KUHN RIKON
SWITZERLAND

FRYING PAN GUIDE

FRYING PANS
THE TECHNOLOGY OF FRYING

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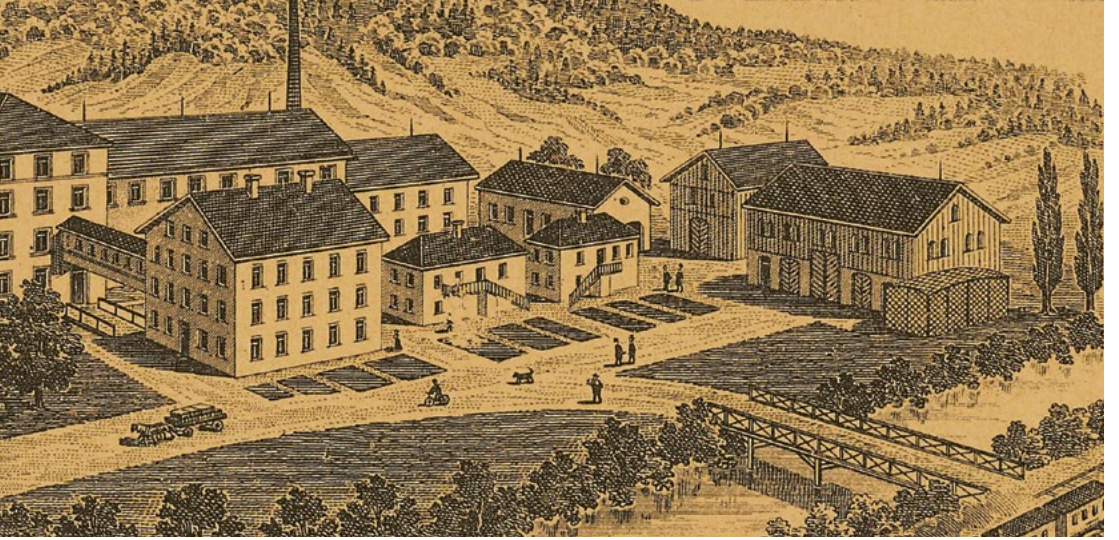


PRODUCING PANS

Here at Kuhn Rikon, we've been manufacturing cookware since 1899 at our production site in a small town in the east of the Canton of Zurich. The quality products we produce here are delivered – in cooperation with our subsidiaries – to customers around the globe.

Kuhn Rikon AG | Neschwilerstrasse 4, CH-8486 Rikon

FRYING PAN EXPERTISE
MADE IN SWITZERLAND

We've coupled our expertise with our design and manufacturing experience to create a number of new frying pan collections that complement our traditional portfolio. We offer a wide selection of materials, styles and price ranges.

In total, we stock around 14 different frying pan collections in at least 10 different combinations of materials. If you're looking to offer your customers a wide selection, Kuhn Rikon has everything you need.

THE QUEST TO FIND THE RIGHT FRYING PAN

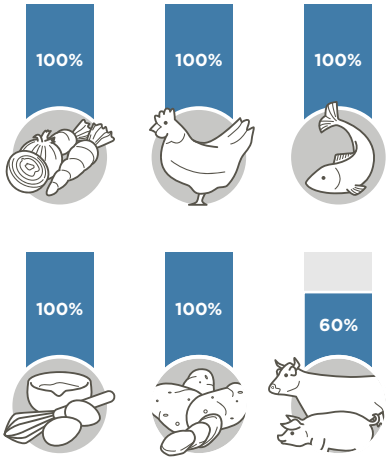
ALL-PURPOSE FRYING PANS? THERE'S NO SUCH THING!

One frying pan that can handle everything? Unfortunately that hasn't been invented yet. Different frying techniques require different product characteristics. And just like in the world of sports, no single frying pan can win in all the different disciplines.

Some frying pans are really good at distributing heat, while others are particularly low-maintenance. Some have excellent non-stick properties, while others can be heated to extremely high temperatures. Every frying pan shines in some field or other!

WHAT FOOD WILL YOU COOK IN **YOUR NEW FRYING PAN?**

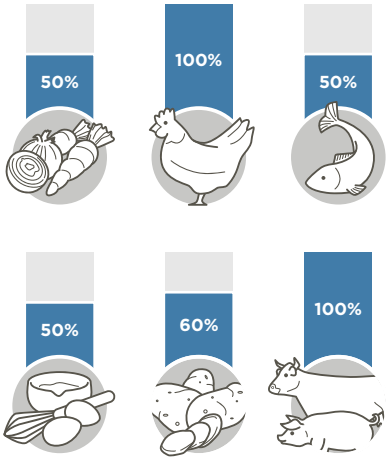
PTFE COATING



Frying pans with excellent non-stick properties are extremely versatile. The non-stick coating prevents food from sticking to the pan, but can't withstand very high temperatures.

Ideal for sautéing vegetables, meat, fish, egg dishes and potatoes

CERAMIC FINISH



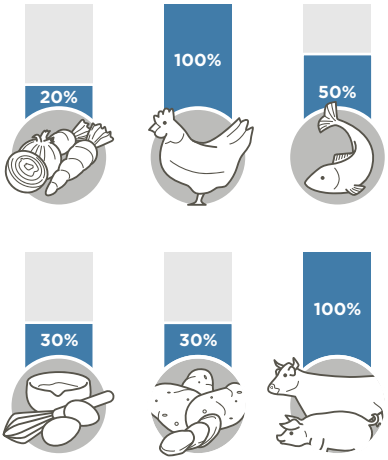
This frying pan is easy to clean thanks to its smooth surface. The good heat permeability of the ceramic coating makes frying crispy food even more pleasant. Always use fat or oil.

Ideal for searing tender vegetables, breaded/marinated meat and crispy potatoes

The percentages on this page are approximate guides.

SPECIAL FRYING PANS PAGE 34

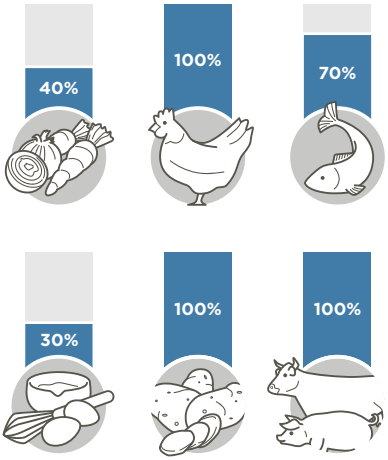
UNCOATED STAINLESS STEEL



The ideal frying pan for meat. This uncoated frying pan can be heated to a high temperature which makes it ideal for searing meat and poultry.

Ideal for searing meat, vegetables and egg dishes (always use sufficient fat or oil!)

UNCOATED IRON



The professional frying pan for hobby chefs – this type of frying pan is extremely robust and offers excellent heat distribution. Frequent use causes a patina to form on the base, which then acts like a non-stick coating.

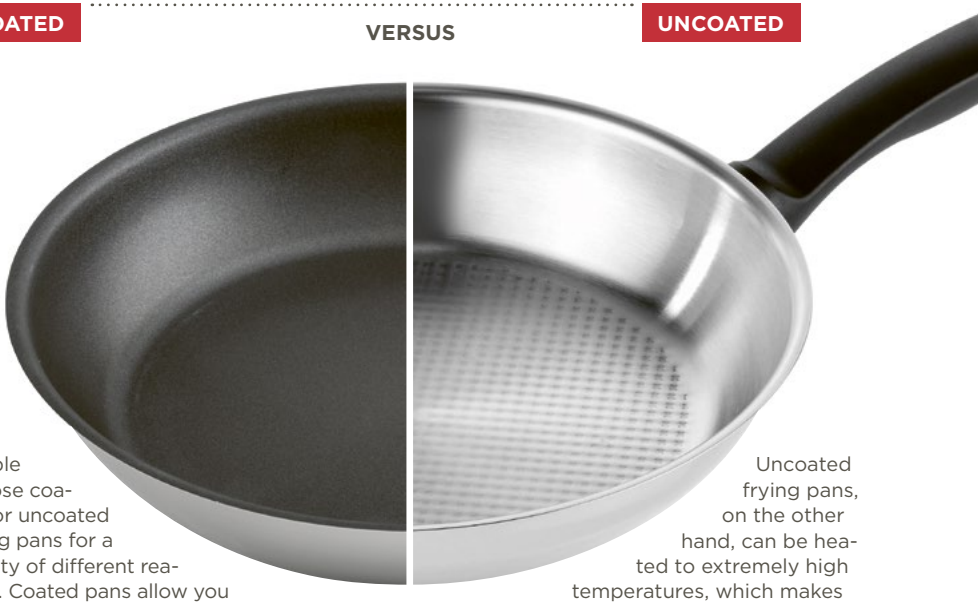
Ideal for searing meat, poultry, potatoes and fish

COATINGS
INSPIRED BY NATURE

COATINGS
PEELING BACK THE LAYERS

Non-stick coatings contain layers of water-repellent polymers (chemical substances) rather like those found on the surfaces of leaves. The most common non-stick coating is PTFE (polytetrafluoroethylene), more familiarly known as “Teflon” (the DuPont brand name). A non-stick coating prevents food from getting stuck and thus makes the frying pan easier to clean afterwards. The substances used for non-stick coatings are not biodegradable.

COATED VERSUS **UNCOATED**



People choose coated or uncoated frying pans for a variety of different reasons. Coated pans allow you to cook healthier meals with less oil or fat. The non-stick coating does part of the same job normally performed by oil – it prevents food from sticking to the pan. Non-stick frying pans are also much easier to clean than uncoated pans. However, non-stick pans should never be subjected to temperatures higher than 240°C. Non-stick pans have to be treated with great care. Metal cooking utensils (particularly knives!) can easily damage the non-stick coating.

Uncoated frying pans, on the other hand, can be heated to extremely high temperatures, which makes them ideal for searing meat and poultry. A waffle pattern on the base of the pan can help to compensate for the absence of a non-stick coating. This patterns ensures oil is distributed evenly over the pan to prevent food from sticking to the base. All the same, cleaning an uncoated pan takes more effort. On the plus side, uncoated pans are extremely robust and generally last much longer than their coated counterparts. In an ideal kitchen, you’ll find both types of frying pan.

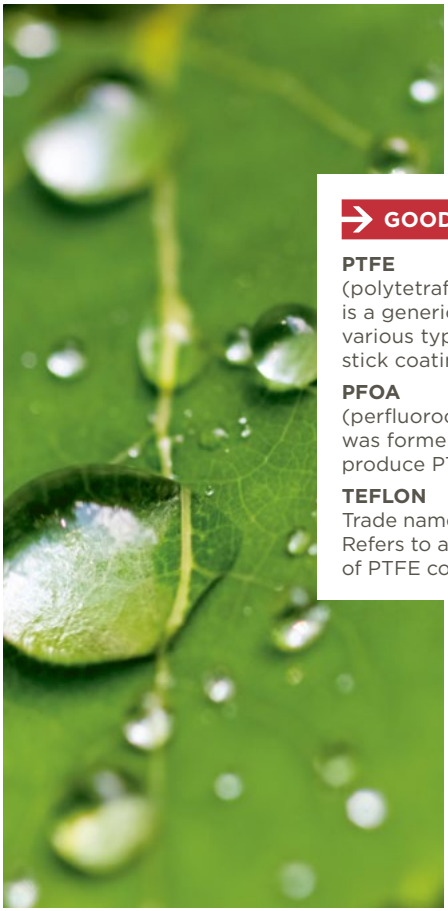
ADVANTAGES OF COATINGS

- Virtually nothing sticks to the pan when you fry food
- You can flip fragile foods over easily
- You can fry with less cooking oil or fat
- You can clean the pan easily and gently, using only a small amount of washing up liquid
- You can clean the pan easily by hand

DISADVANTAGES OF COATINGS

- The coating can get scratched easily
- The non-stick coating can only be heated on the stove or in the oven up to 240°C
- Cleaning in the dishwasher can reduce the longevity of the coating
- Hand-washing is less abrasive than a dishwasher for the non-stick coating

ENVIRONMENTAL FOOTPRINT & HEALTH



The environmental footprint of frying pans is a hot topic of discussion, and non-stick coatings made of PTFE are perhaps the greatest bone of contention. In the past, traces of PFOA (perfluorooctanoic acid, thought to have carcinogenic properties) were released in the manufacture of PTFE. In 2013, a law was introduced banning the use of PFOA in non-stick coatings. This means that modern PTFE coatings can now rightly be declared as PFOA-free. If PTFE-coated frying pans are heated to temperatures exceeding 300°C for an extended period of time, toxic gases may be released and trigger flu-like symptoms. For this reason, coated frying pans should never be heated on high heat when empty. Coated pans are used to sauté foods gently, so they use less energy than uncoated pans, which are used to sear foods at very high temperatures.

The long-chain fluoropolymers in PTFE coatings aren't biodegradable ("forever chemicals") which means they cannot be decomposed by bacteria or living organisms.

GOOD TO KNOW

PTFE
(polytetrafluorethylene) is a generic term for various types of non-stick coatings

PFOA
(perfluorooctanoic acid) was formerly used to produce PTFE

TEFLON
Trade name by DuPont. Refers to a certain type of PTFE coating

THE STRUCTURE OF COATINGS

High-quality coatings consist of multiple layers. Beneath the actual non-stick layer and the base of the pan there are a number of additional layers. These help to make the coating more scratch-proof (anti-scratch layer and titanium hard base) and adhere more strongly (foundation) to the base. These extra layers make the non-stick coating considerably more durable, which is better not only for our environment, but also for our health. For this reason, Kuhn Rikon always uses 3-layer or 4-layer coatings for its products.

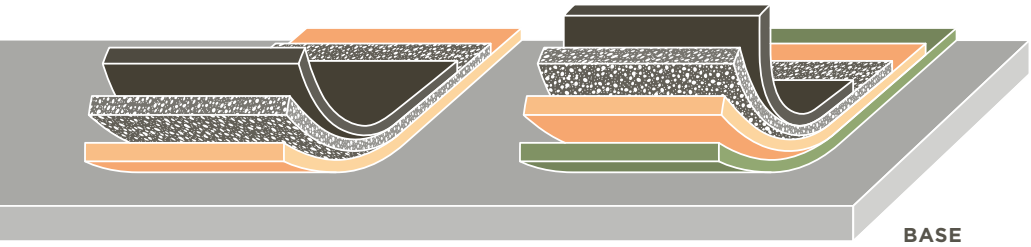
LAYERS

NON-STICK COATING
Heatproof up to 240°C

ANTI-SCRATCH LAYER
Tiny particles ensure high scratch and wear resistance

PRIMING
A strong bond between the body of the pan and the non-stick coating

TITANIUM HARD BASE
Helps the coating to adhere more firmly



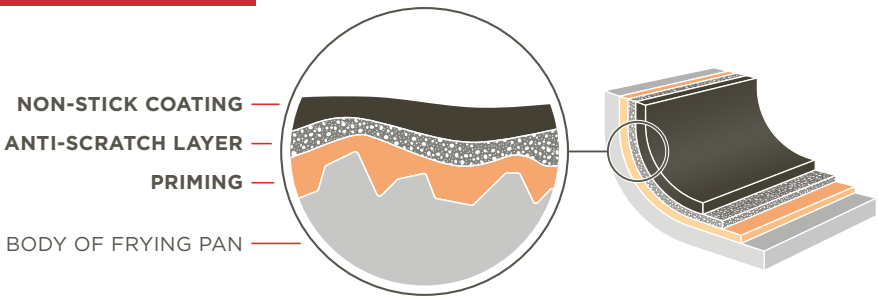
3 LAYERS

3-layer coatings are high quality coatings with a special anti-scratch layer that helps to protect the pan against mechanical damage. The priming layer helps the upper coatings to adhere more strongly to the base of the frying pan.

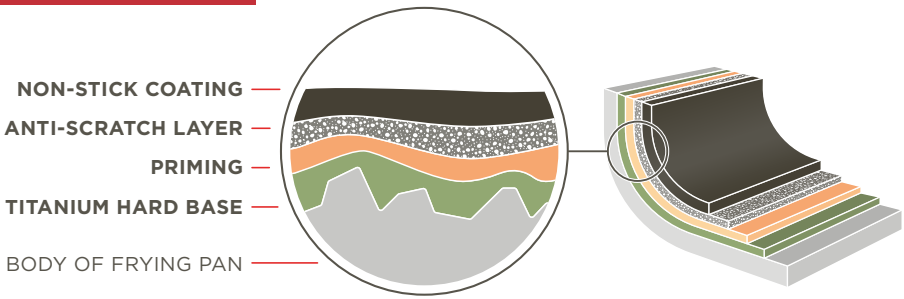
4 LAYERS

4-layer coatings have an extra titanium hard base. For this layer, particles of titanium are injected at high speed onto the base of the pan and protrude from the surface like tiny anchors. This makes the top coating more resilient without losing any of its non-stick effect. It also improves the bond between the coating and the base of the frying pan.

3-LAYER STRUCTURE



4-LAYER STRUCTURE



FACTS ABOUT THE QUALITY OF COATINGS

Good non-stick properties or good scratch resistance? Ideally, we'd all like a strong, scratch-resistant coating with an exceptionally good non-stick effect. But in reality, we need to find a compromise – because these two characteristics are mutually exclusive. The higher the quality of the coating, the closer one gets to a good compromise. The quality of a coated product depends not only on clever layering, but also on the coating techniques used in production. Here at Kuhn Rikon, we always use the "spray coating" technique for our frying pans. It's more expensive than other techniques, but it produces higher quality results.

COATING TECHNIQUES

ROLL COATING

The roll coating method Here the coating is applied to flat circular plates, die-cut from large metal sheets using rollers. The plates are subsequently shaped into frying pans.

Disadvantage: the coating is compressed.

CURTAIN COATING

The curtain coating method This method involves spraying the coating onto metal sheets. Next, this is cut into circular plates which are then shaped, together with the coating, into frying pans.

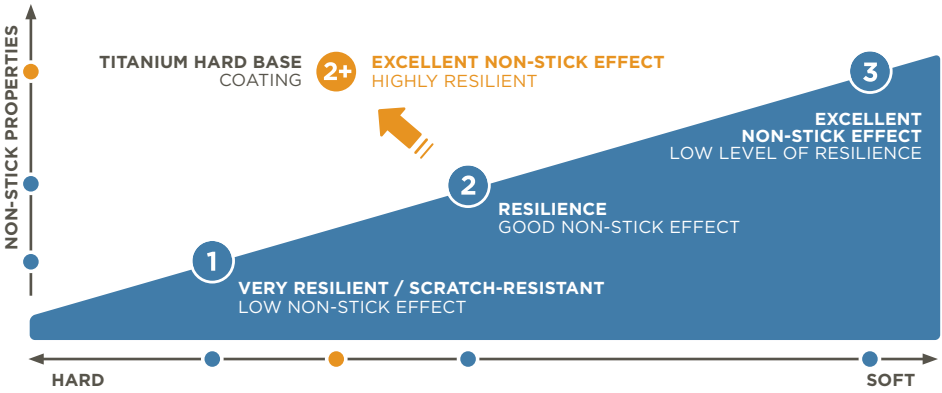
Disadvantage: the coating is compressed.

SPRAY COATING

The spray coating method Like the curtain coating method, this technique also involves spraying the coating. The big difference: here the coating is sprayed after the plate has been shaped into a frying pan, and not before.

Advantage: the coating is homogenous and the edges are closed. The coating is not compressed.

DURABILITY VS. NON-STICK EFFECT



Lower non-stick effect with good resilience

Coatings of this kind can cope with metal utensils such as metal turners or kitchen tongs. However, they'll still be damaged by sharp metal utensils such as knives. The non-stick properties are the least pronounced in comparison

Excellent non-stick properties and improved resilience

Thanks to a high quality titanium hard base, this 4-layer coating has a comparable non-stick effect to number 3, but is considerably more resilient. As such, it's an excellent compromise between two opposing characteristics.

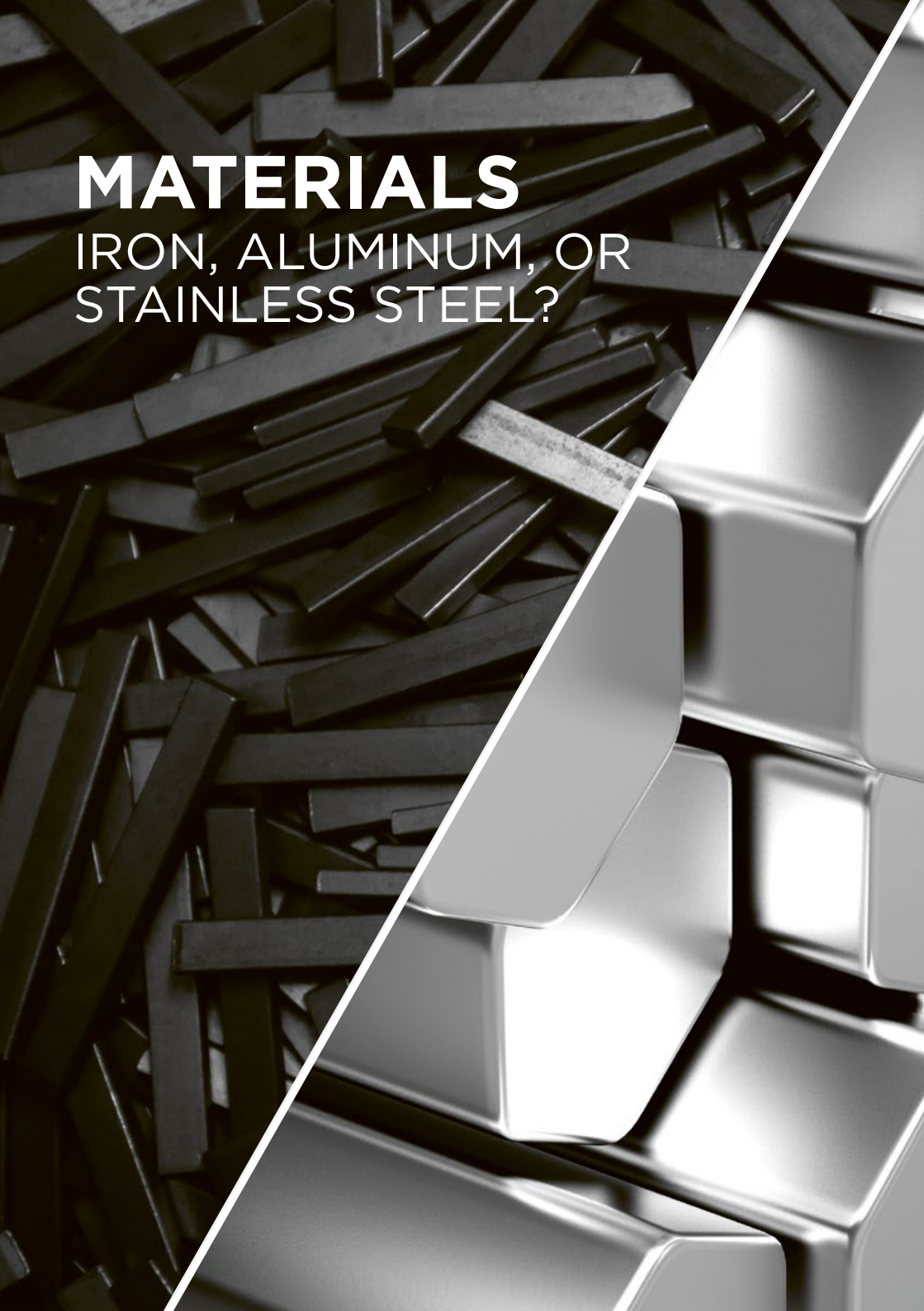
Excellent non-stick properties but poor resilience

Due to its excellent non-stick properties, this coating is softer and thus more susceptible to damage from cooking utensils. If your frying pan has this type of coating, you should only ever use wooden or silicone utensils with it.

Which of our products has which coating?

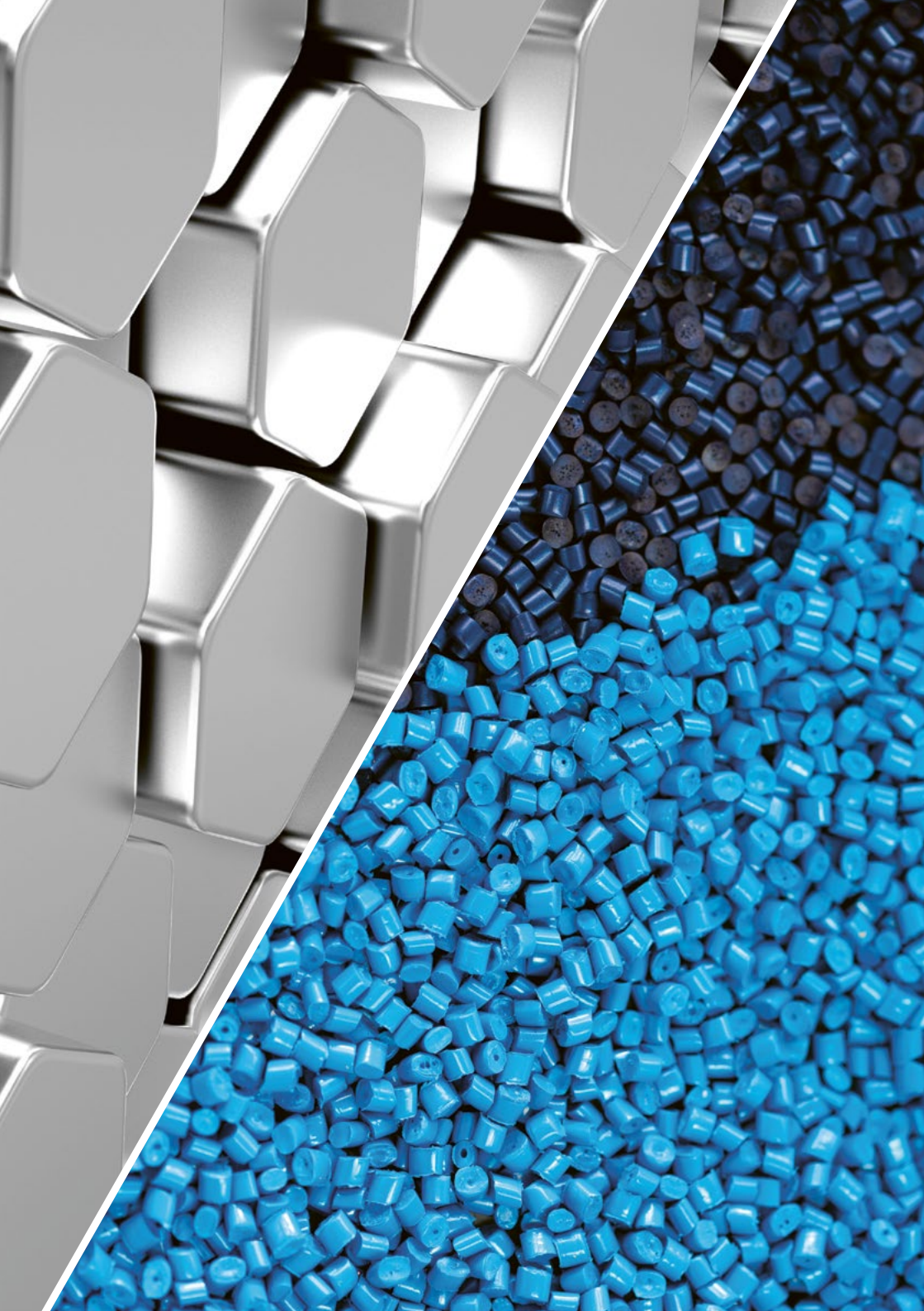
2+ Silver Star, Montreux, Titanio Star | 3 Locarno, New Life, Allround, Easy Pro, Smart & Compact, Classic, Easy Induction

→ **CLEANING** PAGE 32



MATERIALS

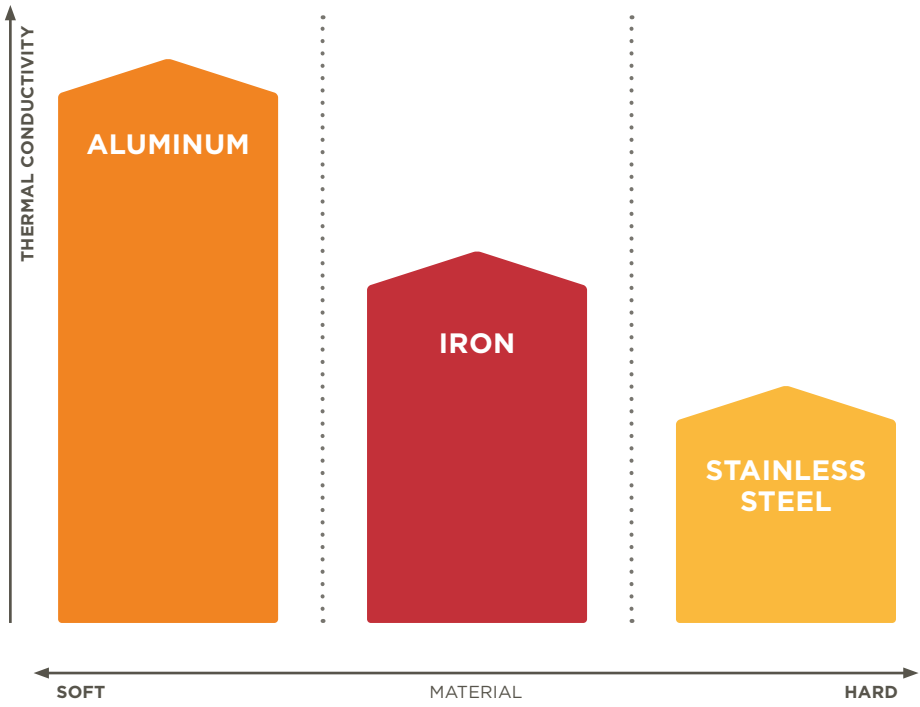
IRON, ALUMINUM, OR STAINLESS STEEL?

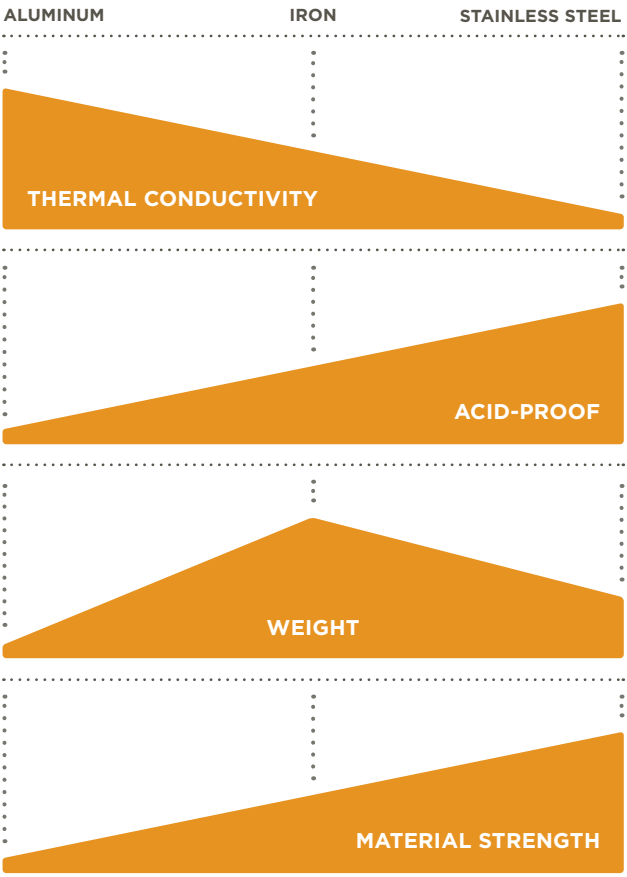


MATERIALS AND THEIR DIFFERENT PROPERTIES
FUNCTIONALITY & QUALITY

Different materials have different characteristics. The first frying pans were made of elemental iron, an extremely heavy metal that conducts heat well and is very durable. Iron frying pans have to be looked after well so that they don't begin to rust. Aluminum frying pans are easier to handle because they're lighter in weight. Aluminum, however, is a very soft metal, so these frying pans can get dented very easily. In addition, aluminum reacts to acids and can oxidise quickly. The resulting oxidation layer is coarse and unsightly. The third option is stainless steel (a chromium-nickel alloy), which is very hard, very resistant to all chemicals, and aesthetically pleasing thanks to its polished look. Unfortunately, it doesn't conduct heat as well as iron or aluminum.

THERMAL CONDUCTIVITY & DURABILITY





The base of the pan is made of a blend of different materials and performs a variety of different functions. It has to be extremely flat in order to maximise the surface area that touches the hob. It also has to conduct heat extremely well. In fact, on an induction hob, the base of the pan itself is the source of heat.

GOOD TO KNOW

Why don't we use copper? Copper is a very expensive metal. It offers excellent thermal conductivity, but it's very prone to oxidise if used for acidic foods.

MATERIALS AND THEIR DIFFERENT PROPERTIES
INDUCTION & HEAT DISTRIBUTION

Only magnetic metals can be used on induction hobs. Induction hobs are growing ever more popular. They use less energy than conventional hobs and can be regulated with greater precision. With an induction hob, the inducted metal heats up instead of the actual hob. In order for this to happen, the metal must be magnetic. This is the case for both iron and chrome steel (without nickel). Modern frying pans are all suitable for induction hobs and have multi-layered bases. Some are made entirely of multi-ply materials.

EFFICIENCY ON INDUCTION HOBS

30 %

50 - 60 %

70 - 80 %

ALL **KUHN RIKON** FRYING PANS
80 - 100 %

Chrome is expensive, but it's worth the extra cost. The more chrome you include in the base of the pan, the more efficiently it will induct heat on an induction hob – and that's good news for the environ-ment, too.

PERCENTAGE OF CHROME IN THE BASE

MAGNETIC METAL = SUITABLE FOR INDUCTION HOBS

ALUMINUM

IRON

STAINLESS STEEL

CHROME

SINGLE LAYER PANS

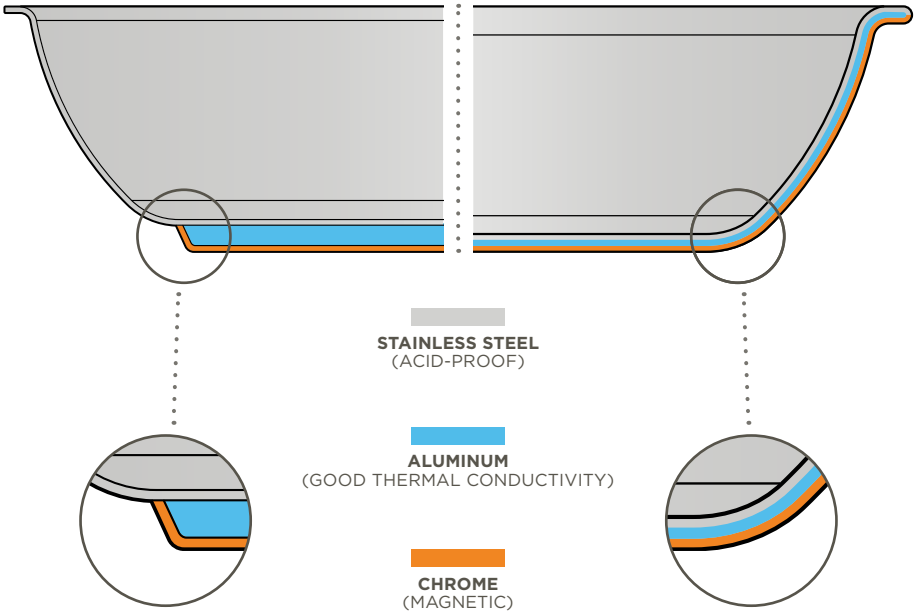
THE BASE HEATS UP

The bases of modern frying pans are made up of three layers. The first is an aluminum layer. This works well on conventional hobs, conducting heat efficiently to the body of the pan. The magnetic chrome layer heats up on an induction hob. But since neither chrome nor aluminum are acid-proof, stainless steel is used for the pan body. This is what we call a **sandwich base.**

MULTI-LAYER PANS

THE ENTIRE PAN HEATS UP

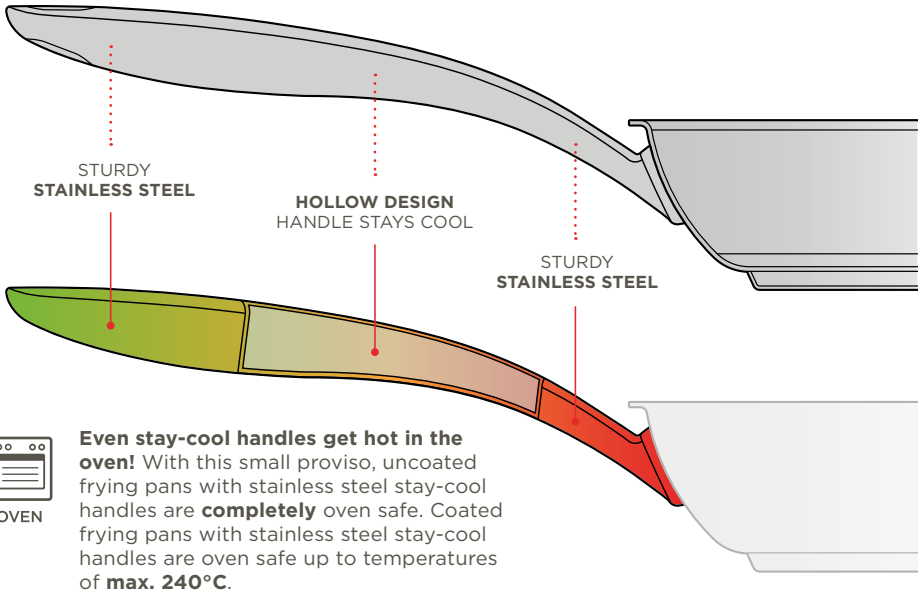
To further enhance the quality of a frying pan, the multi-layer structure described on the left is extended up the sides of the pan. This not only helps to distribute heat better across the entire pan, but also increases the surface area that touches the induction hob. As a result, multi-layer pans heat up faster and you can regulate the heat with greater precision. This is what we call a **multi-ply frying pan.**



Our multi-ply products:

Culinary Fiveply

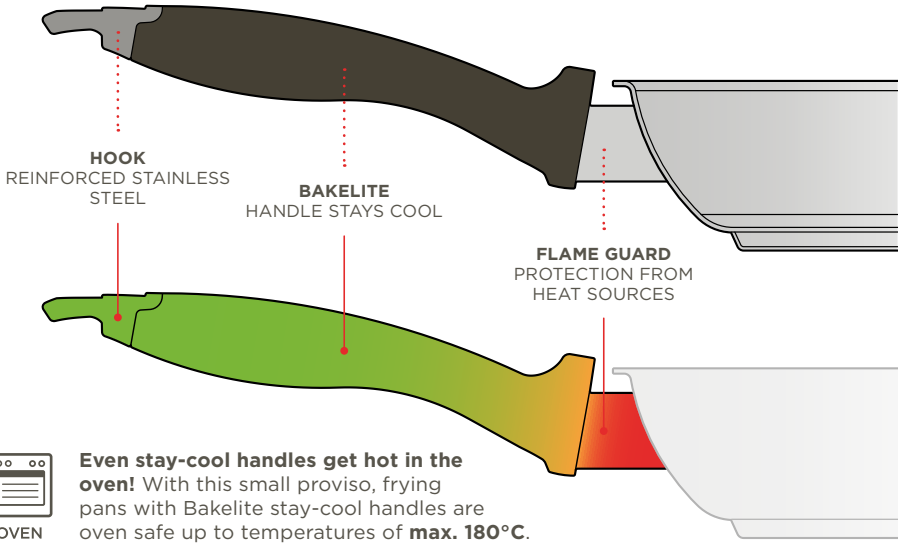
STAINLESS STEEL STAY-COOL HANDLES



OVEN

Even stay-cool handles get hot in the oven! With this small proviso, uncoated frying pans with stainless steel stay-cool handles are **completely** oven safe. Coated frying pans with stainless steel stay-cool handles are oven safe up to temperatures of **max. 240°C**.

PLASTIC STAY-COOL HANDLES



OVEN

Even stay-cool handles get hot in the oven! With this small proviso, frying pans with Bakelite stay-cool handles are oven safe up to temperatures of **max. 180°C**.

STAY-COOL HANDLES MADE OF METAL CONSIST OF 3 PARTS

You can't tell just by looking, but metal stay-cool handles actually consist of three different segments. The two outer segments consist of sturdy stainless steel. The central part is hollow, so it doesn't conduct heat nearly as much as the two outer segments. This hollow segment acts as a thermal insulator and, in combination with the other parts, ensures the handle stays pleasantly cool.

PLASTIC HANDLES ON FRYING PANS ARE MADE OF BAKELITE

Bakelite is an extremely poor conductor of heat, which prevents the heat from the pan from spreading to the handle. The disadvantage of Bakelite is that it's only heat proof up to 180°C, and is only oven safe up to this temperature.

GOOD TO KNOW

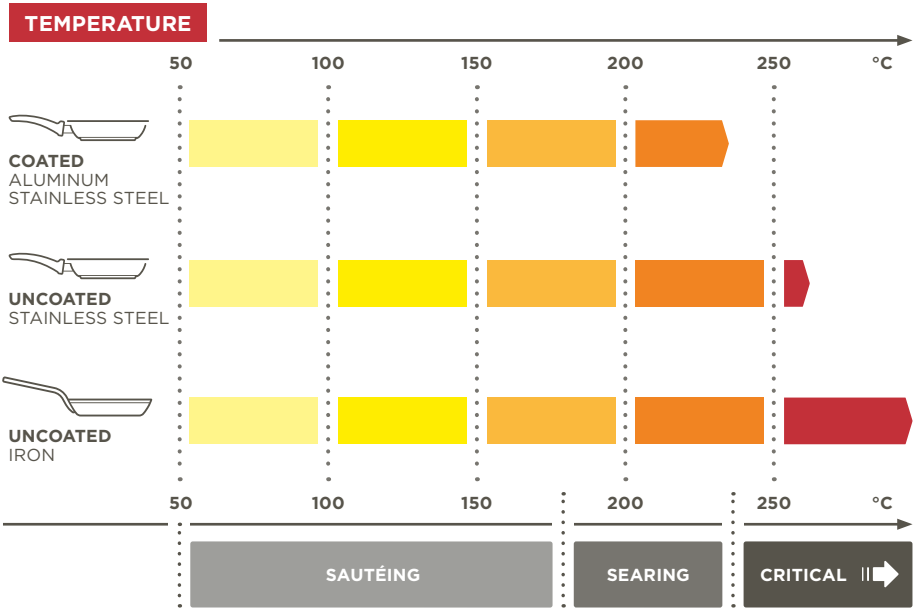
How to stay safe when you use a coated frying pan

If you're using a coated frying pan, never heat cooking fats or oils to a high heat! If you want to sear meats or other foods, make sure you use suitable cooking oil (otherwise risk of fire)

Uncoated stainless steel frying pans are ideal for searing meat. If you want to dry-fry your food, make sure the meat is not seasoned. If it is, spread a little cooking oil or fat over the base of the pan.

WHAT TEMPERATURE FOR WHICH FRYING PAN?

Coated and uncoated frying pans are used for different frying methods. A high quality coated frying pan should never be heated above 240°C. Uncoated frying pans can withstand higher temperatures. Frying food at a temperature of 180°C or more is known as “searing”. Frying at lower temperatures is known as “sautéing”. Uncoated frying pans are ideal for searing foods.



SAUTÉING

When you fry food at a low temperature, you give it time to absorb the heat from the pan and transport it the centre of the food. The temperature of the pan has to remain low for this method otherwise you’ll burn the crust of the food. You can sauté food in any type of frying pan.

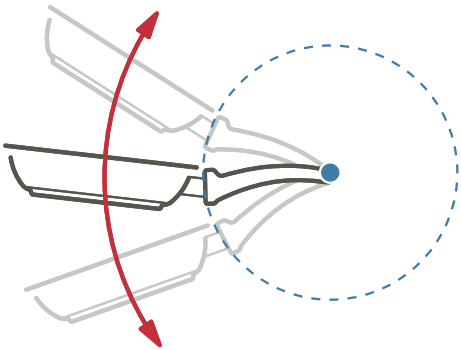
SEARING

If you want to sear food, you should use an uncoated frying pan and heat it up (empty!) on no more than ¾ of the maximum heat setting. Perform the “heat test” by sprinkling a few drops of water into the pan to check it’s reached the desired temperature. Now add a little cooking oil or fat and reduce the heat to no more than half the maximum heat setting. Sear the food briefly on all sides. The high temperature will form a crust on the meat. You’ll also get the familiar, delicious smell of frying.

PAN SIZES FOR DAILY USE

Why do I need different frying pans in different sizes? First and foremost, the size of your frying pan will depend on how many people live in your household. A large frying pan offers plenty of room for stirring food around or flipping it over. However, large frying pans require more energy and take longer to heat up. They're heavier (an important factor with iron pans!) and they take up more space in your kitchen cupboards. So like with your other pots and pans, it's good to have at least two different sizes to choose from.

LENGTH OF HANDLE & LEVERAGE



You should be able to hold your frying pan comfortably because it won't spend all its time on the hob – sometimes you need to lift it to toss your pancake or omelette. Long handles provide better leverage if you're tossing or flipping food.

The longer the handle, the easier it is to give the pan a quick, sharp jerk. But they take up considerably more storage space.

Long handles are helpful on heavy, iron frying pans because they allow you to use both hands. Also, the handle will be cooler the farther way from the pan it extends.

When it comes to lifting or carrying a full frying pan, you'll find it easier if you hold the part of the handle that's closest to the pan. This is why most stainless steel pans have heatproof plastic handles (Bakelite) or specially designed, stainless steel stay-cool handles.

CLEANING YOUR FRYING PAN
A DIRECT COMPARISON

Cleaning a frying pan might seem very straightforward. The internet is full of tricks and tips – some better than others. However, cleaning a frying pan is more complex than it appears at first glance. It's also more important than you might think, because it has a direct impact on the lifespan of the frying pan. The illustration here provides an overview of which cleaning implements are ideal for your frying pan (green), which are less ideal but still acceptable (grey), and which implements you should avoid at all costs (red).

A COMPARISON


SCRAPER

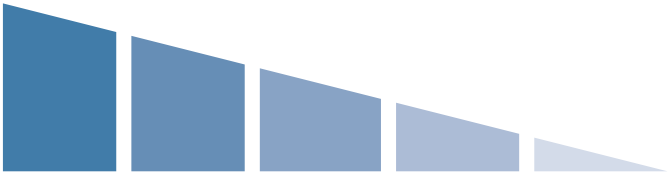

STEEL WOOL


SPONGE CLOTH


WASHING UP LIQUID


DISHWASHER

	SCRAPER	STEEL WOOL	SPONGE CLOTH	WASHING UP LIQUID	DISHWASHER
COATED	✗	✗	✓	✓	✓
UNCOATED	✓	✓	✓	✓	✓
IRON	✓	✓	✓	✗	✗



COATED FRYING PANS

Thanks to their non-stick properties, these frying pans are very easy to clean. You need very little washing up liquid, because very little residue sticks to the base of the pan. You won't need to use abrasive cloths or scrub hard – in fact, you should avoid doing so at all costs. If you scrub too hard, you could scrape away or damage the coating, and then it would lose its non-stick effect.

UNCOATED STAINLESS STEEL FRYING PANS

These frying pans are the most difficult to clean. They don't have a non-stick coating, so burnt remnants of food can easily stick to the base of the pan. Here you'll need cleaning agents and good old "elbow grease". If food is badly encrusted, try sprinkling baking powder onto the base of the pan, pour a little water over it and heat briefly. After an hour or so, you should be able to scrape the crust away easily. The cleaner and more intact (no deep scratches!) the stainless steel, the less food will stick to the pan the next time you use it. This type of frying pan is dishwasher safe.

IRON FRYING PANS

In contrast to uncoated stainless steel frying pans, iron frying pans are liable to rust. To prevent damp areas from rusting after cleaning, this type of frying pan is seasoned to create a dark, protective patina. Take care not to damage this oily, water-repellent surface when you clean the pan, and don't use washing up liquid for this reason!

SPECIAL FRYING PANS

FOR SPECIAL USES

IRON FRYING PANS
A FRYING PAN FOR LIFE

If you want crispy sautéed potatoes, or you want to sear meat at a very high temperature, you'll need a iron frying pan. These have excellent thermal conduction properties and distribute heat evenly.

Iron frying pans can be used on all types of hob, and even on a grill. This type of frying pan will last you for life because it's virtually indestructible.

DETAILS

+ Suitable for all hobs
+ Oven safe, suitable for the grill
+ Quality iron, uncoated
+ Extremely durable

IRON FRYING PANS
BY KUHN RIKON
Or copy this shortcut link into your browser: **k-r.live/en-3231**

HOW TO SEASON YOUR **IRON FRYING PAN**

Before you use your iron frying pan for the first time, it needs to be seasoned. This creates a film of grease with a natural, lasting non-stick effect that prevents food from sticking to the pan so easily.

1. Clean the frying pan thoroughly with water | **2.** Cover the base of the pan with sunflower oil or peanut oil | **3.** Layer the base of the pan with potato skins | **4.** Add plenty of salt | **5.** Fry until brown (approx. 30 minutes at no more than ¾ of the maximum heat setting) » This removes the anti-rust layer » This creates an oily film (for a natural non-stick effect). Foods that contain a high proportion of starch or protein will be less prone to stick | **6. + 7.** Discard the potatoes, salt and oil | **8. + 9.** Once the iron frying pan is dry, rub the base with a piece of kitchen towel dipped in cooking oil (preferably sunflower oil). » Don't wash the frying pan with water again, because otherwise you'll lose the non-stick benefits of the patina. » In general, you only need to season a iron frying pan once to create a permanent non-stick effect. » However, you can repeat the process at any time if you need to.

ATTENTION: before you re-season your frying pan, you'll need to clean it first.

CLEANING A USED IRON FRYING PAN

Get rid of stuck-on food using table salt | **I** Sprinkle a layer of salt around ½ cm thick over the base of the frying pan | **II** Heat the frying pan on ¾ of the maximum heat setting | **III** Gently shake the salt around in the pan. It will stick to any burnt bits of food in the pan | **IV** Turn off the heat as soon as the salt turns brown | **V** Use an old cloth or a piece of kitchen paper to rub the salt into the base and sides of the pan and get rid of burnt bits of food » Caution: the salt is very hot! | **VI** As soon as no more salt sticks to the frying pan and there are no burnt bits of food left stuck to the base, allow the salt to cool. You can re-use this salt for the same purpose at a later date. » You can now re-season your iron frying pan.

FRYING PANS FOR CRÊPES
IDEAL, LOW-RIMMED DESIGN

This type of frying pan is ideal for making pancakes and crêpes. Thanks to the flat design, you can flip thin crêpes or omelettes much more easily in a crêpe pan than in a conventional frying pan. These sweet French specialities have never been so easy to prepare!

Thanks to the forged aluminum, this frying pan is very easy to handle and is perfect for everyday use. The 3-layer non-stick coating is reinforced with titanium particles for extra durability and strength.

DETAILS

+ Ideal for crêpes, egg dishes and potato pancakes
+ Very low rim
+ Lightweight and easy to handle
+ Food can be tossed, served and portioned easily

CRÊPE FRYING PANS
BY KUHN RIKON
Or copy this shortcut link into your browser: **k-r.live/en-3120**

WOKS FOR FRESH ASIAN CUISINE

In recent years, Asian cuisine has become extremely popular in Europe. The stir-fry method of cooking locks virtually all the vitamins and nutrients into the food and preserves the authentic taste. Vegetables retain their bite, pasta its aroma and seafoods their exquisite flavour. In short, stir-fried food is as tasty as it is healthy. Asian food is best prepared in a wok.

COMPARISON

ALUMINUM WOKS	STEEL WOKS	STAINLESS STEEL WOKS	IRON WOKS
+ Good heat conduction	+ Even heat distribution	+ Robust and durable	+ Even heat distribution
+ Coating offers good non-stick properties	– Food may stick to the pan more easily	– Food may stick to the pan more easily	+ Excellent heat retention
– Coating cannot withstand high temperatures	+ Can be heated to a high temperature	+ Can be heated to a high temperature	– heavy
	– Always requires cooking oil (rust protection)	– Larger diameter makes it difficult to shake food in the pan	– Very prone to rust

Woks come in different materials and sizes, from classic iron models to steel or stainless steel designs through to aluminum woks with a convenient non-stick coating. The weight of the wok is particularly relevant if you want to “shake” food around in the pan.

Traditional steel woks are generally very light in weight. Aluminum woks and some stainless steel woks can also be used for stir-frying and conventional frying. Larger woks made of stainless steel or iron are too heavy if you want to shake food around in the pan.

WOKS
BY KUHN RIKON
Or copy this shortcut link into your browser: **k-r.live/en-370**

FRYING PAN OVERVIEW

Every frying pan has its price.
The price will depend on factors such as material, coating and handle.

Below, we've listed the frying pans in order of price to give you a clearer overview.

1	2	3	4	5	6
EASY INDUCTION	EASY CERAMIC	EASY PRO	ALLROUND	TITANIO STAR	NEW LIFE

7 — 8 — 9 — 10 — 11

NEW LIFE PRO	CULINARY FIVEPLY	LOCARNO	SILVER STAR	BLACK STAR


GENERELL
50
Rikon
(Zell)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SWITZERLAND


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KUKA


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