

EQUIPMENT MANAGEMENT AND FINANCE PROCESSES

Whether it be a piece of equipment or a machine, **maestro*** grasps all material that can be used for a project. Tools, heavy equipment, fabrication tools, and company vehicles; all can be considered as equipment, whether they belong to the company or are rented.

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PROJECT COSTS ALLOCATION

Since the use of equipment is preponderant in most construction projects and companies, it is important for its use to be reported and to know its financial impact. The allocation of costs to construction projects, such as those linked to the use of equipment, makes it possible to know the actual project costs. However, it is important to understand and validate them. To evaluate whether the equipment's hourly rate is reasonable, Maestro recommends the creation of a project for each piece of equipment and to charge the usage income to the respective project. If, for example, the equipment project turns out to be very profitable, it could possibly indicate that the hourly usage rate is too high, and/or that the construction project costs are overestimated. Conversely, if the equipment project is in deficit, this could mean that the equipment is not used at its fullest, and/or that we overvalued the construction projects' profitability by funding them with hourly usage rates that were too low.

There are usually two methods used to charge the use of equipment to construction projects: entering the hours of use and allocations.

By Hour Entry

In the various worked hours entry methods in **maestro***, it is possible to specify if pieces of equipment were used, and for how long. This makes it possible, in part, to associate equipment and tool usage costs to the project, and thus, get more accurate project costs.

To do so, **maestro*** allows the allocation of four hourly rates for the use of each piece of equipment configured in **maestro***; these latter being identified with the help of a code. The first rate generally represents the use of the equipment alone, whereas the others might include, for example, the use of gas and/or more users. A company could, for example, define the following rates for the use their equipment:

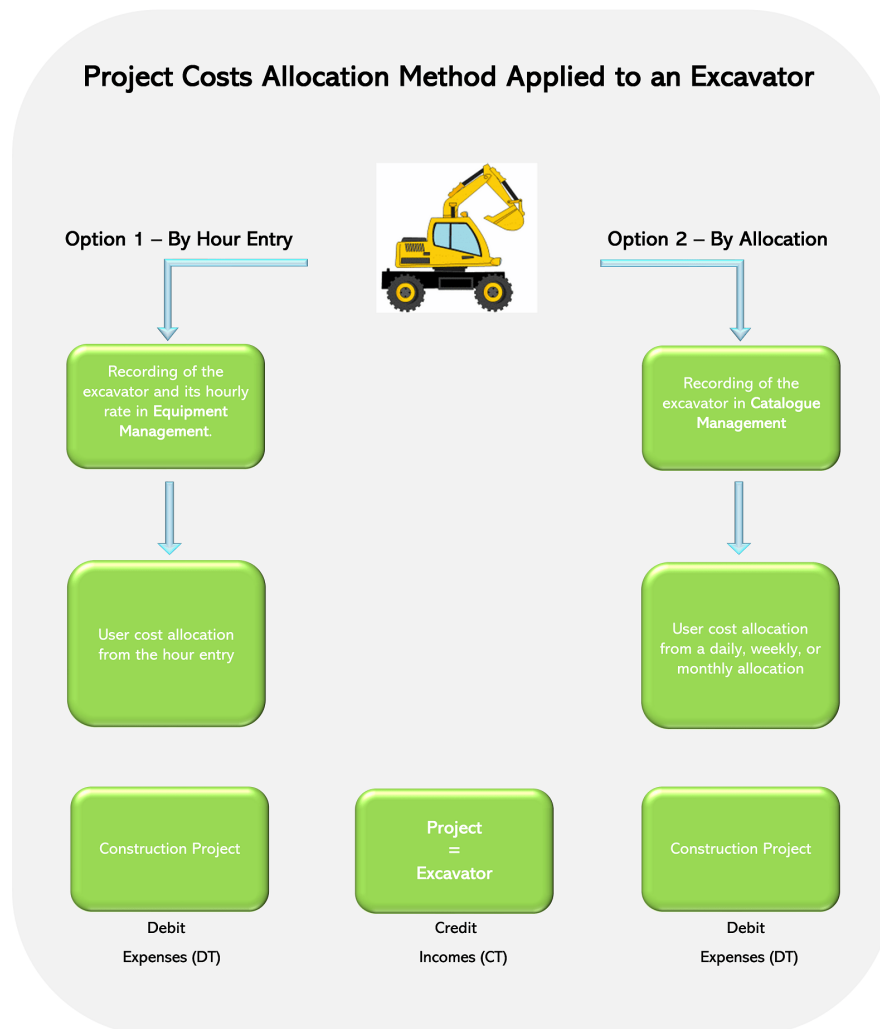
- With operator only.
- With gas.
- With operator and gas.
- Standby.

The rate can be selected when entering the number of hours of use. Better yet, it can be chosen upon the creation of the construction project in **maestro***. Thus, for a long-term project that uses a lot of machinery, a company can prefer to account for gasoline as an expense, and directly apply it to the construction project. In this example, the rate, selected by default, for the construction project and selected equipment, consists of the use of equipment rate only. If, on the contrary, the equipment is used for various projects, the preferred rate will be with operators and gas, for those projects. The same logic applies if there is allocation, or not, of an operator, or of all other costs to a piece of equipment.

This method is usually used to apply large equipment, heavy machinery and/or vehicle usage costs to construction projects.

By Advanced Allocation

Another way of doing consists of listing the equipment, or a part of them, in the **maestro*** [catalogue](#), and then set a daily, weekly, or monthly allocation. Recurring equipment usage costs will be applied to the designated construction project and, in return, an allocation will be systematically paid to the project linked to the equipment used. This method is often preferred to apply small tool usage costs, or when a piece of equipment is used long-term on a project.



EQUIPMENT AND PROFIT CENTRE

As previously mentioned in the chapter on [profit and cost centres](#), the equipment project can be considered as a cost centre. However, it is possible, and recommended, to make sure that it becomes a profit centre by applying an income to the equipment project, generated by the use of equipment on construction projects. Indeed, the fees charged to construction projects for the use of equipment can translate into income that counterbalances the equation and makes it possible for the equipment project to become a profit centre. This also makes it

possible to monitor its profitability. This profit centre can be limited to the one equipment project, or it can regroup many projects of a common nature or trait (generators, parking), according to the business's analysis needs.

Whether the company owns or rents the equipment, the costs must be considered and applied to the profit centre:

- Maintenance
- Repairs
- Damping
- Funding
- Insurances
- Registrations
- Gas
- Tires
- Rental fees
- Etc.

Equipment Management Options

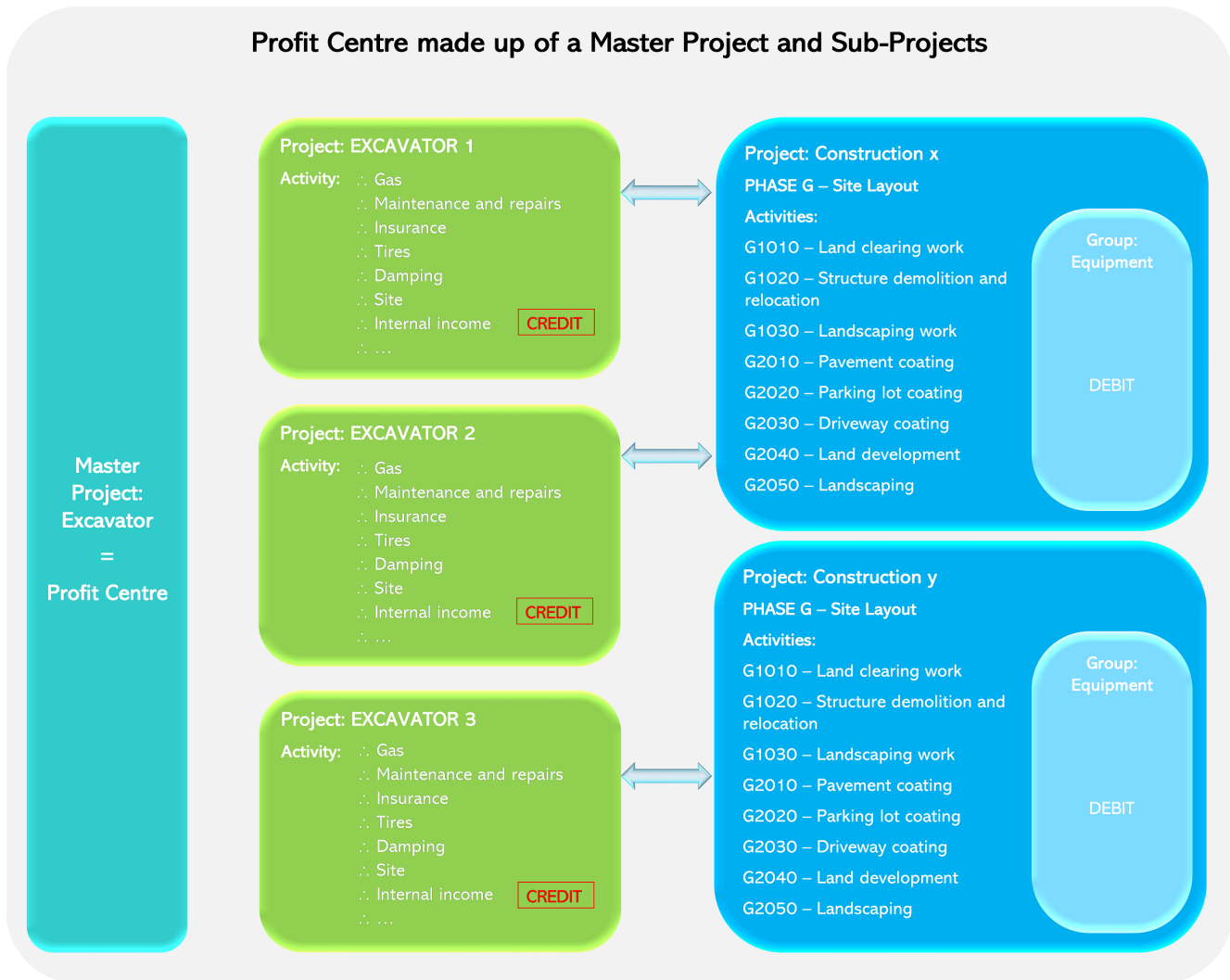
There are several ways to manage equipment and monitor their profitability in **maestro***. Only one method can be used, but it is also possible to use more than one, depending on the quantity of equipment, their characteristics, the available information coming from the construction site, and the wants/needs of the company.

Option A

Creating a Profit Centre made up of a Master Project and Sub-Projects

Large equipment and/or equipment of the same nature can be managed as a profit centre; each equipment, in itself, makes up a sub-project, and the set of equipment sub-projects is overseen by a master project, which regroups all sub-projects. An identical project structure is used for each sub-project (equipment), and expense and income activities are displayed there. There are activities for usage fees, such as repairs, maintenance, damping, etc., as well as a usage income activity, that which provides the accounting counterpart of usage charges, the former being applied to construction projects through the entrance of hours.

Profit Centre made up of a Master Project and Sub-Projects



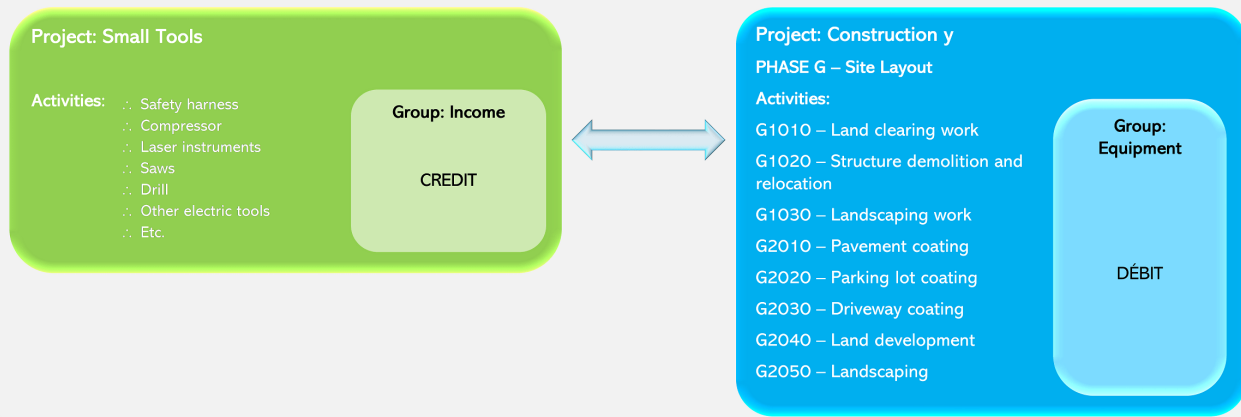
Option B

Creating a Profit Centre made up of a Project with Activities for each Tool Category

This option advocates for the creation of a project, for all equipment, and the creation of activities for each major equipment category. This is a common way of managing small tools since the creation of a distinct project for each of them would make it more complex. This method also makes the project a profit centre; the usage costs are charged to the construction projects and, as for the corresponding incomes, they are allocated to the project created for the equipment. Two options are offered to the user concerning the allocation of usage expenses to construction projects:

1. By hour entry, corresponding to the number of hours the equipment was used (option B1).
2. By allocation, applied at an x rate and made possible by using the **maestro*** [catalogue](#) (option B2).

Profit Centre made up of a Project with Categories for each Tool Category

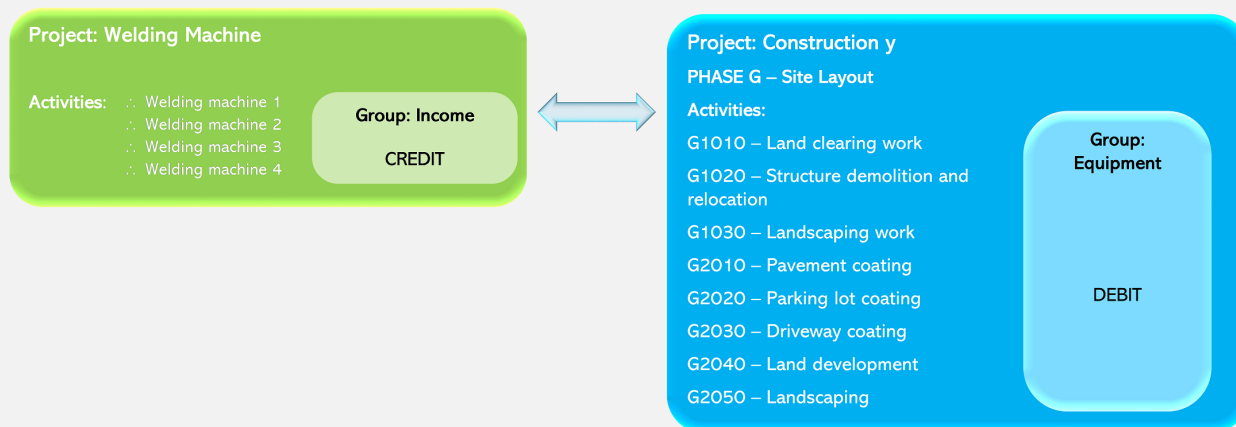


Option C

Creating a Profit Centre made up of a Project for each Equipment Type and an Activity for each Individual Equipment of this Type

Option C proposes a method inspired by the previous two. A project is created for each equipment type, which makes it possible to benefit from a global portrait of this equipment type, then an activity is associated to each equipment individually, allowing a very close follow-up. This method also makes the project a profit centre; usage costs are charged to construction projects, and, as for the corresponding incomes, they will be allocated to the specific equipment project and activity used.

Profit Centre made up of a Project for each Equipment Type and an Activity for each Individual Equipment of this Type



Option D

Creating a Cost Centre made up of a Project with Activities for each Tool Category

This method implies that equipment usage costs are not applied to construction projects, but instead regrouped to create a general company expense.



Advantages and disadvantages of these options

Option	Description	Advantages	Disadvantages
A	<ul style="list-style-type: none"> • A profit centre • A master project for an equipment type • Sub-projects for each individual equipment • Detailed and standard activities for each sub-project • Cost allocation from the hours of use entry 	<ul style="list-style-type: none"> • This option makes it possible to benefit from all information per equipment, in addition to having all information concerning the whole equipment group. 	<ul style="list-style-type: none"> • To benefit from data this precise, it is first necessary to have access to information from the construction site, and have a process and the necessary resources which makes it possible to capture this information and enter it in maestro*.
BI	<ul style="list-style-type: none"> • A profit centre • One project for the equipment • One activity per equipment category • Cost allocation from the hours of use entry 	<ul style="list-style-type: none"> • This method is obviously the easiest to manage and implement since it does not follow up on each individual equipment. For example, it is not necessary to know exactly which compressor has been used. 	<ul style="list-style-type: none"> • Since less information is available, it is obviously harder to pinpoint the problem, if it should happen, and/or identify the specific source. For example, if the compressor activity is in deficit, research will be less conclusive.

Option	Description	Advantages	Disadvantages
B2	<ul style="list-style-type: none"> • A profit centre • One project for the equipment • One activity per equipment category • Allocation of usage costs and incomes from an allocation 	<ul style="list-style-type: none"> • It is possible to save and have many detail elements concerning the equipment, these latter being listed in the maestro* catalogue. 	<ul style="list-style-type: none"> • It is necessary to have a resource dedicated to the equipment, and that is responsible for entering information in maestro*.
C	<ul style="list-style-type: none"> • A profit centre • One project per equipment type • One activity for each individual equipment • Cost allocation from the hours of use entry 	<ul style="list-style-type: none"> • This option, in part, consists of a hybrid method of options A and B, and provides a relatively interesting quantity of information. 	<ul style="list-style-type: none"> • This method also requires for information from the construction site to be captured and entered in maestro*.
D	<ul style="list-style-type: none"> • A cost centre • One project per equipment • One activity per equipment category 	<ul style="list-style-type: none"> • No data entry must be performed concerning the use of the equipment on the construction site. 	<ul style="list-style-type: none"> • Equipment usage costs are missing from the project and can distort the profitability of the latter.

Lastly, companies that own the **Preventive Maintenance** module (which allows, in part, to plan maintenance according to the number of hours or kilometres used and notify the user when maintenance is required) will be able to generate work orders from the equipment. These work orders will, afterwards, be charged to the applicable profit centre.

REMINDER

- In **maestro***, the term equipment or machinery refers to any material piece which can be used in a project, regardless of its size, or whether it is rented or not.
- It is recommended to create projects for major equipment and make them profit centres; it is then possible to evaluate the projects' profitability.
- Applying equipment usage fees to construction projects can be done by attributing hours, or by applying an expense amount at a specific frequency (allocation).
- Other costs can be charged to an equipment profit centre, such as insurance fees, maintenance fees, buying tires, etc.
- Users have many options in which they can manage equipment in **maestro***, apply costs and incomes, and obtain the information they need.
- Equipment usage rates can be defined in **maestro*** and selected by default for each construction projects.

FOOD FOR THOUGHT – EQUIPMENT MANAGEMENT IN MAESTRO*

- Your company is the owner of what type(s) of equipment?
- Are there many such equipment?
- Is any of this equipment rented, by you and/or your customers?
- How is your equipment assigned, and then used in each of your projects?
- Are they kept in inventory?
- How is the use of equipment charged to projects, or even to customers?
- Is an hourly rate applied to the use of machinery?
- Do these rates differ from one project to the next?
- How do you currently evaluate the profitability of your equipment?
- How are expenses, such as gas, insurances, etc., currently recorded?

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