

Kokoro Technical Information Sheet



Every curve and contour of the Kokoro is engineered for effortless mastery. Our custom grate design optimizes airflow while ensuring even the most delicate of ingredients rest securely over the flame. Maintenance is just as seamless; the fuel basket and cooking grates lift

Product Name: Kokoro

Product Model Number: K-V1

Product Description: With Kokoro, cooking becomes your personalized ritual. Build and nurture a clean, steady flame, with the fuel of your choice. Smooth flowing, infinite stopping points allow the grill's grate and frame to be adjusted for any combination or preference of height and function.

Your personal touches of flame, heat, smoke, and char make the process itself an attribute of the flavor and dining experience.

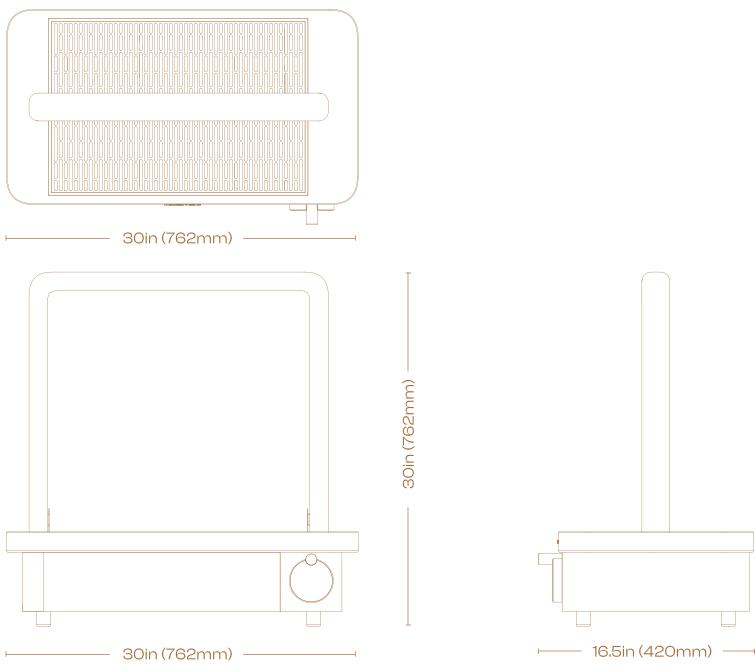


out for deep cleaning, while a discreet, removable ash tray allows for quick disposal without interrupting service. Adjustable feet and advanced dual-chamber insulation keep the unit level and the exterior cool to the touch, proof that true precision lies in the details.

Crafted With Premium Quality Materials

With NSF/ANSI certification underway, Kokoro's engineering requirements will surely meet or exceed expectations of reliability, cleanability, and use. Non-toxic, recyclable materials, produced responsibly is the only way.

Certifications	NSF/ANSI pending
Dimensions Width x Depth x Height	30in [W] x 16.5in [D] x 30in [H] 762mm x 420mm x 762mm
Weight	88lbs (40kg)
Fuel housing maximum capacity	4.4lbs (2kg)
Cooking area	22in x 15in (557mm x 381mm)
Simultaneous Capacity Profile:	+/- 40lbs (18kg) per hour
5-10 Minute Cooking Cycles:	~20 Standard Yakitori Skewers ~8-10 Standard Size Steaks ~10-12 Average Size Hamburgers
Materials	Stainless Steel, 316L
Packaging	Collapsible crate for seamless, sustainable transport, storage, and event logistics



Performance By Fuel Type

DS Kokoro Proprietary Solid Biofuel (launching year 3)

Technical profile to meet or exceed those of White Charcoal.

Binchotan/White Charcoal: Technical Profile

Average Fire Up Time | 25-40 minutes

Binchotan is notoriously difficult to light due to its extreme density and purity (it has very few volatile compounds that ignite easily). It cannot be lit with a match; it requires a dedicated charcoal chimney, a gas burner, or a direct-torch starter to light properly.

Average Burn Time | 3-5 hours

This is one of its primary benefits. Once lit, its dense structure allows it to burn at a consistent, high temperature for a very long time.

Peak Temperature | 1000°F - 1200°F (540°C - 650°C)

Some specialized Binchotan can reach even higher. It is prized for its ability to generate intense and consistent far-infrared (FIR) heat, which quickly penetrates the food surface, heating the product internally in addition to providing a superior sear.

General Flavor/Imparting Profile | Neutral / Clean

This is its most famous characteristic. Because it is nearly 98% pure carbon and has no binders, chemicals, or moisture, it burns without any smoke, odor, or flare-ups. It does not impart a "smoky" flavor; instead, it provides an intense, clean sear that instantly locks in the natural juices and umami of the food.

Consumption Rate | Extremely low

Due to its density and slow-burning properties, a small amount of Binchotan lasts a very long time. This is why it's a staple in professional kitchens. It is also reusable; you can extinguish it (by cutting off oxygen in a snuffing pot) and re-light it for your next service.

Ash Waste Percentage Ratio | Very low (approx. 3-5%)

It burns down to a very small amount of fine, white ash, making cleanup minimal. Standard briquettes, by contrast, can be 20-30% ash and fillers.

Takesumi/Bamboo Charcoal: Technical Profile

Average Fire Up Time | 15-25 minutes

It is significantly easier and faster to light than traditional oak Binchotan. While still very dense, its cellular structure (a defining feature of bamboo) ignites more readily with a chimney or torch.

Average Burn Time | 2-3 hours

It offers a very long and consistent burn time, far exceeding standard lump charcoal. However, it is not as dense as traditional oak Binchotan, so it will not last as long as the 3-5 hour burn time of its oak-based counterpart.

Peak Temperature | 800°F - 1000°F (430°C - 540°C)

It burns extremely hot and provides the same high-quality, far-infrared (FIR) heat as Binchotan, which is excellent for searing.

General Flavor/Imparting Profile | Neutral / Clean

Just like Binchotan, high-grade bamboo charcoal is prized for its purity (often 90-95% carbon). It is smokeless, odorless, and does not have binders or chemicals. It provides a clean, intense sear that locks in the food's natural flavors without imparting any "smoky" taste.

Consumption Rate | Low to Moderate

It is a very efficient fuel that burns slowly and evenly. Because its burn time is shorter than oak Binchotan, its consumption rate is comparatively higher over a long (4-5 hour) cooking session, but it is still vastly more efficient than standard lump or briquettes.

BTU Output (per pound) | Approximately 12,000 - 14,000 BTU/lb

Binchotan is prized for its high density and purity (often 98% carbon). This means it releases an immense amount of energy for its weight, and it does so consistently over a very long period, primarily as far-infrared (FIR) heat.

Emission Content:

CO (Carbon Monoxide)

Binchotan produces CO, as does any charcoal combustion. However, its emissions are significantly lower than standard lump charcoal or briquettes. Because it is nearly pure carbon and lacks the volatile organic compounds (VOCs) and binders found in other fuels, the combustion is much more complete. This results in a "cleaner" burn, but it still requires ventilation, as the CO produced can be dangerous in an enclosed, unventilated space.

CO₂ (Carbon Dioxide)

It is considered "carbon neutral." The CO₂ released during combustion is theoretically offset by the CO₂ the original oak tree absorbed during its lifetime.

Other

It is virtually free of sulfur, nitrogen oxides (NO_x), and particulate matter (smoke/soot), which are the primary culprits in "dirty" fires.

Ash Waste Percentage Ratio | Very low (approx. 3-6%)

It burns down to a minimal amount of fine, white ash, making for an extremely clean burn and easy cleanup/prits in "dirty" fires.

BTU Output (per pound) | Approximately 11,000 - 13,000 BTU/lb

While slightly less dense than its traditional oak counterpart, high-grade bamboo charcoal still packs an incredible energy punch and provides the same high-quality far-infrared (FIR) heat.

Emission Content:

CO (Carbon Monoxide)

Similar to Binchotan, it produces CO but at very low levels compared to traditional fuels. Its purity (often 90-95% carbon) leads to a very complete, clean combustion. It must still be used with proper ventilation.

CO₂ (Carbon Dioxide)

Like Binchotan, it is considered carbon neutral. In fact, its sustainability case is often considered stronger, as bamboo is a fast-growing, renewable grass, not a slow-growing hardwood tree.

Other

It is smokeless, odorless, and free of the chemical binders and impurities that cause smoke and soot.

Performance By Fuel Type

Continued

Coconut Charcoal (Briquettes): Technical Profile

Average Fire Up Time | 15-20 minutes

As a dense, compressed briquette, it takes a bit longer to light than standard lump charcoal but is often faster than Binchotan. A chimney starter is highly recommended.

Average Burn Time | 2.5 - 4 hours

This is one of its primary advantages. Coconut shell charcoal is extremely dense and burns very slowly and consistently, making it ideal for long cooking sessions.

Peak Temperature | 700°F - 800°F (370°C - 425°C)

It provides a very hot, stable, and even heat, which is excellent for grilling and searing. It doesn't typically reach the extreme peaks of Binchotan but offers more than enough heat for most applications.

General Flavor/Imparting Profile | Neutral / Clean

This is a key selling point. It is made from carbonized coconut shells, not wood, so it imparts no "smoky" flavor. It's a pure heat source that allows the natural flavor of the food to stand out.

Consumption Rate | Very low

Due to its high density and incredibly long, slow burn time, it is one of the most efficient charcoal fuels on the market.

Ash Waste Percentage Ratio | Extremely low (approx. 2-5%)

This is a significant advantage. It produces a fraction of the ash of traditional briquettes (which can be 20-30% fillers), making for a much cleaner burn and minimal cleanup.

Emissions Profile | Virtually smokeless and odorless

Because it's made from pure carbonized shells and typically uses a natural binder (like tapioca starch) or no binder at all, it produces no smoke, sparks, or flare-ups. This makes it an excellent choice for countertop grilling, balconies, or any environment where smoke is a concern.

BTU Output (per pound) | Approximately 9,000 - 11,000 BTU/lb

As a compressed briquette, its energy output is very high and, most importantly, extremely consistent. It's engineered to provide a stable, even heat for a long duration, making it a reliable workhorse.

Emission Content:

CO (Carbon Monoxide)

All coconut briquettes produce CO. However, high-quality brands that use only 100% carbonized shells and a natural binder (like tapioca starch) produce significantly less CO and smoke than traditional wood briquettes (which are often full of fillers like sawdust, coal dust, and chemical binders). Ventilation is absolutely required.

CO2 (Carbon Dioxide)

It is considered carbon neutral, as it is made from a "waste" byproduct (coconut shells) of the coconut industry.

Other

When made correctly, it is smokeless, odorless, and does not spark or flare up, as it contains no volatile wood compounds or chemical additives.

Indoor Commercial & Outdoor Household Use Guidelines

For commercial use, the Kokoro is classified as an "extra-heavy-duty" cooking appliance when burning any solid fuel.

The International Fire Code (IFC) and the frequently cited NFPA 96 standard state that to be compliant, you must use a system that includes:

- 1. A Type I Hood:** Necessary for appliances that produce smoke or grease-laden fumes, which includes solid fuel cooking.
- 2. Separate Exhaust:** The ventilation system for a solid-fuel appliance must be separate from all other exhaust systems in the kitchen.
- 3. A Spark Arrestor:** You must install a spark arrestor device to prevent embers from being pulled into the ductwork.
- 4. Fire Suppression System:** The hood and duct system must be protected by an approved automatic fire-extinguishing system (e.g., a UL 300-compliant wet chemical system).

5. Strict Maintenance: Commercial kitchens using solid fuel are required to have their full exhaust system inspected and cleaned monthly.

6. Surface Compatibility: Suitable for non-combustible, level surfaces (Stainless Steel, Stone, etc.) with weight capacities exceeding 150lbs (68kg). Note: For residential or other surface types, a heat-resistant mat or base is recommended. Adjustable feet, integrated heat-shielding, and air-gap technology minimizes heat transfer to the grill's exterior and surface below.

7. Residential Use: For outdoor use only. Any application in a residential environment other than standardized outdoor cooking scenarios must be IFC/Local jurisdiction compliant.

WARNING: Burning wood, charcoal, or any solid fuel produces Carbon Monoxide (CO), a lethal, odorless, and invisible gas. Most residential range hoods are NOT currently designed to safely manage these potential risks. The Kokoro must only be used in accordance with local ordinances and fire codes, and away from combustible materials. Always extinguish fuel before disposal. Never leave the grill unattended. Keep children and pets away from the grill while in use.