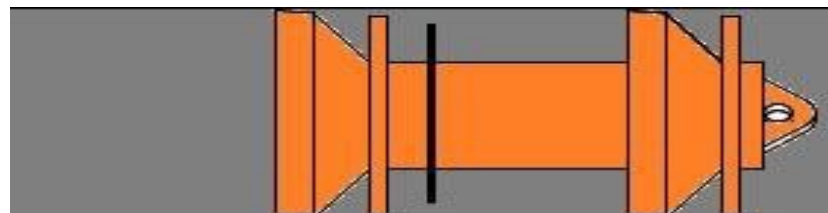
3. Medium cleaning. Pigs made of polyurethane, consisting of 2-6 support disks 85-90ShoreA.



4. Hard cleaning. Pigs made of polyurethane, consisting of 2-4 support disks 85-90ShoreA, reinforced radial, sector brushes, carving disks, disks with metal plates, and/or 2 cuffs.

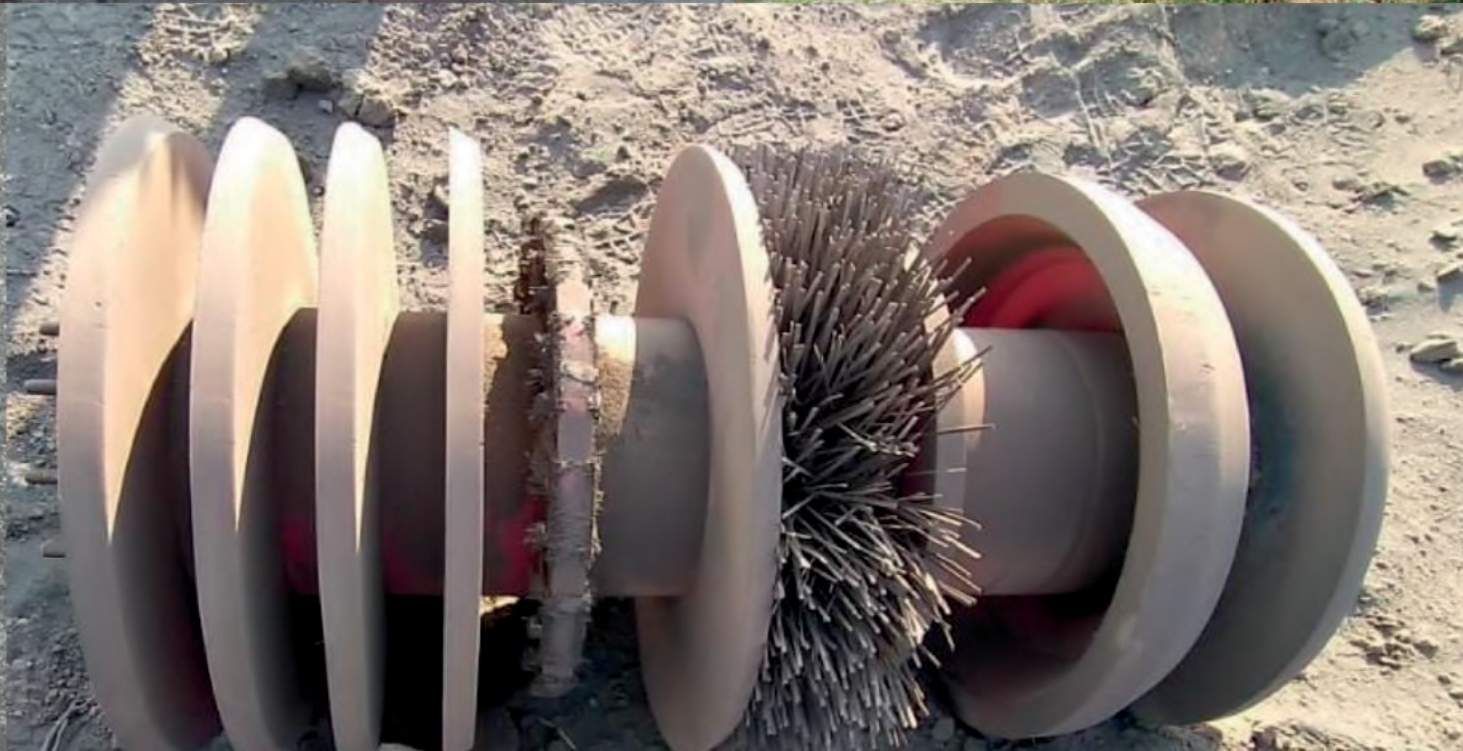


5. Calibration. Pigs made of polyurethane, consisting of 2 supporting disks, calibration disks 85% and 75% of the inner diameter of the pipeline.



The cleaning program is selected by qualified specialists of LLC Active Alliance LLC individually for each specific case of the pipeline, depending on its technical characteristics, terrain and other features specified in the questionnaire.

The transition to the next stage is carried out with the positive results achieved at the previous stage, which consist in minimal damage to the working / calibration elements of the equipment.



Low frequency Transmitter AAU.S

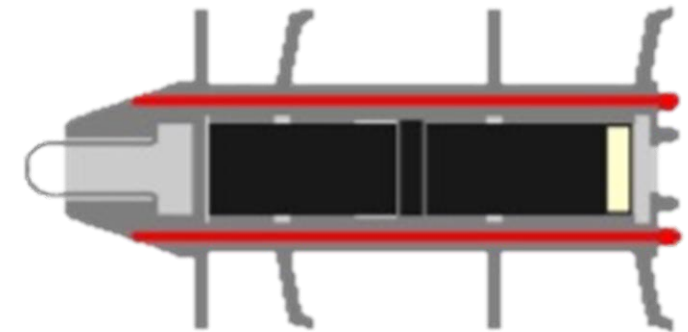
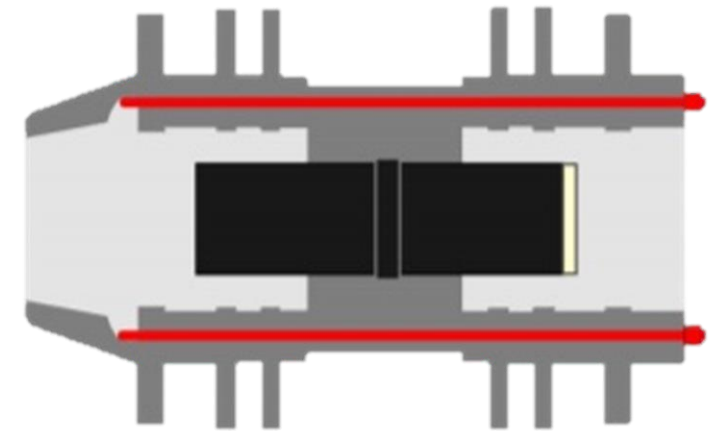


The AAU.S transmitter can be installed on various cleaning pigs for pipeline. It is used with cleaning pigs inside the pipeline for detection pig dislocation.

It emits an electromagnetic signal at a frequency of 22 Hz, which is able to pass through the metal walls of the pipeline and a layer of soil and/or water above it. Using a low-frequency detector, the position of the detector in the pipeline can be determined. The transmitter has an LED indication of the remaining battery life and the selected emission mode. For remote on/off and change of emission modes of the transmitter without removal from the in-line projectile, a remote control panel operating in the infrared (IR) range is used.

INSTALLATION POSITIONS

| Tool specification | AAUS-1 | AAUS-2 | AAUS-3 |
|---|--|------------------------------------|----------------------------------|
| Suitable for pipelines with diameters | from 200 to 1500 mm (from 8" to 60") | from 100 to 250mm (from 4" to 10") | from 75 to 200mm (from 3" to 8") |
| Detection range by air | 25m | till 15m | till 9m |
| Autonomous operation time | Not less than 700 hours (till 2000) | 150 hours | till 60 hours |
| Pressure of environment | 120atm (till 153atm) | | |
| Degree of protection of casing according to ГOCT 14254-96 | IP68 under pressure 12 MPa | | |
| Temperature of environment | - 40°C...+80°C. | | |
| Power supply | 4 x D, 1.5B | 4 x AAA, 1.5 B | 2 x AAA, 1.5 B |
| Sizes | Diameter – 86mm (on flange 94mm), Length 298mm | Diameter - 42mm, Length - 222mm | Diameter – 42mm, Length 132mm |
| Weight | 6.0kg | 1.0kg | 0.65kg |
| Mean life before failure | not less then 5000 hours | | |
| Signal emission modes | Continuous, Periodic | | |
| Indication of remaining work time | + | | |
| Indication of emission mode | + | | |



Low Frequency Detector AAU.D

| | |
|-----------------------------------|--------------------------|
| Detection range by air | 25 m |
| Autonomous operation time | not less than 240 hours |
| Temperature of environment | - 40°C...+80°C. |
| Power supply | 4 x AA, 1.5 V |
| Sizes | 90 mm x 110 mm x 270 mm |
| Weight | 3.5 kg |
| Mean life before failure | not less then 5000 hours |

Low Frequency Detector AAU.D is a device, designed to search for stopped in-line projectiles, as well as to register the passage of pigs through the marker points. Depending on the selected locator mode, registration is performed either by changing of magnetic fields or by electromagnetic fluctuations at a frequency of 22 Hz from a transmitter mounted within a cleaning pig. The operator is notified by sound from built-in speaker and the LED signals on the front panel locator if the filtered signal exceeds a certain threshold value. At the same time, the signal is recorded in the internal memory of locator.



Reviews

Regal Petroleum  Регал Петролеум

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Президентство
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с. Яблунівка, р-н Південний, м. 142
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04071, Київ, обл. Київська, м. 04071
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Вис. №1615 від 10.09.2019 року

Президенту компанії
ТОВ «Компанія «Актив Альянс»
Пугачевська С.П.

Представництво «Регал Петролеум Корпорейшн Лімітед» повідомляє, що з кампанією ТОВ «Компанія «Актив Альянс» укладено договір № RPS004563 від 22.01.2018р. на виконання робіт з внутрішньотрубною діагностикою газопроводу із засги внутрішньотрубових інспекційних снарядів.

Згідно згаданого договору компанія ТОВ «Компанія «Актив Альянс» роботи з внутрішньотрубною діагностикою газопроводу-відгалуження Ме Голотвицької ТЗСУ - магістральної газопровід «Курск-Київ», трубопроводів для та довжиною 18,3 км.

Під час виконання робіт ТОВ «Компанія «Актив Альянс» застосувал внутрішньотрубові інспекційні снаряди, призначені для виявлення особливостей гео форми трубопроводу: вм'ятин, гофр, овальностей, кутів повороту та інших особ дефектів та аномалій, а також інше обладнання, прилади та інструменти, які і необхідні документи та дозволи на застосування і експлуатацію.

Спеціалісти компанії показали високий рівень професійної підготовки у різних та видах робіт. За час співпраці підприємство провело себе як надійного партнера, якісно та чесно, без зауважень та порушень, виконую свої зобов'язання. Рекомендуємо до співпраці.

Директор департаменту по виробництву та капітальному будівництву

В.М. Ма

В.А. Директора Представництва

М.М. Ян



АКЦИОНЕРНЕ ТОВАРИСТВО «УКРТРАНСНАФТА»
вул. Московська, 32/2, м. Київ, 01010, Україна
JOINT STOCK COMPANY «UKRTRANSNAFTA»
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Факс/Тел.: +38 044 201 57 78
044 201 57 78
www.ukrtransnafta.com

11.09.2019 12:00/11/5332

Директору ТОВ «КОМПАНІЯ «АКТИВ АЛІАНС»
І.А. Кунічаку

Цим листом підтверджуємо факт успішного співробітництва між АТ «Укртранснафта» та ТОВ «КОМПАНІЯ «АКТИВ АЛІАНС».

Згідно договору поставки від 29.08.2018 р. № 23-02/40-18, ТОВ «КОМПАНІЯ «АКТИВ АЛІАНС» виступало постачальником ручних інструментів пневматичних чи моторизованих (код 42650000-7 за ДК 021:2015) (пристосування для врізки в трубопроводі під тиском) (далі - Товар).

Місце поставки Товару: вул. Кошовина, 18, м. Львів; вул. Саїтовська, 9, м. Кременчук; с. Августівка, Білявський р-н, Одеська обл.

Строки поставки Товару: до 28 грудня 2018 року включно. Поставка Товару була здійснена у повному обсязі 31.08.2018 року.

Претензій та зауважень по якості, кількості та строкам поставки Товару - відсутні.

Рекомендуємо ТОВ «КОМПАНІЯ «АКТИВ АЛІАНС» як надійного ділового партнера.

Контактна особа АТ «Укртранснафта» - Солодаренко Наталія Петрівна, начальник відділу закупівель матеріально-технічних ресурсів, (044) 201-57-94.

Директор із закупівель

О.В. Колесник



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Президенту ТОВ «Компанія
«Актив Альянс»
п. Пугачевський С.П.
вул. Андрюшенка 4Д, оф.92
м. Київ, 01135

Цим листом підтверджуємо факт успішного співробітництва між АТ «Укртранснафта» та ТОВ «Компанія «Актив Альянс».

Згідно договору надання послуг від 12.12.2019 ТОВ «Компанія «Актив Альянс» надало послуги з внутрішньотрубною діагностикою трубопроводів по об'єктам «Капітальний ремонт І-ої черги лінійної частини нафтопроводу «Броди - Держкордон» з заміною труби Ду 500 на ділянках км 17,7 - км 37,3».

Під час виконання робіт ТОВ «Компанія «Актив Альянс» було застосовано внутрішньотрубинні інспекційні снаряди «Функціональний агрегат для виявлення геометричних особливостей трубопроводу Фагот-20», призначений для виявлення особливостей геометричної форми трубопроводу: вм'ятин, гофр, овальностей, кутів повороту та інших.

Претензій та зауважень по якості та строкам надання послуг відсутні.

Заступник генерального директора

О.П. Шубка

Відділо Ф.С.,
(052) 291-97-65

Regal Petroleum  Регал Петролеум

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Тел./факс: +380 (44) 344-79-30(31)

Вис. № 2380 від 13.12.2018 р.

Президенту компанії
ТОВ «Компанія «Актив Альянс»
Кунічаку І.А.

У відповідь на Ваше звернення повідомляємо, що ТОВ «Компанія «Актив Альянс» працює на об'єктах Представництва «Регал Петролеум Корпорейшн Лімітед» з квітня 2018 року. За цей період фахівцями підприємства виконувались роботи з очищення та внутрішньотрубною діагностикою газопроводу-відгалуження Мелдівсько-Голотвицької ТЗСУ - магістральної газопровід «Курск-Київ».

Виконуючи роботи, ТОВ «Компанія «Актив Альянс» застосовує сучасні засоби очищення для видалення відкладів і сторонніх предметів і внутрішньої порожнини трубопроводу, а також внутрішньотрубинні інспекційні снаряди, призначені для виявлення особливостей геометричної форми трубопроводу: вм'ятин, гофр, овальностей, кутів повороту та подібних особливостей, дефектів та аномалій, а також інше обладнання та інструменти, які мають необхідні документи та дозволи на застосування та експлуатацію.

Спеціалісти компанії показали високий рівень професійної підготовки у різних ситуаціях та видах робіт. За час співпраці підприємство провело себе як надійного партнера, який якісно та чесно, без зауважень та порушень, виконую свої зобов'язання.

Загріємся з високим обладнанням, з початком надання послуг, з наданням звітів за час співпраці не було.

Рекомендуємо ТОВ «Компанія «Актив Альянс» до співпраці іншим замовникам.

В.А. Директора Представництва

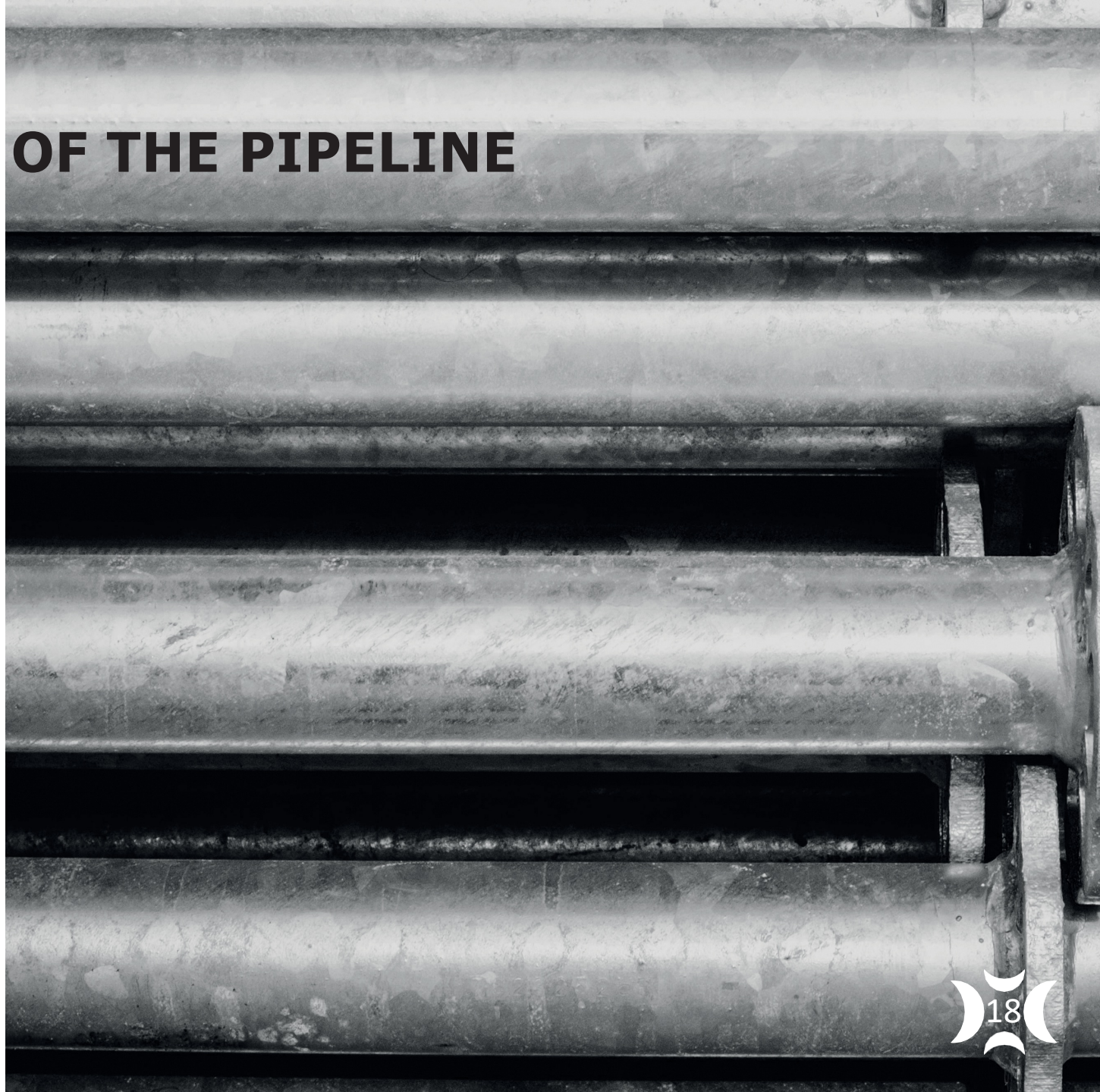
М.М. Яновський

Директор департаменту по виробництву та капітальному будівництву

В.М. Машко

GEOMETRY INSPECTION OF THE PIPELINE

The main task of the functional geometry inspection tool of the pipeline is to detect narrows, bends, tees, insets, blockages, chops, corrugations, taps, as well as to determine the length and effective cross-sectional area of the pipeline, in order to make a decision on the continuation of cleaning, from the point of the operation of the pipeline- removal of critical sections and the possibility of conducting in-line inspection (ILI) by means of special diagnostic equipment MFL, SMFL, TFI, DEF.



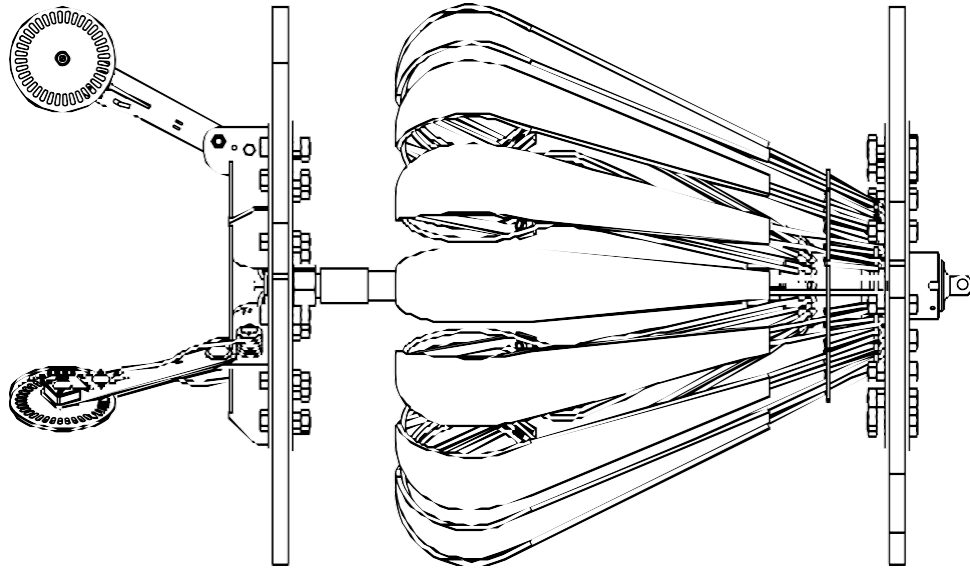


INSPECTION TOOL «FAGOT»

«FAGOT» reliably determines and visualizes: the geometry of dents, corrugations, factory-made bends, weld protrusions, valves, gate valves and other anomalies and features of the pipeline geometry.

Operating conditions — liquid, gaseous and multiphase media, including explosive ones. Profilometry is performed on existing oil and gas pipelines without changing the pumping mode.

FEATURES OF «FAGOT»



"FAGOT" is functional tool for determining the geometric features of the pipeline.

A low-frequency signaling device of the AAU.S type is installed in the body of the pulling section to track the passage of the device.

The cardan joint connects the pulling section with the measuring one.

Odometers are designed to determine the distance traveled, the distance to the anomaly, and the speed of product transfer.

The measuring section consists of 16 independent arms that determine the cross-sectional shape of the pipeline.

The risk of "Fagot" getting stuck is minimal due to the fact that cross-country cuffs are used on the pulling section.

Tool specification

| | |
|-------------------------------|--------------------------------|
| Temperature range | From -30 to +80 °C |
| Pressure range | 8 MPa |
| Flow rate | 0.1-6 m/s |
| Length, m | Not more than 915 mm |
| Weight, kg | Not more than 25 kilos |
| Bends passability | 1.5 D, 90° |
| Time of tool autonomous work | Not less than 72 hours |
| External diameter of the pipe | From 6" till 28 " |
| Wall thickness | 4-20 mm |
| Environment | Gas/liquid/mixture/ammonia/air |
| Path distance | Up to 300 km |

After carrying out in-pipeline diagnostics using specialized software, a team of certified specialists analyzes the received data and provides a report in accordance with POF 2009 and 2016 subject to additional.



Advantages of our geometry tool



- Diameter range from 4" to 28".
- Presence of 3 odometric wheels, in order to increase accuracy of distance and velocity measurements, and decrease the measurement error.
- Fast mobilization with minimal costs.
- Narrows possibility 85 % of internal diameter.
- Determination of angles and radii of turns with high accuracy.
- Determination of pressure, temperature and product flow rate.
- Determination of geometric anomalies with an accuracy of 1 mm.



ACTIVE ALLIANCE LLC IS THE FIRST MANUFACTURER OF MFL IN UKRAINE

The Company has an ability to manufacture MFL with a diameter from 6 inches up to 56 inches.

The structure of MFL

FORWARD SECTION

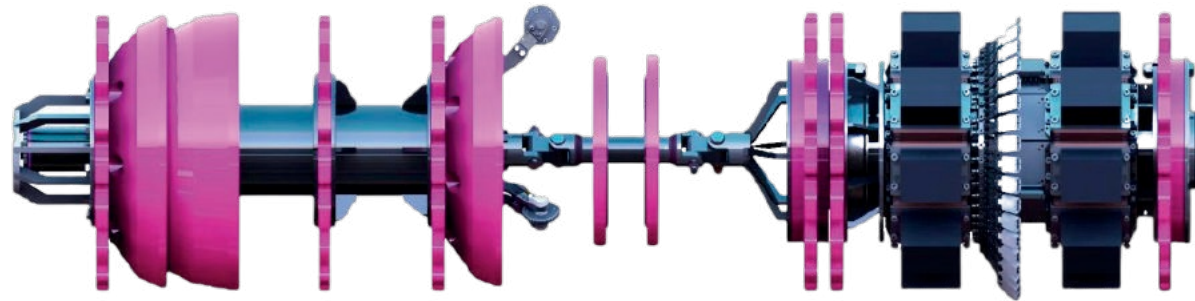
Consists of polyurethane cuffs on a metal case. Serves to ensure the movement of the device in the product.

A low-frequency transmitter is installed in the housing of the forward section, which is used to track the location of the device during run

HARDWARE SECTION

It consists of a control unit, data storage, and slots for installing batteries. Serves for providing power to all electromagnetic circuits, collecting, processing, accumulating and outputting data.

The section has also been equipped with gyroscopes for measuring angular displacements in the X Y Z axis and accelerometers for measuring accelerations and indirect determination of instantaneous values of speed and passed distance, with temperature and pressure sensors.



ODOMETR BLOCK

It consists of odometer wheels on a rigid support and springs. It is used to measure the traveled distance and the speed of movement of the device.

MAGNETIC SECTION

Consists of permanent magnets, demagnetization coils, magnetic cores.

It is intended for magnetization or demagnetization of the pipeline wall during diagnostics.

Main technical characteristics of MFL DN 20

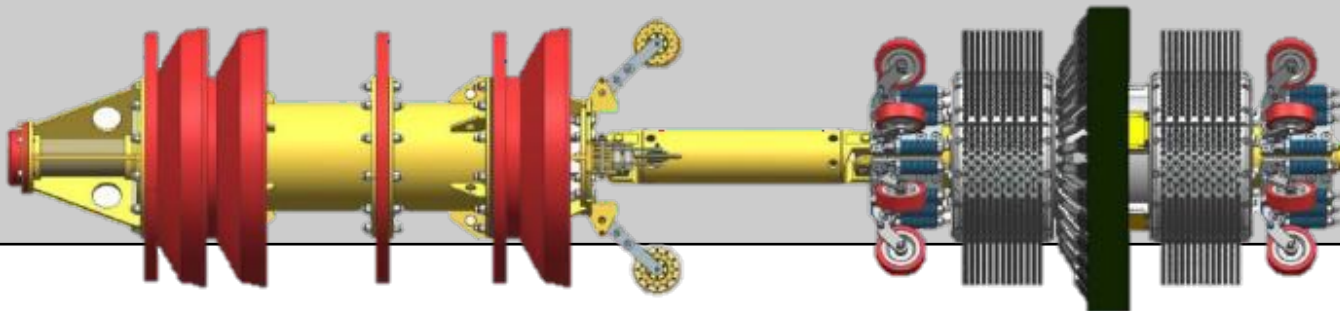
| CHARACTERISTIC | VALUE |
|--|---------------------------------------|
| External diameter of MFL | 530 mm |
| MFL length (forward and magnetic sections) | 2900 mm |
| MFL weight (including battery) | 1013 kg |
| Resolution of the measuring system longitudinal (transverse) – | 1 (3) mm |
| Number of magnetic sensors (Hall sensors) | 540 pieces |
| Number of eddy current sensors | 120 pieces |
| The maximum length of the surveyed area | 250 km |
| Channels of communication and data transmission with the service computer: | wired - USB 3.0; wireless - Wi-Fi. |
| The amount of stored data - | 2 TB |

Battery cell type

lithium sulfuryl chloride for professional use.

The MFL allows you to detect and correctly classify with an identification probability > 0.9:

- features of the inner and outer surfaces of pipelines;
- anomalies of the type: corrugation, corrosion, dent, risk, anomaly of the transverse seam, anomaly of the pipe material;
- changes in the thickness of the pipeline wall;
- type repairs: weld socket, patch, rebar.



Technical characteristics of the inspected pipelines

CHARACTERISTICS

VALUE

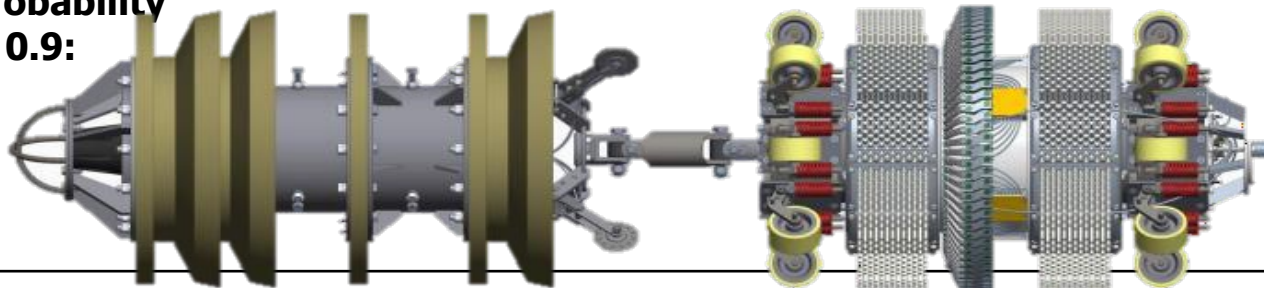
| | |
|---|--|
| DN | 20" (530 mm) |
| WT range | 7 mm – 15 mm |
| Environment | Oil / natural gas |
| Allow. content of H₂S | 0,0 – 2,0 % |
| Minimum permissible internal diameter of the pipeline, no more | 85% from the min ID |
| Minimum permissible radius of pipeline turning, not less | 3 x DN |
| The minimum distance between the axes of adjacent tees, not less | 2 x DN |
| The maximum diameter of the branch of the tee without lattice, no more | DN |
| Maximum bend of the pipeline | 90° |
| Maximum length of the wedge cavity of wedge gate valves, no more | 210 mm |
| Environment temperature | 0 ... + 50° C |
| Environment pressure | Gas: 2.0 - 8.0 MPa Oil: 1.0 - 8.0 MPa |
| Environment velocity | no less 0,3 m/s and no more 3.0 m/s |



Main technical characteristics of MFL DN 28

| CHARACTERISTIC | VALUE |
|---|---|
| External diameter of MFL | 730 mm |
| MFL length (forward and magnetic sections) | 2865 mm |
| MFL weight (including battery) | 1100 kg |
| Resolution of the measuring system longitudinal (transverse) – | 1 (3) mm |
| Number of magnetic sensors (Hall sensors) | 720 pieces |
| Number of eddy current sensors | 160 pieces |
| The maximum length of the surveyed section at an average speed of the MFL along the pipeline is 1 m/s | 400 km |
| XYZ Inline Navigation System | industrial IMU with GPS |
| Channels of communication and data transmission with the service computer: | wired - USB 3.0; wireless - Wi-Fi |
| The amount of stored data - | 2 TB |
| Battery cell type | lithium sulfuryl chloride for professional use. |

The MFL allows you to detect and correctly classify with an identification probability > 0.9:



- features of the inner and outer surface of pipelines;
- anomalies of the type: corrugation, corrosion, dent, risk, anomaly of the transverse seam, anomaly of the pipe material;
- changes in the thickness of the pipeline wall;
- support, weight, pipeline fittings, magnet;
- type repairs: weld socket, patch, rebar.

Technical characteristics of the inspected pipelines

| CHARACTERISTICS | VALUE |
|---|--|
| DN | DN700 (720 mm) |
| WT range | 6 mm – 18 mm |
| Environment | Oil / natural gas |
| Allow. content of H₂S | 0,0 – 2,0 % |
| Minimum permissible internal diameter of the pipeline, no more | 85% from the minimum ID |
| Minimum permissible radius of pipeline turning, not less | 1.5 x DN |
| The maximum diameter of the branch of the tee without lattice, no more | DN |
| Environment temperature | 0 ... + 50° C |
| Environment pressure | Gas: from 2.0 MPa to 8.0 MPa Oil: from 1.0 MPa to 8.0 MPa |
| Environment velocity | no less 0,3 m/s and no more 3,0 m/s |



The systems provides:

- Defect detection with a probability of up to 98% (including cracks);
- correct identification of its type (including corrosion of any type, erosion, cracks or deposits);
- the most reliable information about the location, width, length and depth (residual wall thickness) in accordance with the parameters specified in the POF-2016 recommendations;
- the determination the pressure in front and behind the tool;
- temperature determination;
- gyroscope and accelerometer data, which provide precise gyroscope and accelerometer data, which provide GPS (WGS-84).

A main feature of our magnetic flaw detectors is the use of the latest technologies - triaxial sensors of the latest generation and magnets that ensure complete saturation of the pipeline wall with a magnetic field.

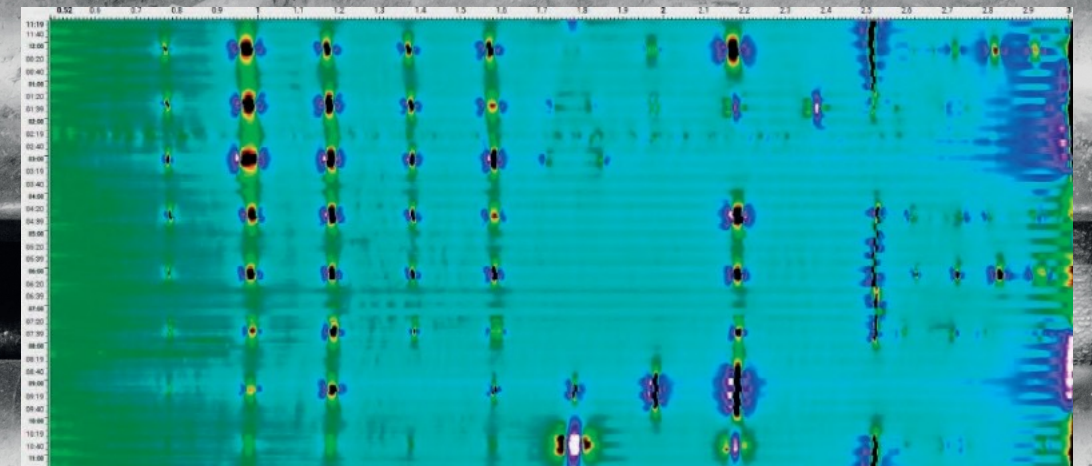
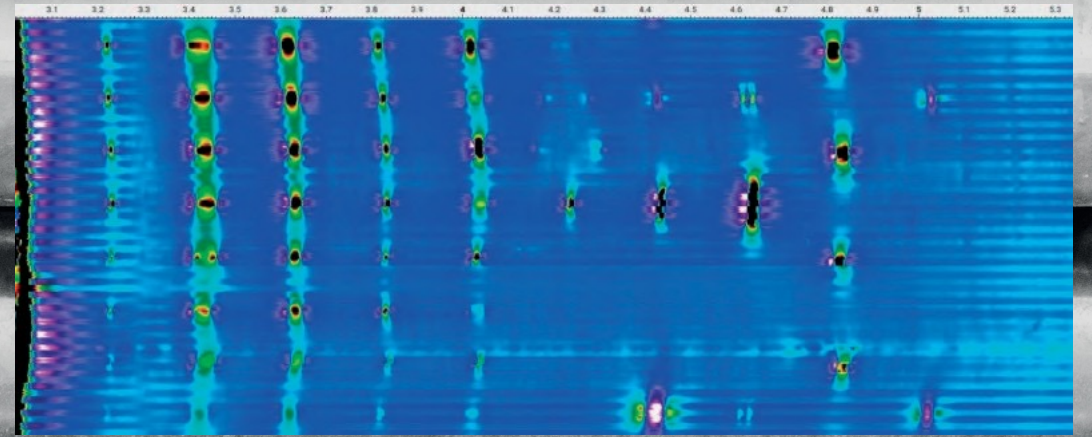
Triaxial sensors form the basis of a state-of-the-art measuring system that is resistant to various temperatures and vibrations.

Report

The final stage of in-line inspection is the preparation of a report. The report is preparing based on the results of the analysis of signals recorded by the inspection tool. Proprietary techniques, algorithms and software are used to decode signals. Several types of reports are provided (according to the Agreement with the Customer):

Preliminary report – issued as soon as possible with an indication of significant defects that are subject to immediate additional inspection.

Final report - contains the most complete information about the operating modes of the tool, all the identified elements of the arrangement of the surveyed section of the pipeline, features, anomalies (defects) and their measured parameters.





Active Alliance LLC is constantly improving its capabilities and is always open for future cooperation!

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