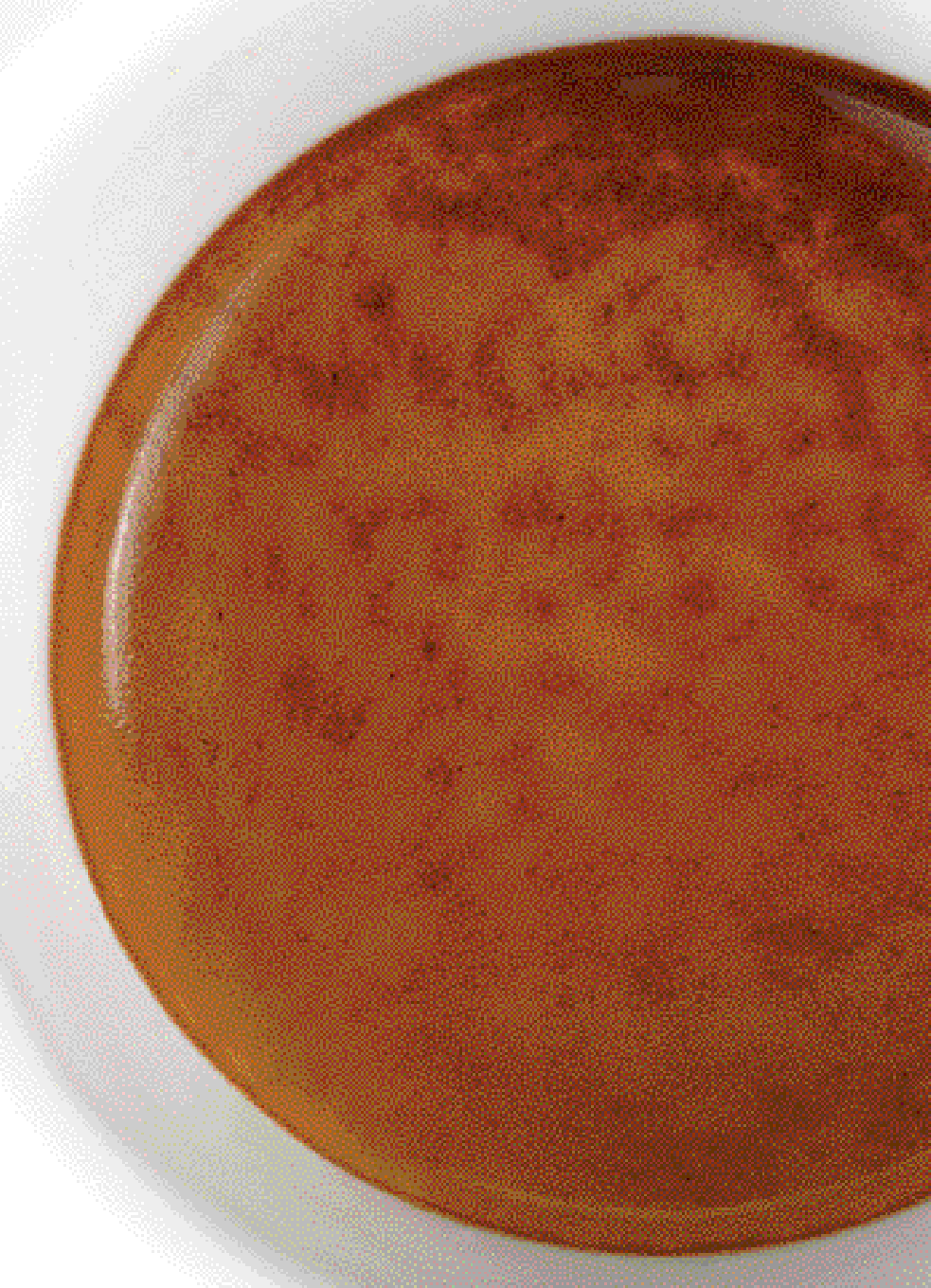


# The X Project

Espresso machines  
from FrancisFrancis!

[www.francisfrancis.com](http://www.francisfrancis.com) Tel. + 4141 8544141





## In the beginning, there was an excellent espresso and a design idea

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1994: The X1 was the result of coincidence and inventiveness. I will never forget, how Luca, who understood not a single word of Catalan, gesticulated to Joaquim, who understood not a single word of Italian, and indicated concentric circles with his hand, as if he was trying to depict the shape of a head... Joaquim nodded... and Luca kept at it: He would send him the drawing.

Without a doubt, it had been talked about for years: *"The espresso machine is a misshapen, parallel-piped object, an inexpressive thing that should be hidden away in a cupboard but nevertheless always seems to be cluttering up some surface..."* or *"There should be a beautiful coffee machine, which would fill the kitchen with joy, be pleasing in design and inviting to the touch..."*.

Two months later, Joaquim, beaming with joy, presented the first X1 made out of wood. It immediately became obvious to all of us: The pleasure in the shape lay in the notion of giving the kitchen an entirely new meaning. The aseptic food preparation zone had become a place of life, of meeting, of trying things, experimentation, of fun and enjoyment. This vital area of the house had slipped back into its original role, which it had lost over the course of thousands of years of serfdom or poverty - and the X1 had played its part in the process. On the day on which our design idea assumed the shape of the X1, we were not fully aware of the revolution that we had set into motion. But shortly thereafter, the idea of equipping the kitchen with objects whose beauty and attractiveness unconsciously invited one to linger in the kitchen became our purpose in life: FrancisFrancis! is synonymous with products of exuberant and infectious *joie de vivre*.

Because the child in each of us needs to be able to rejoice. Even in an excellent espresso.



Luca Trazzi  
architect, designer  
of the X-Project  
machines from  
FrancisFrancis!

An excellent espresso is a very special experience

Espresso is a little cup containing a very small amount of "coffee" (and, if it exceeds half the volume of the cup, it is already an espresso *lungo*, a somewhat longer espresso); Espresso has a thick, nut-coloured froth with a smattering of dark brown stripes; it has the heady fragrance of jasmine, flowers, fruits, nuts, cocoa and tea; it is a full and strong flavour, velvety and sweet; it has a slight bitter note that disappears after about two minutes; and the lingering aroma of coffee, chocolate, caramel, pastry crust, freshly baked bread, butter and dried fruits, a

## What actually constitutes an excellent espresso?

*Preparing a perfect espresso should therefore be left to the experts: even the results of the grinding process will change if there is the tiniest variation in humidity and environment.*



sweet, aromatic flavour that can linger for two hours. In short: heavenly enjoyment for the taste buds.

However, an excellent espresso is a complex matter

It simultaneously needs to be a solution, an emulsion and an extraction. This means, the soluble parts of the ground coffee (sugar, caffeine etc.) need to be dissolved in it, the fatty parts (the coffee oils together with their gaseous aromas) need to be emulsified in it, and the solid and colloidal particles need to be extracted into it, in order to transfer up to 25% of the weight of the ground coffee into the cup.

All this only becomes possible if the basic rules of espresso preparation are observed:

Coffee	.....	approx. 7 grams of ground coffee per serving
Water	.....	40 ml
Temperature	.....	97 Degrees Celsius (206 F)
Pressure	.....	10 bar (dynamic)
Time of extraction	..	20 to 25 seconds

If these rules are not heeded, then one will get anything but a perfect espresso, because:

- if the amount of ground coffee is less than 7 grams  
*an insufficient amount exists for extraction* **weak and watery**
- if the grain size distribution is too coarse  
*neither the solid nor the colloidal parts will be extracted* **weak and watery**
- if the ground coffee is not compacted  
*the colloidal parts will not be extracted* **weak and watery**
- if the coffee is too coarsely ground  
*considerably less than 25% will be extracted* **weak, watery, barely aromatic, sour, bitter and unpleasant, the aftertaste will not last long**
- if the water temperature is less than 97 Degrees Celsius  
*the extraction will be reduced* **predominantly sour**
- if the water does not have a minimum pressure of 9 bar  
*the colloidal particles will not be able to be extracted* **predominantly bitter**
- if the water temperature is much above 97 Degrees Celsius  
*the coffee will become scorched during the extraction* **bitter and woody, will smell charred**

## Espresso preparation made easy

E.S.E. stands for "Easy Serving Espresso" or espresso preparation made easy. It involves illycaffè Trieste - a leading manufacturer who uses laser-controlled, precision grinding mills - grinding the right mixture from beans. The coffee that has been ground in this manner is then forcefully compacted into 7-gram portions using an illycaffè-patented 'rotating compacter'. The portions are then covered with different filter papers on the top and bottom: The upper filter paper has a strong filtering action so that any impurities that might be in water are restricted and also so that

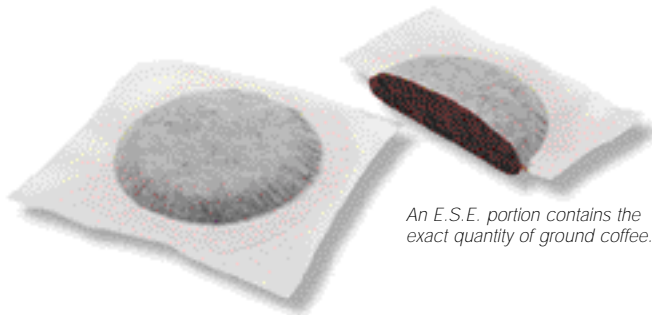


## The E.S.E. system

the machine does not 'draw up' any coffee particles after the infusion process. The filtering action of the lower layer of paper is less, so that even the largest ground coffee molecules will be able to pass into the cup. The single E.S.E. portions are packed into metal containers in which the air has been replaced by an inert gas, thus ensuring that the aromas are absorbed by the coffee oils; it is these oils that are responsible for giving the coffee its pungent fragrance once

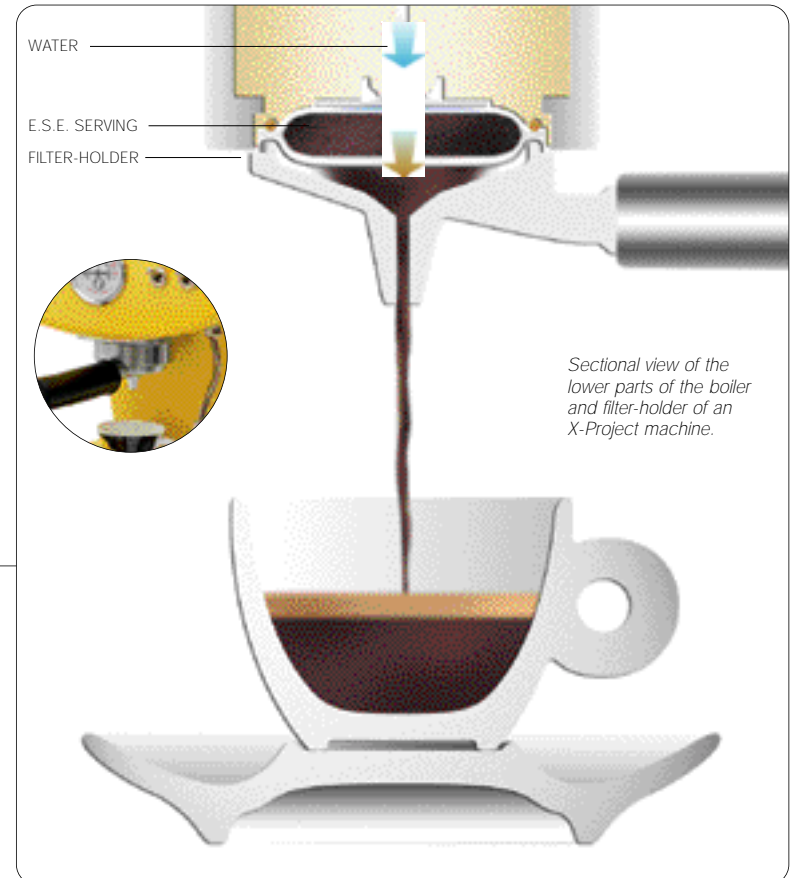
### With the result that all potential problems are solved:

- 1) The amount of coffee precisely correct
- 2) The grinding result is guaranteed (*three different blends are available, depending on taste preferences*)
- 3) The compaction is perfect
- 4) The moisture is excluded
- 5) As the oxygen
- 6) The continuity of the extraction is guaranteed



An E.S.E. portion contains the exact quantity of ground coffee.

they have been emulsified in the cup; and all of this is achieved with a "residual oxygen content" of less than 0.1 percent. This process means that an E.S.E. portion is always guaranteed to be perfect: nothing can go wrong. In addition, the filter paper is made predominantly of plant fibres, **making it biologically degradable and therefore very environmentally friendly.** But the metal containers are also environmentally compatible because they are made primarily of iron (a metal that exists in large quantities in nature) and, because of their magnetic properties, can be sorted from waste for recycling.



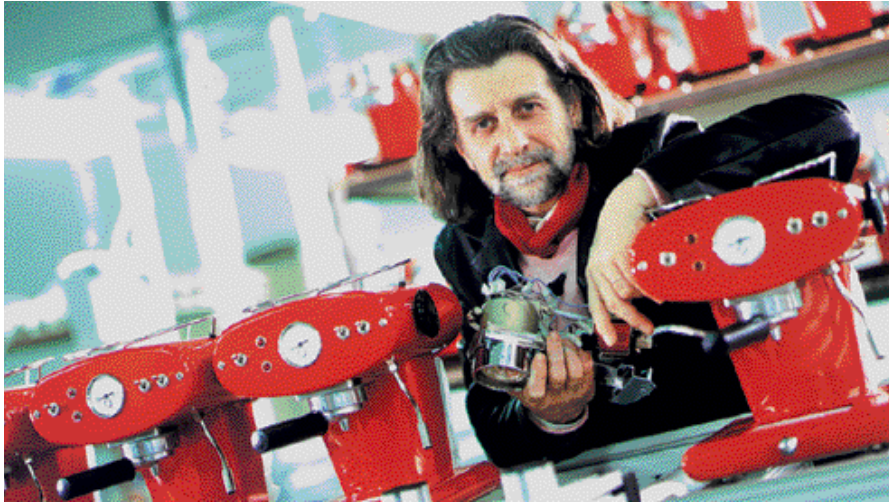
The XProject  
The quality of the materials

*Piece of the "side wall" X4*



## We have opted for metal for the housing of XProject products

In principle we have decided to avoid plastic if at all possible. There is a simple reason for this decision: We are convinced that products made from metal have a much longer life span, not because plastic doesn't last as long, but because plastic doesn't withstand the ageing process as well.



After ten years, a machine made from high-grade steel will have a patina, its own character and its own history which will be evident from the markings and condition of its surface. It will become a piece of history, perhaps a sought-after collector's item, like an old Bugatti. An object that will be restored, like many professional espresso machines that have since become "antiquities", to look new again and thus become indestructible: it's simply a matter of priority. It is clear that many consumers dispose of their products once they have had their day: it's the nature of our modern society. But when the structural parts of the machine are intact, the appearance of the



*Body of an X1 after the rust protection treatment.*

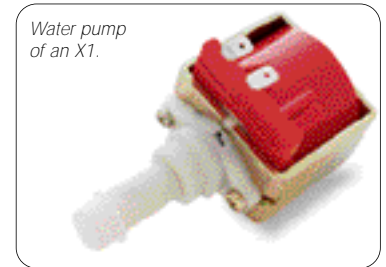
machine is exclusive and the patina has the character of an antique, many of us would opt for restoration instead of disposal; and I have seen many espresso machines that still work to the satisfaction of their owners after 20 years. That's why we decided our housings should be long lasting. We also offer all of our machines in a high-grade steel finish. All of our iron housings are treated with the same anti-rust primer that is used in the automotive industry. We have selected paints that guarantee a maximum lifespan and a lasting shine; and that's why a machine that is always kept dry and clean will give its owner many, many years of pleasure.

## The quality of the moveable parts is also of prime importance

That's why only tested components of the best quality are used in X-Project machines from FrancisFrancis! The switches and buttons are practically indestructible (our customer service centres rarely need to replace these). The valves are entirely of bronze and are just as reliable. The tubing, made from plastic, is designed to withstand the high pressure generated in the boiler for extended periods. The thermometer in the X1 is manufactured by a company that has specialised in the production of thermometers for decades. The same applies for the pumps, which are of a leading brand worldwide. They ensure the correct pressure and can withstand tens of thousands of preparation cycles without breaking down (the replacement of pumps is also a rarity, in spite of having manufactured more than a hundred thousand machines).



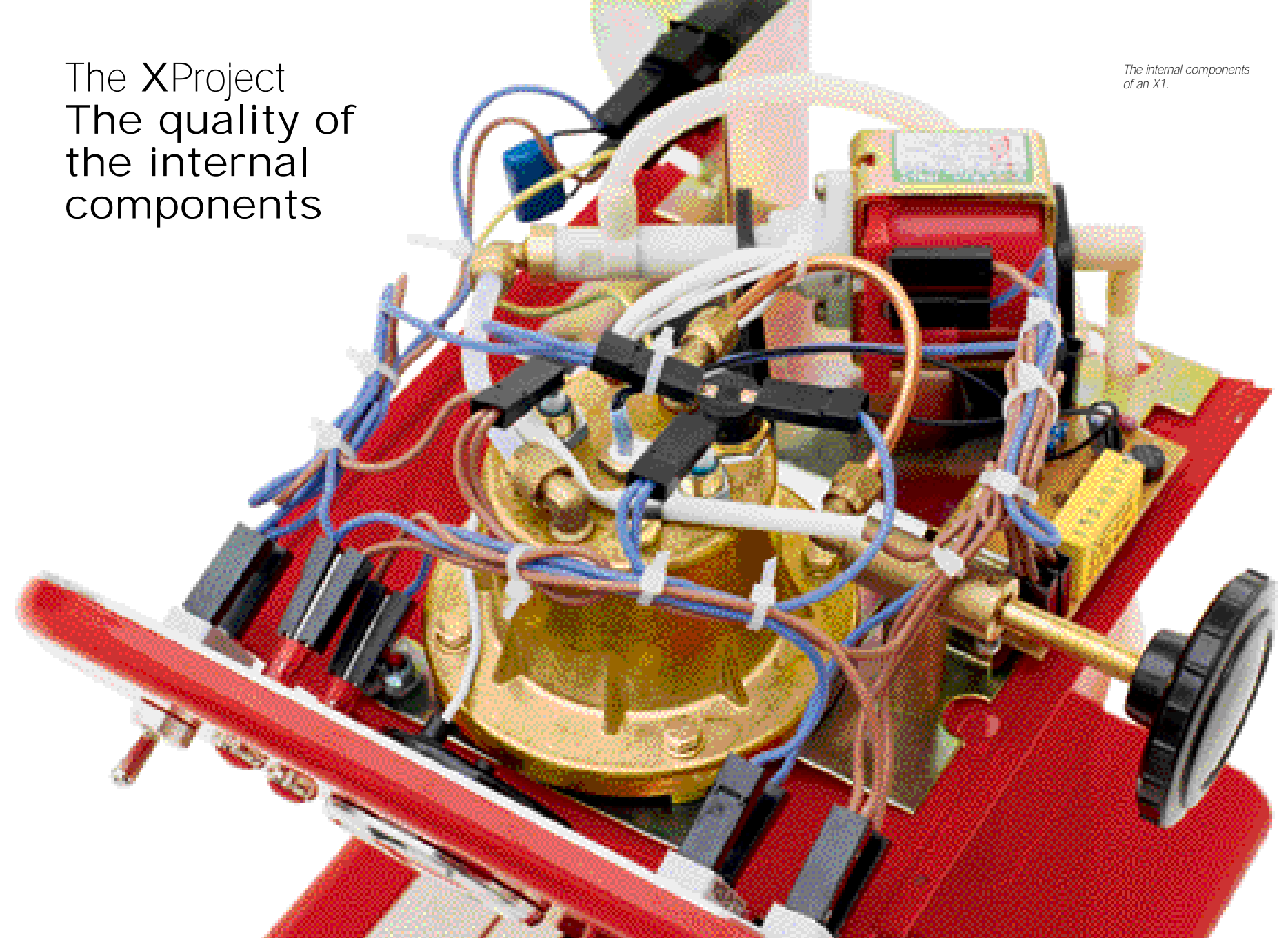
*Detail of the switches and pilot lights of a X1.*



*Water pump of an X1.*

The XProject  
The quality of  
the internal  
components

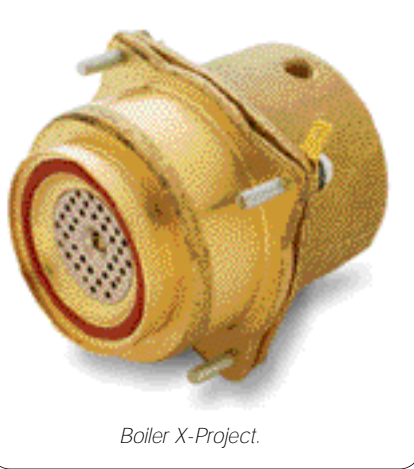
*The internal components  
of an X1.*



We selected the water heating system for the XProject for very specific and important reasons:

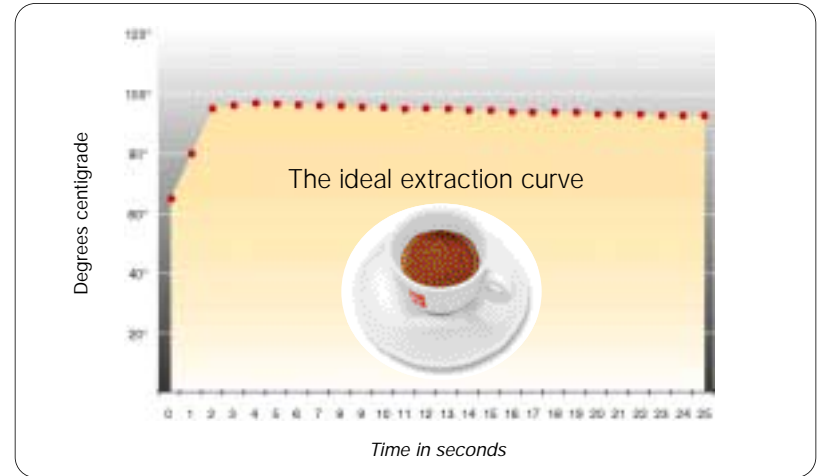
- |   |   |
|---|---|
| 1) The water heating system, which is linked to an electronic thermostat, has outstanding thermal stability                                     | <b>outstanding espresso</b>             |
| 2) Due to the fact that cold water is drawn in during coffee preparation, a boiler is the only means to ensure an ideal water temperature curve | <b>outstanding espresso</b>             |
| 3) In contrast to other systems, this boiler system attains steam temperature in the shortest time possible                                     | <b>cappuccino without waiting</b>       |
| 4) In contrast to other systems, the boiler generates a large amount of powerful steam  | <b>outstanding cappuccinos</b>          |
| 5) In contrast to other systems, the boiler system cools off immediately after steam generation   | <b>the coffee doesn't get scorched</b>  |
| 6) In contrast to other systems, the boiler system generates lots of water at extremely high temperatures                                       | <b>faster preparation of hotter tea</b> |

Naturally, we know and don't conceal from anyone that more calcium is deposited in a boiler system than in a thermal block heater. But we want to produce an exquisite coffee - and that's why one simply has to get used to **descaling the machine every one to three months, or as dictated by the water hardness**, to be free of this problem. At this opportunity, the myth that the thermal block heater that never needs to be descaled should also be cleared up: This is absolutely not the case. Even this unit will become clogged up with calcium.



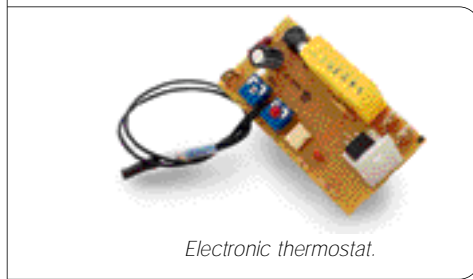
*Boiler X-Project.*

**The ideal temperature curve for the extraction** is a curve that rises sharply at the outset, to ensure a large amount of energy is available in the first phase of the extraction, and then tapers off slowly in the subsequent phases in order to extract an ever-decreasing amount and leave the 'woody' parts in the infused coffee sediments. **Every other curve is plainly wrong:** A slowly-ris-

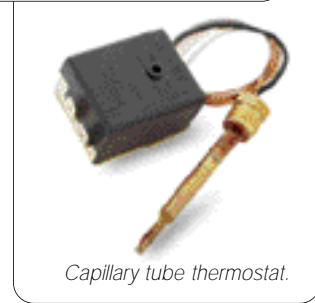


ing curve, for example, tends to result in a decidedly more bitter coffee.

**The start temperature must always remain constant.** That is why every machine in the X-Project is fitted with an **electronic precision thermostat**



*Electronic thermostat.*



*Capillary tube thermostat.*

(with the exception of the X3, in which a capillary tube thermostat is used to produce the same results, thanks to the properties of the water heater system). The temperature for espresso preparation is pre-set at the factory. Anybody wishing to prepare a particularly strong espresso can raise the temperature slightly by setting the machine to steam generation (not for longer than ten seconds!). After one to two minutes, the temperature that has been reached on the X1, X2 and X4 machines can be read off. The X3 and X5 are not equipped with an external thermometer, but the result (excellent coffee) remains the same.



The XProject  
A system  
for every taste



The XProject uses the “Easy Serving Espresso” System (E.S.E.)

Because this system combines user friendliness and the option to prepare different types of coffee blends in the best possible way. In addition to illy-caffè, which includes **three different roast and**

**grind blends, as well as an excellent decaffeinated coffee,** a variety of other coffee types is available in compacted E.S.E. single portions, meaning that you have the option of selecting your favourite blend. Over and above this,

**Filter 1** has a filter surface with few pores and is designed for particularly concentrated espresso, i.e. for **ESPRESSO RISTRETTO**

**Filter 2** has more pores and is designed for normal **ESPRESSO**

**Filter 3** has a particularly large number of pores and is designed for the long **CAFÉ CRÈME**

the E.S.E. system offers three different types of filters.

It is simple to change these three filters and a café crème can be prepared immediately

after an espresso without a problem. If, for example, one member of the household wishes a somewhat longer and weaker espresso, it can easily be prepared with the selected blend; while, in the same manner, another member of the household can prepare a more concentrated ‘Neapolitan-style’ espresso. This is not possible with simple ground coffee

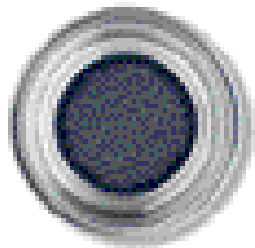
or with automatic coffee machines.

A **decaffeinated espresso** can be prepared in the same simple and uncomplicated manner: one simply needs to place the respective E.S.E. portion into the machine.

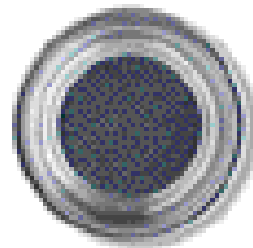
And last but not least: **The freshness of the coffee.** In automatic machines, the coffee remains in the grinding mechanism for long periods where it is subjected to heat and moisture. Because of this, it is practically impossible to prepare an espresso that is fresh and completely aromatic. With the E.S.E. system, however, small quantities of coffee are kept in containers, which are best stored closed and at room temperature, or even in practical single portions, which naturally ensure absolute freshness, as they remain in an inert atmosphere until use.



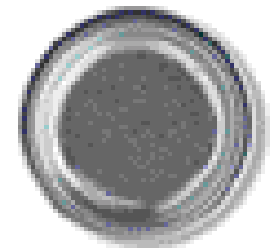
*Espresso Ristretto made with filter 1.*



*Espresso Normal made with filter 2.*



*Café Crème made with filter 3.*

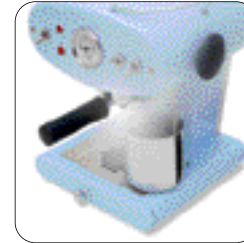


# The XProject And finally the cappuccino: always simple and never scorched

Preparing a perfect cappuccino is simple, but some rules do need to be observed



*Prepare an espresso.*



*Allow the water that has collected in the steam tube to run off into a container.*



*Submerge the steam nozzle one to two centimetres.*



*Pour the milk gently into the cup.*

- 1 Always** prepare the espresso portion of a cappuccino first, and in the cappuccino cup.
- It should be a normal espresso. That is to say, use the *espresso E.S.E. and filter 2*.
- 3 Switch the machine over to steam operation as soon as the extraction of the espresso starts** (if you are preparing several cappuccinos, switch the machine over at the start of the last extraction).
- As soon as the espresso extraction has finished, **allow the water that has collected in the steam tube to run off into a container**. Steam will begin to escape after a few seconds; at this point close the valve immediately. Do this as soon as the coffee has passed through, without waiting for the steam pilot light to extinguish.
- Pour a little milk into a metal container, **or a container that will allow the temperature of the milk to be felt by hand**.
- Submerge the steam nozzle one to two centimetres into the milk and open the steam valve; when doing so, hold the container in your hand in order to feel the temperature.
- Move the container gradually lower** as more froth is produced so that the steam outlet remains submerged by one to two centimetres.
- When the milk feels hot enough, pour it into the cup containing the espresso and enjoy your cappuccino.
- 9 Switch the machine back to coffee temperature and run the pump** until you see liquid at the outlet opening of the filter holder: The boiler is then filled and there is no risk to damage the heating element because of an empty boiler, or from overheating the machine.

## And this is the second advantage of the boiler:

once the last step has been carried out, the temperature in the boiler will already have dropped sufficiently so that the next espresso cannot be scorched, even if it is prepared immediately afterwards. **You will probably not have noticed the first advantage:** the machine starts generating steam before you are even able to switch on steam operation. In all other systems the thermal inertia in reaching steam temperature or returning to infusion temperature is considerably longer.



The XProject

# X1

X1 was Luca Trazzi's first espresso coffee machine. Presented in 1995 and sold in twenty-eight countries, the magazine WIRED described its design as retro-futuristic. Sturdy and easy to use, the X1 makes its best coffee with the Easy Serving Espresso system that uses pre-ground single servings of coffee sealed in filter paper. The hot water dispenser for tea and the steam nozzle for heating milk for cappuccinos are also very easy to use. All bodies for the X1 in colors are made of metal treated by cataforesis (rustproofing) and are available in 15 colours.

**Dimensions** Width 26 cm - Depth 25 cm - Height 33 cm - Water reservoir 1,5 litres - Weight 7 kg - Maximum electrical power 1'100 Watts



The XProject

# X1



Yellow



Orange



Red



Green



Deep blue



White



Grey



Black



Black/Chrome



Stainless steel



Gold



Titan



Crème



Rose



Pale blue



The XProject

# X1



The XProject

# X2



Slightly more than twice the size of the X1, it weighs 17 kilograms because it is made entirely of stainless steel. There are two separate X1's inside. The large water reservoir holds five litres, which makes about 100 cups of espresso. It can be refilled from the top or removed and filled from the back of the machine. A quartz clock always gives the exact time and its batteries can be easily replaced. Steam and hot water can be dispensed by both boilers.

**Dimensions** LargeWidth 52 cm - Depth 35 cm - Height 38 cm - Water reservoir 5 litres - Weight 17,2 kg - Pump pressure 15 bar - Maximum electrical power 1'100 + 1'100 Watts

The XProject  
**X2**





The XProject

# X3

It looks like a ship's prow or perhaps one of those classic American **diners** made of metal. The X3 was designed for people with very little space in their kitchen. The X3 has a brass boiler, which makes a fabulous cup of coffee with the Easy Serving Espresso system. The knob on the side controls the hot water dispenser for tea and the steam nozzle for making marvellous cappuccinos.

**Dimensions** Width 52 cm - Depth 27 cm - Height 30 cm - Water reservoir 1,2 litres - Weight 6 Kg - Maximum electrical power 1'100 Watts



The XProject  
**X3**



Cast iron



Silver



Brushed stainless steel



Black



The XProject

# X4

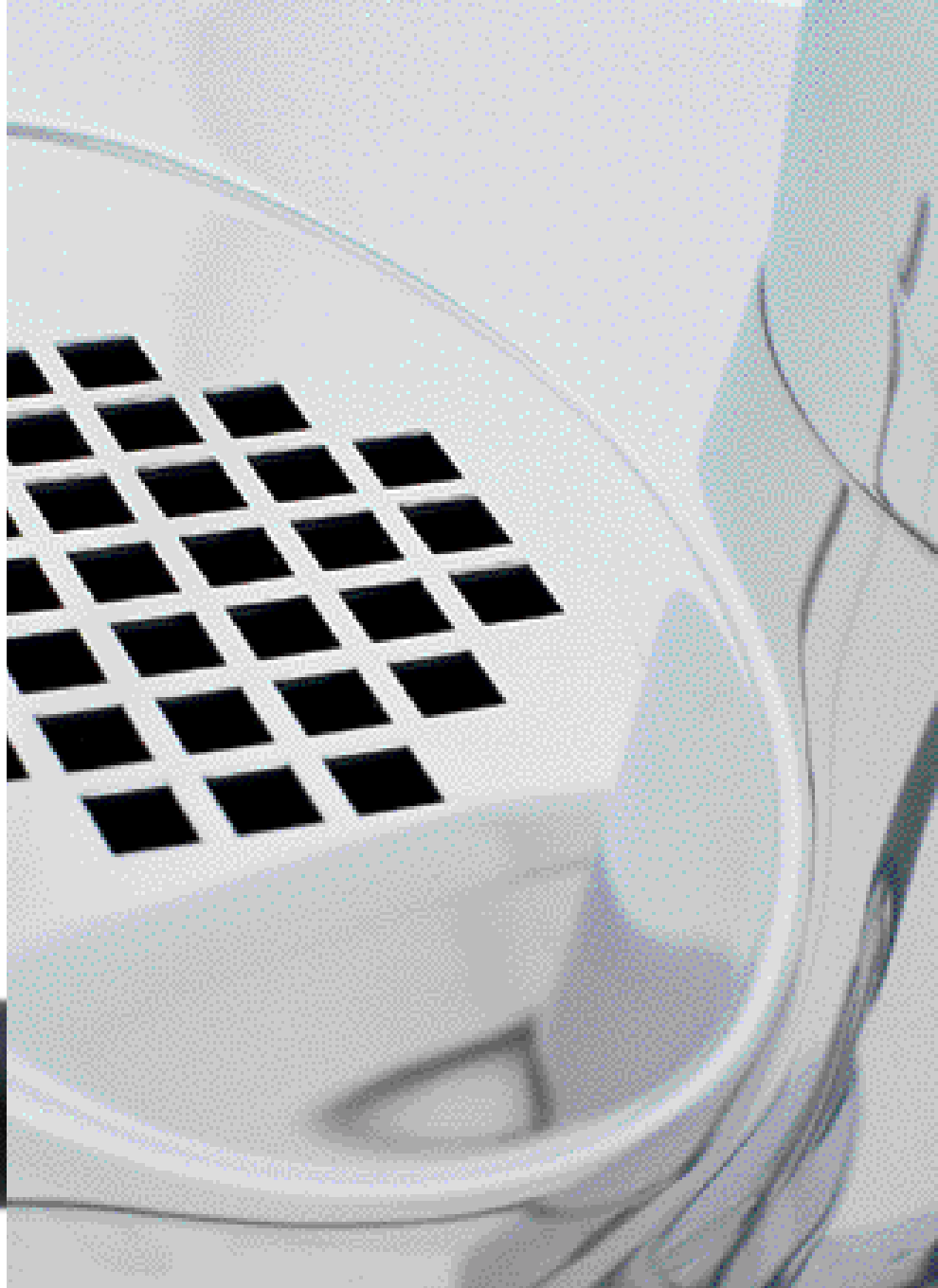
The X4 is fully computerised and programmable: it has automatic boiler re-fill and when the water reservoir is empty, it signals this and switches itself off. The coffee extraction stops according to a predetermined time interval, which is very easy to program. The temperature at which coffee is made can be regulated according to the preference of its owner, and the X4 switches itself on and off for stand-by and active modes, so as not to waste energy when it is not in use. It can produce a continuous supply of steam so that much more milk can be heated up than is possible with traditional machines. When in stand-by mode, it shows the time on a back-lit display.

**Dimensions** Width 31,6 cm - Depth 31 cm - Height 30 cm - Water reservoir 0,9 litres - Maximum electrical power 1'100 Watts - Weight 9 Kg



The XProject

# X4



The XProject

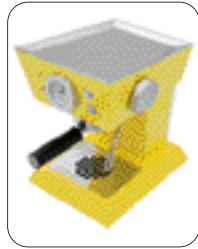
# X5

Obviously the X5 is not exactly an anti-radar device, and even if it was, it wouldn't do very much, even though the angular and sloping shapes of all its sides are reminiscent of the aircraft and ships that are invisible to radar. It is a machine suited to small kitchens, as its size is kept to a minimum, and it makes amazing coffee with the E.S.E. system. An attractive, centrally-mounted clock shows the exact time and is easy to regulate. Hot water and steam are delivered by using the knob on the side.

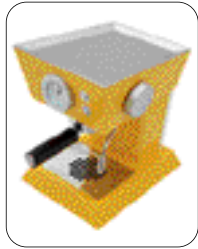
**Dimensions** Width 21 cm - Depth 26,5 cm - Height 29 cm - Water reservoir 1,5 litres - Weight 5,5 kg - Maximum electrical power 1'100 Watts



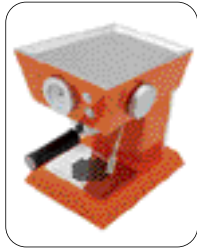
The XProject  
**X5**



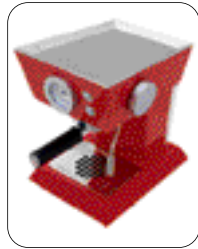
Yellow



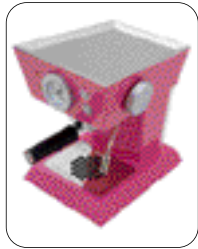
Light Orange



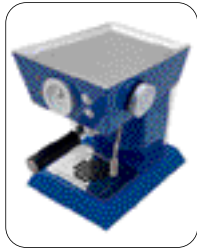
Orange



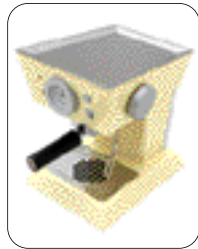
Red



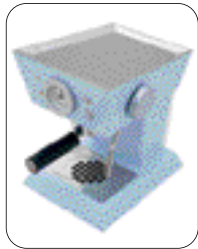
Fuchsia



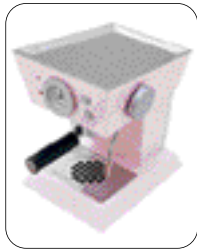
Deep blue



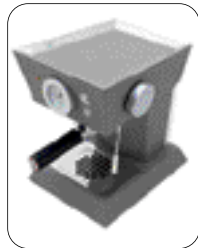
Crème



Pale blue



Rose



Grey



Black

