

THE ULTIMATE
**CHEAT
SHEET:**

**VISUAL JOB SHOP
SCHEDULING**





VISUAL JOB SHOP SCHEDULING

AT A GLANCE

Do you remember that friend in high school who after class still had time to go to soccer practice, violin lessons and scout meetings all in the same week? You were left wondering where your evening went after your first page of math's exercises while he still managed to get his homework done every day.

If you talk to him he will probably tell you he had a timetable drawn on a paper and stuck on his bedroom wall or fridge which helped him **visualize his time** and led to ultimately organize all the materials he needed for a successful performance in all areas.

Before you point out this is a far cry from your business time management for its simplicity; what is the key element in this story? The visual paper timetable. We know we cannot compare a paper timetable to your data and decision complexity but **Visual Job Shop Scheduling** can actually do the trick for you. What both tools do have in common however, is the visual

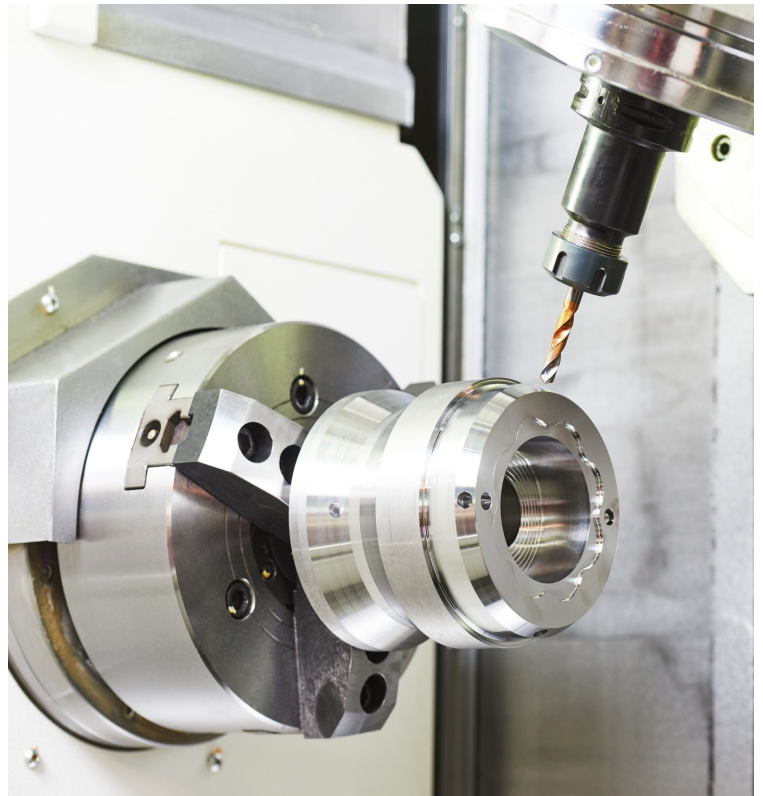
component which makes both of them easy to understand. While the paper timetable works for a relatively stable routine of one resource, **Visual Job Shop Scheduling** has the ability to pen down frequent changes of multiple many tasks, deadlines and dependencies of resources.

WHAT IS IT?

Visual Job Shop Scheduling software aims at helping job shops and small make-to-order manufacturers visually schedule the production process in depth. It allows to **comfortably** and **reliably** meet delivery times and better utilize resources.

WHY NEEDED?

What happens when the amount of incoming orders and all their different specifications are too much to keep up with at a glance? You still want to get a grip on everything going on, from the supply chain, to resources to how production runs. What you want is a combination of **coordination, efficiency and visibility** in all stages of your production. You need a clear picture of what is going on in your shop floor.



WHAT ARE THE BENEFITS?

Here are just a few examples on how **Visual Job Shop Scheduling** can benefit the production process:

1. Visual, intuitive and comprehensive.

A properly designed visual job shop scheduling system is easy-to-use and rapid-to-understand. That means no extensive training is needed to operate it and you can soon be ready to build production strategies which can be easily followed and understood by the entire team.

2. Advantage of anticipation.

When the visual schedule is created based on the introduced parameters and specifications of your orders – release date, deadline and timeframe being key –, you are able to (literally) see a full accurate picture of your production process. This allows you to set

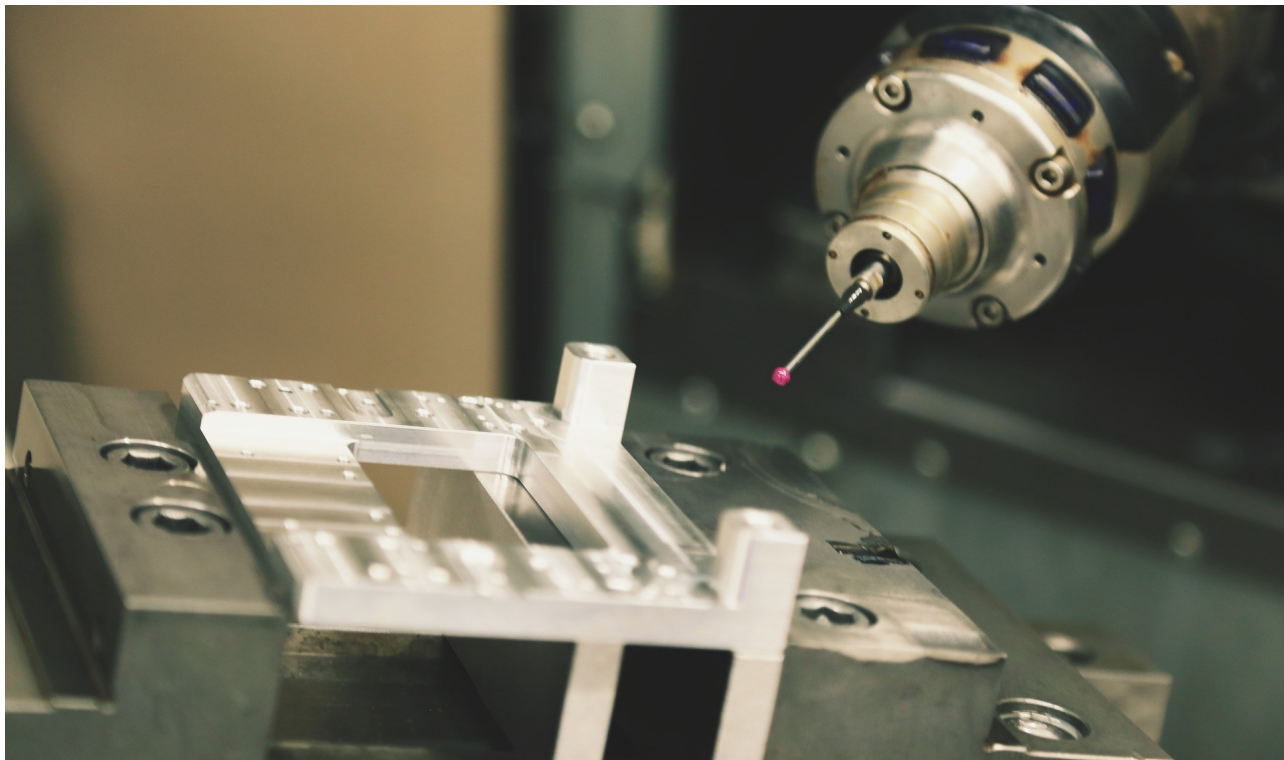
realistic expectations with respect to delivery dates and hence it helps you to not cloud the relationship with your client. Providing all parties a clear view on dependencies and delivery dates will make your shop floor more reliable

3. Better understanding.

Some of your reoccurring problems, let's say quality sacrifice in favour of faster deliveries, delay on the necessary materials to start producing or a last minute urgent order can be dealt with, as a **better understanding of the entire scenario provides clever choices** to the different action options. For example, you can learn how to smartly fit the new order in the scheduling cycle or have a clearer communication with your workers as they get an understandable insight of the situation. It also helps provide solid answers to what should be done next, such as adding extra working time to a machine to increase work capacity.

4. Functions you need.

As Visual Job Shop Scheduling is thought for businesses with individualized orders, highly customized production processes and ever changing deadlines, functions to visually change and manage the schedule become of great use. This can become key when looking to achieve scheduling efficiency and agility.



WHY DOES IT WORK?

It fits.

General purpose advanced scheduling systems (APS) are thought for bigger production capacities with repeatable processes (and often make-to-stock environments) seeking for economies of scale. Typically, these large-scale software systems require an extensive customization to the proprietary processes and systems of the client as well as investments into data quality so that their algorithms can produce results that justify the huge license cost associated. Job shops usually don't have the resources, time and willingness to make such an investment.

With **Visual Job Shop Scheduling** the user can experience a purpose-made software that fits his needs and fulfils all requirements. A tailor made standard software for tailor made orders.

HOW DOES IT WORK?

To achieve best visual scheduling results for your job shop, we built our software supporting a common scheduling process. It easily takes you through all the steps from updating the schedule to understanding the schedule, to taking scheduling actions to finally reporting the schedule to all parties involved.



1. Update.

Upload new data and update existing jobs. The intuitive interface allows uploading Excel spreadsheets directly into the program. In addition, you can quickly create new jobs in the application. Once that is done, the user will find itself facing a visual representation of his shop floor schedule.

2. Understand.

From task number to Job View, Resource View and Calendar View, the software will help visually understand the interdependencies as shown in a Gantt chart. The easy editing dialogs along with multiple colour schemes and various filter options can help to visually organize a smart route of action.

3. Schedule.

Plan based on your need for action. The software offers the opportunity to schedule in depth, assigning a time frame to each job and task. There are three different modes adjustable to every need: Automatic scheduling, manual scheduling and hybrid scheduling – with the latter two allowing to apply ASAP and JIT strategies both to the entire schedule and to single orders.

4. Report.

Retrieve and share reports of your new schedule. All parties can learn the specifications and descriptions of each tasks and jobs and the data can be exported to Excel and passed along as “to do” lists to the resources. The capacity reports provides in-depth information about the utilization and utilization gaps. With the capability to save a baseline, you can also compare your execution against the quality of your schedule ... and learn for future planning cycles.

5. Last but not least, execute and repeat!

FURTHER READING

Here are **TOP8** content sources to get started and learn more about (visual) job shop scheduling:



1) 10 Machine shop scheduling best practices:

<http://www.just-plan-it.com/smb-production-scheduling-blog/10-machine-shop-scheduling-best-practices>

2) 5 Requirements for an effective machine shop scheduling:

<http://www.just-plan-it.com/smb-production-scheduling-blog/5-requirements-for-an-effective-machine-shop-scheduling-software>

3) Top 5 Reasons spreadsheets dead weight:

<http://mfgtalkradio.com/top-5-reasons-spreadsheets-dead-weight/>

4) Better business process, smoother days:

<http://www.thefabricator.com/article/shopmanagement/better-business-processes-smoother-days>

5) Goal oriented planning optimizing available capacities to meet customer demands:

<https://www.flexis.com/en/solutions/job-shop-scheduling>

6) 9 Challenges to scheduling your Job Shop and why your schedule is dead on arrival. "Dr Lisa" Lang. (Ebook) :

<https://www.velocityschedulingssystem.com/ebook/>

7) Job Shop scheduling :

<https://www.waterloo-software.com/job-shop-scheduling-software/>

8) Job Shop Scheduling:

https://de.slideshare.net/atiwari2312/job-scheduling?next_slideshow=1



TAKE 2 MINUTES GIVE IT A TRY

just plan it is a software that is made to help machine shops with easy time and resource scheduling. You can try it out with no further obligations.

LET'S TRY IT