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**ENTERING RUSSIAN MARKET** 

**Case Sievi-Tools Oy** 

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### **ABSTRACT**

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Nowadays many companies are eager to expand the barriers and enter a new market. Despite the bad economic situation on the Russian market, foreign companies still try to enter it and find new customers. The Russian market provides big opportunities, but only in the case of successful implementation of the knowledge the company has and researches it has conducted.

The thesis was commissioned by Sievi-Tools Oy. It is a small Finnish company providing milling- and mould production services, which is famous for a high quality of final products. The objective was to conduct a market research and provide information about different aspects of entering the Russian market, suggest an entry model and give the final opinion in the conclusion.

The main research method was qualitative research. For this thesis, only the newest and relevant sources were selected from the Internet. Different kinds of articles, official documents and reports were analysed, and all needed information was found This method was used to describe the principles of milling, different types of milling machines, Russian market analyses, entry mode description, and marketing in the theoretical part. The empirical part of the thesis is connected to direct work with Sievi-Tools. It includes various analyses such as competitor analysis, customer analyses etc. and translating and creating marketing materials

As a result, it was found out that the Russian market is not easy to enter for Finnish companies providing milling services due to much competition, customs, lower prices and faster delivery of Russian competitors. However, if the company wants to open a branch with the same high quality of final products, there is an opportunity to attract customers and achieve great results. The suggestions on how the company should enter the market in the Conclusion part were made based on the pre-formed analyses and found information.

# **Key words**

CNC milling, Marketing, PEST analysis, Russian, SWOT analysis.

# **CONCEPT DEFINITIONS**

B2B – Business to Business

B2C – Business to Customer

CNC milling – Computer Numerical Control milling.

EXW – Ex Works Incoterms 2010

GDP - Gross Domestic Product

PEST analysis is a tool for situational analysis that helps to analyze the market. PEST stands for Political, Economic, Social and Technological factors of the analysis.

SWOT analysis is a tool used to help the company to develop a business strategy. SWOT stands for Strength, Weaknesses, Opportunities, and Threats.

VAT - Value Added Taxes

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### 1 INTRODUCTION

Despite the sanctions against Russia and the economic downturn, foreign companies are still attracted by the Russian market. Russian economy rather quickly can adapt to new conditions and catch up with what it has missed, and that is why even with the influence of dozens of sanctions and restrictions the foreign investors would still like to cooperate with Russia.

# 1.1 Background and objectives

Entering new foreign markets is one of the most popular strategies to expand the business and attract new customers. Companies all around the world are trying to become international by selling online, exporting or even opening branches in different countries. In order to achieve the internalization goals successfully and get to the new market, much work should be done. The companies should analyse the market, make research about competitors and customers, as well as get into the details about local laws. All this work should be done before entering and by professionals.

Finnish companies that are eager to expand the barriers and enter new markets usually pay attention to the neighbour countries such as Russia, Sweden or Norway. The study of this thesis was completed for Sievi-Tools Oy. It is a small Finnish company planning to expand its business and the Russian market is one of the choices it has. The company provides services of computer numerical control (CNC) milling and moulds productions. Sievi-Tools Oy has a great reputation among the customers and points out the quality as the main advantage. The company has a much experience of approximately 20 years of successful work and has a staff of 20 qualified professionals.

### 1.2 Research questions

The main objective of the thesis was to provide the research and recommendations for Sievi-Tools Oy concerning entering Russian mechanical market. In order to do it, the different types of analyses and researches are required, so in the conclusion, the main questions was: what Sievi-Tools Company should do in order to receive the highest result when entering the Russian market.

At the beginning the list of tasks and questions was set as follows:

- ➤ Market study and operating environment analysis of Russian mechanical engineering markets limited to Moscow and Leningrad areas.
- ➤ What does it take to start export sales?
- > What are the limitations and sanctions?
- > Creating a competitor- and SWOT analyses.
- ➤ Market segmentation and strategic choices.
- > Action plan and goals.
- > Developing marketing material for the Russian market.

Moreover, there was a plan to take a trip to and participate in Saint-Petersburg subcontracting fair in March 2019 but later these plans were cancelled due to private reasons of the company.

#### 1.3 Research limitations

The main limitation of his thesis was connected to the areas. This research and analyses covers only the Moscow and Leningrad area due to the fact that the territory of Russian Federation is very big, and it would be impossible conduct such as extensive study in a short period of time. Moreover, the PEST analysis was done considering the company's wants and needs and some points were excluded. For example, such topics as the religion, ecological production, ethnical variety etc. were not important in the case of the main objective and goals of Sievi-Tools Oy and were left out.

### 1.4 Structure of the thesis

The thesis consists of several parts, - the theory about CNC milling, Russian market analysis, working with Sievi-Tools Oy, strategic choices, different types of limitations and marketing. In addition, the thesis can be divided into two parts, - theoretical and empirical. The first one is connected to all the theoretical information as CNC milling and different types of CNC milling machines, the PEST analysis and analysis of Russian mechanical market, information about sanctions and limitations, the description how to open a branch or start export, and about marketing strategies. The practical part is connected to direct work with the company, - conducting a competitor- and SWOT analyses, looking for potential customers, translating and creating brochures and so on.

### 2 CNC MILLING

Before proceeding with the computer numerical control milling, we should define what milling and CNC mean separately. It is important to understand each term in order to get an overall picture of what CNC milling is and what it does.

Computer numerical control or CNC is a code that gives the machine an instruction on how the process should be done and what kinds of moves the machine should make. Principally, it declares how to produce a virtual object into a real one. The computer transforms this code into Cartesian coordinates that are used in the actual work and help to produce the goods with a high degree of precision. (Theias 2019.)

Milling machines are machines used for cutting and drilling the materials whether it is metal or wood and can be done manually or with the help of CNC. The main purpose of this process is to remove unnecessary material to make the desired shape and form of the needed part. Such machines use a milling cutter which is a rotating cylindrical tool. The advantage of milling machines over others is that they can perform cutting in different angels with the ability to move along different axes. (Theias 2019.) Thereby, we can define several types of milling machines.

CNC milling process consists of several stages. The first stage is designing 2D or 3D part which is then converted into a CNC-machine program that later defines the actions and movements which the machine should make in order to finish the right workpiece. The second step is to prepare the machine. An operator places the workpiece on to the worktable or vice and attaches the needed milling tools. When everything is ready, the machine is launched, and the process begins which means that the machine rotates the cutting tool which cuts into the workpiece. Then the piece, if needed, can be measured in order to check if everything is correct or the surface can be polished. (Ronquillo 2019.)

# 2.1 Classification of CNC milling machines

As was mentioned before, CNC milling machines can be classified by a number of axes or by the type of the mill:

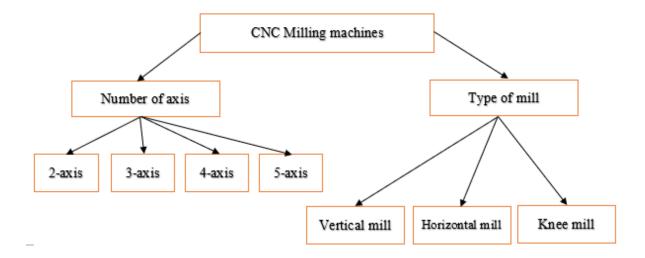
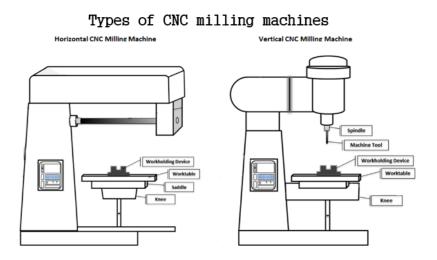


FIGURE 1. Types of CNC milling machines (adapted from Theias 2019)

The 2-axis machines are able to cut in the x- and z-axes, so the work can be done only in the vertical or horizontal direction. The 3-axes machine have an additional y-axis that allows cutting vertically in any directions but without the ability to cut below. The 4-axis machines have the ability to rotate the x-axis, while 5-axis machines can rotate the x- and y-axes in the same time which makes such machine the most complicated. (Theias 2019.)

Another classification is by the type of mill it has. We can define three types of mills: vertical mill, horizontal mill and knee mill. As shown in the PICTURE 1, the vertical milling machine consists of the table and the arm where the spindle is attached. The table moves along the z-axis in order to reach the fixed arm. The horizontal milling machine means that the spindle is placed horizontally which is better for working with longer and heavier pieces of work. A knee milling machine is a type of milling machine where the table can move up and down according to an adjustable knee. (Theias 2019.)



# 2.1.1 Advantages and disadvantages of CNC milling machines

What are the advantages of using CNC milling machines? First of all, the machines allow minimizing the human factor when processing the details. This is possible because of the automatic mode based on the dimensions inserted in the program and as a result, there will be the final product with the highest accuracy rate and the perfect surface quality. Additionally, the CNC milling allows producing a great volume of parts in a short time. Another advantage of using CNC machines is the reduced production costs which affect the final price and give the company a competitive advantage. Moreover, before milling starts, the 3-dimensional model is created which allows producing the most complex shapes with exact dimensional compliance. Moreover, the machines are equipped with cutters with wear-resistant heavy-duty edge coating that ensures the highest quality of cut. (Formung 2019.) Another privilege is that CNC milling machines can work with a wide range of materials. The workpieces can be made of aluminium, stone, steel, titanium, plastic, glass, wood, nylon etc. Thereby such technologies can be used not only in the production in aviation, space, medicine but also in furniture manufacturing, prototyping, sculpture making and so on. (Ronquillo 2019.)

The disadvantages of CNC milling can be the high cost of complicated shapes or even the impossibility to manufacture them. Further, the starting cost of CNC machining is very high and may not be profitable for low-cost prototyping, for example, the prototyping where the plastic is used as the material. Furthermore, the lead time of CNC milling can be longer than 3D printing. Lastly, this process requires expert knowledge which means that this service is not always available. (Bournias-Varotsis 2019.)

### 3 RUSSIAN MARKET ANALYSIS

Situation analysis is an essential part of the preparation for implementing the strategic plan. The PEST analysis represents the main component of a situation analysis and should be done periodically every 6 or 12 months in order to identify changes in the macro-environment. PEST stands for Political, Economic, Social and Technological factors. This analysis also can be extended to PESTEL analysis where such factors as Environmental and Legal factors are included, or PESTELI, PESTL and so on. Organizations that regularly monitor and respond to changes have a significant advantage over competitors. The outcomes can help in identifying opportunities and threats in a SWOT analysis. (Post 2018.)

### 3.1 PEST: Political factors

Political factors represent the level of involvement the government and government regulations impact the organization or industry overall. The political situation in Russia is rather stable nowadays. It is a semi-presidential federation with a Constitution as the main law. The president is elected every 6 years and nowadays Vladimir Putin takes this position. (Guzanova 2015.)

Russia is more often than not a conservative country, so the domestic policy is more traditional. However, Russia belongs to various international organizations as the United Nations, World Trade Organization, Europe and Eurasian Economic Union and others. Nowadays Russia has established relationships with around 191 counties and 144 embassies which show the active involvement in international relationships and activities. (Guzanova 2015.)

Additionally, when doing business in Russia, a company should be aware of the high corruption level, especially in the judicial system and public procurement. The corruption has the biggest negative effect on the competition on the market. The Russian Federal Anti-Corruption law states that all companies should create and follow the anti-corruption program, but in practice, this law is mostly ignored which has resulted in bribery, facilitation payment and all kinds of gifts. (Gan 2018.)

### 3.2 PEST: Economic factors

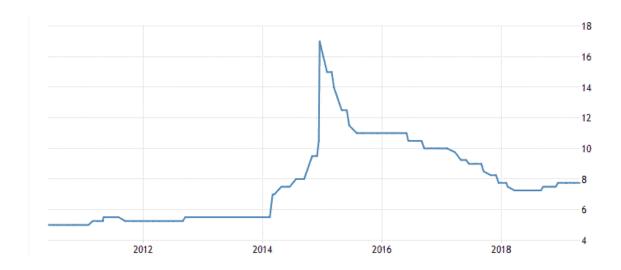
Economic factors impact the economy which directly affects the organization's performance. The economic situation in Russia can be characterized as unpredictable. After the collapse of the Soviet Union, the Russian economy has been changing towards a market-based system. However, there is still a high difference between social groups and the officials have the biggest rate of wealth compared to others. After the reforms in 1990, some industries became private, but such sectors as transport, banking, social media, defence and energy-related sectors are under the control of the government. (Guzanova 2015.)

Russia is known as the country where the main production is natural gas, oil, aluminium and steel and its economy is highly dependent on the prices of these products. Nowadays the economy situation is decreasing due to the fall of global oil prices, sanctions and other limitations. The Central Bank has forecast the decline in the gross domestic product (GDP) by 0,5%, while the Russian Ministry of Economic Development has expected a growth of about 0.7% per year. (Guzanova 2015.)



FIGURES 2. GDP Growth Rate (adapted from Trading Economics b)

The GDP in the fourth quarter of 2018 was higher by 0.80 % comparing to the third quarter in the same year. The average growth of the GDP is calculated as approximately 0.74 % annually from 1995 until 2018 where the highest one (4.10%) is in the first quarter of 1999 and the lowest one (-5.40%) in the third quarter of 1998. (Trading Economics b.) Above there is a chart that shows the fluctuation of the Russian GDP Growth Rate from 1998 till these days. As one can see there was a recession during 2014-2015 but now the rate is increasing and stabilizing.



FIGURES 3. The interest rate (adapted from Trade Economics a)

The interest rate in April 2019 is 7.75% and it is a little higher than the average of 7.32 % from 2003 until 2019. The highest interest rate was 17% in December of 2015 and the lowest rate was 5% in June of 2010. (Trading Economics a.) Above you can find the chart where all the fluctuation showed from June 2010 till May 2019.



FIGURES 4. Exchange rate (adapted from The World Bank)

Due to the sanctions and economic crisis, the exchange rate of RUB significantly decreased compared to the past 5 years. On the tables above, we can see the fluctuation of RUB to EUR during the last 6 years. In the case of EUR/RUB rates, the exchange rate increases at the beginning of 2018 and then falls in the middle and grow at the end of the year. It is forecasted to have an increase in the EUR/RUB rate in 2019 but not significant. (Trading Economics d.) According to The World Bank, as of January 2018, the financial sector in Russia has stabilized and it seems the domestic business confidence is slowly growing. However, the demand for loans is still low and asset quality is weak. Banks are performing financially better, possibly due to the cleaning of the banking sector: as of January 2017, there are 110 fewer banks in Russia compared with the same month of the previous year. Oil prices, government finances, and imports continue to be seen as risks. (World Bank 2017.)

The standard corporate tax rate is 15.5% to 20%, where 3% goes to the federal budget and 17% is for relevant constituent regions. Additional tax for foreign companies on income that is not obtained by the permanent establishment is 10%. The VAT is 18% while the reduced rate of VAT is 10% and applies mainly to basic food, children's goods, medical goods and pedigree cattle. A 0% rate applies to specific goods and services including supplies to diplomats, the sale of raw hydrocarbons extracted from Russian territory. As well, as Russia became a member of World Trade Organizations (WTO), the average bound tariff rate was lowered from 10% to 7,8% by 2017. (Santander 2019a.)

#### 3.3 PEST: Social factors

Social factors describe the social environment and trends in the target country. This analysis helps better understand the customers and adaptation. As for B2B marketing and mechanical engineering business, CNC machining to be specific, the social factor can be considered not important since the age, population growth etc. do not affect this business. However, it is significant to define the attitude of Russian customers toward imported goods, saving and investing, and buying habits.

Russian customers are attracted by foreign products since the quality of such products is considered to be high comparing the quality of the domestic products. However, there is a belief that Russian companies have a better understanding of the Russian culture and thus the domestic products are more suitable for Russian customers. Moreover, Russian customers tend to categorize the products depending on the country of origin. For example, they believe that Italian, French or Korean clothes are fashionable, while the products of Germany are high quality and will last longer. Because of the popularity of foreign

products, some Russian companies have adopted western types of names and the way of business. (Russian Research Marketing 2014.)

Additionally, brand loyalty among Russian customers is very strong and they will often know what product or brand they will buy before even going to the shopping centre. Recently, private consumption has fallen by 7.1% because of the crisis, but the recovery process seems to have started. Nevertheless, the Russian customers have become more selective and discerning in the purchases due to the adaptation to the new market situation. Moreover, Russian customers do not tend to save money due to the unreliable banking system which they do not trust. (Santander 2019b.)

# 3.4 PEST: Technological factors

Technological factors focus on the rate of technological innovation and development that affects the industry in which the organization operates. Based on the Global Competitiveness Report, Russia ranked 62nd out of 138 countries in the list of technological readiness, and 56<sup>th</sup> in terms of innovations. (Schwab 2016, 306.)

Nowadays Russia tries to build high-tech economy with high-tech parks and zones, but the bureaucracy prevents it. Some innovations are received relatively late compared to other developed countries in Europe, America and Asia. Additionally, most of them the government would like to displace by products of local companies, but most of the time these attempts are unsuccessful. However, the internet is widely available in Russia and according to statistics of 2015 around 73.4% of the population uses it. (Guzanova 2015.)

# 3.5 Russian Mechanical Engineering

Mechanical engineering is one of the most capacious branches of Russian Industry and it includes the production of various machines, equipment and instruments. It is calculated that around 3.5 million people work in the mechanical engineering industry. Most of the enterprises focused on machine-building are located mainly in the European part of the country. The leading area is the Central Federal District, whose enterprises produce about 1/3 of all engineering products. (UTMagazine 2015.)

The branch structure of the Russian machine building industry consists of three main branches: manufacturing of machinery and equipment, manufacturing of electrical equipment, and manufacturing of vehicles. The biggest part of the volume of mechanical engineering production is located in the Central Federal district (31%), then follows the Volga Federal district (26%) and North-West Federal districts (21%). Other districts have a low per cent of the volume and are not mentioned. (UTMagazine 2015.)

## 3.5.1 Aircraft engineering and shipbuilding.

There are about 250 enterprises in the aviation industry and around 400 thousand workers. The assets are concentrated in two companies which are "United Aircraft Corporation" and "Russian Helicopters". The total turnover in 2014 of these companies was over 450 billion roubles or 5.8 billion euros for today. Russia ranks second in the world in the production of aircraft, but most of them are military. In 2014, around 39 civilian airlines were launched, which is 25% less comparing to 2013. (UTMagazine 2015.)

The main part of the shipbuilding industry of the Russian Federation is concentrated in St. Petersburg, Nizhny Novgorod, Severodvinsk and the Kaliningrad region. In total, there are about 1,000 enterprises in Russia involved in shipbuilding, ship repair, the production of engines and equipment for various vessels. At the same time, about 160 of them are engaged directly in shipbuilding. The largest enterprises of the industry are members of "the United Shipbuilding Company". (UTMagazine 2015.)

# 3.5.2 Vehicle manufacturing

The main areas in the field of vehicle manufacturing are automotive and rail transport. The automotive industry is the largest branch of engineering with a share of about 27% of the total aggregate output. About 900 thousand people are employed in the Russian automobile industry. In 2014, 89.74 million passenger cars were produced worldwide. The industry leader was China, which produced almost 26% of all cars, followed by the United States and Japan. The largest European car manufacturer in Germany, in terms of production, lags behind China in 4 times. The Russian Federation takes the 14th place, having a 1.9% share of the world production. (UTMagazine 2015.)

Among 1,739,600 cars produced in Russia in 2014, 1,038,000 were foreign brands, which is 2.9% less than in 2013. In turn, the production of domestic car brands was 701,600, which is 16.5% less than in 2013. In general, the industry decline in production amounted to 9.7%. In addition to reducing the production of passenger cars in 2014, the production of buses decreased by 18.2% to 43.2 thousand units, trolley buses by 70.6% to 155 units, and trucks by 25.7% to 154 thousand units. However, there was an increase in the production of trailers for passenger cars by 11.2% to 49.2 thousand units, as well as tractor trailers and semi-trailers by 13% to 13 thousand units. The production of tankers increased in 2014 as 3 370 units were produced. (UTMagazine 2015.)

Railway engineering of Russia is represented by enterprises producing locomotives, wagons, as well as those engaged in the repair of railway transport. Today, the situation in the industry is very complicated, as the demand for products in the domestic market has declined in recent years. This is especially true of freight cars, the production of which is the main activity for many enterprises of railway engineering. At the end of 2014, 54,500 freight cars were produced in Russia, which is 10% less than in 2013. Such a fall is due primarily to a surplus of freight rolling stock. Of the available 1.2 million cars, the surplus is 250 thousand. Such an excess of wagons led to a significant reduction in the prices for products which forced Russian manufacturers to reduce production volumes and reduce production plans in 2015 by 25–30%. In addition, the increase in metal prices to 28% greatly affected the industry. (UTMagazine 2015.)

## 3.5.3 Manufacturing of machinery and industrial equipment

In this branch of mechanical engineering, there are three main sub-sectors: the production of industrial equipment, the production of construction and agricultural equipment, and the production of household appliances. Even though this sector has the largest range of manufactured products, its share in the engineering industry of the Russian Federation is the smallest. Moreover, in the last few years there has been a decrease in production volumes. (UTMagazine 2015.)

Even though the export of Russian engineering products in 2014 amounted to 28.29 billion US dollars, imports of the same products to Russia during the reporting period exceeded exports by more than 5

times. Compared with 2013, exports of engineering products decreased by 7.5%, while the share of imports of engineering products decreased by 13%. In addition to anti-Russian sanctions that restrict the supply of machinery and equipment to the Russian Federation, the Russian government, in response to the sanctions, adopted several decrees prohibiting the import of certain types of engineering products to the country. Nowadays, the basis of Russian export is the equipment for mining and metallurgical enterprises, aircraft, products of the military-industrial complex of Russia, stamping production, and the power equipment manufacturing. In turn, the main articles of imports of engineering products in the Russian Federation are cars and trucks, electrical equipment, components and equipment for radio and television, equipment for mining and construction, aircraft, and agricultural equipment. (UTMagazine 2015.)

#### 3.6 Industrial centres

The closest biggest cities where Sievi-Tools Oy can operate are Saint Petersburg and Moscow. Mechanical engineering is highly developed in these cities so there is a big chance to find customers and meet the demand. Other cities where mechanical engineering is developed are located far away from Finnish-Russian borders and transportation can be costly. Nevertheless, it is recommended to start the export to companies located in Moscow, Moscow area, Saint Petersburg and Leningrad areas, and then in the case of success to expand to other cities.



### PICTURE 2. 250 the biggest industrial centres in Russia (adapted from Urbanica 2012)

The Cities of the Moscow area with good developed mechanical engineering industry are Electrostal, Podolsk, Kilimna, Mytishy, Serpukhov, Likino-Dulevo, Golitsino, Korolevo, Egorovsk, and Dmitrov. Other highly developed cities in mechanical engineering outside this area are Voronezh, Ekaterinburg, Novokuznetsk, Abakan, Krasnoyarsk, Irkutsk, Komsomolsk – on- Amur, Belgorod, Taganrog, Kaluga, Tver, Vishnu Volchok, Murmansk, Nizhniy Novgorod, Tolyatti, Vladimir, Petrozavodsk, Ryazan, Bezetsk, and Kazan. (Urbanika 2012.) Above you can find the map where the cities with the most developed industrial sector are marked.

# 3.6.1 Mechanical engineering in Moscow

Moscow is the capital of the Russian Federation and the city of the federal significance. It is the largest city in Europe and considered to be a political, cultural, economic and scientific centre of the country. It is as well the most developed industrial centre of the Russian Federation, where the main types of industries are engineering, machine tools, shipbuilding, and instrument making. Additionally, there are such developed areas as production of ferrous and non-ferrous metallurgy, the chemical industry, light and printing industries. There is a contradictory situation since it was shown an increase in industrial production, but at the same time, there is a tendency to move the production to the outside of the city. It should be noted that since Moscow is an engineering centre so there is a big number of products are being created and researches are conducted. New technologies are constantly being created and mastered. (Metaprom 2015a.)

The largest civilian production factories are Moscow Oil Refinery, Avtoframos, Likhachev Plant, Moscow Tire Plant, and Trekhgornaya manufactory (Metaprom 2015 a). There is a list of the largest industrial enterprises and plants in Moscow placed below.

TABLE 1. Industrial enterprises of Moscow (adapted from Metaprom 2015 a)

Enterprise	Field	Enterprise	Field

Moscow Refinery	High-octane petrol and	E.ON Russia	Electrical and thermal
	diesel		energy and power
Hammer and Sickle	Metallurgy	Transneft	Oil pipelines
Electrozavod	Electrical transformers and reactors	Moscow Electroboard Plant	Electrical switchgear
SIBUR- Russian Tires	Tires	Norilsk Nickel	Non-ferrous metal ores
Likhachev Plant	Trucks	GAZ Group	Automotive holding
Avtoframos	Car construction (Re-	Metalloinvest	Mining and metallurgi-
	nault)		cal holding
Tushinsky Machine-	Aircraft	United Metallurgical	Metallurgy and pipe
Building Plant		Company	
Concern Almaz-Antey	Weapons	Transmashholding	Railways
Salyut	Aircraft engines	Evraz Group SA	Mining and metallurgy
Moscow Tire Plant	Tires	Evrokhim	Mineral fertilizers
Rosenergoatom Con-	Nuclear power plants	Eurocement Group	Concrete, non-metallic
cern			and building materials
UES of Russia	Electric power holding	Rosatom	Nuclear assets
TVEL	Nuclear fuel	GAZPROM	Energy
LUKoil	Oil and gas	Uralkhim	Mineral fertilizer
NK Rosneft	Oil and gas	Gazprom Neft	Oil and gas

# 3.6.2 Mechanical engineering on Saint Petersburg

Saint Petersburg is one of the targeted markets and the location of the biggest machine builders such as Kirovsky plant, "Electrosila", Leningrad Metal Plant etc. This is a city of federal significance and also the administrative centre of the North-West Federal District with the population of approximately five million people in 2019. (Saint Petersburg city 2019.) The city is located in Northern Europe, North-West

of the Russian which makes it easy to access from European countries such as Finland, Estonia, Latvia etc.

One of the most developed areas of mechanical engineering in St. Petersburg is transport engineering with such plants as "Vagonmash" (passenger cars for railways, electrical cars etc.), assembling busmaking factory "Scania-Piter", St. Petersburg's tramp-mechanical plant. Recently big international companies have built plants in Saint Petersburg. For example, one will find the plant of General Motors, Toyota, Nissan and Hyundai's plant recently has been started building. (Metaprom 2015 b.)

One of the most developed industries in Saint Petersburg is shipbuilding (both military and civil). For example, there are such plants as "Severnaya Verf" plant, Admiralty shipyards, Baltic plant and so on. Other important industries for the city are machine-tool construction, instrument engineering, manufacturing of electrical appliances and electronic equipment, as well as optics manufacturing. In addition, such industries as nonferrous and ferrous metallurgy, chemical industry, printing industry, and light industries are highly developed. (Metaprom 2015 b.) Below there is a list of the largest industrial enterprises and plants of Saint Petersburg:

TABLE 2. Industrial enterprises of Saint-Petersburg (adapted from Metaprom 2015 b)

Enterprise	Field	Enterprise	Field
Power Machines Con-	Power engineering,	Petersburg Tram Me-	Tram cars
cern	equipment for nuclear,	chanical Plant	
	hydraulic, thermal and		
	gas turbine plants		
Izhora Pipe Plant	Large diameter pipes	Scania-Peter	Large class buses
Leningradsky metal	Steam. hydraulic and	Severnaya Verf	Defence industry
Plant	gas turbines		

(continues)

Electrosila	Electrical machines, traction motors and generators	Admiralty Shipyards	Shipbuilding
Plant of Turbine Blades	Blades for steam and gas turbines	Leningrad Electrome- chanical Plant	Electrical measuring equipment
Izhorskie Plants	Heavy engineering – equipment for nuclear energy, mining, petro- chemical and metallur- gical industries	Kirovsky Plant	Foundry and steel rolling production, nuclear and power engineering, equipment for the agroindustrial complex, road, industrial and civil construction, gas and oil industry, rail transport, shipbuilding, metro.
Nevsky Plant	Power	Red Vyborzhets	Non-ferrous metals

### 4 ANALYSIS OF SIEVI-TOOLS OY

Before proceeding to the competitor or SWOT analysis, it is important to understand what the company does. I believe that understanding of a company's activities, its goals and objectives, as well as an understanding of the market itself, on which it operates is essential. With the understanding of the specifics of the company and how it works, one can avoid various problems, such as the incorrect formulation of the problem, the analysis of a completely different market, the omission of potential buyers and competitors from the type. Therefore, I think it is very important to describe the activities of Sievi-Tools and then perform the analysis of competitors, potential customer and SWOT analysis.

### 4.1 About the company

Sievi-Tools is an advanced, agile and flexible company which applies 3D-technology for machining of products with complicated geometry, small series, prototype products, tools and moulds. It was founded in 1999 and is a subsidiary company of Sievin Jalkine Oy. The company is located in Oulainen where all the production work is performed and from this city company delivers its products. (Sievi-Tools Oy.)

The Company has two 5-axis machining centres with pallet exchangers and a moving spindle, a 3-axis machining centre with a horizontal rotating axis, and a 3-axis machining centre Deckel Maho 7V. With these high-quality machines, Sievi-Tools can provide such service as NC-programming for 3-,4-, and 5-axis machining, prototype production, moulds and cores for plastic industry and foundries, moulds and lasts for the shoe industry and so on. The company specializes in impellers and individual blades for turbines and propellers. The main customers of the company are Finnish companies from different industry areas, such as aviation, medical, manufacturing, aerospace, energy, railroad etc. However, there were cases when foreign companies cooperated with Sievi-Tool and the company successfully completed these orders. (Sievi-Tools Oy.)

The biggest advantage of the company is a wide range of materials that can be used such as aluminium, steel, rubber, platinum, copper etc., and the high quality of final products. Although the company is small – it has about 20 employees – it successfully fulfils a large number of orders and has annually

increased the turnover. Due to successful results that the company has been showing for several years, it plans to expand the business and enter a new market. The Russian market is one of the options that is considered for successful implementation. (Sievi-Tools Oy.)

## 4.2 Competitive analysis

A competitive analysis is a very important process for creating a marketing plan for the company. It helps to evaluate what makes the product or service unique and how to attract target customers. Moreover, after completing this analysis the marketing manager can clearly see the company's position on the market, merits and flaws, easier to complete SWOT analysis and ways how to improve the product or service. Commonly, the competitive analysis includes the analysis of competitors' services, profitability, objectives, sales, strengths and weaknesses etc. Occasionally it is hard to perform and analyse all factors and the marketer should operate only with available information. (Tighe 2017.)

During the competitive analysis, various websites were searched and checked. It was discovered that there are many different companies which provide CNC machining as one of the main services. There are only SMEs or individuals who are ready to provide such services. I have chosen 25 companies from Moscow and 25 companies from Saint Petersburg that can be considered as competitors of Sievi-Tools. After collecting all the information, I have discovered that 98% of the companies (49 companies) provide additional services and only 2% (1 company) focusing directly to machining. In order to get a clearer picture of competitors, I have analysed other services which can be provided and highlights the most popular:



FIGURE 5. Competitors' services.

Considering the price and the length of production, it is hard to compare since it is strictly individually. The price and production time depend on several factors such as the difficulty of the details to be machined, the amount of the details, the size of the details, the overall load of the company (the number of orders to be proceed before), the price of labour hour, the machines used in production and the cost of the material.

To compare prices, the company provided the example of the detail and it was sent to every competitor. I have played the role of a mystery shopper to pretend to be a customer and ask about the prices and how long it will take to produce this detailed. Unfortunately, only 20% of the companies provided me with the answer and named the prices. Two companies have declined the work due to overload and the other two were declined due to high difficulty or unavailable material. Four of the companies asked if any other materials (Russian analogue of such material) can be used which means that Sievi-Tools has an advantage over such companies. Other companies have not answered me yet.

Based on the information about the price which I have, I could calculate the average price for Moscow region and Saint Petersburg region. All calculations of currency conversion of Russian Ruble to Euro is

made based on the data at the end of May 2019. The average price for Moscow region equals 17 717.4 RUB (around 243.14 EUR), while in Saint Petersburg region is it lower and equals 12 780 RUB (around 175.39 EUR). All the prices are calculated for 1 piece of the good with VAT, which is 20%. Comparing to Sievi-Tools, I can say that the company has a higher price.

Some of the companies do not provide specific information about the prices per one piece of manufactured goods and instead place the price for labour hour. For example, company A places the price of 700 RUB per labour hour (9.61 EUR) while company B announces 2 000 RUB (27.45 EUR). The cost of labour hour of Sievi-Tools is much higher comparing to Russian competitors. Other companies may define the minimum price for the order to proceed. For example, company C asks for a minimum amount of 20 000 roubles or 275 EUR.

Considering the production time, it is hard to calculate it since there are still several unknown factors such as a workload of the company, machines, other orders etc. The longest time period which was named is 4 to 6 weeks, while the shortest is 3 working days. The average production time is 14 to 20 working days. Delivery time is not included.

Concerning Finnish companies, there are only two companies that I could find during the research. Unfortunately, there is no much information about them since they still have not replied to my order request. One of the companies additionally provides turning and lathe services, while the other provides thermal cutting, welding, boring, lathe, turning services.

#### 4.3 Potential customers

Potential customers are people who are not using a company's products but there is a high possibility to attract them and make them the company's customers (Burad 2019). When entering a new market, it is important to understand who the potential customers can be. In order to do it, the company should provide a survey of the current customers and members of the targeted market, research the potential competitors and look which companies they work with, set the target advertisements and participate in fairs of the same field, and use local social media (Olenski 2015).

In the case of Sievi-Tools, the potential customers are small and medium enterprises in the need of high-quality milling or mould services, individuals, start-ups and other non-governmental organizations. The enterprises regulated by the government cannot be the potential customers since most of the time the company should participate in the tender processes. Many big Russian companies participate in these processes and Sievi-Tools cannot compete with them because the priority is given to local production. Moreover, most of the time such tenders are corrupted and won by companies that are somehow connected to the government.

Based on the competitor analysis, a list of potential customers was created. These customers were found by screening the companies with whom our competitors work and visiting special websites where most of the industrial companies are named. Then I have checked their purchasing policy and those companies who do not require tender process were included in the list. I will not show this list in terms of confidentiality but can mention that it consists of 20 companies mostly from the Moscow area from different industrial areas. There are companies with the specialization on the production of medical hardware and cosmetology complexes, cables and conductor products, optics and optical-electronic devices, sports goods, boat production and so on.

### 4.4 SWOT analysis

SWOT analysis is a helpful and powerful tool which aims to help a company to develop a business strategy. It can be deciphered as Strength, Weaknesses, Opportunities, and Threats. The first two factors are internal which mean they are connected to the company and thus can be controlled or changed. The next two factors are external, which mean they are connected to the market and what is happening outside the company. The company cannot change them but can adapt. (Parson 2018). If the SWOT analysis is performed rightly, the company can build a good and strong strategy which will make the company be a leader on the market. The process of creating the analysis will help managers to look at the business in a new way and point out new directions for actions. To make this analysis and strategy plan consequential, the company should review and update it every 12 months. (Grant 2019).

The SWOT analysis for Sievi-Tools was prepared by the group brainstorming. This method aims to collect the individual points of view and suggestions, and then to discuss, correct and accept the ideas by the group. While brainstorming, we used specific questions to create an analysis:

- ➤ What advantages do we have over the competitors?
- ➤ What physical and mental assets do we have? Such as knowledge, equipment, technology etc.
- ➤ What is needed to be improved?
- ➤ What image does the company have?
- Are there potential competitors who can enter the market? etc.

Based on these and other questions, the SWOT analysis was performed.

**Strengths** of the company are mostly connected to the quality of the products, great experience (over 20 years) and the good image of the company. The European quality of materials and positive thinking about Finnish products give the advantage over Russian competitors.

Weaknesses of the company are mostly referred to as price. Russian prices are perceptible lower than in Finland and this factor has a big influence. Moreover, if the company plans only export sales, then the delivery time will be much longer than the Russian competitors can offer. Additionally, the price will be even higher due to customs and delivery fees. Moreover, not all Russian companies are eager to accept Ex Works (EXW) Incoterms 2010 conditions which Sievi-Tools would like to use. Another weakness is the limited variety of services. As the competitor analysis showed, Russian companies have a larger list of services they offer.

**Opportunities** of the company are opening a branch in Russia or using a customs agent/broker/representative. Opening a branch will eliminate such weaknesses as long delivery, decrease the price due to eliminating customs fee and involving cheaper workforce. Additionally, the company has the opportunity to extend the list of serviced by purchasing new equipment and involving new professionals.

**Threats** of the company are mostly connected to customs and sanctions. Due to high corruption level and limitations involved, there can be problems with the customs clearance. Additionally, some products can be perceived as dual-use products. Moreover, there is a chance of another economic contraction and new, more powerful competitors. Below you can find all the factors listed in the table.

TABLE 3. SWOT Analysis.

Strength	Weaknesses
European (Finnish) quality ISO certificates, audits, qualified staff Great experience (20 years) 5-axis machine + 3D technology Finnish quality of materials Sievi brand is well known + Good reputation	Price presumably above average Log delivery Focus on EXW Incoterms 2010 Small variety of services and the need of subcontractors.
Opportunities	Threats
	There may be problems with customs
Opening a branch in Russia	Some products may be perceived as dual use.
Customs agent, broker, representative.	Sanctions, restrictions
An extended list of services + New technologies	Deterioration of the economy
(3D Printing)	Companies focusing on urgency
	Fast Delivery Focusing Companies

### 5 STRATEGIC CHOICES

Based on the internal and external analyses, it is possible to proceed with the strategic choices. There are various different foreign market entry modes that companies can choose from. There are five main ways of entering new foreign markets: exporting, joint venture, opening a branch, direct investment and Licensing. (Miley 2019.) Initially, Sievi-Tools considered the export mode but after the competitor- and SWOT- analysis it was decided to consider also opening a branch. This way can bring more benefits and eliminate some problems which the export will bring such as custom work, long and expensive delivery, and so on.

# 5.1 Export

The Finnish company that plans to start export or import can find the first steps and advices on the official customs website tulli.fi in the section "New importer/Exporter". Section "Before starting export" describes the first steps and the sequence of export.

The first step is to find out if there are any restrictions regarding the export of the goods in the country of origin. Restrictions connected to export can be checked via Taroc database by commodity code. A company needs to make sure that these goods are not a subject of export control in the country origin. Besides, an exporter must make sure if any license is needed. All additional information can be found on the custom restriction manual. (Tulli b.)

The second step is to find out about restriction and requirements, as well as transportation restriction, of the country of destinations. A company can acquire this information from Finpro website, the Shipping handbook, embassies or the Market Access database of the EU Commission. Usually exporters make a contract with a forwarding agent who provides more precise information directly connected to the customer's products. Shipping companies, airlines or other transport operator can also be a good source of information. (Tulli b.)

The third step is to check the commodity code. The Commodity or TARIC code is a code used for customs clearance and declared for all goods to be imported or exported. The code helps to determine the duty rates on the goods and restrictions and prohibitions. By using the commodity code right, the company can price the imported products right and avoid any back taxes. This code can be found in the Combined Nomenclature or Taroc database. Moreover, customs can help with determining the right commodity code. (Tulli b.)

The fourth step is to find out if the goods get an exception from customs duty or lowered tariff treatment in the destination country. It is important to check if there any mutual free trade or other preferential agreements between Finland and Russia. If there is any, then the company should make sure that all prerequisites for preferential treatment are fulfilled. It is also beneficial to become an approved exporter if the company export regularly. It allows to have more extensive authorization and a company can verify the declaration of origin oneself. (Tulli b.)

The fifth step is to obtain the registration and IDs needed to submit a declaration. When the company is registered as an approved exporter with Customs' smoothies processing of declarations, they receive an EORI number at the same time, so there is no need to apply for it separately. If the company plans to use Customs Export Declaration Service, then they need Katso ID or Master User ID which can be obtained from the Finnish Tax Administration. (Tulli b.)

The sixth step is to declare your export to Customs in advance which means that the goods must be placed under the export procedure. Sievi-Tools is responsible for customs clearance as exporters if the agreement does not state otherwise. A company can lodge the export declaration online using Export Declaration Service or by message. A company should choose the right customs procedure and nature of transaction according to the purpose of use. It is required to submit an export declaration no later than loading the goods into the means of transport. (Tulli b.)

**The seventh step** is loading which can begin when customs has approved the export declaration. Goods must be available for customs inspection at the mentioned location and the transportation can begin when Customs has sent the decision on release and the export accompanying document the EAD. The EAD is a reference MRN which specifies the export. The carrier needs the MRN to finalise the export

at the place of exit. When goods have left the EU area and the freight carrier has given Customs the required documents, Customs certifies the export. One receives the decision on release with the certification of exit confirmed by customs. (Tulli b.)

The eighths step is to request a correction or invalidation if something goes wrong or if, for instance, the export is cancelled. The company can file a claim for revision if any error occurs. It is recommended to find out the prerequisites for an appeal beforehand because it must be lodged as soon as possible. The request must be electronically made within a year from the date original declaration was received by Customs. (Tulli b.)

# 5.2 Documents Required for export

The lists of documents required for export can be different due to the type of the product exported, limitations, sanctions, needed licenses and certificates, and other factors which influence the exporting procedure. Nevertheless, there are documents which are the base of export and are required for any products or situation.

### 5.2.1 Contract.

Parties must conduct an international trade agreement both in Russian and English languages. Parties should point out the main language that is understandable for everyone. It will eliminate the misunderstanding that may appear due to differences in both versions of the same text. The same is applied to other additional agreements. (VVS 2018.) The following should be point out in the contract:

- > Scope of the agreement
- > Cargo value (or value of goods) and the total sum of the contract
- ➤ Dates and Terms of Delivery based on Incoterms 2010
- > Terms of handover-acceptance of cargo
- ➤ Information about cargo's handling operations (packaging, marking)

- > Liabilities of the parties
- > Force majeure situations
- > Operation procedures in the case of conflict
- Contractual time
- ➤ Requisites of the parties. (VVS 2018.)

Other documents for import/export can include other agreements that can state:

- Description and amount of goods
- > Price per unit of goods
- Cost of total cargo
- > Terms of payment
- ➤ Duration of manufacturing. (VVS 2018.)

In the past based on the contract, the parties made Forex transaction report form if the price of cargo exceeds or equal \$50 000. It was made for the purpose of currency control. From 1st of March 2018, Forex transaction report form is eliminated but the currency control remains. Now the banks should register the agreement if the sum exceeds the amount of 3 million rubles (around € 40 000). These operations are made by Russian residents. (T-J 2017.)

#### **5.2.2 Invoice**

Invoice is an essential document for import and export. It contains all the information about the deal and all the identification information. It is made by the template provided by the manufacturer and all parties sign it. The document is prepared in two languages (Russian and English) and all the information should be similar to conditions in the contract in order to avoid difficulties on the customs. (VVS 2018.) Typical subjects to mention in the invoice:

- > Type of document: commercial or proforma
- > Date and serial number of the invoice
- > Information about parties and freighter
- > Date and the number of the agreement
- ➤ Delivery clauses Incoterms 2010

- > Description of all products separately, the value and amount
- ➤ Bottom-line cost (US dollars)
- > Total weight of cargo
- > Purposiveness of supply
- ➤ The surname of the person in charge, signature and stamp. (VVS 2018.)

# 5.2.3 Bill of lading and the certificate of origin

The bill of lading is required to confirm the acceptance of the goods for its transportation by sea. In addition, it confirms the conclusion of a contract for the carriage of goods by sea and the carrier's undertaking regarding the delivery of cargo to the port of destination for issuing it to the bill of landing owner, that is, the legal recipient. The bill of lading must be made in several copies. All these documents for the import of goods are considered originals. If the cargo is issued on one of them, then the rest is void of legal force. (VVS 2018.) Nevertheless, sea transportation is not profitable for Sievi-Tools from Oulainen to St. Petersburg or Moscow. Due to this reason, it will not be described as the needed information in the bill of lading.

The certificate of origin confirms the country that manufactured the product being transported. This document is not required for paperwork at customs. However, with customs clearance, if there is a certificate, certain benefits can be obtained if the goods to which they are distributed are imported. (VVS 2018.)

# 5.2.4 Railway invoice

Railway invoice is a document confirming the existence of contractual obligations between the parties and their implementation. If the shipment is carried out using railway transport, then a railway consignment note must be issued. The document specifies the obligations of the customer and the carrier. The carrier should have the invoice for the entire length of the journey and, after receiving the goods, the document goes to the second side of the contract. In the railway consignment note are indicated:

- > Point of departure and destination of the goods
- ➤ Information about the parties to the contract
- ➤ Information about the cargo (name, characteristics, cost, etc.)
- ➤ Delivery date. (VVS 2018.)

### 5.2.5 Additional documents

The above list of documents may be inconclusive, because for the implementation of the export one may need some additional documents described below. It is not necessary that the company needs all the described documents for the export of goods. This list is approximate, because when exporting a specific product, special, additional documents are required, such as samples, booklets, etc., while preparing a package of papers, remember about the proper template of each individual document. If everything is arranged in accordance with regulatory requirements, then there will be no customs problems. Documents that can be needed to export the goods:

- > Statutory documents of the company importing the goods
- > Payment documents evidencing the payment of customs duties
- Consignment notes (depending on the type of transportation used: by road, by air, etc.)
- > Insurance
- Shipping bill
- Customs declaration of the exporting country
- > Contracts with all entities involved in the transaction
- ➤ Accounting documents
- Invoices for broker services or commission payments (if this was the case when making a deal)
- ➤ Receipts from the warehouse where the goods were temporarily stored
- Information about the price of the goods of the manufacturer (or calculation of the cost price of the commodity unit)
- ➤ Copyright agreements or licenses
- ➤ Packing list containing information about the characteristics of the transported goods. (VVS 2018.)

# 5.3 Opening branch

Branches are a part of the parent organization performing the same business in a different location. This strategy to expand the business allows to attract new customers, performs the services faster and build an effective distribution system. (Surbhi 2018.) Opening a branch in Russia is considered as the most convenient way to present the company. The advantages of this are that the company can freely transfer money from one company's bank account to branch's bank account and the company does not need to adapt to the requirements of the currency control law. (Awara 2017.) To open a branch the company first need to finish the accreditation and get the allowance to provide services in Russia.

#### 5.3.1 Accreditation

Accreditation is granted for an unlimited period, and for its implementation, a state fee of 120,000 rubles is charged which is approximately 1 600 EUR. Accreditation for the branch is carried out within 25 working days from the moment all necessary documents are submitted. To open a branch in Russia, it will take about 1-1.5 months on average. To organize a branch, foreign legal entities must comply with the established procedure for accreditation by submitting an application and the following documents to the Federal Tax Service:

- Constituent documents of a foreign company
- ➤ An extract from the register of foreign companies or another document that indicates the legal status of the company
- A document on the organization's registration as a taxpayer in its own country, issued by an authorized body and containing the taxpayer code (or the equivalent of this code)
- The company's decision to establish a branch in the Russian Federation
- > Regulations on a foreign affiliate
- ➤ Power of attorney confirming the necessary powers of the branch manager in the Russian Federation
- > Receipt of payment of state duty
- Copies of submitted documents (International law company.)

#### 5.3.2 Foreign workers, Legal address and Branch accounting

It is important to know that if a branch of a foreign company makes a decision on attracting foreign citizens to work, it is necessary to obtain permission to engage them. This permission is required already when appointing a branch manager, regardless of whether she/he is already in Russia or not. However, such a permission cannot be obtained before the branch is accredited. This means that at the time of accreditation, the duties of the head of the branch must be performed by a citizen of Russia. (Gosteva 2017.)

To create a branch, it is also necessary to have the address of the location, which may be a room leased to accommodate the branch. After receiving accreditation, the branch must register with the tax authority, the Pension Fund and the Social Insurance Fund, as well as state statistics bodies within thirty days. (Gosteva 2017.)

A branch of a foreign legal entity is obliged to comply with the requirements of the Russian accounting regulations. Accounting books may be kept in the manner prescribed in the country of origin if accounting is carried out in accordance with International Financial Reporting Standards (IFRS). However, taxes should be accrued in accordance with Russian tax legislation. (Gosteva 2017.)

#### 5.3.3 Benefits for the branch of foreign company

Representative offices and branches of foreign companies operating in Russia can significantly save on the rent of office and housing for employees. The exemption is not provided directly to foreign missions and branches, but to those who rent out their office or housing. The essence of the exemption is as follows: leasing of premises to foreign citizens or foreign organizations accredited in Russia is exempted from VAT. This rule is mandatory which means that it is impossible to refuse. In other words, if the lessor specified in the Contract the amount of the rent including VAT or issued an invoice with the allocated VAT, the foreign representative office is entitled to demand:

- Exclude VAT from all documents
- Reduce the cost of rent by the amount of tax (Gosteva 2017.)

Relating to this, VAT and utilities and maintenance services for leased premises should not be taxed. This benefit can be used if two conditions are met:

- ➤ The legislation of the relevant foreign state establishes a similar procedure with respect to Russian citizens and firms accredited in this foreign state.
- > Such a rule is provided for by an international agreement of the Russian Federation.
- ➤ There is no need to calculate monthly advance payments if the branches of foreign companies report quarterly.
- A branch of a foreign company in Russia has some preferences in terms of hiring foreign employees to work in Russia. Thus, branch employees should not receive permission to work in Russia, if they have been personally accredited. The number of foreign employees is agreed with the accrediting body.
- A branch of a foreign company enjoys privileges on customs duties for the goods imported temporarily and for the needs of the branch. It can be office equipment, cars, furniture and other goods.
- ➤ The branch does not fall under the requirements of currency legislation. A simplified way to withdraw money for the parent company. (Gosteva 2017.)

#### 5.4 Bank issues

A Russian company can transfer money to the account of Finnish or other foreign banks using the SWIFT system. For this, a Russian company needs to open a foreign currency account, from which payment will occur. Without any documentation, a company can transfer up to 5,000 US dollars or their equivalent in any currency to the account of a foreign company. In case of exceeding this amount, the company must provide supporting documents and pay a fee of around 1-3%. Some of the Russian banks charge a transfer fee to a foreign bank in the amount of 0.5 to 5% depending on the amount of the transfer. The lowest commission is valid when sending funds through Internet banking. (Komsomolskaya Pravda 2017.)

#### **6 LIMITATIONS**

As in many counties, there is a list of prohibited goods and products which are not allowed to import to Russian or need licenses or permissions. The official documents and lists of prohibited goods can be found on the web site of The Russian Federal Customs Services. Most of the information is in Russian, but there is also an English version of the website.

#### 6.1 Prohibited goods

I did not find any restrictions connected to the products that Sievi-Tools Oy produces. It is allowed to import mould and machined details. However, there can be limitations if the produced details can be considered as dual-use goods or products can be connected to areas where the confirmation of compliance on the custom border is required such as railroad or railroad transportation.

Goods prohibited or limited for transfer via the customs border:

- Information at printed, audio-visual means and other data storage devices, restricted for entry or export
- > Service and civilian weapons their major parts, and ammunition
- Dangerous wastes
- > Special technical means, meant for surreptitious obtaining of information
- > Ozone-destroying substances and products, containing ozone-destroying substances
- Narcotic drugs, psychotropic substances and their precursors, except limited amounts of narcotic and psychotropic substances in the form of medical agents for personnel administration on medical indications in case of presence of the supporting medical documents with specification and amount of the product, as well as precursors in volume.
- ➤ Human organs and (or) tissues and blood
- > Live sables
- Unpolished precious metals, junk and waste of precious metals, ores and concentrates of precious metals and raw goods, containing precious metals
- > Kinds of mineral raw materials

- ➤ Radio-electronic equipment and (or) high-frequency devices of civilian application, inter alia, integrated or being a constituent part of other goods
- > Information concerning the mineral resources and places of location of fuel-energy and mineral raw materials
- ➤ Means of plant protection and other persistent organic pollutants
- > Plant protection means
- ➤ Means of extraction (catching) of aquatic biological resources
- ➤ Poisonous substances, which are not the precursors of the narcotic drugs and psychotropic substances
- Encoding (cryptographic) commodities
- > Collections and collectables in the sphere of mineralogy and paleaontology, bones of the fossil animals
- > Items of cultural value, documents, national archive funds, original archive documents
- Wild live animals, certain wild plants and wild drug raw materials. (Federal Customs Service.)

Moreover, based on the Decree of the Government of the Russian Federation № 778 from 7 of August 2014, it is prohibited to import to Russia different kind of meat, fish, milk and dairy products, vegetables, fruits and nuts and so on. All of these are not connected to the company's operations, so I will not focus on it. (Federal Customs Service.)

#### 6.2 Sanctions

Sanctions are a significant aspect when analysing business opportunities in Russia. In 2014 and through the present, the foreign commerce of Russia was negatively influenced by economic sanctions which were introduced due to the situation in Ukraine. The first sanctions were introduced on the 6th of March 2014 by the European Union (EU) and 17th of March 2014 by United States of America (USA). As Finland is a part of the European Union, I will not discuss American sanctions but focus on European ones. European sanctions are mostly focused on the prohibition of entrance for selected individuals and freezing their accounts in European banks if there any and introducing limitations for certain industries. For example, it was prohibited to export or invest in telecommunication, transportation or energy industries. (Skuld 2019.)

All sanctions can be divided into 3 levels: the first level, the secondary level and the third level. The first level declared the cancellation of Russian-EU summit meeting in June and the delay of negotiation about the visa-free regime and new co-operation agreement. The first level was introduced on the 6th of March 2014. The second level introduced the limitation for selected individuals involved in the escalation of the situation in Crimea. The last level of sanctions focused on limitation in commercial, financial and military fields. These types of sanctions were introduced on the 31st of July 2014 and came in force on the 1st of August 2014. (Skuld 2019.)

I will leave out part of the sanctions by the reason for the much number of them. Part of the sanctions are focused on the Crimea region, which is not in our interest, while others are referred to as individuals and specific Russian companies. Below I will describe sanctions related to the foreign commerce of Russia.

On 17th of July 2014, European Bank of Reconstruction and Development (EBRD) stopped financing new projects in Russian, and European Investment Bank (EIB) stopped co-operation programs. On 31st of July 2014, EU made a resolution №512 which declared an introduction of the third level of sanctions. The following actions were taken under this resolution:

- Restricted access to the main and secondary markets of the EU for some of the Russian banks and companies, in particular, the restrictions apply to such banks as "Sberbank", "VTB Bank", "Gazprombank", "Vneshekonombank", and "Rosselkhozbank".
- Embargo of the export/import weapons in Russia, as well as the export of dual-use goods, that is, those that can be used for military purposes in Russia.
- Restricted access to certain sensitive technologies and services that can be used for oil production and exploration.
- ➤ Prohibition of investment in Russian infrastructure, transportation and energy sectors. (Current Time 2019.)

During the period of 2015-2018, the EU did not introduce new resolutions. Decisions were made to update the sanction list and extend old resolutions. Resolution №512 is extended till 23rd of June 2019.

On 25th of September 2015, European Commission prohibited European banks and other financial organization to make an analysis researches of Russian credit organizations which were in a sanction list, which led to the impossibility of any investment in Russian economy from The EU countries. (Current Time 2019.)

After the first year of sanctions, according to a NATO report, the Russian economy entered a recession, the fall in GDP was 2.2% in the first quarter of 2015 compared to the first quarter of 2014. It is impossible to say exactly the sum of losses caused by the sanctions. Different numbers are provided in several sources. According to the assistant to the President of Russian Federation Sergey Glazyev, the losses from sanctions in the financial sector of Russia as of 2016 amounted to \$250 billion. However, the Economic Development and Trade Ministry believes that Russia lost \$25 billion, and the European Union lost \$ 100 billion due to retaliatory sanctions. Another effect of sanctions was the enormous growth of the currency. The exchange rate of the dollar and euro grew up and affected the overall price level in the country. (Current Time 2019.)

Sievi-Tools operates in mechanical engineering, focusing on CNC milling. Sanctions mentioned above cannot directly affect the company's operation and do not restrict its participation in export. However, one of the fields where the company is working is aerospace, where problems may appear since it can be described as "dual-use" goods. Dual-use products refer to goods which could be diverted to be used in a military or weapon of mass destruction (WMD) environment without modification (Strong & Herd).

#### 7 MARKETING

Marketing refers to activities that a company performs in order to attract customers to buy its products or services. These activities can be advertising, selling, and delivering to customers or businesses. The goals of the marketing department are to keep the current customers or increase their loyalty and attract new potential customers. A helpful tool to create the right marketing strategy and achieve the company's goals is "marketing mix" also known as the 4P – Product, Price, and Promotion. In a few words, the product should be aimed to fulfil the demand and satisfy the customers more than the products of the competitors. Price should be set rightly with taking into consideration the unit cost price, marketing cost, distribution costs, and competitors' price. Place is referred to the way the company would like to sell the products online or storefront. Promotion refers to the activities the company need to take in order to make customers to pay attention to the products or services. (Twin 2019.)

Marketing can be divided into two groups: Business to Customers (B2C) marketing and Business to Business (B2B) marketing. B2C marketing is a business conducted between the company and individual customer or, in other words, for common customers. B2B marketing is a business conducted between two companies. These marketing strategies have significant differences since the objective is different. (Xiao 2019.) Below one can find a short comparison of B2C and B2B businesses. Since Sievi-Tools presents the B2B business, I will focus on the promotion of this type of business.

TABLE 4. The difference between B2B- and B2C businesses (adapted from Minin 2018)

	B2C	B2B
Market size	Wider	Narrower
Price of products and services	Lower	Higher
Customer relationships	Quick customer purchase	Long-term relationships
The difficulty of products or	Simpler	More difficult
services		
How fast the purchasing deci-	Faster	Slower, more time to think
sion is made		
Content strategy	Brand awareness, user engage-	Developing the expertise, mar-
	ment	ket leadership

#### 7.1 Promotion for B2B

Promotion of B2B and C2B businesses are significantly different from each other. In B2C business the main factors for making a purchase decision is price and the number of products, while in B2B business these factors are also important, but that is not all. The technical specifications, delivery conditions, different partnership agreements play a very important role in making a purchasing decision in the B2B area. (Furman 2017.) B2B sales promotions can include the following:

Trade fairs and exhibitions are events where different companies from the same industry get together to show their product or services they offer and attract new partners or customers. Fairs are a great place to meet new partners, get some information about the competitors and get some ideas of improving one's own products. (Furman 2017.) This type of promotion is the main marketing activity for Sievi-Tools Oy.

Price reductions are a method of promotion when the suppliers bid for buyers. The lowest price the supplier can offer will win such auction. Moreover, the company can provide promotional products such as T-shirts, pens, keychains and so on with the logo of the company. The seller can give such products as a gift for the buyer in case of big purchase or in case of establishing strong long-term relationships. (Furman 2017.)

Following of promotion are not suitable for Sievi-Tools since the offered products and services are highly customized. Nevertheless, I would like to describe it briefly. One of these methods is to provide a sample of new products. If the company produces a new product or services, they can provide it for free to some customers. It helps to make the purchase decision and give awareness of the new product. This method has a great value for the companies since it can lead to long-term relationships. The next one is the trade-ins. Trade-ins in the B2B market is similar to trade-ins in the B2C market. The customer can receive a discount for the next purchase in exchange for the old version of the company's product. (Furman 2017.)

#### 7.2 Marketing materials

Marketing materials are items which help to deliver the needed information to the customer and make the first impression. It can be business cards, envelopes, brochures, website, catalogue and so on. In order to make a good impression, companies should invest in materials that will attract customers. The best marketing materials should be colourful, be presented in the same style (for example a similar front, col-our, themes), high-quality, and be informative. A company's materials represent the company, so the customer will associate such quality with the products or services the company offers. (Conquest Graphics 2018.)

The simplest examples of marketing materials can be business cards, letterhead and envelopes, presentation folders, company brochures, catalogues, product data sheets, case studies, thank you cards or newsletters. All these materials will make an image of a successful and active company that is eager to cooperate with others. The customer will create a better opinion of someone who is prepared and always ready to provide all materials and information, than the representative who does not have a business card or the brochure looks unprepared. (Conquest Graphics 2018.)

The main marketing materials of Sievi-Tools in Russian markets are brochures. The author made the translation of the materials which the company provided and, in spite of the absence of Photoshop experience, created the similar but with translation in the Russian language (APPENDIX 1 and APPENDIX 2).

#### **8 CONCLUSION**

The main objective of the thesis was to analyze the Russian market and provide the recommendations and all relevant information for entering this market. The thesis was commissioned by Sievi-Tools Company that providing milling- and mould manufacturing services. Based on the research findings the company can make its own decision whether to enter the market or not, while the recommendations are given.

During the work, all the main questions were completed, and tasks were done. During the market research, the situation in Political, Economic, Social and Technological areas of Russia was described, as well as the situation in the mechanical markets of Moscow and Saint-Petersburg. Additionally, the competitor analysis was conducted and showed that there are various small and medium enterprises providing the same services with lower prices, faster delivery and additional services. Based on the competitor analysis, the SWOT analysis was performed where it was suggested to consider opening a branch instead of export sales due to the fact that export sales will require additional spending, while branch will allow dispose of some weaknesses and threats. The next step was the description of sanctions and customs limitations. It was discovered that neither the sanctions nor customs limitations cannot prevent the work of Sievi-Tools. Moreover, it was described what it takes to start export, how to organize the branch and what actions should be done in order to do it and other useful information was presented. In the end, the marketing materials were also translated and prepared.

After all this work is done, the conclusion can be prepared. First of all, the Russian market is stabilizing after the sanctions and the adaptation starts which mean there is a good possibility for successful entrance. The Russian customers have a good attitude towards Finnish companies and Finnish products which make it easier to attract them. However, it was discovered that there are many competitors presented on the market. They provide cheaper services that Sievi-Tools because the workforce and materials are much cheaper in Russia than in Finland. Moreover, if the Sievi-Tools considers the export sales as the entry mode, the delivery time will be longer than the Russian competitors' promises, and the price will be higher due to international logistics. It means that the customer who needs to produce some small number of products and as soon as possible cannot be the potential customers anymore. Then, the opening branch should be considered as the preferred entry mode. Moreover, this strategy has advantages since the branches of foreign companies get the benefits of lowered VAT. Limitations for providing CNC milling were not found, so the company should not be afraid of some legal problems.

To conclude, it is important to mention that the Sievi-Tools Oy has a good chance of successful implementation to the Russian market in the case of opening a branch, even if it requires more paperwork. In the long run, the cheaper workforce and materials, a wide range of potential customer will result in a good profit. The export sales may work as well, but probably more investment, analysis and effort required. Nevertheless, the company should make its own decision of which enter mode to choose and how to proceed.

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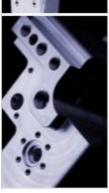
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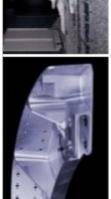
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# 3D Modeling

- solid models or in special cases multiform surface models
   3D conversions of old 2D geometries
- (DXF: DW3, IGES etc.)

  3D scanning of objects with portable equipment and creating a 3D geometry

  adding reliefs on surfaces

relative to each other, distances and angles geometric elements such as planes, cylinders, cones, holes and their locations · Three-dimensional measurements of

3D Measurement

- 3D shape measurements can be made very precisely, comparing the 3D geometry of a CAD document with a real life manufactured component . 3D digitizing / scanning of an object and
  - creating a surface or a volume model of it

lasembly and finishing also possible.

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# Fast and flexible machining based on advanced 30 technology. Sophisticated mold and tool manufacturing.

Our manufacturing facilities are ISO 9001:2008 certified.

the maximum size of a part is approximately 1 cubic meters (m²) and below 1 500 kg
 wide range of materials: aluminium,

titanium, red metals, tool and structural

steel, plastics, wood/plywood

extensive experience of programming and doing genuine 5-axis machinings

5-Axis Machining

3-axis machinings on a portal machining center, maximum part size 3100 x 1800 x 800 mm

Turnings and finishing via our partner network.

Mould Manufacturing

low pressure moulds
 stretch blow moulds (PET)

Inspecta



# Sievi-Tools

# special moulds and lasts themoforming moulds, also of plywood cashing models, core baxes shoe moulds and tools mould polishing, modifying and repairs 3D scanning, digitizing and re-machining of moulds is also possible. deep-drawing moulds injection moulds

# Prototype Machining

in ideal conditional customer sends a production-ready permatry on e-mail 4-NC thace and a jig if needed, ready and washing when the material ammera asimmediate matchining and measuring · very fast turnaround time (less than a wee

the advantages of multi-axis technology are numerous; prototype parts can be large and the ability to machine complex shapes in a single set-up saves customer's time and

### **Sievi-Tools Equipment List**

#### **Machining:**

#### Deckel Maho DMC125U

Two (2) separate 5-axis machining centers, equipped with pallet exchangers and swivoling heads. X / Y / Z -axis: 1250 / 880 / 800 mm. Speed range up to 18,000 rpm. Max. load 1500 kg. Using pallet rotation the max, work area is 1250 x 1250 mm (xx).

The pallet exchange system allows smooth rotation of different types of works. With one mounting a part can be machined from five (5) different sides. Sloping positions and a genuine 5-axis machinings are also possible.

#### Deckel Maho DMC70V

3-axis machining center, X/Y/Z-axis: 700 / 550 / 500 mm. Speed range up to 18.000 rpm.

#### Johnford

3-axis portal machining center. X/Y/Z-axis: 3100 / 1750 / 800 mm. Equipped with an additional 4th axis + flange for turning the part. Spindle: 15.000 rpm, 17 kW. Max. load 10 000 kg.

#### Other equipmet:

Manual lathe, beltsaw (600 mm throat), hydraulic press (175 tons), abrasive blasting cabinet (~1 m²)

#### 30 Measurement:

#### Faro PowerGage

Three-dimensional measurements of geometric elements such as planes, cylinders, cones, holes and their locations relative to each other, distances and angles can be done relatively quickly, especially on an individual item.

3D shape measurements can be made very precisely, comparing the 3D geometry of a CAD document with a real life manufactured component.

#### Software:

We use versatile 3D software for design (PowerShape) and programming the toolpaths (PowerMill). With PowerInspect 3D models and geometric elements are brought into the measurement environment. The models are transferred mainly in IGES, STEP, VDA-FS and DXF-formats. Toolpath transfers go through network without any length restrictions.

#### Double ourvature 3D shapes are everyday work for us.

We are machining in three shifts, and doing the NC-planning in two shifts. We currently have a total of 20 employees.









Kivikankaantie 14 86380 Oulainen, FINLAND Tel. +358 8 4881 550

### Hi-Tech enhances subcontract machining

#### 3D Modeling

The work usually begins with a complete 3D geometry supplied by the customer. If necessary, the 3D geometry can be created based on customer's data or 2D geometry. 3D digitization can also be used. Finally, a mould or a design for fastening is made.

#### **NC Programming**

NC programming is made on the basis of the accurate 3D model. This work is done on powerful workstations that can also simulate the actual machining operations before the toolpaths are transferred to a machining center.

#### Machining

The machining itself is done in 3–5-exis machining centers. Before starting the actual machining all the tools are presetted. Parts are usually fixed in their places using zero-point workholders. The pallet exchange system enhances usability of the machines.

#### Finishing

The manufactured products often require special finishing procedures such as uniting the mould surfaces and, if necessary, polishing the mould surface. When the material is selected correctly, even mirror bright surfaces are possible to obtain by polishing.

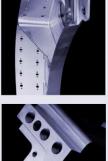
#### 3D Measurement

Three-dimensional measurements of geometric elements such as planes, cylinders, cones, holes and their locations relative to each other, distances and angles can be done relatively quickly, especially on an individual item.

3D shape measurements can be made very precisely, comparing the 3D geometry of a CAD document with a real life manufactured component.















# 3D моделирование.

особых случаях, модели с разнотипными поверхностя Объемные модели с однотипной поверхностью или,

Преобразование старых 2D моделей в 3D (DXF, DWG 3D сканирование объектов с помощью портативне борудование и создание 3D модели (GES и так далее)

# Добавление рельефов на поверхность 3D Измерения

рехмерное измерение геометрических элементов, наней, цилиндров, конусов, отверстий и их рас друг друга, расстояний

ов с помощью сравн очное измерение 3D о 3D оциф

# OHTAKTE

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Sievi-Tools Ov

# Быстрая и многоцелевая обработка на Изготовление пресс-форм высокой основе передовых 3D-технологий. сложности и инструментов.

Общирный опыт программирования и выполнения 5-ти ко-

5-ти координатная обработка на фрезерном станке

Обработка

• Максимальный размер детали – 1 кубический метр и до

ординатной обработки.

 Широкий ассортимент материалов: алюминий, титан, цвет ные металлы, инструментальная и конструкционная стали Наше промышленное предприятие сертифицировано по стандарту ISO 9001:2008.

Inspecta

Токарные работы и отделка осуществляется через нашу парт-

нерскую сеть.

центре с максимальным размером детали 3100 х 1800 х 800

3-х координатная обработка на портальном обрабатывающем

пластик, дерево или фанера.

• Пресс-формы низкого давления

Производство пресс-форм.

- ПЭТ пресс-формы
- Специальные пресс-формы
- Пресс-формы для горячей формовки
- Пресс-формы с глубокой осадкой
- Пресс-форма для литья под давлением
- Полировка, модификация и ремонт пресс-форм • Пресс-формы для обуви и инструментов
- Так же возможность выполнение 3D скан

# ки и ремонт пресс-форм.

## • Изготовление в короткие сроки (меньше недели при и ных условиях): заказчик отправляет готовую к произ модель по электронной почте -> Подготавля Изготовление прототипа

для станка с ЧПУ подготавливается и ожидается по

тотипа могут быть большими, а способность обрабатыват время и деньги. • Преимущества многокоординатной обработки териала -> Оперативная изготовление и измере сложные формы в один этап эконо

#### Список оборудования Sievi-Tools

#### Обработка:

**Deckel Maho DMC125U.** Два 5-ти координатных обрабатывающих центра, оснащенные автоматической сменой паллетов и поворотными головками. Координаты X/У/Z: 1250/880/800 мм. Диапазон скоростей до 18.000 об/мин. Максимальная нагрузка 1500 кг. При использовании вращающегося паллета максимальная рабочая зона 1250 х 1250 мм (ХУ). Система обмена паллетами обеспечивает плавную смену различных видов работ. С одной установки возможно обработать деталь с пяти разных сторон. Также есть возможность произвести 5-ти координатную обработку под наклоном

**Deckel Maho DMCV.** 3-х координатный обрабатывающий центр с осями X/y/Z: 700/550/500 мм. Диапазон скоростей до 18,000 об/мин.

**Johnford.** 3-х координатный портальный обрабатывающий центр с осями X/Y/Z: 3100/1750/800 мм. Оснащен дополнительной 4-й осью, а также фланцем для поворота детали. Шпиндель: 15,000 об/мин., 17 кВт. Максимальная нагрузка 10 000 кг.

Другое оборудование: ручной токарный станок, ленточная пила, гидравлический пресс (175 тонн), абразивоструйный кшкаф (примерно 1 м3).

#### 3D измерения:

Faro PowerGage. Трехмерное измерения геометрических элементов, таких как грани, цилиндры, конусы, отверстия и их расположение относительно друг друга, расстояния и углы. 3D измерения выполняются относительно быстро и очень точно, сравнивая трехмерную CAD схему с реально изготовленной деталей.

#### Программное обеспечение:

Наша компания использует универсальное 3D-программное обеспечения для проектирования (PowerShape) и программирования траекторий (PowerMill). С программой PowerInspect 3D модели и геометрические элементы вводятся в среду измерения. В основном модели вносятся в форматах IGES, STEP, VDA-FS и DXF. Передача траектории проходит через сеть без каких-либо ограничений

3D объекты с двойной кривизной – это повседневная работа для наших специалистов. Обработка происходит в 3 смены, а выполнение УП-планирования в 2 смены. В настоящие время наша компания насчитывает 20 высококвалифицированных специалистов.









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# Передовые технологии расширяют возможности субподряда.

#### 3D моделирование

Работа обычно начинается с полной трехмерной модели, предоставленной заказчиком. При необходимости 3D-модель может быть создана на основе данных заказчика или 2D-модели. Также 3D оцифровка может быть использована. В результате изготавливается конечная деталь или пресс-форма.

### Подготовка управляющей программы (УП) для станков ЧПУ

Программирование УП производится на основе точной 3D модели. Эта операция выполняется на мощных производственных рабочих станциях, которые также могут имитировать фактические операции обработки перед передачей траекторий в обрабатывающий центр.

#### Обработка

Сама обработка выполняется на 3-х или 5-ти координатных обрабатывающих центрах. Перед началом фактической обработки все инструменты помещаются в обрабатывающий центр. Детали обычно фиксируются с помощью держателей с нулевой точкой. Система обмена паллетов повышает удобство использования машин.

#### Отделка

Производимые изделия часто нуждаются в специальных процедурах отделки, таких как объединение поверхностей пресс-форм или, если необходимо, полировка поверхности. Если материал выбран правильно, то с помощью полировки можно получить зеркально-блестящую поверхность.

#### 3D Измерения

Трехмерное измерения геометрических элементов, таких как грани, цилиндры, конусы, отверстия и их расположение относительно друг друга, расстояния и углы. 3D измерения выполняются относительно быстро и очень точно, сравнивая трехмерную CAD схему с реально изготовленной деталей.

3D моделирование

Подготовка УП для станков ЧПУ

Обработка

Отделка

**3D** Измерения











