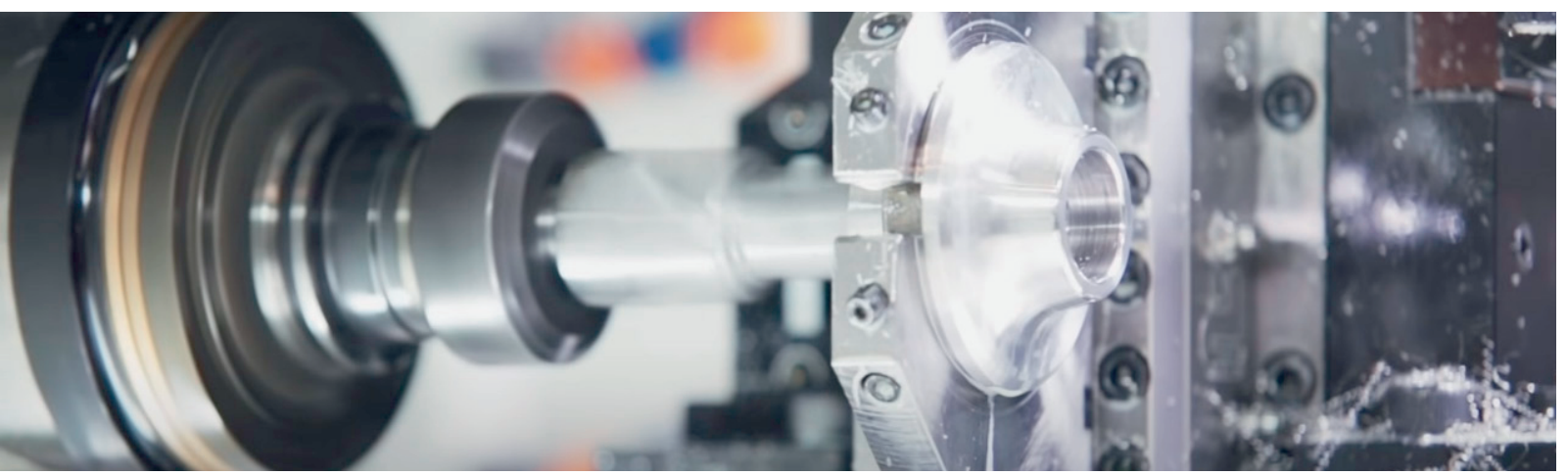
GET BACK TO MAKING MONEY

As Competitively As You Used To!

By Maurizio Porta

THE MOST COMMON MISTAKES OF A PRODUCTION DEPARTMENT,

HOW TO AVOID THEM AND THE ESSENTIAL STRATEGIES FOR YOUR COMPANY TO THRIVE



Now more than ever, the need to start again and trace the outline of a new normal, even in the professional field, puts us in front of the theme of change, with all the doubts on HOW to face this challenge.

The truth and essential assumption to know is that, as human beings, we all have a very strong fear of the unknown and of what we do not know thoroughly.

We don't know how the future will be and this scares the hell out of us.

That's the way we are by nature, both you and I, and it is our job to identify the best tools to face the fear of the unknown, so that we can have a more positive vision of the future and get better results.

I understand that none of us have a magic wand or a crystal ball to see what will happen in the future and have an edge over the others.

"You need a well-structured, concrete and tested METHOD that allows your production department to start again today!"

But one thing is certain:

WE CAN MINIMIZE MISTAKES AND INCREASE THE PROBABILITIES OF REACHING AMAZING RESULTS.

And the only way to do this is to set our company and our production department as a battalion, immune to the storms and sudden changes that the market puts in front of us.

And you too can achieve this result, but only by studying and applying techniques, tools and methodologies to your production department that always keep you one step ahead of your competitors.

Above all, what you need is a precise and well-structured, concrete and tested METHOD that allows your production department to take off and start again today, not tomorrow, but today!

You can't wait, time is money and it's priceless. I know it may sound as a cliché and an "old" saying, but it is the truth ... more relevant than ever.

In this way you can save years of useless attempts and mistakes, which would only waste you many valuable resources.

And now what I want to do for you is ...

introduce yourself as I am helping users of Machine Tools to earn more and defend themselves from an increasingly aggressive and competitive market!

All this through a Method that I have studied in over 25 years of career in this sector that led me to identify a series of key concepts and strategies, which today I consider essential for anyone operating in our field.

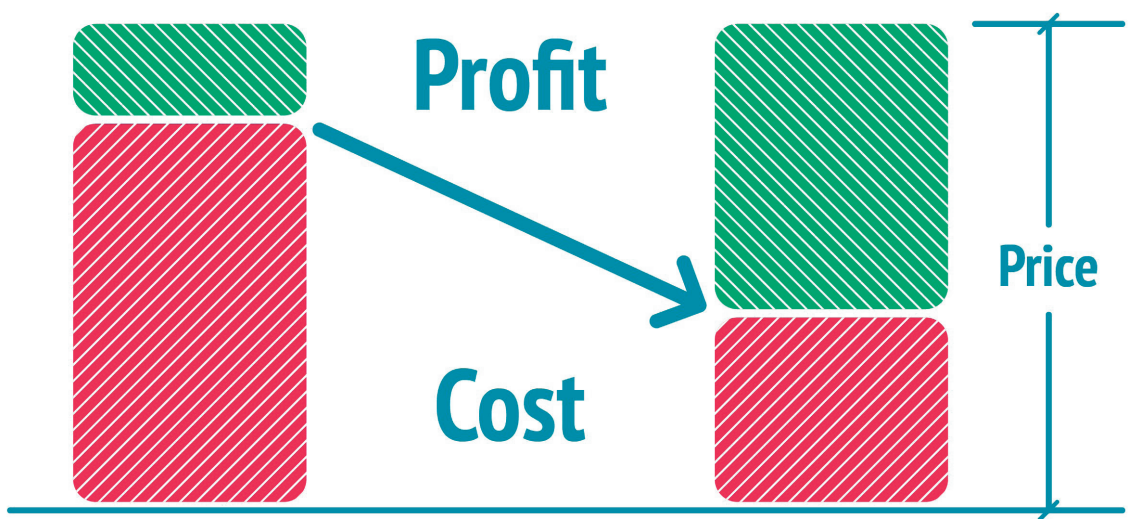
That of metalworking.

And I've always wondered: "What distinguishes my customers who earn a lot and have a strong leadership in their industry, from small companies that are not able to find a space worthy of their efforts?".

Here are the answers I found, a heap of important concepts that, if applied, will help you make a real difference.

And I will try to convey them making an analogy of a strong building, that gives the idea of strength.

PORTA
PRODUCTION METHOD



2 BASICS, 3 PILLARS, 5 STEPS

2 INVIOLABLE BASICS

2 Basics. As well as a building needs a suitable ground to stand up, which does not crumble, a method must be based on solid foundations to be effective, long-lasting and guarantee excellent results.
The foundations of my Method are 2 INVIOLABLE BASICS, a starting point that you absolutely cannot ignore.

The first basic is the **AWARENESS**, namely, acquiring awareness of a problem and taking full responsibility for it. In other words:

FEEL PAIN AND WAKE UP

Being conscious, facing reality, makes us suffer, that's why we try to avoid it. However, in the working environment, the more you are aware, the less mistakes you make and, if you are wrong, you are able to change your approach faster.

Even more difficult is admitting to be the problem!
Recognizing it entails not feeling comfortable, feeling pain, taking responsibility, that is why most often we pretend not to see.

On the other hand, the second basic relies on **MEASUREMENT AND DATA:** not evaluations based on "emotions", rather tangible data.
The aim is *"To do more with less ..."*: less time, less space, less effort, less machines, less stock.
In production, before reducing the piece cost, you need to know how much the manufacturing of the piece costs, thus having a parameter on which to evaluate whether we are actually improving or not.

"Becoming aware to start the change."

3 Pillars. In addition to solid foundations, which is the other aspect to consider when constructing a solid building?
Of course, the structure of the building and its load-bearing walls.
Therefore, in order to be reliable, the Method must also be supported by stable and strong load-bearing columns.
In this case, I define these columns as pillars, 3 FUNDAMENTAL PILLARS, which are the soul of the Method, ensuring results over time.

The way to get success is the **Pareto principle** (or Rule 80/20) that, applied to the Lean world, allows to speed up the achievement of results, shortening implementation times.
According to this principle, about 20% of the causes cause 80% of the effects.

Applying this theory to the Machine Tool sector, among the techniques of Lean Manufacturing, based on my direct experience in my customers' production departments, I have identified the 16 tools that I consider most practical and effective.

Applying the 80/20 concept, 20% of 16 mathematically is 3.2, so, rounding off, we can consider the number 3, which corresponds to the 3 tools (20%) that allow you to reach 80% of the results:

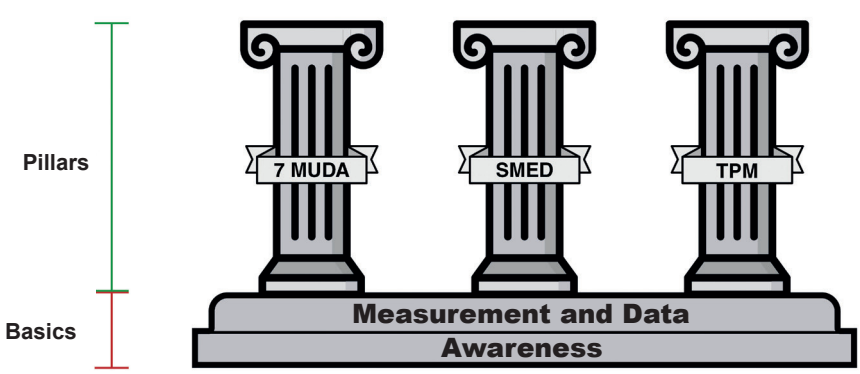
1. **The 7 WASTES OF PRODUCTION**
2. **SMED**
3. **TPM**

The 7 wastes (in Japanese **MUDA**) of production, namely all wasted resources that must necessarily be managed in a more clever way, are: Overproduction, Transport, Waiting, Stocks, Useless Handling, Defects, Over Processing.
Overproduction is a very dangerous waste, which tends to hide production problems. It is the main cause of the stock burden which, if redundant and mismanaged, can be a huge cost for the company. The goal is to develop a "Pull" production model (produce what the market requires) instead of a "Push" production model (production based on personal initiative, in hopes of selling and selling out the stock).
With regard to Transport, every time a product is handled, it risks being damaged or lost, thus becoming a cost that does not produce value.
Waiting refers both to the time spent by workers waiting for the resource to be available, and to the fixed capital that have not yet been delivered to the customer. In any case, fixed capital that turns into costs and waste.
Stocks, as raw materials, material in process (WIP) or end products, represent a capital that has not yet generated any profit, neither for the manufacturer, nor for the customer, so it is waste.
Useless Handling can cause damage, wear, and safety problems to workers and machines.
Defects are manufacturing mistakes and remakes, but also the production of unnecessary parts and products. The effort employed in tracking down defects is a waste.
All the above points create Over Processing, that requires the use of more resources (or more qualified resources) than those actually necessary for production activities, generating further waste.

SMED (Single Minute Exchange of Die) is a Lean technique aimed at reducing production set-up times.
In a nutshell, we can speak of "fast change".
In fact, the great innovation lies in the possibility of heavily reducing the set-up time of an operation to a time frame lower than ten minutes.

TPM (Total Productive Maintenance) is a production system that aims to achieve maximum business efficiency.
But what exactly does **"Total Productive Maintenance"** mean? This expression indicates the activity aimed at maintaining the efficiency of the plants over time, with the purpose of improving their process reliability and productivity, through the active involvement of all personnel.

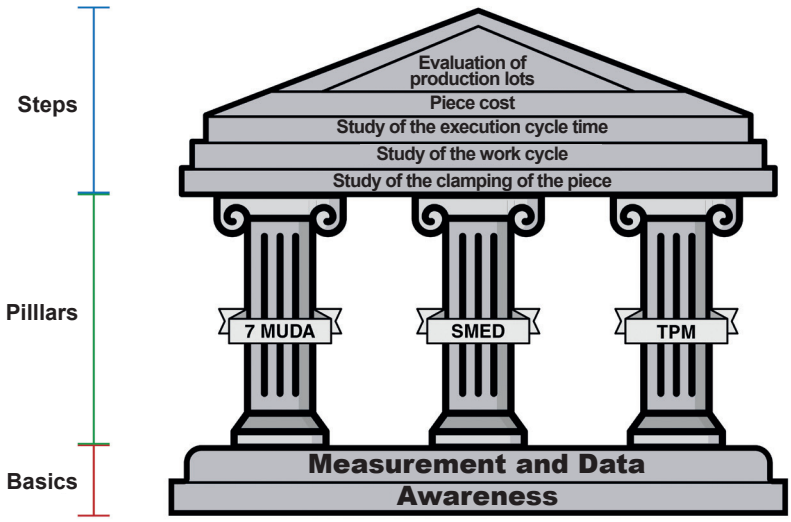
3 FUNDAMENTAL PILLARS



MAINTENANCE IS AN IMPORTANT PART OF PRODUCTION!

It is used to produce, to generate profit, it is not the short end of the stick, ready to work just in case of breakdown.
The efficiency increase of the machines, obtained thanks to the improvement, the planning of the maintenance system and the training of the operators, goes through the elimination of the 6 big losses: losses due to defects (failures and adjustments), speed losses (slowdowns and micro stops), quality losses (start-up defects and reworking).

5 STEPS



5 Steps. After choosing the proper ground (2 BASICS) and building the load-bearing walls (3 PILLARS), what is missing to make this building safe?
A roof that protects from bad weather. A roof that, when you are about to choose a new plant, keeps you safe from wrong investments.
This roof is composed by 5 well defined STEPS:
1. **Study of the clamping of the piece** to be produced.
2. **Study of the work cycle**, to establish how many tools are needed to manufacture the piece.
3. **Study of the execution cycle time**, namely the time needed to produce a piece.
4. **Calculation of the piece cost**, a unique data, to be calculated scientifically.
5. **Evaluation of production lots**, so the real market demand.

As you well know, nowadays, buying a new plant or machine tool is not easy at all. I am sure that if in the past you have been involved in this decision, your memories related to the supplier selection phase certainly do not make you feel calm and relaxed, but rather the opposite. And this is more than understandable, since these are significant and sometimes decisive investments for the fate of the company.
With a wrong investment, the company that bought the machinery, but undoubtedly also the person (or group of people) who chose the supplier, have to pay the piper.
The company, on the front line, in addition to not reaching its goal and suffering economic damage, will most likely lose that customer (and also its reliability on the market).
The person in charge of choosing the supplier, making a bad investment, will not only blemish his "professional record" with a more or less fatal mistake for the company, but will also tarnish his relationship with colleagues, from which he will be labelled as the architect of their possible future personal and economic problems.
This is why it is essential to follow the 5 steps that allow you not to make mistakes when purchasing a machine tool.

"The importance of not making mistakes when purchasing a new machine tool."

All this is the

PORTA PRODUCTION METHOD.

THE METHOD I CREATED TO HELP PRODUCTION COMPANIES THAT USE MACHINE TOOLS FOR METALWORKING TO ACHIEVE EXCELLENT RESULTS AND EARN MORE.

If you are interested and want to better understand how to apply this Method in your production department, contact us NOW and ask for a FREE consultation with one of our TECHNICAL TUTORS.

Visit www.flexibleproductionassistance.com to get more information.

Or contact us at these references

Phone: **+39 030-800673**

Email: **porta@flexible-production.com**

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TESTIMONIAL OF A CUSTOMER WHO APPLIED THE PORTA PRODUCTION METHOD

That's how it is possible to improve competitiveness thanks to faster set-up times and production rates, applying the **PORTA Production Method** to the right technology.

The whole thing using less space and less skilled personnel!

Let's read the words (published with customer consent) of those who use the PORTACENTER, leaving the name and surname of the customer concerned. I suggest you to contact him to check if this testimonial is 100% true or if it is the result of my imagination.

P.S.: Remember that TRUE testimonials must ALWAYS reveal the name and surname of the "witness", with reference to the company in which he works.
Beware of the numerous testimonials in which the signer does not appear!

"With our transfer machine, we had significant downtime and we had longer changeover times, around 1.5-2 hours. Moreover, the production team was unable to machine a feature on our new shower valve with the transfer machine, which is hard tooled and not flexible. Lastly, we were having capacity issues running our current diverter valve, requiring multiple machine operations.

Thanks to the PORTACENTER we can make everything in one process, whereas the other two machines manufactured in two different operations.
With the added tools of 24 per carousel on each spindle (72 total), we are able to machine in an extra feature, which required 4 additional tools in total. The diverter valve can run on both PORTACENTERs, which will free up capacity in three other machines in our CNC shop.

The positive results are the significant changeover improvement at only 15 minutes (in some cases, changeover is zero minutes within the same valve family), easier operation and setup of the machine, without needing a very skilled machinist, and last but not least, the smaller footprint."

Steven Kinney
Director of Manufacturing Engineering

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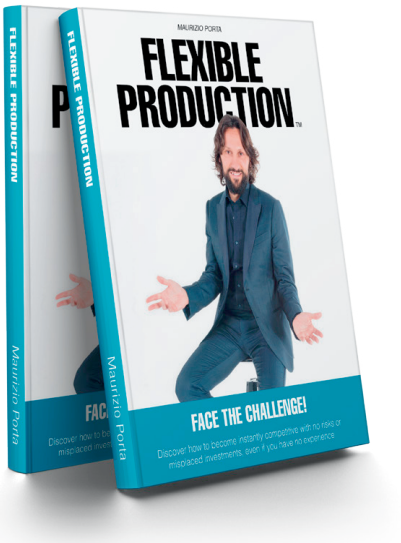
My book dedicated to users of Machine Tools who want to make the leap in quality is waiting for you!!!



To your results,

Maurizio Porta
Master Trainer PORTA PRODUCTION METHOD