

# MANURHIN K'MX NEWSLETTER

Innovative technology

**VISIT IN KOVOVÝROBA MUSIL, THE OWNER OF 27 MANURHIN K'MX MACHINES MADE IN TAJMAC-ZPS IN ZLIN.**



The company has been operating in the mechanical engineering market - in the field of fine mechanics - since 1994. Its headquarters are located in area of former Chronotechna plant in Šternberk, where PRIM alarm clocks were used to be produced. This is where the first machines on which the company started its business came from.

The company specializes in series production of various fine and precise rotating parts. Great emphasis is placed on quality and reliability, the company holds the ČSN EN ISO 9001:2015 certificate. Customers include Czech and foreign companies.

In July 2019 we sat down with the owner Pavel Musil to have some coffee and talked about how the company was doing and why he was investing in MANURHIN K'MX machines.

## When did you buy the first CNC machine for your company and why?

The first CNC machine purchased was the MANURHIN K'MX 413, which we installed in September 2007. We decided for this investment for two main reasons. At that time, new, tougher materials, new tools began to appear on the market, and the requirements for precision of machined parts were constantly increasing. Moreover, this has been influenced by the constant need to manufacture a variety of jigs for finishing parts produced on cam machines on other machine tools.

The second reason was one particular contract. We received a request from a company that was producing parts already on the MANURHIN K'MX 413 machine at that time. Because they were very satisfied with it and recommended it, we bought it and started production. Thus CNC machines became a part of our production. At that time we had about 20 employees.

## How many MANURHIN K'MX machines do you have now and why? I remember when you were buying the eighth machine, you said it was enough that you would not buy any more.

We installed MANURHIN K'MX machine number 27 in June this year. We did not originally plan to have such growth, but the reality and our experience now is that if the company does not want to lose its customers, it must grow with them.

## How many employees do you have today? And how do you train people to machines?

Today we have forty-three employees, which is actually funny, because one of the original goals of engaging CNC machines in production was to reduce the number of employees. But this number is associated with an increase in production and quantity of CNC machines. At the beginning we got CNC machine operators by your training of our employees. Now we train them ourselves.



**The last more than ten years has been a period of subsidies (European funding). Subsidies do not create a fair business environment. How many of the twenty-seven machines did you get with subsidies?**

As long as we have CNC machines and basically every time we purchase new machines, we are considering the possibility of getting a funding for them. Usually, we examine grant programs that could be used at that time, and we have been approached several times by companies that are engaged in consulting in the area of funding. But it always has the same result. We consider the conditions of the funding programs and the obligations arising from them to be too burdensome, and given the rapidly changing economic conditions, the commitments to increase the number of jobs or achieved turnover are uncertain. All 27 machines were bought without funding, all for leasing or credit. And we definitely don't regret it. We determine the direction of our own business.



**How many machines did you pay to banks at the same time?**

Twelve.

**Is it even possible to compete with such an approach in today's market?**

Of course it is possible. The organization and efficiency of work must certainly be at a higher level than companies with subsidized machines. Probably because we have paid the full price for everything, we make sure that machines and people make the most of their time. Machines must earn for their operation, labor costs and grow the resources for the necessary renewal of the machinery.

**Obviously you must also have high demands on the reliability of the machines or the length of any machine shutdowns due to failure.**

Absolutely. An unreliable machine would be a big problem for us. In addition, the factory service you provide and the speed with which you can solve any problems with the MANURHIN K'MX machines are a huge advantage for us and for you. Spare parts are available only an hour drive away. If the service technician eventually doesn't know how to go on, he simply calls the designer, be it mechanics, electrical or software, and gets the answer to what he needs in return. Well, and we can soon continue production. That's why we have twenty-seven of these machines. Although we were offered the cheaper brands here.

**What about customers? Do they change in time or do you have your permanent ones?**

About 95 % are regular customers, for whom we work regularly and on a long-term basis. The remaining 5% are occasional customers who echo with a repeat order, perhaps every five years. Around 50% of our production capacity is occupied by orders from our three largest customers.

**From what industry? Can we break it down?**

The automotive industry is not central to us, accounting for only about 10% of production. We produce most for the electrical industry, about 30 %. Our further production goes to healthcare, furniture or hydraulics.

**What diameters and material do the parts produce?**

We have 21 machines for bar stock up to 16 mm diameter and 6 machines for 32 mm diameter. So we specialize in smaller diameters. The materials are roughly 20 % brass, 30 % free cutting steel, 30 % stainless steel and the rest plastic, aluminum and bronze.

**What type of coolant do you use?**

Only oil.

## You only buy four-axis and five-axis machines from us. We have a machine with six, seven, eight, nine and ten linear axes at MANURHIN K'MX. Why?

As I said, we work for regular customers. I have about 70 of them. And we make about 1600 different parts for them. Since we have these machines, a multi-axis machine would be useful in only one or two cases. And it has always been small volumes anyway, so buying us such a multi-axis machine seems to make no sense.

## What is the biggest season you've delivered?

It was about 800 thousand pieces.

## And the smallest?

About 10 pieces. :)

## What precision do you reach on parts for customers?

The limit is 6-8 microns, 10 microns is sustainable in turning for all materials.



## If I come to you as a customer and want to deliver workpieces you have never done so far - normal, not tricky - in what period of time can you deliver them to me?

Over the years I can say that 90 % of the cases we have in stock material and collets, guide bushes and tools, equipment for bar feeders, so we are able to deliver within a week after receiving the drawing, sometimes within 24 hours. Everything, of course, depends on our production capacity.

## And how much time do you need to "re-adjust" the machine to a "regular" new product?

It ranges from 4-24 hours.

## On average, how many machines are operated by one person?

Five. We're working two shifts. Surely we could manage three shifts, but there are more administration and other organizational demands.

## Perhaps you will not be angry if some new customers contact you when they read this. But it seems to me that you have no more space for the new machines. Do you plan to construct new building?

We will see how everything will evolve and how our customers will grow. :)

## We will definitely keep our fingers crossed in Zlín. Thanks for the interview.

Ve Šternberku, 18.7.2019  
Recorded by Tomáš Dederle

**MANURHIN K'MX**<sup>®</sup>

**KOVOVÝROBA MUSIL**  
**Ing. Pavel Musil**  
Nádražní 27, 785 01 Šternberk  
Czech Republic

**Tel:** + 420 585 012 403  
**Mobil:** + 420 608 952 253  
**E-mail:** musil.kovo@iol.cz  
**www.musil-kovo.cz**