

Updated Coffee Proposal

Dear members,

We brew about 12,5 litres of filter coffee a day and throw three to five of them away. Coffee that stands on a hot plate turns bitter, which is a standing complaint, and the machine is set up and cleaned by hand every evening by a board member. Furthermore, as the machine is almost 20 years old, the risk of failures keeps rising. Therefore, we would like to take an informed decision of a replacement now rather than needing to do this very quickly once the machine breaks down.

After a deep-dive into the options, we have come to the conclusion that replacing it with a bean-to-cup machine that grinds and brews each cup on demand, is the most suitable option. This letter covers all options and motivates the final conclusion.

Since the last time this topic was discussed, we have looked into several additional aspects, and spoke with former board members about the options and their implications.

Previous concerns:

- Throughput time
- Contract options
- Cleaning
- Costs

Recap

Before the summer we first brought up the idea of a new coffee machine, and the GMA expressed the desire for more research before taking a decision, especially with regard to the range of suppliers and contract options.

Four machines:



Necta Kometa

100 cups a day
€ 2.570 to buy

FULL MENU



JURA X4c

100 cups a day
€ 2.180 to buy

COFFEE ONLY



JURA GIGA X3c

150 cups a day
€ 4.240 to buy
FRESH MILK, NO COCOA



Yunio X90

200 cups a day
€ 5.070 to buy
MILK OR COCOA.

Of the four, only the Kometa serves coffee, milk drinks and hot chocolate from powder. The Yunio X90 has a single powder canister, so it holds either milk or cocoa, not both, unless a fresh milk cooler is added alongside it.

Why we recommend a coffee-only solution

A fresh milk machine needs a refrigerated unit that has to be cleaned every day and emptied before every holiday. This is quite a downside, as reducing the daily workload is one of the reasons we want to replace the Bravilor with an alternative. Keeping the daily and weekly effort in mind, we give a full picture of the options; therefore fresh milk and powder solutions are included as well.

What we now propose

We propose buying two JURA X4c machines and placing them side by side where the current machine stands.

Throughput

The previously outlined options were fit for the total demand throughout the day (100-150 cups per day), but with most times per cup at around 30 seconds, not for handling peak demand. Lecture breaks of 15 minutes mean that under optimal circumstances 30 people can get coffee. We agree that this is far from desirable

Always coffee and tea

With a second machine, the impact associated with possible breakdowns or maintenance is also less, as there is always a second machine to rely on for coffee and tea.

Why not two consumer machines?

During the 114th GMA, the idea was brought up to just buy a simple consumer machine. However, we believe that these machines will not last with the usage they will be put under. In addition, these machines have much smaller reservoirs for beans and water; resulting in the need for filling multiple times throughout the day. Furthermore, these machines are generally not 'made to be repaired', whereas this is the case for industrial coffee machines, increasing lifespan and decreasing costs.



WHAT WE NOW PROPOSE

Two JURA X4c

200 cups a day · two cups at once · ≈ € 4.360 to buy · black coffee only

The X4c makes black coffee and nothing else, meaning there is nothing extra to refill, nothing extra to clean, and fewer parts that can fail. It is also the cheapest machine on the shortlist, which is exactly what makes buying two of them realistic.

	New B20-HW	Today, filter	One JURA X4c	Two JURA X4c
Up front	€5.331	owned	€ 2.180	€ 4.360
Total cost per year	€3.357	€ 2.291	€ 2.167	€ 2.663
Extra vs today	+€1066	baseline	- € 124	+ € 372
Per cup	€ 0,251	€ 0,171	€ 0,162	€ 0,199

Figures on the basis used throughout this letter: 13.400 cups a year, beans from Sligro at € 17,59 a kilo, purchase price spread over five years, cleaning products included, servicing and repairs excluded, no milk or cocoa.

What it costs

Today we spend € 2.291 a year on filter coffee, for about 13.400 cups. Every figure below is calculated on that same 13.400 cups, with no milk drinks and no cocoa, because we have no way of forecasting a change in demand. We currently buy 125 kilos of filter coffee a year to serve those cups, because roughly a third of every brewing is thrown away; a bean machine grinds per cup and wastes nothing, so it needs about 95 kilos for the same amount of cups. That is why the coffee itself gets cheaper. There is also no noticeable difference in costs per kilo between beans and filter coffee.

The “total cost per year” includes the cost of owning the machine: the purchase price is depreciated over five years for the options we buy outright, plus cleaning products and beans

Two X4c cost **€ 4.360 up front** and **€ 2.663 a year**, which is **€ 372 a year more than we spend on filter coffee today**, or € 0,199 a cup against € 0,171 today. As Stress has enough liquidity, purchasing the machines outright is not a problem and saves money compared to leasing/renting.

For comparison, two X4c bought ourselves come out **€ 141 a year cheaper** than one Kometa on the JDE favourite deal we recommended before (€ 2.804 a year), and cost about the same up front as one JURA GIGA X3c and less than one Yunio X90.

It should be kept in mind that a machine purchased is ours to keep, meaning that there are costs benefits when looking at the standard 15+ year lifespan.

Every route, with one machine

Route	Machines	Up front	Total cost per year	Extra vs today	Per cup	Who fixes it
DIY JURA X4c	1	€ 2.180	€ 2.167	– € 124	€ 0,162	Us
DIY Necta Kometa	1	€ 2.570	€ 2.245	– € 46	€ 0,168	Us
Today, filter coffee (Bravilor)	1	owned	€ 2.291	baseline	€ 0,171	Us
DIY JURA GIGA X3c	1	€ 4.240	€ 2.579	+ € 288	€ 0,192	Us
JDE buy, no service	1	€ 2.893	€ 2.638	+ € 346	€ 0,197	Us
DIY Yunio X90	1	€ 5.070	€ 2.745	+ € 454	€ 0,205	Us
JDE favourite deal	1	€ 350 start-up	€ 2.804	+ € 513	€ 0,209	JDE, all 7 years
JDE buy + service	1	€ 2.893	€ 3.090	+ € 798	€ 0,231	JDE, years 2 to 7
Aroma Club, buy X4c	1	€ 2.257	€ 3.174	+ € 883	€ 0,237	Aroma Care
Aroma Club, lease X4c	1	€ 250 deposit	€ 3.486	+ € 1.195	€ 0,260	Aroma Care
Aroma Club, buy X90	1	€ 4.794	€ 3.746	+ € 1.455	€ 0,280	Aroma Care
Aroma Club, lease X90	1	€ 450 deposit	€ 4.251	+ € 1.960	€ 0,317	Aroma Care
Broers Koffie, all-in	1	€ 275 start-up	€ 4.483	+ € 2.192	€ 0,335	Broers, preventive

Shaded: the machine the Board advises. The DIY rows cover beans and cleaning products only; servicing and repairs sit on top of them.

Every route, with two machines

The same routes priced with two machines instead of one. Beans and cups are identical in both tables; only the machine, its cleaning products and any per-machine fee are doubled.

Route	Machines	Up front	Total cost per year	Extra vs today	Per cup	Who fixes it
Today, filter coffee (Bravilor)	1	owned	€ 2.291	baseline	€ 0,171	Us
New Bravilor Bonamat B20 HW	1	€5.331	€3.357	+ € 1066	€0,251	Us
DIY JURA X4c	2	€ 4.360	€ 2.663	+ € 372	€ 0,199	Us
DIY Necta Kometa	2	€ 5.140	€ 2.819	+ € 528	€ 0,210	Us
JDE buy, no service	2	€ 5.786	€ 3.321	+ € 1.030	€ 0,248	Us
DIY JURA GIGA X3c	2	€ 8.480	€ 3.487	+ € 1.196	€ 0,260	Us
JDE favourite deal	2	€ 700 start-up	€ 3.654	+ € 1.363	€ 0,273	JDE, all 7 years

Different Purchase methods explained

DIY — we buy the machines ourselves

Terms. We buy and connect them ourselves, and procure beans of our own choice (Sligro at € 17,59 a kilo, against € 20,57 through JDE and € 23,65 through Aroma). The Kometa is available online at € 2.495, roughly € 400 below JDE's own price for the same machine.

Good. The cheapest route by a clear margin. The machines are ours from the first day. No contract, means no minimum bean volume or annual price increase, and with two machines, the second one is our replacement machine.

Catch. The prices cover only cleaning and descaling products. Every repair after the twelve-month warranty is ours. A JURA specialist covers Enschede and fixes most faults on site; for the Yunio and the Necta the nearest brand service sits considerably further away.

JDE — the favourite deal

Terms. € 65 a month for seven years, covering the Kometa, the water filter and all servicing, plus a one-off € 350 to start, including a 10% discount on DE beans.

Good. Repairs, parts, water filters and call-outs are covered for the full seven years, and JDE will move us to a larger machine if the Kometa cannot keep up with demand.

Catch. The machine is never ours; we commit for seven years, after which we have to go through the decision process again. Additionally, we have to buy JDE beans per the contract.

Aroma Club — buy or lease

Terms. The JURA X4c or the Yunio X90, bought outright or leased over 60 months. Aroma Club Care covers call-out, labour and parts and provides a replacement machine during a breakdown. A lease transfers the machine to us after 60 months for 10% of its value.

Good. A replacement machine during any breakdown, and a lease still ends with the machine belonging to us.

Catch. The X4c makes black coffee only. Both prices depend on a 30% discount that requires buying Aroma beans for five years, and the X90 arrives set up for the fresh milk we would rather avoid.

Broers Koffie — everything included

Terms. € 369 a month covering the Yunio X90, beans, milk or cocoa, cleaning products and filters, with preventive servicing, parts and repair within one working day, for 1.200 drinks a month. € 275 to start. No fixed term, cancellable monthly.

Good. The least work of any route. Broers service the machine before it breaks rather than after, and we can walk away at a month's notice.

Catch. The most expensive by a wide margin. The monthly drink allowance does not carry over, so a quiet month is still charged in full, the machine never becomes ours, and we still have to choose between cocoa and milk.

Additional benefits

So far, many aspects and characteristics have been discussed. The proposal brings in other benefits that we think are worth mentioning. The Jura X4c can be used both with a water connection and as a standalone machine with a water tank; therefore, a machine could also be moved to wherever needed (GMA, lunch lectures, etc.). Furthermore, there is a variety of drink options for both tea and coffee drinkers. The machine can provide water for tea and has a special setting for green tea. For coffee lovers there are different varieties of espressos, lungos and americanos and the possibility of brewing a jug of coffee. Although these features are not essential, we believe that they are very nice to have.

What we ask you to vote on

1. We would like to raise a motion to decide to replace our current filter coffee machines with 2 newer bean-to-cup coffee machines.
2. We would like to raise a motion to decide on which coffee machine to switch to, taking into account the feedback of the GMA

With kind regards,

The 51st Board of Study Association Stress, “Keep Rising”

The 52nd Candidate Board of Study Association Stress, “Semper ad Meliora”