

FRAC TOOLS TOKEN

The world's first crypto token based on
oil industry production

2024

FRAC

TABLE OF CONTENTS

1. INTRODUCTION.....	4
1.1. Brief description.....	4
1.2. What is hydraulic fracturing.....	6
2. ADVANTAGES.....	8
2.1. Advantages of token.....	8
2.2. Advantages of the company.....	9
3. OVERVIEW OF THE MARKET AND FRAC TOOLS LLC.....	10
3.1. General definitions.....	10
3.2. Types of completions.....	11
3.3. Total market volume.....	12
3.4. Market indicators.....	15
3.5. Analysing the procurement of well completions services.....	16
3.6. Shares of service companies in the total market volume.....	16
3.7. Market position and development plan.....	19
3.8. Market outlook to 2030.....	25
4. PURPOSE OF FUNDRAISING EVENT.....	27
4.1. Innovative method of investment. First stage of modernisation.....	27
4.2. Second stage of modernisation.....	28
4.3. Action plan.....	28
5. ROADMAP.....	31

FRACT

TABLE OF CONTENTS

6. TOKENOMICS	32
6.1. Token utilisation	32
6.2. Justification of token value growth	32
6.3. Financial model of token payoffs	33
6.4. Token governance	34
6.5. Warranties	35
6.6. Token distribution	36
6.7. Listing on exchanges	37
6.8. Further development plan	37
7. CONCLUSION	39
8. APPENDIX	41
Variable costs (materials)	42
Catalog	44

FRACT

1. INTRODUCTION

1.1. BRIEF DESCRIPTION

We are pleased to announce the world's first oil industry-based crypto-token, the Frac Tools Token (\$FRACT). This document will examine the distinctive features and advantages of the token. We will provide a detailed description of the purpose of the token creation, namely as a tool for investing in an existing scientific-production association (FRAC TOOLS LLC).

FRAC TOOLS LLC is a team of professionals with extensive experience in the oilfield services industry, specialising in downhole equipment. We place great importance on the quality of our manufactured equipment and the ongoing improvement of its functionality. This allows us to meet the exacting standards of the largest oil and gas companies.

A distinctive feature of the company is our proven and flexible approach to solving complex and non-standard tasks, which consistently delivers the expected result.

Our production facility for metal processing, assembly and testing of downhole equipment is equipped with modern IT solutions to ensure compliance with QMS (Quality Management System), and registration of product test parameters. This guarantees the customer stability and quality of supplied products.

We are continually seeking to expand our business relations and invite interested parties, customers, contractors and competitors to collaborate with us.

FRAC TOOLS LLC manufactures products and engages in activities such as:

LOWER WELL CLOSING. Equipment assemblies for:

- uncemented liner;
- uncemented liner followed by MHF;
- continuous cementing of the liner;
- continuous cementing of the liner followed by multi-stage hydraulic fracturing;
- collar cementing of the liner;
- collar cementing of the liner followed by multi-stage hydraulic fracturing;
- sectional running of the liner both with and without cementing;

FRACT

- lateral wellbores with production casings of different thicknesses ("bottle" EC);
- eliminating leaks in the "head" of the shank;
- collar cementing of the casing followed by multi-stage hydraulic fracturing;
- two-stage or sleeve cementing of the casing with a coupling;
- two-stage or sleeve cementing of the casing using a packer sleeve.

FT OIL&GAS WELL SYSTEMS is the brand name for a range of affordable and reliable downhole equipment for multistage hydraulic fracturing. The design of the equipment is selected and realised based on the current requirements of the large international customers.

Current nomenclature:

- Ball-activated ball-operated fracturing coupling FT401.114.136.2.1;
- Ball-activated ball-activated ball coupling FT402.114.136.2.1;
- Saddle for ball-activated hydraulic fracturing couplings FT801.0.001;
- Ball-activated hydraulic fracturing coupling FT403.114.136.2.1;
- Hybrid controlled hydraulic fracturing clutch FT404.114.136.2.1;
- Activation coupling FT601.114.127.1.1.1;
- Interinterval hydromechanical packer FT203.114.136.2.1;
- Interinterval hydromechanical packer FT203.114.143.1.1.1;
- Interval hydromechanical packer FT203.114.148.1.1.1;
- Metallic column shoe FT902.114.127.1;
- Rotating metal column shoe FT903.114.127.1;
- Rotating column shoe rotating mechanical metal FT904.114.133.1;
- Check plug valve FT905.114.127.1.1.1. 4

Further details of the nomenclature can be found in the Appendix chapter.

Our company's equipment is used extensively in oil and gas production projects, including those utilising hydraulic fracturing technology.

FRACT

1.2. WHAT IS HYDRAULIC FRACTURING?

Hydraulic fracturing is a method used to stimulate oil and gas wells and increase the injectivity of injection wells. Hydraulic fracturing is a highly profitable method for oil and gas companies.

The hydraulic fracturing method involves creating fractures in the pay zone at great depths (below 500 m from the ground surface). This facilitates the flow of water injected into injection wells into the formation or the flow of oil from the formation into production wells. When the working fluid is pumped into the well at a high rate, a high pressure is created at the bottom of the well. If the pressure generated exceeds the horizontal component of the rock pressure, a vertical fracture is formed. If the rock pressure is exceeded, a horizontal fracture is formed. The network of fractures created improves the hydraulic conductivity of the formation rock and increases the well drainage area.

This method leads to the intensification of reserve development, which in turn results in the achievement of higher ultimate oil recovery and increased efficiency.

Fracturing technology is employed at the final stage of well construction, when a casing string with the requisite technological equipment is run into the previously drilled well (open hole). In industry jargon, this is referred to as a "liner". In simple terms, a liner is a steel pipe with a specific set of equipment designed to reinforce the previously drilled well and facilitate further technological operations (well completion).

The final objective of well completion is to transition the well from the construction phase to the development and production stage, where hydrocarbons (oil or gas) are extracted. In other words, it is one of the key stages on the way to transforming investments into profit.

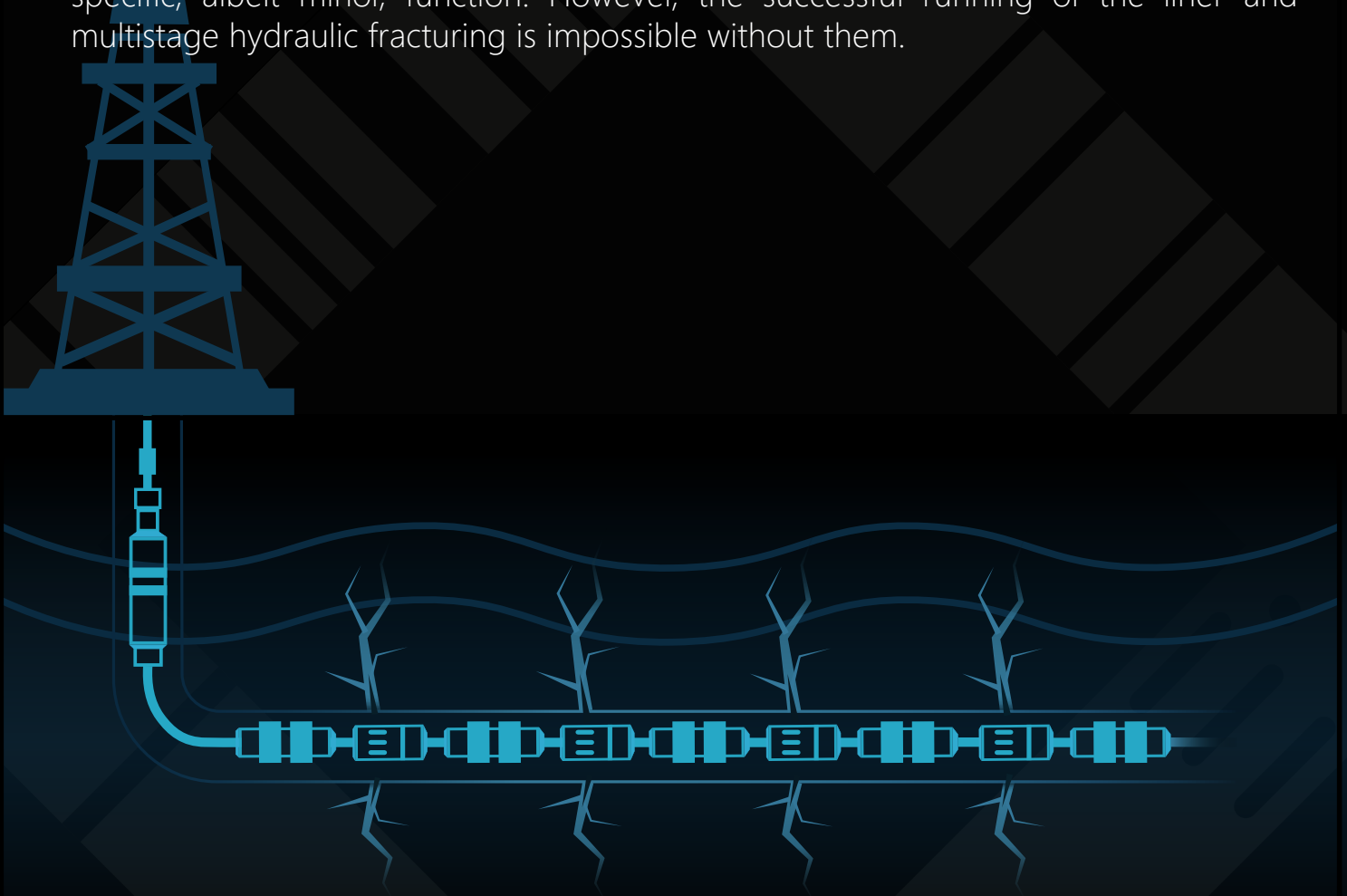
The hydraulic fracturing tool produced by the process tooling is divided into three main categories:

The liner hanger is a device used to fix and seal the lowered liner in the previous casing string. The device allows significant cost savings on casing, for example, by reducing the amount of steel pipe required from 3000 m to 1000 m, with only one hanger needed.

FRACT

Multistage hydraulic fracturing (couplings and packers for hydraulic fracturing) is a type of equipment used in multistage hydraulic fracturing (MHF), the most popular method of obtaining maximum flow rate (volume of oil/gas produced) from one drilled well. The hydraulic fracturing sleeve is used to create extended cracks in the productive formation (the pores of which contain oil/gas), thereby increasing the useful production area. The greater the number of hydraulic fracturing stages performed, the higher the potential well production rate. The hydraulic fracturing packer is used to hermetically seal the isolation of hydraulic fracturing stages from each other. This ensures that each stage of hydraulic fracturing affects its own isolated section of the well. It is the most widely used equipment in the field of multistage hydraulic fracturing well completion. For instance, a 20-stage hydraulic fracturing operation would require 20 couplings, 20 hydraulic fracturing packers (with only one liner hanger).

Auxiliary equipment is a diverse range of equipment, each of which performs a specific, albeit minor, function. However, the successful running of the liner and multistage hydraulic fracturing is impossible without them.



FRACT

2. ADVANTAGES

2.1. ADVANTAGES OF TOKEN

The \$FRACT token will be powered by the Polygon blockchain platform, which is one of the most popular frameworks for creating Ethereum-compatible blockchain networks and scaling solutions. Polygon offers two key advantages: increased transaction throughput and low fees.

◆ We already have an existing production facility.

◆ We are privileged to have the trust of major international oil and gas companies.

◆ We are proud to report consistently growing profits.

◆ All tokens are fully secured and insured.

◆ The \$FRACT token is not linked to inflation, as the cost of production is determined by three key factors: the cost of oil, the cost of gas and the cost of metal.

◆ From the outset of the listing process, the Frac Tools team will purchase back \$FRACT tokens if necessary, thereby safeguarding the value of the tokens and facilitating growth.

◆ Open houses will be held so that all interested parties can gain an insight into the operations of the company.

◆ Please be advised that rewards to \$FRACT token holders will be distributed no more than once a week.

FRACT

2.2. ADVANTAGES OF THE COMPANY

FRAC TOOLS LLC has established itself as a reliable partner in the oil industry market. We are proud to have gained the trust: Our client list includes leading companies such as Halliburton, Schlumberger, Shell, Rosneft, Lukoil, Gazprom Neft and many others.

Our company employs a team of specialists with extensive experience in the oil industry, including technologists, design engineers, designers, and project managers.

The oil industry is one of the most profitable in the world.

The market for hydraulic fracturing equipment is highly profitable.

The company has invested over \$11.15 million in the development of high-tech designs and blueprints, which have been patented.

Our company has achieved a threefold increase in profits each year for the past three years.

The ability to customise equipment for virtually any well conditions.

We are able to respond rapidly to market demands.

Our ISO 9001-certified quality system is in place at all stages of production.

The compact dimensions facilitate easier launching into the well, while the reduction in metal intensity reduces production costs and provides a competitive advantage.

3. OVERVIEW OF THE MARKET AND FRAC TOOLS LLC

3.1. GENERAL DEFINITIONS

The term "well completion" refers to a set of technological processes that occur from the moment of penetration of the productive formation until the point at which it is tested, developed and tested as an industrial object. In other words, it is the process of preparing a well for production (or injection) after drilling operations.

The process involves preparing the bottom hole according to the required specifications, running the production string and associated downhole tools, and perforating and stimulation as necessary.

The completion method is determined following an investigation of the rock in the field area.

The main completion methods are:

- Traditional well completion with perforated string;
- Well completion with stationary equipment;
- Multilayer completion;
- Sandstone cut-off completion;
- Completion with cutting off water or gas reservoir.

The main objectives of well completion are:

- Well strength and reliability;
- Reducing the risk of uncontrolled release of the natural formation;
- Achievement of design flow rates under specified operating conditions.

The primary completion systems are as follows:

Top completion. Upper completions are predominantly represented by UEC (underground equipment complex) equipment and descent services.

FRACT

Lower completion. Descent of equipment for securing liners (cemented and non-cemented liners, cemented and non-cemented multistage hydraulic fracturing assemblies), multi-barrel and multi-hole completion.

Intelligent completion.

3.2. TYPES OF COMPLETIONS

Top completion. Top completions provide the following benefits: isolation of layers in the casing, the ability to produce oil or gas from several zones separately or simultaneously, control and measurement of flow parameters, complete or partial control of the well regime, and, with properly selected bottom completions, the ability to maximise the use of the well resource. To address these challenges, we select the most suitable equipment for installation at various stages of the well's construction.

The downhole equipment for top completion allows for real-time monitoring of well parameters and flow control, both through well intervention and without it. This is achieved with flow control valves with hydraulic lines. The technologies enable the creation of smart wells, the first step towards a smart field. They can predict the behaviour of the field as a whole, including production, flow rates and allow the well to be managed in real time at minimal cost.

Lower completion. The final stage of the process is the completion of the bottom. Lower completion equipment is used to provide a hydraulic connection to and optimisation of the reservoir. The equipment is typically positioned in the productive interval of a production or injection formation using a liner hanger to secure the equipment to the production casing.

Downhole completion tools and equipment are designed to allow production from multiple reservoirs under a variety of conditions, ensuring flexibility and reliability. In some cases, simplified openhole completions are employed to complete wells drilled in hard rock. However, the majority of wells still necessitate the utilisation of certain tools for optimal production.

Intelligent completion. An intelligent well is typically equipped with controllers and control systems that process data from sensors and make decisions based on predetermined parameters.

FRACT

These systems are capable of automatically regulating well flow rates, monitoring pressure, controlling valves and other devices. Furthermore, these devices can regulate fluid flow in the well and at the surface, ensuring optimal production conditions.

The system may include various disconnecting devices, such as isolation valves or gate valves, which can be used to isolate specific areas of the well or perform workovers without shutting down the entire production system. By utilising sensors and control systems, well parameters such as pressure, temperature and fluid flow can be continuously monitored, enabling automatic adjustments to operating parameters to achieve optimum performance. This can result in increased oil or gas production.

Well condition monitoring and automatic control enable prompt response to potentially dangerous situations, thereby preventing accidents or leaks. Furthermore, it assists in optimising resource utilisation and reducing greenhouse gas emissions.

3.3. TOTAL MARKET VOLUME

The world's largest drilling and completion markets are: The USA, Saudi Arabia and Russia are the leading countries in this field. The number of drilling rigs and new service contracts is anticipated to increase in the coming year. The data indicates that the number of new development wells drilled this year will increase by 7,000 units compared to last year, reaching approximately 65,000 wells.

The rate of development of drilling activity in different regions will vary. For instance, the rate of growth in North America is expected to be faster than in any other region. The shale sector, distinguished by its brief production cycle, is the primary catalyst for growth in drilling activity in the US. However, the pace of this growth will be contingent on the fluctuations in oil prices.

However, despite the growing role of shale, the conventional sector will remain the key driver of global drilling activity. China is expected to lead the trend, drilling around 90,000 conventional development wells in the next five years. This presents an opportunity for our company to expand its market share.

The increase in drilling activity will lead to an increase in oilfield operators' spending on oilfield services related to drilling, completion and further maintenance of wells, as well as an increase in oilfield service companies' revenues from this segment. The revenue generated by oilfield services in the drilling and completion segment is estimated to reach \$110 billion this year.

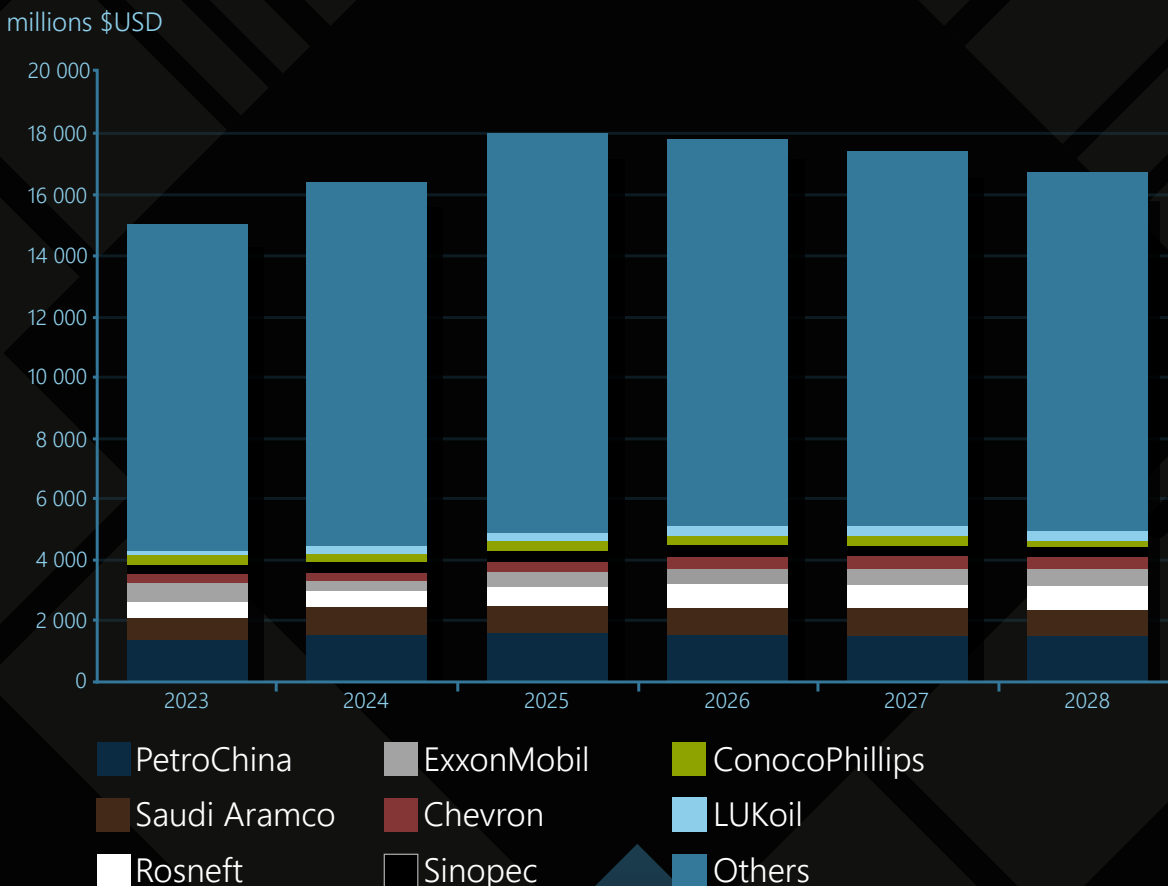
FRACT

Global investment by upstream companies in drilling, completion and well servicing is expected to reach \$176 billion in 2024, an increase of \$18 billion from the previous year. China's national company PetroChina, the largest consumer of drilling and completion services, is projected to spend \$17 billion this year and \$19 billion next year. Global giant Saudi Aramco will maintain a relatively stable level of spending over the next five years.

Rosneft, on the contrary, plans to increase its investments in the segment by 20% by 2025 compared to 2023. It should be noted that the company's costs might be higher, as the current forecast does not take into account Rosneft's planned drilling activity in the Vostok Oil project. The announced reserves at the project's key fields, Payakhskoye and Zapadno-Irkinskoye, require confirmation during the ongoing exploration programme. These fields have an estimated 1.2 billion tonnes and 500 million tonnes of oil reserves, respectively.

Over the period 2023-2028, field operators are anticipated to invest a total of \$884 billion in drilling, completion, and well servicing. Approximately 40% of this investment will be allocated to the completions segment. Over the next five years, North America will invest \$68 billion in drilling, completion and well servicing, Asia and Australia will invest \$34 billion, and the Middle East will invest \$22 billion.

Diagram 1. Spending of production companies on drilling, completion and servicing of wells



FRACT

Next, let us take a closer look at well completion and well servicing services on the example of the Russian market. According to the collected statistical data, the total volume of well completions in 2023 was 12.56 thousand wells/operations and totalled \$540 million.

Table 1. Total well completion market by type in 2020-2023

Type of completion	2020	2021	2022	2023	Share in 2023
Lower	441.6	512.3	469.1	453.4	84.1%
Top	39.8	30.2	53.0	49.6	9.2%
Intelligent	17.9	20.4	34.2	35.9	6.7%
Total	499.2	563.0	556.3	538.9	100.0%

Lower completion represents the majority of the market (84% in monetary terms).

Due to the lack of necessity, upper completions are less common.

Table 2. Indicators of the completion market by main types of services in 2023

Type of completion		w/op	M	Share in pieces	Share in M	Average cost of 1 w/op, thsd
Cemented and non-cemented liners	Non-cemented	762	17.4	6.2%	3.3%	22.8
	Cemented	3 612	80.7	29.5%	15.5%	22.3
MHF assemblies	Non-cemented	1 840	101.6	15.0%	19.5%	55.2
	Cemented	2 450	99.0	20.0%	19.0%	40.4
Traditional	Cemented liners for vertical wells	3 102	18.9	25.3%	3.6%	6.1
UEC descent		228	52.0	1.9%	10.0%	228.1
ICD assemblies		212	17.1	1.7%	3.3%	80.7
MHW assemblies		36	7.6	0.3%	1.5%	211.1
Gravel pack		9	3.2	0.1%	0.6%	355.6
Intelligent completion		5	33.6	0.0%	6.4%	6720.0
Supply of equipment without service			89.9		17.3%	
Total		12 256	521.0	100.0%	100.0%	0.043

FRACT

3.4. MARKET INDICATORS

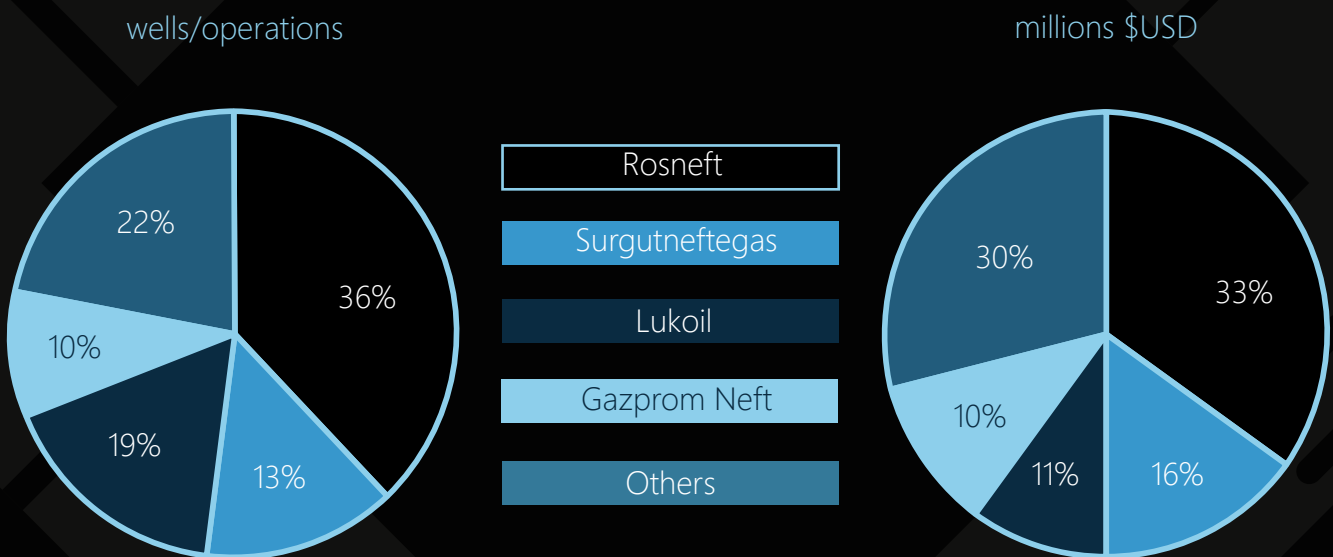
The data indicates that approximately 6,100 wells employ multistage hydraulic fracturing (MHF), 3,000 wells are conventional vertical well completions, while 4,800 wells are sidetracked.

Table 3. Well completion market indicators by customer in 2020-2023

Company	2020	2021	2022	2023	Share in 2023
PJSC LUKOIL	41.1	46.5	57.9	52.1	11.0%
Surgutneftegaz PJSC	62.6	64.6	95.2	80.3	16.9%
PJSC NOVATEK	4.3	9.1	11.2	27.4	5.8%
PJSC NGK Slavneft	7.6	15.3	10.0	13.0	2.7%
PJSC Tatneft	7.1	5.5	7.4	7.4	1.6%
Gazprom Neft PJSC	54.1	53.4	59.4	60.0	12.6%
Gazprom PJSC	35.0	22.5	75.3	58.8	12.4%
RussNeft Oil Company PJSC	1.5	2.7	2.9	2.9	0.6%
Rosneft Oil Company PJSC	197.3	199.2	185.0	184.2	38.8%
Others	92.4	163.2	44.2	40.2	8.5%
Total	462.0	535.5	490.7	474.1	100.0%

Among the major customers, Rosneft subsidiaries account for the majority of the market, representing 36% of the total market volume in physical terms and 33% of the total market volume in monetary terms.

Diagram 2. Completion market indicators by vertically integrated oil companies in 2023



3.5. ANALYSING THE PROCUREMENT OF WELL COMPLETION SERVICES

Collected and analysed tenders in 2020- 2024 on the main sites:

- <https://zakupki.gov.ru/>
- <https://rostender.info/>
- <https://www.tektorg.ru/>
- <https://www.b2b-energo.ru/>

For example, the procurement volume in 2023 was \$284 million. This is about half of the total market for well completion services.

Table 4. Total volume of purchases of well completion services in 2020-2024

Company	2020	2021	2022	2023	Progress	Share in 2023	2024 *
PJSC NGK Slavneft	5.9	13.6	6.3	9.5	150%	3.4%	10.6
Gazprom PJSC	25.0	10.8	55.4	39.0	70%	13.7%	20.9
PJSC LUKOIL	18.0	30.8	28.2	30.9	110%	10.9%	27.2
Gazprom Neft PJSC	5.5	4.5	47.5	50.1	105%	17.7%	53.6
PJSC NOVATEK	9.1	5.6	10.3	8.8	85%	3.1%	0.4
Rosneft Oil Company PJSC	167.9	180.8	171.4	144.7	84%	51.0%	104.6
Others	6.6	5.4	13.5	10.4	77%	3.6%	11.7
Total	232.0	237.9	326.4	283.9	88%	100.0%	218.4

3.6. SHARES OF SERVICE COMPANIES IN THE TOTAL MARKET VOLUME

The well completion market comprises more than 20 service companies. Typically, companies are equipment manufacturers with service divisions integrated into their structure. Production and service are inextricably linked. Manufacturers are responsible for maintaining their equipment, as they are ultimately accountable for its performance.

When considering completion services provided by major players, it is possible to distinguish the following:

1. The service divisions of drilling companies. In the case of simple vertical wells, drilling companies are responsible for running the casing.

FRACT

2. Russian independent companies. Manufacturing companies with service support.
3. Large international companies: Weatherford, Halliburton, Baker Hughes.

Diagram 3. Overall structure of well completion services in the market in 2023.



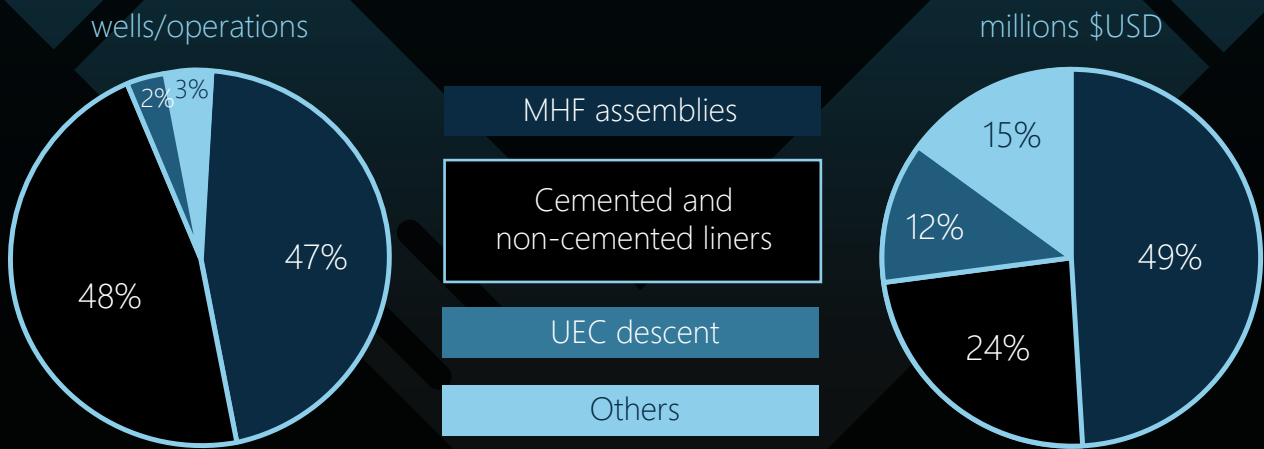
The proportion of services provided by international service companies represents 5% of the total volume.

Until 2008, large international companies provided the majority of services. Subsequently, large international companies were gradually forced out of the market. Russian companies offering more competitive pricing began to emerge. Consequently, large international companies began to divest themselves of the least profitable business. Following the imposition of sanctions in 2022, Schlumberger, Halliburton, Baker Hughes and Weatherford announced a reduction in their presence in the market, including the cessation of investments in the Russian business and a ban on technology supply. However, only Halliburton and Baker Hughes have completely exited Russian assets, selling them to local management.

Despite this, the reality is that the companies continue to operate in Russia. The majority of these companies' work is in more technologically complex wells and offshore projects.

FRACT

Diagram 4. Structure of independent completion services in the market by type in 2023



The largest volume of well operations is occupied by completions for MHF and other horizontal wells.

More than 50% of the completion market is occupied by 4 companies: TSS LLC, NTC ZERS LLC, OKB Zenit JSC and SPE SibBurMash LLC.

Table 5. Total volume of purchases of well completion services in 2020-2023

№	Company	2020	2021	2022	2023	Progress	Share in 2023
1	LLC "TSS"	59.4	50.7	70.3	92.5	131.5%	22.1%
2	NTC ZERS LLC	33.1	36.6	40.7	44.3	108.7%	10.6%
3	LLC SPE Sibburmash	24.3	24.9	22.1	24.6	111.2%	5.9%
4	JSC "Zenit Design Bureau"	40.4	32.8	28.6	31.6	110.4%	7.6%
5	TatProm-Holding LLC	13.8	10.9	13.4	18.1	135.2%	4.3%
6	PJSC Tyazhpressmash	12.3	12.4	10.5	22.0	208.9%	5.3%
7	FRAC TOOLS LLC	-	-	0.3	1.3	425.9%	0.3%
8	Others	190.9	197.1	224.7	184.4	82.1%	44.0%
Total		374.1	365.4	410.7	418.7	101.9%	100.0%
Traditional		15.2	16.0	17.4	19.1	109.7%	
Supply of equipment without service		115.6	201.0	120.5	89.4	74.2%	
Grand total		504.9	582.4	548.6	527.2	96.1%	

3.7. MARKET POSITION AND DEVELOPMENT PLAN

The size of the well completion market is \$540 million per annum, as previously stated. Our current market share is 0.3%. However, the most pressing issue at present is production capacity. With the innovations, we have already made, we will be able to take 1.1% of the total market without changing the cost of goods.

Consequently, we can capture 3.7% of the total market without competing, provided we increase our production capacity.

The remaining market share will have to be won from competitors by reducing production costs, reducing production time and supporting the international quality level.

Please find below a calculation of the market share we would be able to capture under ideal conditions.

It is crucial to recognize that as we expand our presence in the completion market, we will also gain a foothold in other markets, as metalworking is in high demand across various sectors.

Firstly, it is important to understand what the cost of goods is made up. The cost of sales is divided into fixed and variable costs.

Variable costs are all costs that are directly related to the quantity of products manufactured. In our case, these are materials and outsourcing work directly related to material processing.

Fixed costs are all other costs of the organisation, such as payroll, rent, leasing, etc.

In our organisation, the ratio of variable costs to fixed costs is 37% to 63%.

FRACT

Let us now examine the specific elements that comprise variable costs per average unit of production.

Variable costs	Share in the cost of goods
Steel	59%
Outsourcing activities	19%
Aluminium	9%
Plastic or rubber products	7%
Pig iron	2%
Hardware	2%
Other	1%
Other metals	< 1%

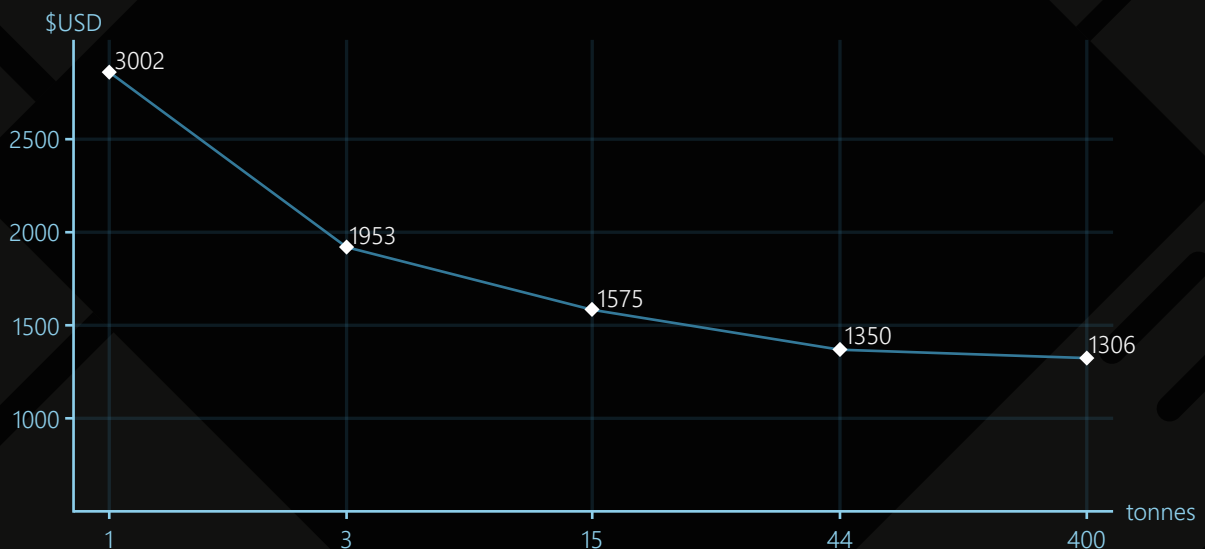
Table 6. Variable costs and their share in the formation of unit costs

In order to achieve a larger market share, it is necessary to identify and develop areas of optimisation that are attractive to potential customers. Such areas for improvement can include speed of order fulfilment, high product quality and low price. Improving at least one of the indicators will allow the company to differentiate itself from competitors and gain a larger market share. This approach has been proven both effective and reliable, and there are numerous examples of its success.

The following section will examine the efficacy of modernising our company with the objective of attaining the largest possible market share within our target market.

1. Steel 59%

Diagram 5. Dependence of the price of a tonne of steel on the volume of purchase



FRACT

The diagram illustrates the correlation between the purchase price and the volume of steel purchased. The purchase of different volumes of steel is contingent upon the size of actual and forecasted orders at the time of purchase.

During the early stages of our company's development, due to the limited number of orders and the necessity to utilise a restricted range of steel pipes of varying sizes and diameters, we were compelled to procure components of pipes at the retail price with an additional surcharge for sawing entire pipes. This type of delivery is currently only used when urgent non-standard orders need to be fulfilled.

The preferred type of steel billets purchased today is the whole pipe. The optimal market price per tonne for orders of up to 3 tonnes aligns with our production capacity.

Should production volumes reach \$33.5 million per annum, steel costs will be \$7.31 million per annum.

The steel order rate is once a week, amounting to \$140.6 thousand per week. These figures allow for an average consumption of 100 tonnes per order. Consequently, this results in a reduction of 31% in the cost of steel procurement.

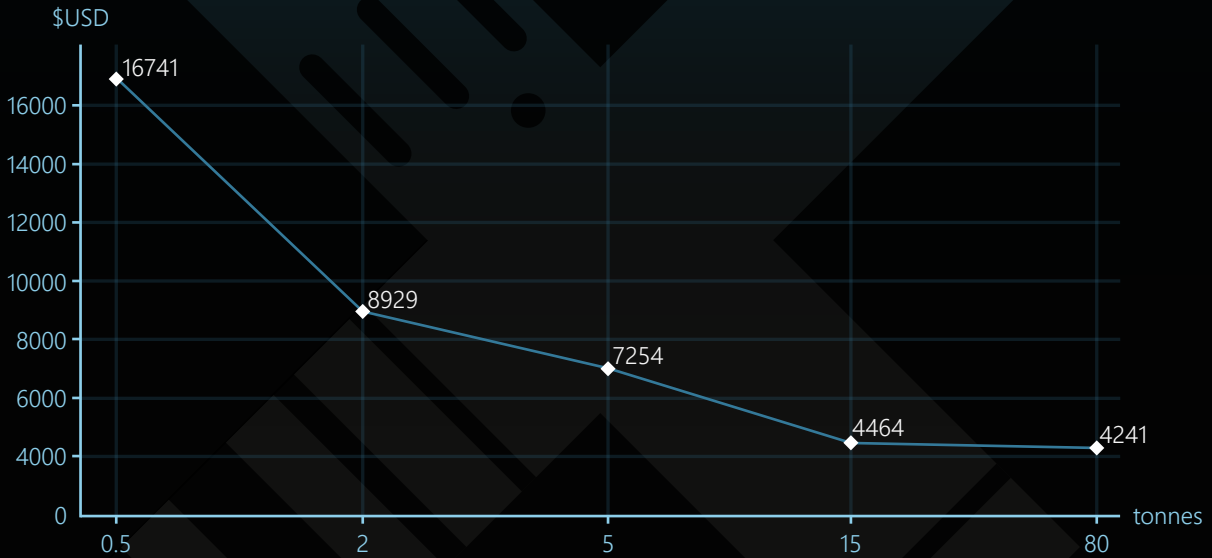
It would be optimal to order steel from a steel mill at a price of \$1.35 thousand per tonne (a carload of steel – 44 tonnes). The steel from the supplier's factory has already undergone heat hardening. This advantage results in a reduction of 11% in the total variable costs of production.

The diagram also illustrates that the reduction in steel costs becomes less pronounced with larger volumes, which will continue to be the case when analysing the procurement of other materials.

2. Aluminium 9%

Currently, the purchase of solid aluminium bars in the volume of 2 tonnes per delivery at a price of \$8.93 thousand per tonne meets our production volumes, representing a significant cost saving compared to ordering 0.5 tonnes.

Diagram 6. Dependence of aluminium price per tonne on purchase volume



Should our production volume be increased to \$33.5 million per year, the cost of aluminium at current cost will be \$1.12 million per year.

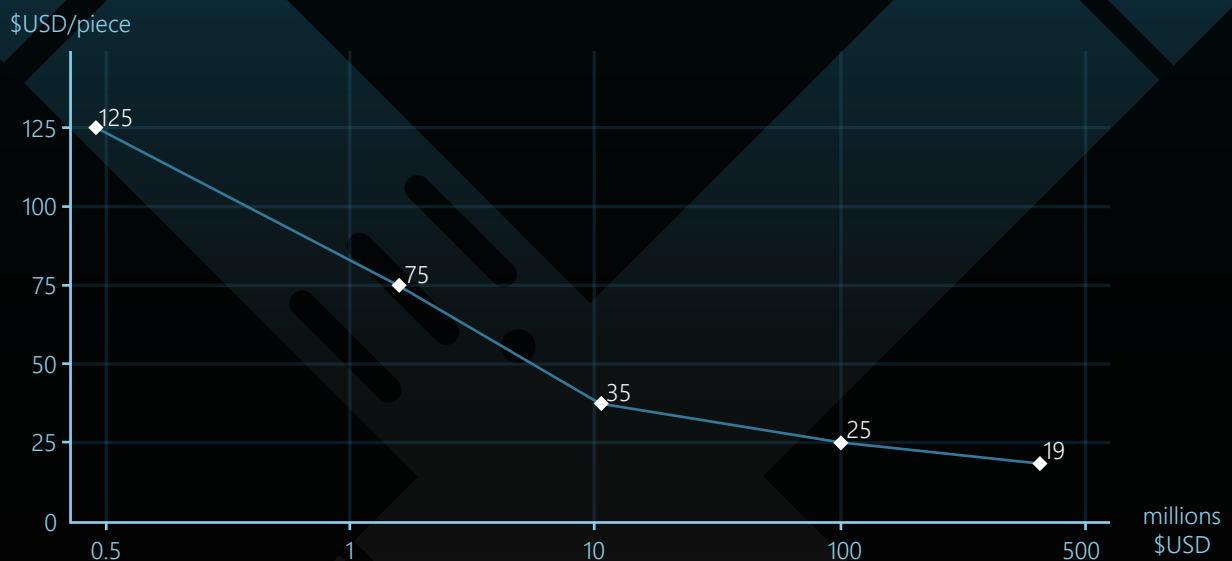
The order rate for aluminium is twice a month, \$41.3 thousand per order. This will allow up to 20 tonnes of aluminium to be purchased from the smelter per order. The increased volumes will result in a 50% reduction in the cost of aluminium. Furthermore, the higher quality of this aluminium will result in a notable reduction in handling times.

3. Plastic or rubber products

It is challenging to calculate the cost reduction of plastic or rubber products in a straightforward manner, similar to the approach taken for steel or aluminium. This is due to the wide range of products required and the varying purchasing volumes. It is not possible to order these products from a single supplier. However, we have calculated the revenue required to introduce certain upgrades.

FRACT

Diagram 7. Change in the cost of a rubber product when the annual turnover of the organisation increases



Upon reaching a turnover level of \$11.17 million, we will purchase our own press machine to manufacture collars from purchased materials, which will significantly reduce the cost of most plastic or rubber products. The total cost reduction for these items will be 53%.

4. Remaining Cost Categories

Outsourcing activities mainly consist of heat treatment of steel and electroplating of finished products. These combined costs account for 76% of all outsourced variable costs. As previously stated, the steel will be delivered from the supplier's plant, having been heat-hardened. We will replace the galvanising with specialist painting, which will reduce the outsourcing costs by 67%. The categories of cast iron, other metals, and sundries, etc. represent a relatively small portion of the overall cost of production, making it impractical to disassemble them individually.

From the above, we can conclude that at the time of transition to a turnover of \$33.5 million, variable costs per unit of production will decrease by 39.6%, which in turn will reduce the total cost of production by 15%.

Fixed costs. This category includes costs that directly increase the quantity of output and do not affect the change in the quantity of output.

Costs that affect the quantity of output include shop floor salaries, sales salaries, logistics, energy costs, and so on.

FRACT

Costs that do not affect production include rent, leasing, and salaries of office staff. At present, the ratio of costs affecting production to costs not affecting production is 31% to 69%, which is below the desired level.

In order to reduce production costs, it is necessary to increase output without increasing non-production costs. To increase the quantity of output, we have already expanded our shop staff to two shifts, and in the future, we plan to expand to three shifts, which will change the ratio to 53% / 47%.

The calculations indicate that a 58% increase in fixed costs will result in a threefold increase in production. Consequently, we will reduce fixed costs by 42%. This will result in a reduction of total costs by 28%.

Next, we will analyse the various stages of modernising production in order to reduce the cost of production by increasing efficiency. The following **three stages** will be given particular emphasis:

1. Modernisation through OEE.
2. Modernisation through the implementation of new equipment.
3. Long-term payback modernisation (robotics, expensive machines, proprietary software, etc.).

Modernisation through OEE (Overall Equipment Effectiveness) is a system for analysing overall equipment effectiveness, which is a key part of optimisation. It minimises costs while maximising productivity. OEE encompasses activities such as reducing the cost of unnecessary employee actions, increasing the speed of changeovers or switching to a different NC (Numerical Control) programming system.

This will result in a further reduction of fixed costs by 31% of the costs incurred following the previous modernisation measures.

Modernisation through the implementation of new equipment. This stage is much more expensive and is not always aimed at direct cost reduction. The primary objective is to equip the production facility with the necessary resources to achieve the greatest possible reduction in manufacturing costs, while maintaining a healthy balance between investment and return on investment.

FRACT

Long-term payback modernisation. Given our primary objective of generating maximum profit with minimal investment, this type of modernisation is not a viable option for us.

Once one production area has been modernised, it will be possible to replicate this as a production unit.

Conclusion: By increasing revenue to \$33.5 million, we will reduce total production costs by 43%, which will reduce the price of finished equipment, making our offer more attractive in the market. Concurrently, the expansion of our workforce and the introduction of additional specialists will enable us to enhance our production capacity while maintaining the exceptional quality of our products. Our products will be able to compete with the major players in the market. Our company plans to capture a market share (aggregate volume of \$540 million) that will allow us to achieve an annual turnover of \$156.25 million. Once this target has been reached, we will choose another market to develop and optimise the company.

3.8. MARKET OUTLOOK TO 2030

The global oil industry will continue to develop, with oil playing an important role in the economies of many countries. As a result, technologies for extracting oil from hard-to-recover reserves will be developed. This is the application of new technologies, including hydraulic fracturing (fracking), and multistage hydraulic fracturing. For instance, it is anticipated that the share of hard-to-recover reserves in the oil production market will reach 70% by 2030 (currently 40%), while the necessity to utilise hydraulic fracturing technologies will intensify annually.

The demand for well completion is contingent upon:

1. The reduction of easily recoverable reserves will result in an increase in the production of more complex equipment.
2. Modernising existing wells to boost production.

FRACT

The projected minimum volume of the Russian well completion market alone is expected to be 12,180 wells per operator, with an estimated value of \$816 million.

Table 7. Forecast of development of the completion market until 2030

Trend	2024	2025	2026	2030
Traditional	3018	2803	2698	2498
MHF assemblies	4057	4241	4292	4312
Other cemented and non-cemented liners	4795	4915	5006	5369
Total	11870	11959	11996	12179
million \$USD	551.34	599.33	661.83	816.96

4. PURPOSE OF FUNDRAISING

4.1. INNOVATIVE METHOD OF INVESTMENT. FIRST STAGE OF MODERNISATION

FRAC TOOLS LLC offers an investment opportunity for anyone interested in supporting the growth of a research and production company by purchasing \$FRACT tokens, created by our team. Those who purchase tokens will receive regular rewards for holding them.

At the time of developing the fundraising event, our company operated on a single shift. However, we have the capacity to sell products in much larger quantities from 2024 onwards.

Because of this, it was decided to employ workers to complete three shifts, which will increase the capacity of the business by three times. Furthermore, since the beginning of the year, we have purchased additional machinery to address bottlenecks in our production process. Following the implementation of the master engineering plan, we anticipate a 30% increase in productivity per work shift.

Once the fundraising event has been completed, we will commence two stages of modernisation:

The first stage will commence shortly. A comprehensive analysis has been conducted, taking into account the following factors:

- Discount to large customers
- Additional costs for various stages of production to produce higher quality products

The calculation indicates that, following the first stage of modernisation, the average annual revenue of the company will be \$10.4 million. The net profit will be \$3.16 million, of which 40% will be allocated to token payments, amounting to \$1.26 million. Consequently, the payout per token will be \$0.0115.

FRACT

The first stage of modernisation will cost \$3.19 million, of which:

\$2.24 million - increase in the machine tool fleet;

\$380,000 - purchase of auxiliary equipment;

\$573,000 - arrangement and supply of premises.

4.2. SECOND STAGE OF MODERNISATION

The second stage of modernisation will focus on hiring new workers and modular expansion of the plant by replicating the already optimised production line.

Based on pessimistic projections, our organisation's turnover is expected to reach \$22.9 million with net income of \$5.74 million and token holder payouts of \$2.29 million (\$0.0208 per 1 token).

We anticipate that the organisation will generate an average of \$33.3 million in annual revenue, with net income of \$10.17 million and average annual payments to token holders of \$4.06 million, or \$0.0369 per 1 token.

The cost of the second stage of modernisation will be \$4.96 million, of which:

\$3.22 million - leasing of the machine tool fleet;

\$498,000 - purchase of auxiliary equipment;

\$1.23 million - arrangement and supply of premises.

4.3. ACTION PLAN

The second stage of modernisation will focus on hiring new workers and modular expansion of the plant by replicating the already optimised production line.

The fundraising event will commence in June and July 2024. This is a convenient arrangement, as the legislation stipulates that accounting statements for the previous year be submitted in March of the following year. Therefore, in March 2024, we will be able to familiarise ourselves with our 2023 figures.

FRACT

We have already entered into an agreement to lease an additional production hall, which gives us **four main tasks**:

- A. Order machine tools;
- B. Hire additional staff;
- C. Order materials;
- D. Prepare the space for operations.

A. Order the machine tools.

We will be procuring machine tools from various Asian and European countries.

Please be advised that the estimated delivery time is 6 to 9 months. Once the machine tools have been received, installation and set-up will take place, with an estimated time of one month

B. The hiring of employees will commence shortly.

To achieve optimal financial performance, the company will hire workers to complete three shifts. To address potential production bottlenecks, we will implement a four-shift system.

It is widely acknowledged that "bottlenecks" in production represent the most expensive areas. For instance, the section with a pipe cutting machine that accepts parts 3 metres long, where the machine costs \$668,000, while other machines cost on average \$223,000. Consequently, we will purchase the most expensive machine, but load it fully.

With the first workshop already equipped, we have the opportunity to commence training workers in advance of opening a new one. Furthermore, it will enable us to utilise more human resources to expand the first workshop as soon as the machines arrive. Consequently, upon the arrival of the machines, we will already have the staff of the first shift of the second production facility.

C. Material ordering.

In order to commence production, we require three basic materials: steel, aluminium and rubber. Steel will be purchased from a metallurgical plant. The minimum delivery batch is one carload, and the delivery period is one month. However, at this stage, a wagon of steel is not required. To avoid any unnecessary delays, we will purchase steel one month before the delivery of the machines. In the meantime, should the need arise, we will source steel from distributors.

The aluminium will be ordered from the appropriate supplier at the factory.

There is a delay in the delivery of plastic of a certain shape due to the supplier's inability to meet the required speed of delivery. The typical lead-time from order placement to delivery is three months. Consequently, we must maintain a three-month supply of plastic parts valued at \$30,000.

D. Preparing the premises for operations.

To ensure the full and efficient operation of employees in the new workshops, it is necessary to build additional rooms (changing rooms, showers, etc.), check the entire electrical network of the workshop space, order and assemble storage racks, etc.

FRACT

5. ROADMAP

Beginning of formation of the design documentation base
2015

Opening of FRAC TOOLS LLC
Q2 2019

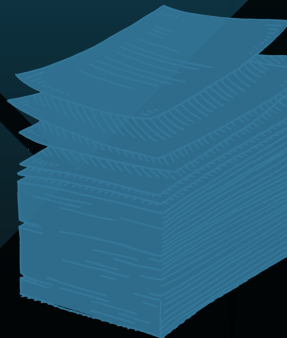
Opening of assembly and test shop. Start of prototype production, testing and introduction into mass production.
Q1 2020

Purchase of machine tools, organisation of own metalworking plant
Q2 2022 - Q4 2022

Organisation of fundraising event to expand production
Q3 2024

First payments to crypto investors
Q4 2024

Completion of full modernisation cycle on invested funds
Q4 2025



6. TOKENOMICS

6.1. TOKEN UTILISATION

The token owner will have the option of utilising the token in two distinct ways.

Rewards will be paid in USDT (United States Dollar Tether).

The most well known and widely used stablecoin at present is Tether (\$USDT). The Tether exchange rate is fixed at a 1:1 ratio with the US dollar. The token holder will receive \$USDT to their wallet within a month of receiving funds from the customer to the company's account. The amount of \$USDT received will be proportional to the number of tokens held by the holder.

Staking.

It is possible to freeze a token and forgo any associated rewards. The company will consider the reward received from the token you have invested in the company. As production expands, the company's income will increase, resulting in additional tokens being issued to you. The payouts on \$USDT tokens (those that have not been invested in staking) will remain unchanged regardless of any increase in issuance. The opportunity to invest in staking will be subject to periodic review and may be discontinued at any time should additional investment in the venture be deemed unnecessary. The interest on staking will be announced in advance.

6.2. JUSTIFICATION OF TOKEN VALUE GROWTH

A 20% investment of the company's net profit will be allocated to the development of the organisation, with the objective of increasing its revenue and profit. Additionally, 40% of the company's net profit will be distributed to token holders. It is therefore clear that the price of the token will inevitably increase because of these two factors.

According to Gordon's formula, which is used by institutional investors to determine the growth of a company's stock capitalisation in absolute terms, the pessimistic valuation of FDV (Fully Diluted Valuation) after two years will be:

$$P = D1 / (k-g)$$

D1 – value of cash flow in the future year, calculated as $D0 \cdot (1+g)$

g – growth rate of future cash flows

k – discount rate

FRACT

The discount rate in the oil and gas sector is 1.12, with an additional risk factor for crypto-projects of 0.09. Consequently, the total discount rate in our case is 1.21.

According to pessimistic calculations, the growth rate of cash flows is 20% per year. We will now calculate the fair FDV after fees.

$$P = \$2\,224\,936 / (1.21 - 1.2) = \$2\,224\,936 / 0.01 = \$222\,482\,767.2$$

Given a total supply volume of 110,000,000 \$FRACT, the presented calculations demonstrate that the pessimistic upside potential of the token price is 25 times the initial offer price.

Our financial model employs the formula for calculating capitalisation from the stock market, given the provision for rewards for token ownership.

6.3. FINANCIAL MODEL OF TOKEN PAYOFFS

The first table demonstrates that token payoffs will remain consistent regardless of an increase in issuance due to staking. This is made possible by the modernisation of production through additional investments.

The calculations in this table are based on the assumption that 30% of tokens will be allocated for staking. For simplicity, all indicators are presented on an annual basis, with one cycle equalling one year. In calculating the financials, the organisation's net profit of \$5.2 million has been taken into account, as well as a pessimistic scenario of the organisation's profitability. Please note that the table does not take into account investments from the net profit of the organisation itself. Additionally, the calculation of compound interest for intra-annual cycles is not included. At the end of the year, an additional consideration will be calculated from the residual profit of the organisation based on International Financial Reporting Standards (IFRS) results.

Table 8. Yield on tokens at staking

Cycle	Investments in production (\$USD)	Total supply of tokens	Allocated tokens for staking	Organisation's net profit (\$USD)	Total amount of the reward for tokens (\$USD)	Funds from staking invested in production (\$USD)	Reward for the token (\$USDT)
1	7 986 000	110 000 000	33 000 000	5 200 000	2 080 000	624 000	0.0189
2	8 610 000	118 595 041	35 578 512	5 606 311	2 242 524	672 757	0.0189
3	9 282 757	127 861 671	38 358 501	6 044 370	2 417 748	725 324	0.0189
4	10 008 082	137 852 365	41 355 710	6 516 657	2 606 663	781 999	0.0189
5	10 790 081	148 623 700	44 587 110	7 025 848	2 810 339	843 102	0.0189
6	11 633 182	160 236 671	48 071 001	7 574 824	3 029 930	908 979	0.0189

FRACT

The following table illustrates the trend of token yield from investments in the net profit of the organisation. The investment represents 20% of the organisation's net profit.

Table 9. The trend in token yield from investing from the net income of the organisation itself

Cycle	Investments in production (\$USD)	Total supply of tokens	Organisation's net profit (\$USD)	Total amount of the reward for tokens (\$USD)	Investments in production from organisation's net profit (\$USD)	Reward for the token (\$USDT)
1	7 986 000	110 000 000	5 200 000	2 080 000	1 040 000	0.0189
2	9 026 000	110 000 000	5 877 185	2 350 874	1 175 437	0.0214
3	10 201 437	110 000 000	6 642 559	2 657 023	1 328 512	0.0242
4	11 529 949	110 000 000	7 507 605	3 003 042	1 501 521	0.0273
5	13 031 470	110 000 000	8 485 305	3 394 122	1 697 061	0.0309
6	14 728 531	110 000 000	9 590 328	3 836 131	1 918 066	0.0349

The final table shows the change in token yields with a constant average annual staking of 30% of the total number of tokens and an investment of 20% from the net profit of the organisation itself. For clarity, we have simplified the table by tiering the timing of token issuance by stake and yield by cycle. This resulted in a distorted rate of return per individual token. However, the rate of return will be the same as in Table 9.

Table 10. The yields on tokens issued under staking and investing are based on the net income of the organisation itself

Cycle	Investments in production (\$USD)	Total supply of tokens	Allocated tokens for staking	Organisation's net profit (\$USD)	Total amount of the reward for tokens (\$USD)	Funds from staking invested in production (\$USD)	Investments in production from organisation's net profit (\$USD)	Reward for the token (\$USDT)
1	7 986 000	110 000 000	33 000 000	5 200 000	2 080 000	624 000	1 040 000	0.0189
2	9 650 000	118 595 041	35 578 512	6 283 496	2 513 398	754 020	1 256 699	0.0212
3	11 660 719	127 861 671	38 358 501	7 592 755	3 037 102	911 131	1 518 551	0.0238
4	14 090 400	137 852 365	41 355 710	9 174 816	3 669 926	1 100 978	1 834 963	0.0266
5	17 026 341	148 623 700	44 587 110	11 086 523	4 434 609	1 330 383	2 217 305	0.0298
6	20 574 029	160 236 671	48 071 001	13 396 563	5 358 625	1 607 588	2 679 313	0.0334

6.4. TOKEN GOVERNANCE

There is no governance function associated with the token.

FRACT

6.5. WARRANTIES

We guarantee:

◆ Redemption of the token at the original price if there are no payments in USDT to token holders within 5 months from the start of the fundraising event

◆ Minimum token return of 10% per year (this percentage is highly underestimated)

◆ Full-scale production launch within 20 months of fundraising event launch

◆ Valuation of the enterprise value using the income method

◆ Discount rate 20%

According to the international laws, we are not allowed to disclose:

Who our customers are

How many products they buy

What products they buy

At what price they buy these products

When they buy them

Please be aware that, due to the nature of our business, we will announce the availability of an order with a delay of an indefinite number of days. Furthermore, we will not disclose the amount of the customer's order. However, you will receive payments one week after the funds have been transferred from the customer.

We will provide a financial report according to the International Financial Reporting Standard (IFRS) every six months, which is publicly available and can be accessed by anyone.

FRACT

6.6. TOKEN ALLOCATION

The total supply of tokens issued is 110,000,000 \$FRACT. Each round of the public sale will be limited to between 35% and 15% of the total tokens. A single user will be able to purchase no more than 5% of the tokens, which will minimise the impact on the token price for large holders. Tokens purchased at different stages of the public sale will have corresponding sale lock-up periods.



Allocation	%	Volume
Public Round No. 1	35	38 500 000
Public Round No. 2	25	27 500 000
Public Round No. 3	15	16 500 000
Team \$FRACT	15	16 500 000
Market Making	8	8 800 000
Bounty programme	2	2 200 000

Public Round No. 1



Beginning to
end



\$0.08/token



11 months, then at 10% monthly unlock

Public Round No. 2



Beginning to
end



\$0.14/token



10 months, then at 10% monthly unlock

Public Round No. 3



Beginning to
end



\$0.16/token



9 months, then at 10% monthly unlock

FRACT

Team \$FRACT

The period during which token sales are blocked is uniform for the entire project team and is one year. Following this, a linear unblocking of 20% will occur every three months. The project team is dedicated to its long-term success.

Market Making

The \$FRACT team is committed to seamless trading, which requires the use of both automated market-making solutions such as Uniswap liquidity pools and professional market-making service providers if required. The objective is to ensure sufficient liquidity for all market participants at all times.

Bounty programme offers an opportunity for participation in the fundraising event of a token without direct investment. The project invites users to perform certain actions in order to obtain tokens. The bounty programme is designed to attract new users and increase the visibility of the token. 2% of the total number of tokens will be allocated for the programme.

In the event of attracting institutional investors, tokens will be allocated from the total volume of public sales rounds.

6.7. LISTING ON EXCHANGES

The \$FRACT token will be made available for trading on both decentralised and centralised exchanges. At the outset of the project, the exchanges will be Uniswap (decentralised) and Gate.io (centralised). As the project develops, the number of exchanges where the \$FRACT token can be purchased will increase. Initial liquidity is generated through the sale of tokens in public sale rounds. Subsequent increases in the supply of tokens in circulation may be due to planned unlocking of tokens as scheduled, as well as increased issuance through a staking programme.

6.8. FURTHER DEVELOPMENT PLAN

The \$FRACT token is the foundation for the development of a large-scale GameFi project in the genre of an economic simulator based on an operating scientific and production association.

FRACT

The concept of the game is that the user will be able to build his own production business empire, starting from a small one, for example from a machine tool. You will be able to develop by purchasing different equipment in the form of NFT linked to real existing equipment and hiring additional workers with whom you can fulfill orders from large international companies. In turn, orders will be placed in the application by the developer team at a certain time and will be linked to our holding company's real orders. To fulfill order, it will be necessary, for example, to build production chains between machine tools, purchase materials and pay wages to workers. You will receive a reward in cryptocurrency for completing an order in the game secured by profit from a real order.

You will be able to manage not only real oil industry production, but also production in such areas as: light industry, metallurgy, chemical industry, food industry, agriculture and others. Exciting well-thought-out interactions with real-world assets are waiting for you.

Detailed description of the concept and rules of the game can be studied when the announcement of this GameFi project is released.

7. CONCLUSION

The objective of launching the \$FRACT token is to develop an innovative tool for investing in an existing research and production association (FRAC TOOLS LLC).

The FRAC TOOLS LLC team comprises individuals with extensive experience in the production and oilfield service sectors, particularly in the field of downhole equipment. Our products meet the highest quality standards demanded by the largest oil and gas companies. Our company's equipment is therefore used actively in oil and gas production projects, including those with hydraulic fracturing technology. [Further details regarding the nomenclature of our products can be found in the Appendix chapter.](#)

The \$FRACT token will be powered by the Polygon blockchain platform, which is one of the most popular frameworks for creating Ethereum-compatible blockchain networks and scaling solutions. Polygon offers two key advantages: increased transaction throughput and low fees.

Token holders have the option of receiving regular payments for holding \$FRACT tokens. The rewards will be distributed to decentralised crypto wallets (MetaMask) in the form of \$USDT (United States Dollar Tether) tokens. The Tether exchange rate is fixed at a 1:1 ratio with the US dollar. The amount of \$USDT received will be proportional to the number of tokens held. Please note that the \$FRACT token does not have any governance function. Additionally, there is the option to participate in a staking programme, which has been described in detail in this document.

The total supply of \$FRACT tokens to be issued is 110,000,000,000. Each round of the public sale will be limited to between 35% and 15% of the total tokens. One user will be permitted to purchase no more than 5% of the tokens, which will help to mitigate the impact on the token price for large holders. Purchased tokens will be subject to a corresponding sale lock-up period, commencing at the time of purchase.

This document also outlines the business case for the successful development of the FRAC TOOLS LLC, with a particular focus on the \$FRACT token. Our team is dedicated to the long-term success of the project.

FRACT

The global oil industry will continue to develop, as it plays an important role in the economies of many countries. Accordingly, technologies for extracting oil from hard-to-recover reserves (HRR) will be developed. This is the application of new hydraulic fracturing technologies, including multistage hydraulic fracturing (MHF). For instance, the proportion of HRR in the oil production market is anticipated to reach 70% by 2030 (currently 40%), while the necessity to utilise hydraulic fracturing technologies will intensify annually.



APPENDIX

FRACT

Variable costs (materials)

Table 1. Dependence of the price of a tonne of steel on the volume of purchase

Explanation	Purchase price per tonne (\$USD)	Amount of steel in the order (tonnes)
Market price of the tube part	3002	1
The current purchase price. One-piece tubes at the lowest price on the market	1953	3
Wholesale from distributors, average market price	1574	15
Minimum volume – 44 tonnes (carload), purchase at the metal rolling plant. Average market price	1350	44
Minimum wholesale order at the factory, average price	1306	400

Table 2. Dependence of aluminium price per tonne on purchase volume

Explanation	Purchase price per tonne (\$USD)	Amount of aluminium in the order (tonnes)
Market price of the aluminium bar part	16 741	0.5
The current purchase price. One-piece aluminium bars market price	8 929	2
Small wholesale	7 254	5
Minimal order at the factory	4 464	15
Wholesale order at the factory	4 241	80

Variable costs (materials)

Tanle 3. Change in the cost of a rubber product when the annual turnover of the organisation increases

Explanation	Average cost of one plastic or rubber product (\$USD)	Organization's annual turnover (million \$USD)
Purchase of completed products using foreign molds	125	0.33
Purchase of completed products using our own molds and own production of protective rings (current level)	76	2.23
Purchase of materials followed by own production of completed products	36	11.16
Self-mixing of raw materials with subsequent production of materials for the manufacture of completed products	26	111.61
Full-cycle own production of plastics and rubber	19	446.43



CATALOG

Current FRAC TOOLS LLC nomenclature

2024

Non-cemented liner hanger HNCLH.1

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing without cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Do not require mill out
2. Packer element is tested for V3 sealing
3. Available in P110 and Q125 steel grade
4. Two release options: hydraulic and mechanical
5. One piece mandrel provides highest performance characteristics
6. Premium materials and gas tight seals
7. Wide range of liner and casing sizes available: 102.146, 114.168, 114.178, 127.178, 178.245 etc.

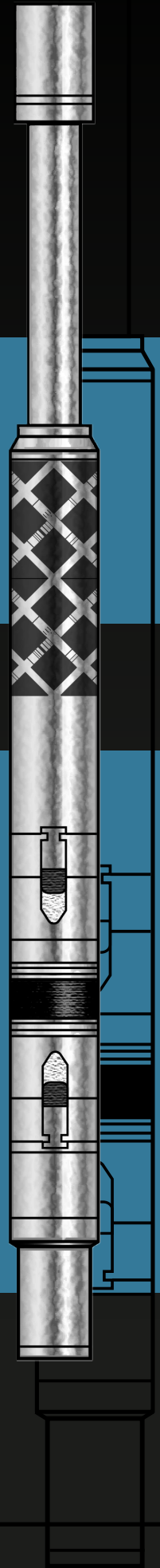
Non-cemented liner hanger HNCLH.2

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing without cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Two release options: hydraulic and mechanical
2. Do not require mill out
3. One piece mandrel provides highest performance characteristics
4. Packer element is tested for V3 sealing
5. Available in P110 and Q125 steel grade
6. Premium materials and gas tight seals
7. Dual anchor provides extra reliable hanging in the required interval



Non-cemented liner hanger NCLH.1

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing without cementing. After activation liner hanger with running tool release liner from work string.

Advantages

1. Two release options: hydraulic and mechanical
2. Do not require mill out
3. Packer element is tested for V3 sealing
4. Available in P110 and Q125 steel grade
5. Wide range of liner and casing sizes available: 102.146, 114.168, 114.178, 127.178

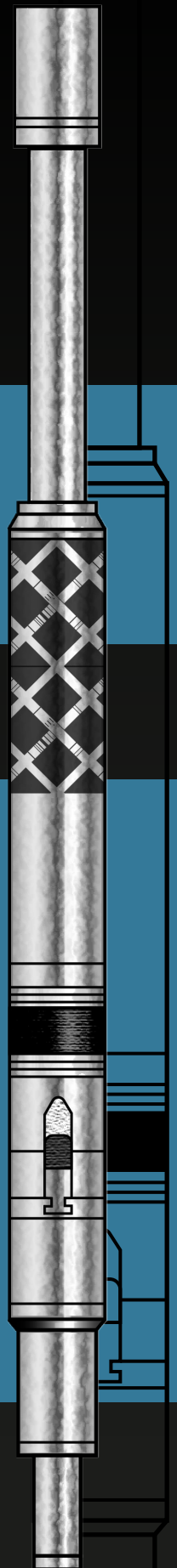
Non-cemented liner hanger HNCLH.UIF.1

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing without cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Two release options: hydraulic and mechanical
2. Washout through the float shoe available in case of liner assembly with perforated filters
3. One piece mandrel provides highest performance characteristics
4. Packer element is tested for V3 sealing
5. Available in P110 and Q125 steel grade
6. Premium materials and gas tight seals
7. Wide range of liner and casing sizes available: 102.146, 114.168, 114.178, 127.178 etc.





Non-cemented liner hanger HNCLH.UIF.2

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing without cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Two release options: hydraulic and mechanical
2. Washout through the float shoe available in case of liner assembly with perforated filters
3. Do not require mill out
4. One piece mandrel provides highest performance characteristics
5. Packer element is tested for V3 sealing
6. Available in P110 and Q125 steel grade
7. Premium materials and gas tight seals
8. Dual anchor provides extra reliable hanging in the required interval
9. Wide range of sizes available: 102.146, 114.168, 114.178, 127.178.

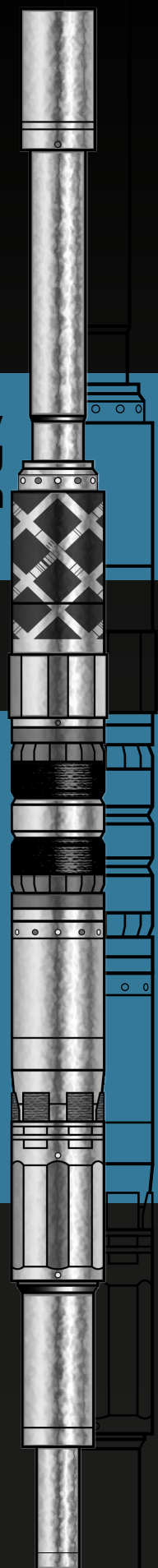
Non-cemented liner hanger NCLH.UIF.1

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing without cementing. After activation liner hanger with running tool release liner from work string.

Advantages

1. Two release options: hydraulic and mechanical
2. Washout through the float shoe available in case of liner assembly with perforated filters
3. Do not require mill out
4. Packer element is tested for V3 sealing
5. Available in P110 steel grade
6. Wide range of sizes available: 102.146, 114.168, 114.178, 127.178





Cemented liner hanger CLH.1

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing after cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Release by right hand rotation before cementing
2. One piece mandrel provides highest performance characteristics
3. Packer element is tested for V3 sealing
4. Available in P110 and Q125 steel grade
5. Premium materials and gas tight seals
6. Fast milled drill pipe dart and wiper plug kit are included
7. Anti split out system for partly compensation of buoyancy after release
8. Wide range of sizes available: 102.146, 114.168, 114.178, 127.178, 178.245, 194.245 etc.

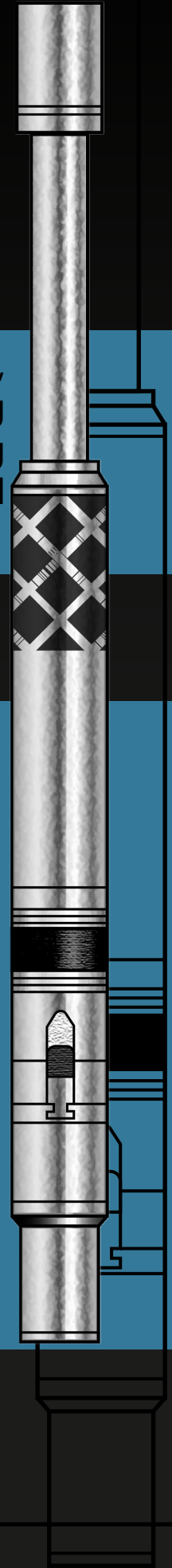
Cemented rotatable hydromechanical liner hanger CRHLH.2

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing after cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

- 1.The possibility of rotating the shank suspension during descent
- 2.The system of partial compensation of the buoyant force on the tool after disconnection
- 3.Packer element is tested for V3 sealing
- 4.Available in P110 and Q125 steel grade
- 5.Premium materials and gas tight seals
- 6.Two ways of separation: hydraulic and mechanical
- 7.The one-piece housing ensures maximum performance
- 8.Wide range of sizes available: 102.146, 114.168, 114.178, 127.178, 178.245, 194.245 etc.





Cemented unplugging liner hanger CULH.1

Purpose

Is used for lowering and hanging liner in production casing, and sealing annulus between liner and production casing after cementing. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Release by right hand rotation before cementing
2. One piece mandrel provides highest performance characteristics
3. Packer element is tested for V3 sealing
4. Available in P110 and Q125 steel grade
5. Premium materials and gas tight seals
6. Fast milled drill pipe dart and wiper plug kit are included
7. Anti split out system for partly compensation of buoyancy after release
8. Wide range of sizes available: 102.146, 114.168, 114.178, 127.178, 178.245, 194.245 etc.

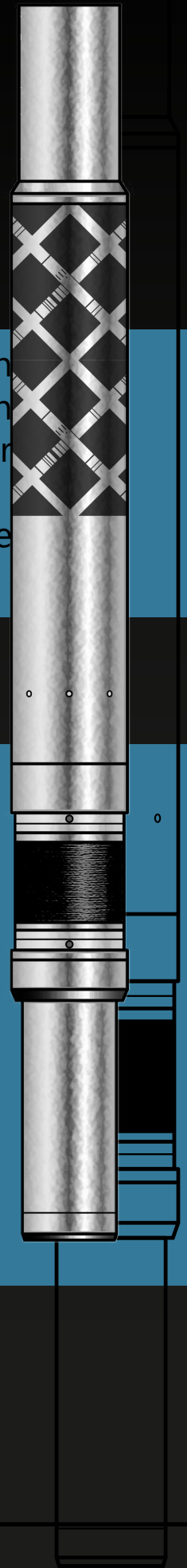
Repair packer EAP.1

Purpose

Is used for elimination of leaks on top of the liner installed in well. Packer seals annulus between liner and production casing without cementing needed. After activation liner hanger with running tool release liner from work string and provides the polished bore for further installation of the stinger and fracking.

Advantages

1. Two release options: hydraulic and mechanical
2. Do not require mill out
3. One piece mandrel provides highest performance characteristics
4. Packer element is tested for V3 sealing
5. Available in P110 and Q125 steel grade
6. Premium materials and gas tight seals
7. Wide range of sizes available: 102.146, 114.168, 114.178, 127.178, 178.245, 194.245 etc.



Jointing stinger JS.1



Purpose

Is used for tight positioning of repair equipment in existing in well liner due to seals and keys on repair stinger engaging with polished bore installed on liner hanger which was run before.

Advantages

- 1.Mechanical engagement in polished bore receptacle
- 2.Do not require mill out
- 3.Available in P110 steel grade
- 4.Premium materials and gas tight seals

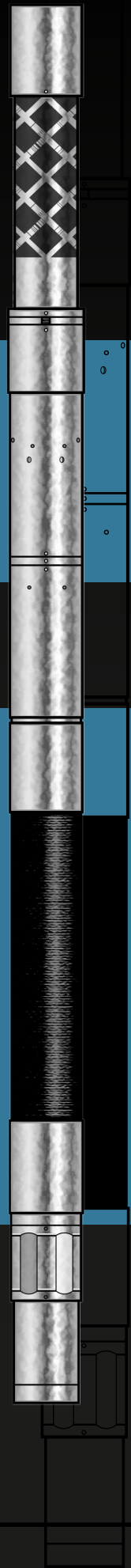
Dual-stage and collar cementing packer DSCCP.5

Purpose

Is used for performing dual-stage or collar cementing of production casing, reliable sealing of lost circulation horizon and effective pays from upper well area. Consist of two tools combined in one: inflatable packer and stage cementing sleeve.

Advantages

- 1.Expanding sealing sleeve with extra armor
- 2.Milled by PDC bit type
- 3.Allows to adjust the expanding pressure during filling
- 4.Tool activation without pressure drop
- 5.Packer element is tested for V3 sealing
- 6.Available in P110 and Q125 steel grade
- 7.Premium materials for seals
- 8.Sizes available: 146, 168, 178, 245.





Inflatable packer IP.2

Purpose

Is used for cross-flow leaks prevention, formation isolation. The packer separates hermetically liquids in the annulus, forms a sedimentation platform for the cement slurry, and contributes to the formation of high-quality cement stone.

Advantages

1. Expanding sealing sleeve with extra armor
2. Do not require mill out
3. Allows to adjust the expanding pressure during filling
4. Tool activation without pressure drop
5. Ability to fill by cementing slurry
6. Packer element is tested for V3 sealing
7. Available in P110 and Q125 steel grade
8. Premium materials for seals
9. Sizes available: 146, 168, 178, 245.

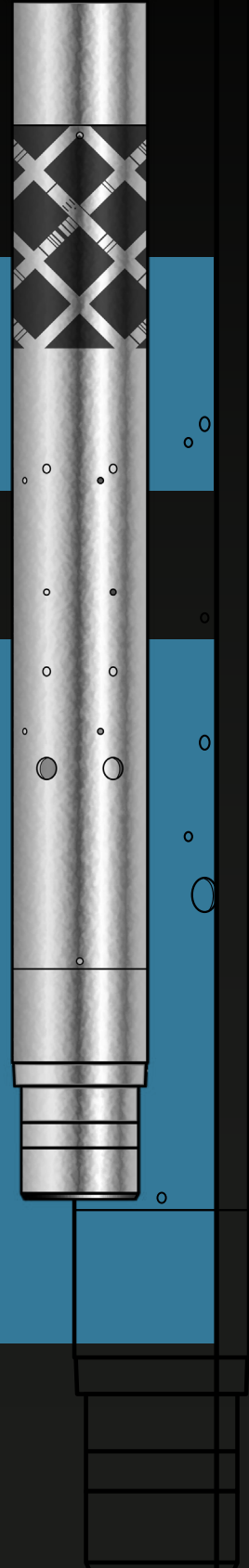
Hydraulic stage cementing collar HSCC.1

Purpose

Designed for dual stage or collar cementing of production casing. The main feature of the tool is the ability to use it in horizontal wells by opening the circulation ports by expressive pressure (hydraulically).

Advantages

1. Emergency closing mechanism of the cementing ports in case of stop signal failure
2. Backflow prevention mechanism for cement slurry in the well
3. Tool design with integrated landing collar
4. Milled by PDC bit type
5. Adjustable circulation ports activation pressure
6. Available in P110 and Q125 steel grade
7. Premium materials and gas tight seals
8. Sizes available: 102, 114, 127.



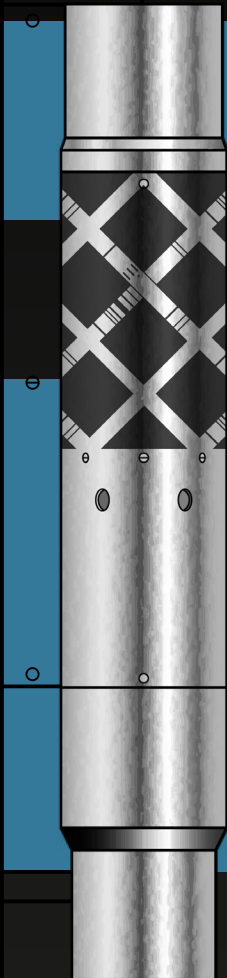
Stage cementing collar SCC.1

Purpose

Designed for dual stage or collar cementing of production casing. The main feature of the tool is the mechanical activation of circulation ports by plug propped from surface.

Advantages

- 1.Simple and reliable design
- 2.Milled by PDC bit type
- 3.Adjustable circulation ports activation pressure
- 4.Available in P110 and Q125 steel grade
- 5.Premium materials and gas tight seals
- 6.Supplied with all necessary plugs and landing collars



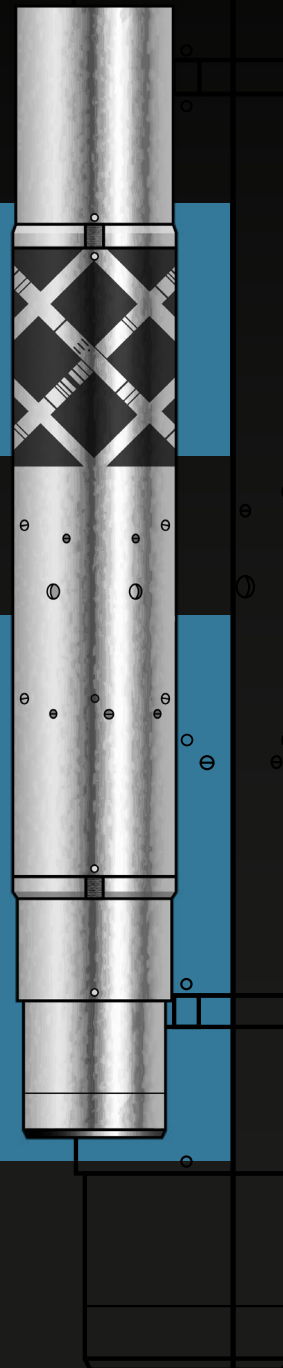
Hydraulic collar of stepwise cementing HCSC.1

Purpose

Designed for dual stage or collar cementing of production casing. The main feature of the tool is the ability to use it in horizontal wells by opening the circulation ports by expressive pressure (hydraulically).

Advantages

1. Two opening modes for circulation ports: hydraulic and mechanical by plug
2. Milled by PDC bit type
3. Adjustable circulation ports activation pressure
4. Available in P110 and Q125 steel grade
5. Premium materials and gas tight seals
6. Supplied with all necessary plugs and landing collars



Pipe testing joint PTJ.1

Purpose

Designed for drift and pressure tests of the drill pipe string in the well, usually before completion with liner.

Advantages

1. Simple and reliable design
2. Activation dart configuration is common with the liner hanger drill pipe dart
3. Adjustable circulation ports activation pressure in range 100-300 bars
4. Available in T steel grade, mechanical characteristics are close to drill pipes
5. Life cycle in 10 applications
6. Supplied in configurations selected depending on the drill pipe type
7. Sizes available : 3-86.102, 3-102.121, 3-133.158

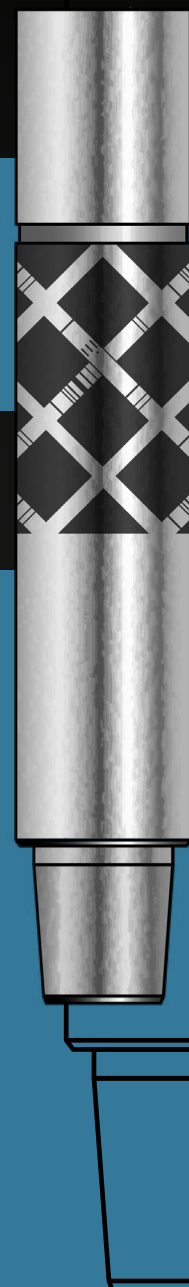
Pipe crimping collar PCC.2

Purpose

The device is designed for use in the well, where it is used for templating and pressure testing of the drill string. This is usually done before running the liner. The design is straightforward and dependable.

Advantages

- 1.The configuration of the device's activation plug matches the configuration of the liner hanger sales plug
- 2.Recirculation resumes through the bottom of the arrangement after device activation
- 3.Allows the activation pressure to be adjusted between 100 and 300 bar
- 4.Available in T steel grade, mechanical characteristics are close to drill pipes
- 5.Life cycle in 10 applications
- 6.Supplied in configurations selected depending on the drill pipe type
- 7.Sizes available : 3-86.102, 3-102.121, 3-133.158



Guide shoe GS.1

Purpose

Designed to guide the casing string along the wellbore during running. The shoe has an aluminum nozzle with a center hole and side flushing holes in the body.



Advantages

- 1.Simple and reliable design
- 2.Complies with the industry standard OST 39-011-87 and O&G companies
- 3.specific requirements in the technological and strength parameters
- 4.Machined from P110 grade steel and aluminium alloy
- 5.Provides high-quality clean up of accumulated drilling sludge and ability casing cementing with an emphasis on the bottom hole due to specific location and diameter of the flushing ports
- 6.Milled by PDC bit type
- 7.Sizes available: 102, 114, 127, 140, 146, 168, 178, 194 etc.

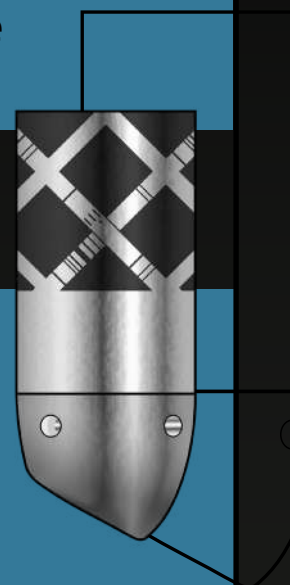
Rotating float shoe RFS.1

Purpose

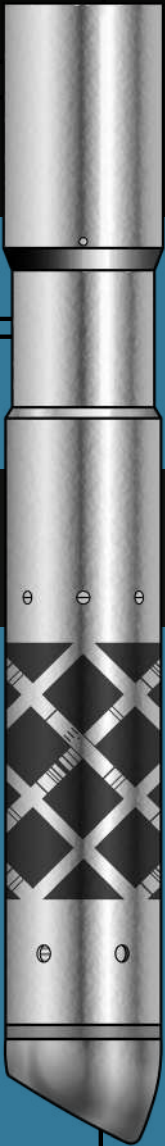
Designed to guide the casing string along the wellbore during running. The shoe has an aluminum rotating nozzle with a center hole and side flushing holes in the body.

Advantages

1. Milled by PDC bit type
2. Complies with the industry standard OST 39-011-87 and O&G companies specific requirements in the technological and strength parameters
3. Machined from P110 grade steel and aluminium alloy
4. Concentric rotating nozzle provides relieved run of the string to the bottom hole
5. Provides high-quality clean up of accumulated drilling sludge and ability casing cementing with an emphasis on the bottom hole due to specific location and diameter of the flushing ports
6. Sizes available: 102, 114, 127, 140, 146, 168, 178, 194 etc.



Ratchet rotating float shoe RRFS.1



Purpose

Designed to guide the casing string along the wellbore during running. The shoe has an eccentric aluminum nozzle with a center hole, reciprocating rotary drive and side flushing holes in the body.

Advantages

1. Complies with the industry standard OST 39-011-87 and O&G companies specific requirements in the technological and strength parameters
2. Machined from P110 grade steel and aluminium alloy, milled by PDC bit
3. Mechanical rotary drive of eccentric nozzle ensure guaranteed shoe rotation when meet the obstruction during run in hole
4. Provides high-quality clean up of accumulated drilling sludge and ability casing cementing with an emphasis on the bottom hole due to specific location and diameter of the flushing ports
5. Sizes available: 102, 114, 127.

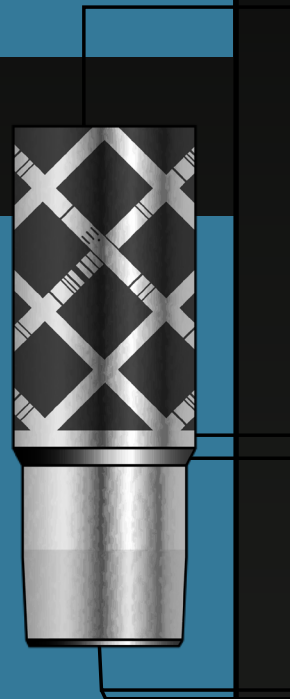
Plunger float collar PFC.1

Purpose

Designed to avoid backflow of the cement or drilling mud from the annulus to the tubing.

Advantages

- 1.Simple and reliable for washout design
- 2.The existing spring-loaded element guarantees insulation regardless of the type and the density of the working fluids
- 3.Machined from P110 grade steel and aluminium alloy
- 4.Spring valve is made of milled material
- 5.Do not require extra operations or actions during run into the hole
- 6.Milled by PDC bit type
- 7.Sizes available: 102, 114, 127, 140, 146, 168, 178, 194 etc.



Landing collar LC.1

Purpose

Designed to reach stop-signal during:

1. Tight landing of the activation ball of the liner hanger with further restoration of the circulation in the well
2. Tight landing of the wiper plug and drill pipe dart assembly

Advantages

1. Simple and reliable for washout design
2. Machined from P110 grade steel and aluminium alloy
3. In activated mode provides feature of float collar due to tight positioning of cementing plugs in seat
4. Milled by PDC bit type
5. Sizes available: 102, 114, 127, 168, 178, 194.



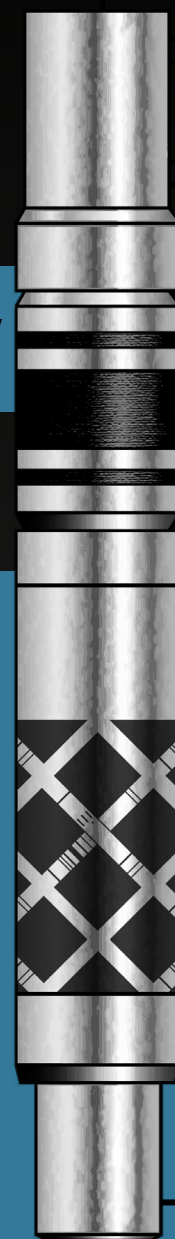
Open hole hydro mechanical packer OHHMP.1

Purpose

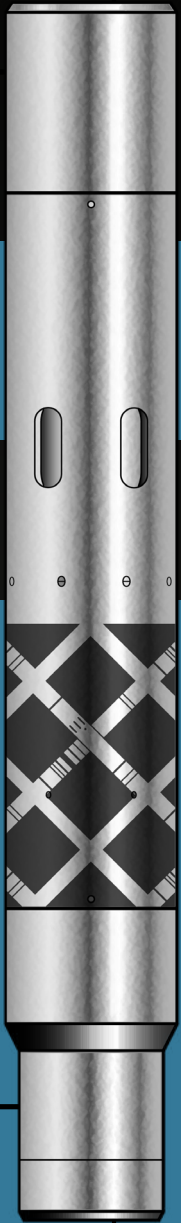
Designed to separate intervals in open hole or casing in well, comprising multistage fracturing performance.

Advantages

- 1.Small outside diameter to enable run in hole during side-tracking
- 2.High setting rate of packer
- 3.One piece mandrel provides highest performance characteristics
- 4.Packer element is tested for V3 sealing
- 5.Available in P110 and Q125 steel grade
- 6.Premium materials and gas tight seals
- 7.Do not require mill out
- 8.Sizes available: 102.118, 114.136, 114.143, 114.146



Hydraulic frac sleeve HFS.1



Purpose

Designed to perform first frac stage of wellbore during performing multistage fracturing and provide hydrodynamic initiation from liner to production formation.

Advantages

- 1.Small outside diameter to enable run in hole during side-tracking
- 2.Multi open-close feature of the sleeve tightly by shifting tool
- 3.Easy adjustable activation pressure
- 4.Available in P110 and Q125 steel grade
- 5.Premium materials and gas tight seals
- 6.Do not require mill out
- 7.Sizes available: 102.113, 114.136

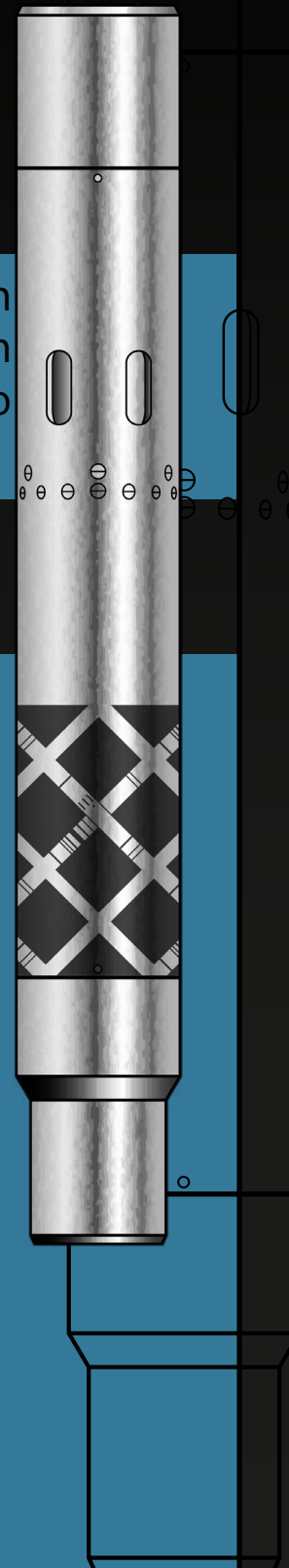
Ball drop frac sleeve BDFS.1

Purpose

Designed to perform frac of the second and higher stages in well during multistage fracturing of the wellbore intervals in well and provide hydrodynamic initiation from liner to production formation.

Advantages

1. Small outside diameter to enable run in hole during side-tracking
2. Multi open-close feature of the sleeve tightly by shifting tool
3. Easy adjustable activation pressure
4. Easy installed and fixed ball seat without need of sleeve disassembling
5. Can be used as first stage Toe sleeve with specific activation ball seat installed
6. Made from P110 and Q125 grade steels, cast iron
7. Milled by PDC
8. Premium materials and gas tight seals
9. Sizes available: 102, 114



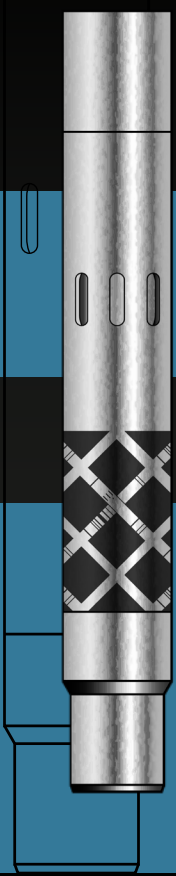
Hydraulic fracturing coupling cemented HFCC.1

Purpose

The product is designed for hydraulic fracturing of the first wellbore interval in a cemented liner during multistage fracturing, with the objective of ensuring a hydrodynamic connection between the liner and the producing formation.

Advantages

1. The small size of the liner makes it easy to lower it into the well during FPSO
2. Cement slurry isolated hydraulic drive of window opening with fracturing element
3. Manufactured from Q125 strength group steels
4. Window opening pressure can be varied
5. High buckling pressure allows this device to be widely used



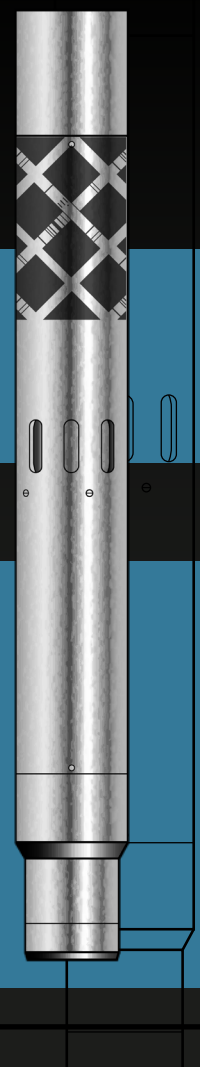
Hydraulic fracturing coupling hydraulic cemented controlled HFCHCC.1

Purpose

The product is designed for hydraulic fracturing of wellbore intervals in cemented liners and for providing a hydrodynamic connection between the liner and the productive formation. The compact dimensions facilitate the lowering of the device into the well during FPSO operations.

Advantages

1. Cement slurry-isolated hydraulic drive for window opening with a bursting element
2. Manufactured from Q125 strength group steels
3. Window opening pressure can be varied
4. High buckling pressure allows this device to be widely used
5. No drilling required
6. Possibility of repeated tight closing and opening of the coupling with a special Premium materials and gas-tight sealing solutions



Activation sleeve AS.1

Purpose

Designed to provide circulation of drilling fluid in liner with further tight mechanical shut-off in order to create pressure increase in tubing for liner hanger activation.

Advantages

1. Mechanical shut-off of circulation slots
2. Milled by PDC bit
3. Reserve activation with larger activation ball
4. Is made of P110 grade steels and cast iron
5. High resistant for washout
6. Resistant for frac pressure rates and reverse pressure drops
7. Sizes available: 102, 114.



Stinger for frac SF.1

Purpose

Designed to create tight connection between tubing string and liner hanger and for protecting the production casing from high pressure impact during hydraulic fracturing.

Advantages

1. Equal drift diameter with tubing string
2. Position indication of top of the liner
3. Position indication for setting into the liner hanger
4. Made from P110 and Q125 grade steels
5. Premium V-type seals
6. Guaranteed setting at any angle of installation of liner hanger
7. Do not require rotation during setting and further release
8. Reusable after redress service
9. Sizes available: 89.146, 114.168, 114.178.

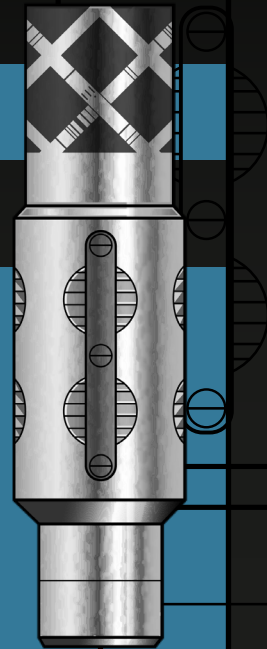
Hydraulic hold down anchor HHDA.1

Purpose

Designed to prevent work string from ejection while fracturing operations.

Advantages

1. Equal drift diameter with tubing string
2. Premium materials and gas tight seals
3. Anti abrasive wear protection of slips
4. Made from P110 and Q125 grade steels
5. One piece mandrel provides highest performance characteristics
6. Do not require rotation during setting and further release
7. Operates only by tubing pressure rate
8. Reusable after redress service
9. Sizes available: 89.146, 114.168, 114.178.



Equalizing valve EV.1

Purpose

It is designed to equalize the tubing and annular pressure in the case of different static levels in the well and annular space.

Advantages

1. Equal drift diameter with tubing string
2. Premium materials and gas tight seals
3. Made from P110 and Q125 grade steels
4. Operates only by tubing pressure rate
5. Reusable after redress service.

