



GET BACK TO MAKING MONEY

As Competitively As You Used To!

By Maurizio Porta

CNC MACHINE TOOLS: THE SECRET CONFESSION OF A 5-AXIS VMC USER



Recently, a Technical Tutor who works with me had the opportunity to speak with an English machine tool user who has recently added a couple of Flexible Production CNC machines to his Production Department.

In particular, this is a company that had a full 5-axis VMC machine battery that for years had used this business model for its production.

During their meeting they had the opportunity to talk about many things together and our Technical Tutor wanted to ask what his opinion was regarding the use of his new Flexible Machines.

And here's what he revealed to him:

"At the beginning I was extremely fascinated by the cycle time we could get with this new machine tool model.

"It is unthinkable to entrust your production model to obsolete systems that force you to apply old business models, which today are not very functional and even counterproductive for your company."

This is because with the 5-axis VMC machines we used about 15 minutes to produce a piece in our metalworking.

In this case, however, with the Flexible Machine we have reached the incredible cycle time of only 130 seconds, a truly extraordinary result."

But that's not all, because in reality he said that the real reason that made him happy and satisfied with this new machine tool is actually the TCO, or Total Cost of Ownership.

And here's what he confessed:

"We had 5 VMC 5-axis machines bought from a famous American brand about 12 years ago.

We are using them on continuous shifts, 24/7, and we realized that this model of

CNC machine tools is not suitable nor designed to be used on such long shifts.

And the thing that leaves us more perplexed and that has pushed us to look for a new solution is the fact that with these 5-axis VMC machines we had to buy one or two spindles for each machine every year! Including the first year!! “

Moreover, recently, this customer has replaced an entire tool change system for one of the machines and was facing major problems with the evacuation of chips and shavings inside the machines.

These issues bring with them a sharp increase in maintenance costs and machine downtime.

And these are things you DO NOT want for your production line, right?

CNC machine tools and continuous cycle production: The definitive solution is ...

In a production department that works 24/7, you absolutely need CNC machine tools that work like Swiss watches.

It is unthinkable to entrust your production model to obsolete systems that force you to apply old business models, which today are not very functional and even counterproductive for your company.

The solution?

I say, in no uncertain terms, that you absolutely must rely on manufacturers of machine tools that offer you turnkey solutions.

Complete packages with guarantees on the spindle, ball screws and Z-axis for at least 10 YEARS.

Do you not believe it? I assure you that they exist and if you want I can show you how to find the right solution for you.

They are not miracles, just rely on those who have been doing this for years and years and thanks to their experience in the world of production today can offer you TOP quality components for your machine tools.

“You absolutely must rely on manufacturers of machine tools that offer you turnkey solutions.”



And this solution can finally be found in a new model of CNC machine tools, a new absolute category that is challenging the old rules of the market.

I'm talking about Flexible Machines.

A flexible machine may cost more at the beginning of the process, because it has a purchase price that tends to be higher than a classic CNC machining center.

But if we compare it, as in this case, to a battery of 5 (FIVE) 5-axis VMC machines, that needs 2 new spindles every year, then you will soon realize how in reality in the medium term a Flexible Machine costs you a lot less.

It seems absurd, right? Well, then take a calculator and check it out. You will soon discover the truth.

The basic concept is that:

“The price of the machine tool is only one of the costs”

Because it's only the initial price that you pay to buy the machine.

And then? There are another list of costs, which often are not counted or even ignored and that in a few years can even go beyond the price of the machine itself.

Basically there are people who try to save money on the purchase of CNC machine tools, then find themselves with disproportionate annual maintenance costs.

But what are the other costs? Let's consider them together:

1. Costs of installation of the machinery
2. Energy costs
3. Number of direct personnel required
4. Training
5. Area occupied (yes, even this is a cost and few know about it)
6. Maintenance (repairs, filter replacements, oil, coolant, adjustments, etc ...)

Do you want me to continue? I could, but I will stop here ...

So basically, by correctly combining these data and parameters, you will have found your TCO! That is the REAL money you are paying for having a Machine Tool

in your Production Department.

To summarize everything, I recommend you not to always look for the cost of the machine tool as the main factor and the only parameter of evaluation when you are evaluating the purchase of a new plant.

Also consider in detail all the other parameters listed above and you will soon see that a Flexible Machine can be the ultimate solution to what you are looking for.

You can not spend a lot of money on a bunch of cheap CNC machine tools, which then have a lot of downtime and spend a large part of your repair budget.

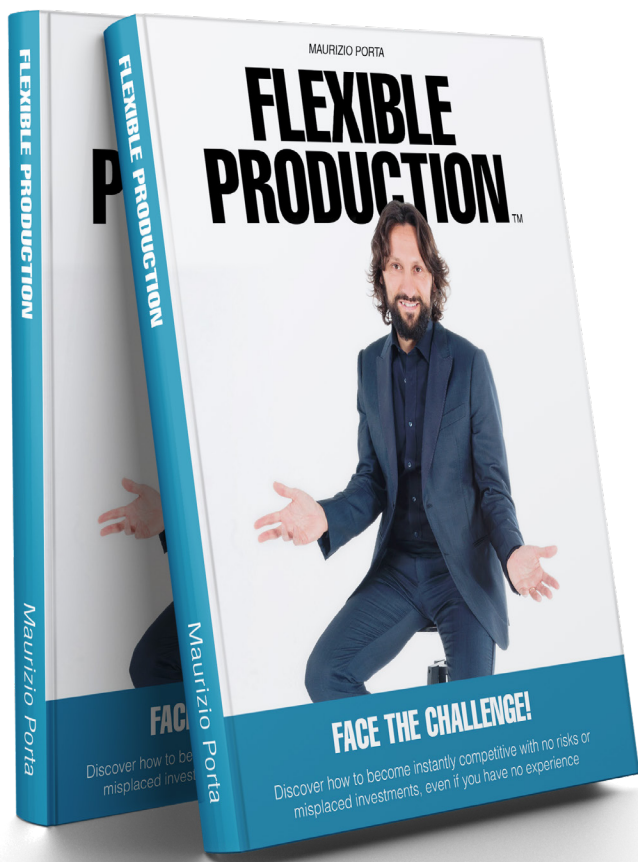
Every machine you buy must "print money".

"I recommend you not to always look for the cost of the machine tool as the main factor and the only parameter of evaluation when you are evaluating the purchase of a new plant."

A Flexible Machine may not appear to be the cheapest solution immediately, but it is definitely the solution with the best TCO on the market, which is the real data and the most important thing! Therefore it is the best investment in your business.

And you? Are you ready to abandon old business models and old machine tools to enter the world of CNC machines?

If you want to deepen the world of Flexibility Production and CNC flexible machines I have excellent news for you, because from today you can ask for a direct consultation with one of our **TECHNICAL TUTOR**.



To deepen the topic on "Flexible Production" and on Competitive Productions

CLICK

www.flexibleproductionbook.com

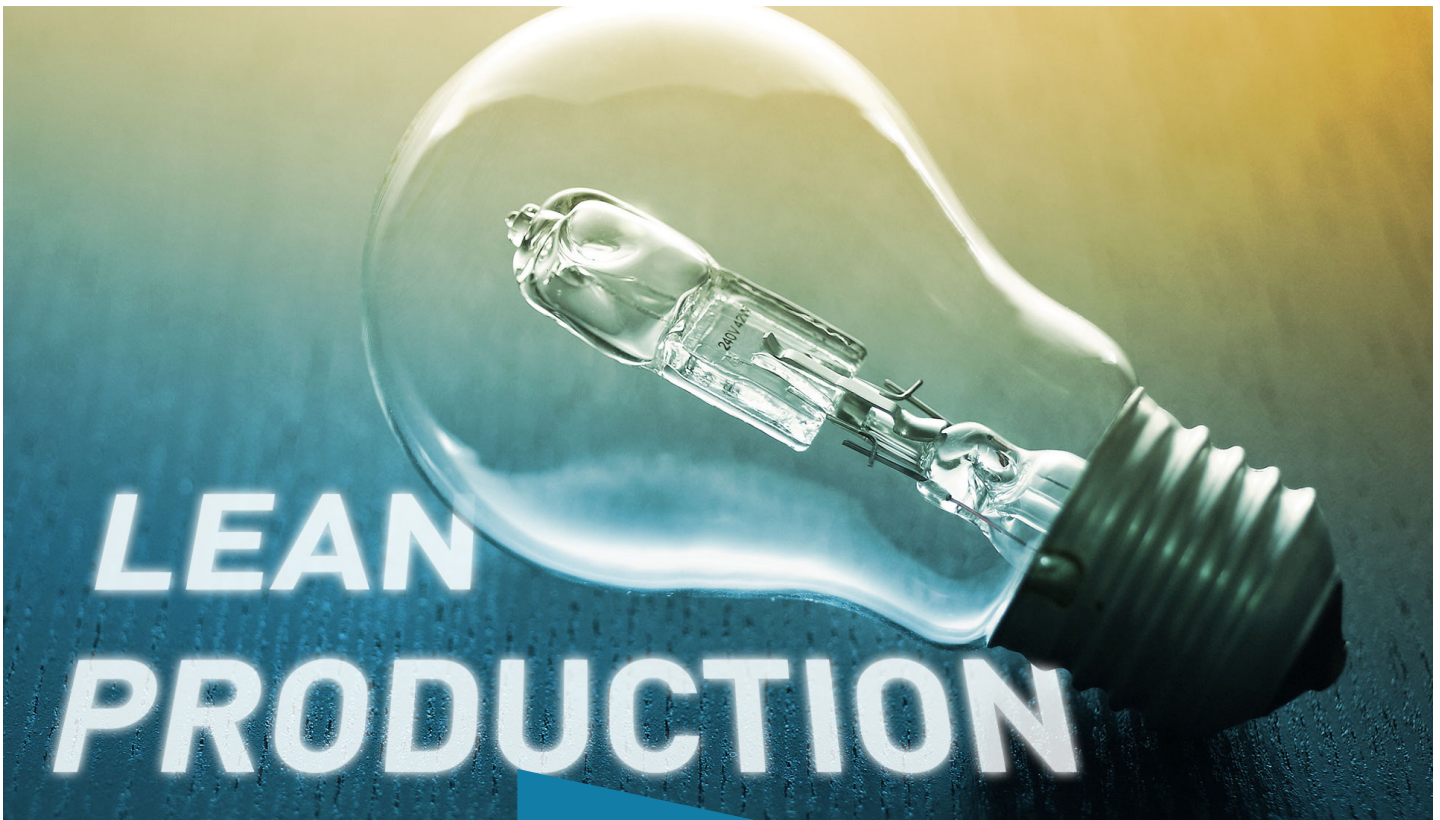
My book dedicated to users of machine tools that want to make the leap in quality is waiting for you !!!

If you have questions of any kind or need help, you can visit

www.flexibleproductionassistance.com

and one of our Technical Tutors will help you with all the necessary information to make your business as productive as possible.

LEAN PRODUCTION: THREE CNC MACHINING CENTERS OR ONE FLEXIBLE CNC MACHINE?



This is a question that should be analyzed step by step for each individual situation and company.

There are companies for which it could be more correct to use CNC Machining Centers, and companies where it is more intelligent to use CNC Flexible Machines instead. But generally, the concepts of Lean Production can be easily adapted if we have the right information to help find the right solution for the specific situation.

Basically, in our Blog we talk about Small and Medium lots of production and therefore we will use the example of these situations and those that have a production company managing small and medium lots. If you use CNC machine tools then you know how important it is to manage these 3 macro problems in the best way:

1. Space management

"Machining centers are very flexible machine tools, which allow for quick production changes and retooling."

"The problem is that they are very slow and this aspect is detrimental to productivity, which makes companies marketplace competitiveness suffer."

2. Production costs

3. Specialized personnel

And certainly, these problems cannot be managed with an old business model or with the classic approach of the CNC Machining centers in battery.

If you continue to entrust the fate of your production department to Machining Centers, you know that this business model alone cannot support a "Lean Production" mentality and that you need to implement a new strategy to better manage the situation. While on the one hand I have the advantage of being very flexible, on the other hand, this advantage balances in the negative sense from a lack of productivity. It causes a "price battle" in which I clash with other companies that are perhaps more competitive. I am then forced to lower prices and margins to survive in the market. A market that is becoming increasingly aggressive.



Lean Production: What are the disadvantages of CNC Machining Centers

As mentioned above, relying on CNC Machining centers to achieve the goal of the basic concepts of Lean Production brings with it many disadvantages.

The first of all is the space, because to become more productive you have the tendency to continue to buy Machining centers. Too often I see production departments invaded by these unproductive machine tools with the only way they have to increase their productivity is precisely to join forces and create the negative phenomenon that I call "Working Center Batteries".

If you have thought about the concepts of Lean Production, you know how the management, saving, and optimization of space is one of the cornerstones of bringing results to your production system.

Obviously, the more space is managed well the more production costs will be optimized as a direct result.

What is certain is that 3 Machining Centers occupy a very large and difficult to manage space.

*"Many machining
centers
=
Many variables to
produce a single family
of pieces."*

*Many variables
=
Many errors that are
expensive."*

Imagine having the only solution to increase your productivity by buying more machining centers. Understand that it is an unmanageable situation in the long run and that it will force you to buy a larger facility prematurely. This makes little sense.

Lean Production VS Direct Costs

The production costs increase more than proportionally compared to the increase in the machining centers and the company's liquidity is undoubtedly affected by this trend.

The more Machine Tools one has in the production department and more robots, equipment, and direct production personnel there will be, which, as you well know, are all heavy costs for a company. Not to mention the variables that are in production with the increase in production changes and the number of retoolings.

Three machining centers involve the use of multiple machine tools for the production of a single family of parts and you can well understand that the variables and errors associated with each are difficult and expensive to manage.

Last but not least, is the direct production personnel who, with a department based on the CNC Machining centers, constantly increases proportionally. The direct staff is expensive and increasingly difficult to find, because fewer and fewer people want to do this job (and less and less do it well).

Am I saying that you do not have to hire staff or that human intervention is not necessary? Absolutely not.

I'm just saying that there is a more suitable and correct way to increase your productivity in a more than proportional way compared to the increase in costs. And all this for the benefit of liquidity and corporate margins. Basically, increase your productivity, become more competitive, and earn more.

The goal of each production department should be first of all to earn. If there is no profit it is not possible to do business properly. So, the question should be:

How can I improve my production department and earn more?

Lean Production applied with CNC Flexible Machines

What is the definitive solution to best apply the concepts of “Lean Production”?

If the Machining centers alone are not enough and their business model can not be sustainable, then it is necessary to integrate and implement in the company a technology and methodology that helps the production departments.

The goal of each production manager should be to find, by reading the numbers, the correct relationship between flexibility and productivity, in order to lower direct costs and increase margins. But how can this goal be achieved?

Relying not only to the machining centers but also integrating the CNC flexible machines in order to achieve a perfect balance between flexibility and productivity. The Flexible Machines are CNC machine tools for metalworking that incorporate multiple Machining Centers into one machine and therefore with a productivity that reaches up to 3.5-4 times more than a single Machining Center. And they have a very rapid production changeover, around 15 minutes (even less) on the 4 pallets.

So, it is a productive and at the same time very flexible platform.

They are perfect for those who want to better manage small and medium batches on production of simple to complex parts.

The goal is to increase productivity and also lowering fixed costs, to give the company more margins and liquidity to be reinvested in the company.

Having a flexible CNC machine in the department entails a number of advantages, including:

1. Increased productivity
2. Flexibility with a change of production in less than 15 minutes
3. Space saving, because with each Flexible Machine you save the space of over two Machining centers
4. Staff savings, because you have to manage only 1 robot compared to 3-4 robots for the machining centers

5. Less production variables, because being able to do an entire process on one machine, many handlings using human intervention are avoided
6. More margins and liquidity for the company

And many other advantages ...

Lean Production and Flexible Production Go Hand in Hand

When I developed the Production Flexibility method, I based it on the concepts of “Lean Production” for metal working and with users of CNC machine tools in mind. Precisely for this reason I decided to invest years in the study and implementation of the Flexible Production method.

And today we are creating the first training school for professionals in this sector, to give the opportunity to those who use CNC Machining centers, Flexible Machines, or Transfer Machines to understand how to best apply the concepts of “Lean Production” to achieve the best relationship between automation and productivity.

And you? Are you ready to enter the world of Flexible Production?

“One Flexible Machine versus 3 Machining Centers brings a number of tangible and indisputable benefits, which will help your production department make a quantum leap.”

You can start by going to this link
www.flexibleproductionbook.com



Testimony of a customer who applied the method Flexible Production



HERE WHAT THE MULTICENTER SOLVED!

I asked questions to one of my customers who uses the MULTICENTER.

By the way, let's give real names and surnames, because there are too many endorsements that praise certain products that are entirely made up. The funny thing is that it is never possible to verify them, and this aspect, which is the result of science-fiction marketing, upsets me a great deal!

Why? Well... Because there is no signature at the bottom of these endorsements; no one knows who this super satisfied customer is and, because of privacy laws, you are not allowed to know... This is a typical gimmick!

SO, WHAT DID I DO?

I simply asked my questions and then asked for permission to publish the answer as an endorsement (in compliance with privacy laws) with all the necessary references so that anyone, even you, can contact the person/company in question and verify the truth of what is being reported!

Here the answer:



Before I had to machine the part in different clampings with the following problems:

- Dents
- Critical thickness accuracies
- Burr problem

*Thanks to Flexible Production Method we had the chance to **optimize the cycle in order to solve the problems of quality and cycle time.***

*In addition, now we can **tool from one part to another in 15 minutes** thanks to the great availability of ever-present tools in the magazine. Actually the changeover consists only of a simple jaw change.*



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