

THE FUTURE OF CARBON BLACK.

menolith[™]
Carbon Black



PLASMA BLACK.

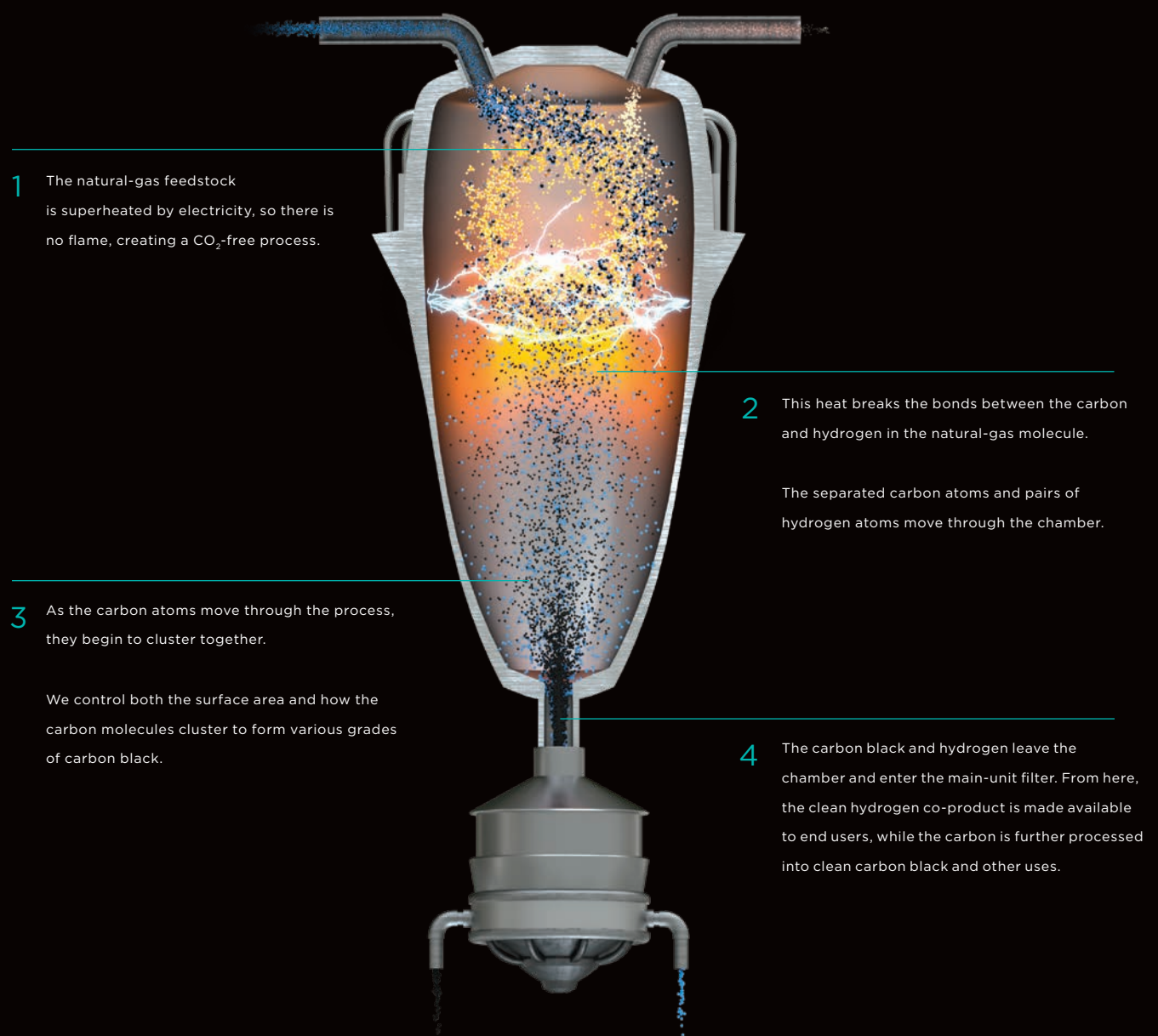
The carbon black for a low-emission future.

[Plasma black](#) evolves carbon black into the inherently low-emission material your customers are demanding. The only sustainably produced carbon black, made without combustion, plasma black significantly reduces CO₂ emissions compared to conventional manufacturing, at a much greater yield, and virtually eliminates NO_x and SO_x.

Monolith Plasma Black sets the standard for true sustainability in the carbon-black industry — and is the only real way forward to a low-emission future.

The Monolith process

Conventional carbon black is produced by burning decant oil or coal tar, releasing large amounts of greenhouse gases into the atmosphere. Through its proprietary technology, Monolith has innovated the [thermal-plasma process](#), a form of methane pyrolysis that harnesses 100% clean electricity to create a superheated plasma that cracks the natural-gas molecule into high-purity carbon black and hydrogen. This clean, sustainable process is virtually emission-free, significantly reducing life-cycle carbon emissions, with a path toward a zero-emission or even carbon-negative future.





The plasma advantage



COMBUSTION-FREE

No oxygen is present inside the plasma reactor. Instead, clean electricity essentially creates a constant stream of lightning that superheats the natural-gas molecule and breaks it apart. There is no flame and no combustion, unlike when oil is burned in the conventional furnace process to make carbon black.



EMISSION-FREE

Due to the absence of oxygen, combustion does not occur, resulting in minimal greenhouse-gas emissions during the production of carbon black and hydrogen.



GREATER YIELD

The plasma process is even more efficient — delivering a minimum yield of 95%, compared to conventional manufacturing's 55% to 60%.

The only truly sustainable carbon black

Monolith Plasma Black delivers the only complete sustainability story in the carbon-black industry — a story as broad as it is deep.

True, proven sustainability gives your products a definitive advantage in the marketplace.





SIGNIFICANTLY REDUCES CO₂ EMISSIONS

When using renewable or bio-derived natural gas as the feedstock, Monolith's plasma process reduces overall CO₂ emissions by nearly 90%, due to the anaerobic (oxygen-free) environment. Even without using renewable natural gas, we generate a 72% reduction compared to the conventional process.



AT MUCH GREATER EFFICIENCY

While using 40% less feedstock compared to the conventional furnace black process, Monolith's process delivers a yield of 95%, compared to conventional manufacturing's 55% to 60%. We use less and make more.



ON A PATH TO CARBON-NEUTRAL OR CARBON-NEGATIVE

When we use natural or bio-derived feedstocks, we can draw down carbon intensity even further, allowing for the potential of a carbon-neutral or carbon-negative carbon black.



VIRTUALLY ELIMINATES NO_x AND SO_x

Beyond CO₂, Monolith's plasma process eliminates the release of other greenhouse gases such as sulfur oxide and nitrogen oxide, and other environmentally harmful gases created by conventional carbon-black production.



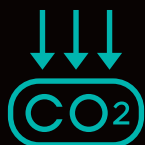
USES MUCH LESS WATER

Not only does Monolith's process require 40% less water than conventional carbon-black production, mainly for cooling, Monolith is able to return up to 5% of the water to the aquifer, with 65% evaporating into the natural water cycle.



UTILIZES CLEAN ELECTRICITY

Monolith's plasma process always utilizes clean, renewable electricity, virtually eliminating emissions from our power source.




SEQUESTERS CARBON SAFELY

Monolith's groundbreaking technology inherently captures and utilizes carbon from natural gas and sequesters it into valuable products.



Monolith's sustainability platform corresponds to nine of the 17 Sustainable Development Goals established by the United Nations. For more details, visit carbonblack.monolith-corp.com.



**LOW-EMISSION.
ACROSS INDUSTRIES.**

**Monolith delivers effective,
low-emission carbon-black solutions
that range across industries
and categories.**



Monolith product lines

GreenBlack™ Designed for reinforcing applications

Core™ General-purpose applications

Bolt™ Ideal for applications with low-sulfur requirements

True™ Highest-purity grades for the most stringent applications



Monolith, the global leader in clean hydrogen and clean materials

Monolith is the world's leading clean-materials and low-emission-hydrogen company. We are the first company to make methane pyrolysis work on a commercial and global scale, using 100% clean electricity to break down natural gas into hydrogen and carbon — with virtually no release of CO₂. From this innovative process, Monolith creates a wide range of economically sustainable clean materials, including carbon black and clean ammonia.



Changing our planet's story

Monolith carbon black plays an integral role in Monolith's mission to lead the way to a decarbonized, greener world. Our clean materials are bringing high-performance, affordable and environmentally responsible solutions to industries that historically have been the largest contributors of greenhouse-gas emissions. Monolith is driven to make lasting change in the world, while providing real value to the customers and [industries](#) we serve. And we're already making it happen today.



carbonblack.monolith-corp.com

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