

SOG

STUDIES AND
OBSERVATIONS
GROUP



RELENTLESS BY DESIGN
FALL 2020



WELCOME MESSAGE

As we enter the third decade of the 21st century, the world is changing at an increasingly rapid pace. New challenges, opportunities and shifts seem to arise almost hourly in politics, technology, culture and science. Each day, it seems, we're forced to re-evaluate how best to address the weighty issues affecting humankind.

For the past two years, SOG has been positioning itself to be at the leading edge on this surge of change. We've evolved with an eye on the future. We've been honing our mission of enhancing human potential and are determined to be an enabler of individual achievement in this challenging, changing, environment.

The manifestation of our efforts are found in our range of 2020 knives and multi-tools. Each of our new offerings are founded on the principle of study, observe, understand, apply and repeat. This will establish a new standard for SOG in the synthesis of form and function.

As SOG adapts to the realities of the changing world, we are driven to create personal gear solutions that interface seamlessly with the operator. We want to enable your achievement of maximum potential by providing products that will deliver boldly and confidently through flawless function.

As the tempo of human achievement gets faster and faster, SOG deepens our commitment to keep up. That's evident in our new products for 2020, and forms the backbone of where we'll continue to go.

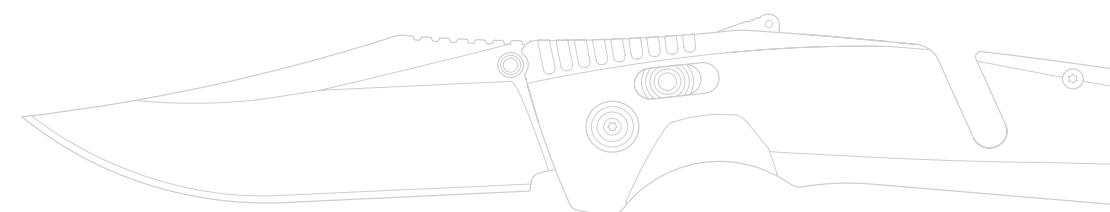
Joe Mc Swiney
CEO

FROM THE FOUNDER

In 1986 we started SOG Specialty Knives with very modest goals. We wanted to reproduce the original MACV-SOG Bowie knife out of respect for the men who carried it, create the highest quality products, and be a positive force in the world. We did that and much more – establishing one of the most innovative and respected brands in the industry for knives and tools at the time. We achieved this mostly because we listened to our users and aimed to exceed their expectations.

I am sometimes asked to give an example of pinnacle moments in the company's history where potential and capability collided, I feel that now is one of those moments. SOG today has come full circle and is on a mission to continue our philosophy to *Study* and *Observe*, and through this, provide users with the tools to enhance their potential. SOG's future pushes into an even greater extension of the original intent when SOG was founded, but I cannot be prouder of what the company has grown into.

Spencer Fraser
Founder





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MATERIALS

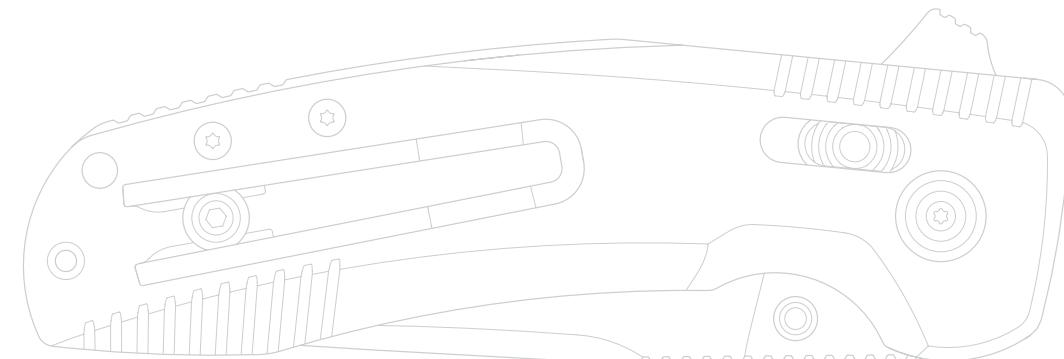
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STUDIES AND OBSERVATIONS GROUP

SOG was inspired by the code name of an elite U.S. Military group formed during the Vietnam War: Military Assistance Command Vietnam – Studies and Observations Group.

Over the course of the last year, we've taken the *studies* and *observations* part of our name as a directive and guiding principle for our future. This means even more refinement when it comes to design, bolder innovations, harder-working engineering and deeper insights in order to deliver greater dependability and performance, especially under pressure. Since our origin, we've always worked closely with users to ensure they have the tools to complete the mission at hand. Now, we're looking to apply our knowledge and experience to develop solutions for those who are driven by a greater purpose.



OUR MISSION:

TO PROVIDE ENHANCED CAPABILITIES FOR HUMAN POTENTIAL

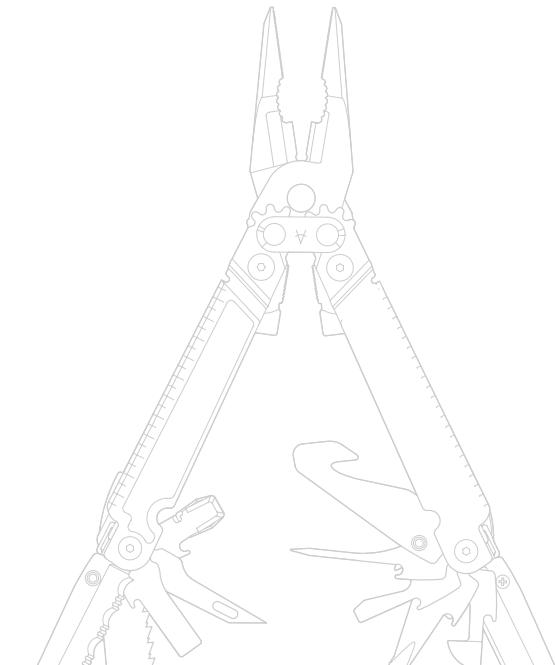
Every leap in human achievement is defined by our resilience and determination to grow stronger from adversity. Our purpose is to make each generation of SOG users the most confident and capable yet. Whether it's on the frontline, on patrol, when the SHTF, at the summit, the campsite or on the last train home for the night. In an unpredictable world, the ultimate advantage is to live ready.



OUR PROCESS:

STUDY. OBSERVE. UNDERSTAND. APPLY. AND REPEAT.

Our process begins with a better understanding of real people looking for real-world solutions. We study, observe, understand, apply and then repeat the process, each time building on the insights we've gained. Continuously designing, engineering and innovating. It's these extraordinary lengths that result in extraordinary products of enhanced capability. Consistent, quality gear designed to exceed expectations and complete the task at hand. This process starts and ends with completely understanding our users.



RELENTLESS BY DESIGN

The human spirit is restless – constantly trying new things and pushing at boundaries. The only way to truly keep up with it is to harness it. It's why we're relentless in our pursuit of systems and solutions for those compelled to respond faster, push themselves further, and ensure mission success more often. It's why our design approach is an ever-continuing loop – each cycle pooling the sum of experience and knowledge of our users for us to expand and improve upon. At SOG our work is never done. It's the only way we can enhance the capability of human potential both now and for generations to come.



SITUATION-READY SOLUTIONS

Each SOG product comes ready to perform, with the additional benefit of being designed around specific use-case scenarios. This gives every SOG user the ability to outfit themselves with the right tool for the task at hand, including mixing and matching solutions to create the perfect system for their needs. SOG's systems and solutions are focused around three main types of use.



PROFESSIONAL

Engineered for professional users and the broad variety of missions they undertake.



OUTDOOR

Honed for adventurers regularly exposed to the natural elements and outdoor conditions.



DAILY

Designed for confident, self-reliant problem solvers who believe in being ready for anything.





OUR DESIGN PHILOSOPHY

Our product range's capabilities are as uncompromising as our deep-rooted drive to provide enhanced capabilities for human potential. Our entire company lives this ideal, in order to deliver on it through the products we put in users' hands.

To achieve this, we utilize our three-step process called **Relentless by Design**.

1

IT STARTS WITH PEOPLE

All our solutions start by engaging our subject matter experts, including elite military units, law enforcement, emergency medicine, first responders, trainers, park rangers, adventurers, overlanders, hunters, designers, photographers, engineers and others.

2

INTENTIONAL DESIGN

Once we've zeroed in on the real-world problems we're trying to solve, we implement a strict set of guiding principles to make certain every design measures up to our exacting standards.

3

SYSTEMS FOR ENHANCED CAPABILITY

As SOG shifts to becoming a provider of mission-centric solutions, we will increasingly deliver on product systems designed to work with one another – providing users with end-to-end solutions to meet their mission needs.

PACKAGING 2020

With a refreshed brand and new product coming in Fall 2020, SOG has taken this opportunity to update its packaging, creating a more uniform experience between product types by utilizing common parts, elevating the look and feel, whilst using less material for packaging and shipping.





NEW SOG PRODUCT NAMING CONVENTIONS

As part of our product refresh, we're aiming to make it easier to understand our product range. Starting with our new-for-2020 products, we're standardizing our naming conventions so that every similar type of product has a two- to three-letter designation.

DESIGNATOR	PRODUCT TYPE	EXAMPLE
XR	XR Lock	Terminus XR
FX	Fixed Blade	SEAL FX
AT	Assisted Technology XR Lock (AT-XR Lock)	Flash AT
FL	Frame Lock	Aegis FL
MT	Multi-Tool	PowerAccess Assist MT

NEW FOR FALL 2020

Made specifically to meet the demanding needs of each of our users, this is the most advanced line-up of SOG products yet.

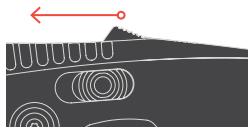


ASSISTED TECHNOLOGY XR LOCK (AT-XR LOCK)

New for 2020, SOG is introducing Assisted Technology (AT) for the XR Lock – delivering a powerful and fast one-handed deployment on command.

Debuting on the 2020 refresh of some of SOG's most popular folding knives, Assisted Technology XR Lock knives are so precise and easy to use, that it feels as fast and convenient as opening an automatic.

The AT-XR Lock works through the balance of opposing high tension coil springs. As you initiate the opening action, the force propelling your blade open becomes greater than the force keeping it closed. The result is a blade that springs completely open almost instantly once it is engaged.



▲ = BLADE LOCKED

Disengage by sliding thumb forward along spine

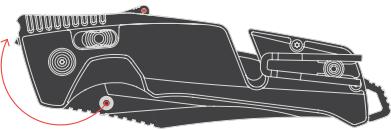


▲ + ● = BLADE READY TO OPEN

Rounded + red indicator, blade ready to deploy

TO OPEN

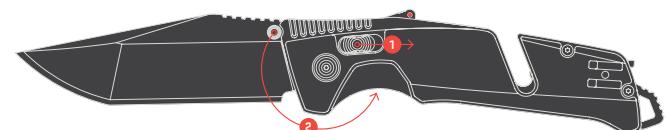
1. Push out on the thumb stud



TO CLOSE

1. Pull lock back

2. Push blade back into closed position



KEY BENEFITS OF AT-XR LOCK

Assisted Technology open:

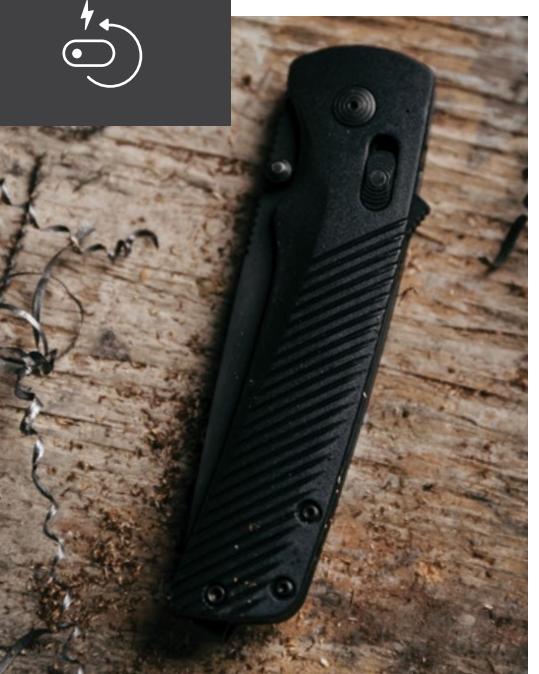
- Powerful and fast deployment
- Easy open with gloves
- Ambidextrous open

Spine mounted safety:

- Can feel position of safety without looking
- One-handed operation
- Fully ambidextrous



LOOK FOR THIS ICON
ON PACKAGING FOR
AT-XR LOCK



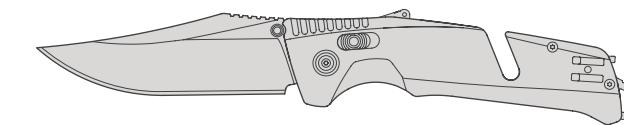


PROFESSIONAL

TRIDENT AT

ASSISTED OPEN FOLDING KNIFE

Trident AT is precision engineered as a solution for professional users. Optimized for critical response, Trident AT balances purposeful design with heavy duty performance and reliability. Featuring an ambidextrous rapid open AT-XR Lock, CRYO D2 steel blade and line cutter, Trident AT's versatility is matched only by its aptitude to enhance each user's capabilities in any critical situation.



\$105.95 MSRP

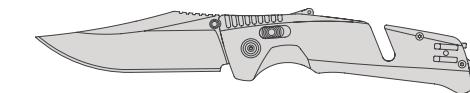
SERIES	MK3	WEIGHT	5.15oz/145g	BLADE LENGTH	3.7in/94mm
CLOSED LENGTH	5.33in/135mm				OVERALL LENGTH 9.03in/229mm
STEEL	CRYO D2	HANDLE	GRN	FINISH	TITANIUM NITRIDE



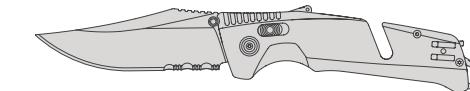
CONFIGURATIONS



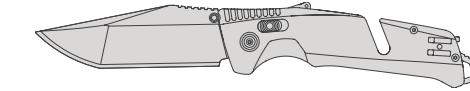
CLIP POINT



CLIP POINT PARTIALLY SERRATED



TANTO



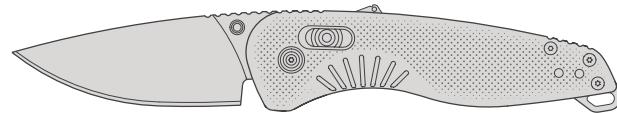
OUTDOOR

AEGIS AT

ASSISTED OPEN FOLDING KNIFE

Designed for outdoor users, Aegis AT features ambidextrous rapid blade open, with an ergonomic handle and grip pattern for comfortable use.

Aegis AT is easy to carry, with a highly functional 3.7 inch cryogenically heat-treated stainless steel blade. Its powerful XR locking mechanism also features solid built-in blade locking safety. The next evolution of the legendary Aegis.



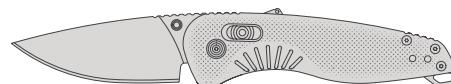
\$94.95 MSRP

SERIES MK3	WEIGHT 5.15oz/145g	BLADE LENGTH 3.7in/94mm
CLOSED LENGTH 5.33in/135mm	OVERALL LENGTH 9.03in/229mm	
STEEL CRYO D2	HANDLE GRN	FINISH TITANIUM NITRIDE

CONFIGURATIONS

INDIGO + ACID FOREST + MOSS

CLIP POINT



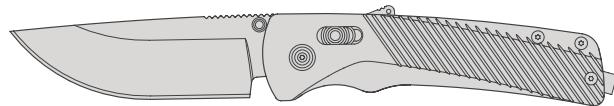


DAILY

FLASH AT

ASSISTED OPEN FOLDING KNIFE

Designed for everyday users, Flash AT features ambidextrous rapid open and ergonomic handle design for enhanced grip and comfort. Flash AT is compact and easy to carry, with a highly functional 3.13 inch cryogenically heat-treated stainless steel blade. Its powerful XR locking mechanism also features reliable built-in blade locking safety. The next evolution of the popular Flash.



\$83.95 MSRP

SERIES	MK3	WEIGHT	4.49oz/114g	BLADE LENGTH	3.13in/79mm
CLOSED LENGTH	5.01in/127mm	OVERALL LENGTH	8.14in/206mm		
STEEL	CRYO 02	HANDLE	GRN	FINISH	TITANIUM NITRIDE



ASSISTED OPEN
AT-XR LOCK



CRYOGENICALLY
HARDENED STEEL



AMBIDEXTROUS
DESIGN

CONFIGURATIONS

CIVIC CYAN

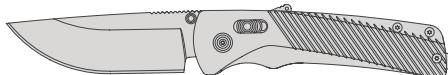


BLACK OUT

URBAN GREY



CLIP POINT



CLIP POINT PARTIALLY SERRATED



XR LOCK

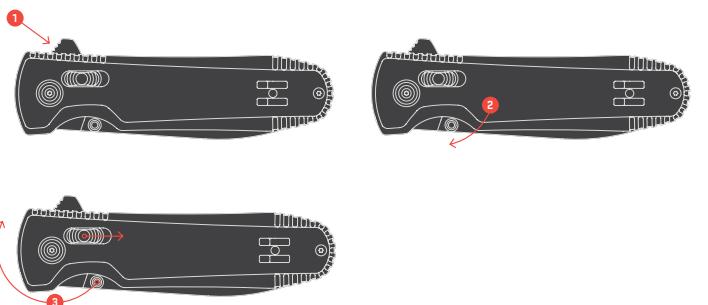
SOG's XR Lock takes a proven mechanism to the next level with a patent-pending design that improves safety and versatility. This mechanism utilizes a sliding transverse bar to lock the blade open or hold the blade closed in the handle.

SOG's XR Lock delivers high lock strength, ambidextrous one-handed operation, and a self-adjusting locking mechanism as it wears to deliver a lifetime of secure lock-up. Larger SOG products featuring XR Lock, especially those intended for professional and hard use, benefit from fixed blade-like feel, with the lock often able to withstand upwards of 2000 pounds of pressure.

Many next generation SOG products are receiving the XR Lock treatment, with a wide range of products coming in the future with this mechanism.

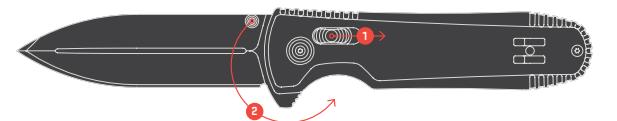
THREE WAYS TO OPEN

1. Flick the kick
2. Push out on the thumb stud
3. Pull lock and flick



TO CLOSE

1. Pull lock back
2. Push blade back into close



KEY BENEFITS OF XR LOCK

High lock strength – has been tested past 3000 pounds on SEAL XR – stronger than competitors equivalents (varies per model).

Three ways to open – allows users to adjust to situational requirements.

Safety suck-back spring mitigates inadvertent open in pocket or if dropped.

No need to wear in the mechanism to open smoothly – good-to-go out of the box.

Self-adjusts over lifetime of wear.

LOOK FOR THIS ICON ON PACKAGING FOR

XR LOCK





PROFESSIONAL

PENTAGON XR

FOLDING KNIFE

Designed for defense, the easy to carry Pentagon XR features a 3.6 inch cryogenically heat-treated stainless steel, wide spear point blade and rugged G10 handle. SOG's XR Lock enables smooth ambidextrous single-handed opening in three different ways with distinguishably solid blade-lock once open, with fixed-blade-like feel and confidence. The next level of enhanced capability backed by Pentagon's proven pedigree.



\$194.95 MSRP

SERIES MK3	WEIGHT 6.1oz/173g	BLADE LENGTH 3.6in/92mm
CLOSED LENGTH 4.77in/121mm		OVERALL LENGTH 8.38in/213mm
STEEL CRYO S35VN	HANDLE G10	FINISH TITANIUM NITRIDE



XR LOCK



CRYOGENICALLY HARDENED STEEL



AMBIDEXTROUS DESIGN

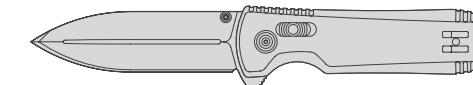


RUGGED HANDLE

CONFIGURATIONS



CLIP POINT



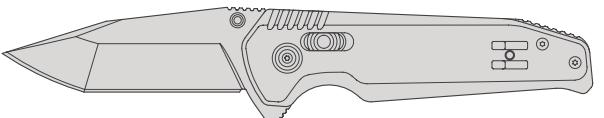
PROFESSIONAL

VISION XR

FOLDING KNIFE

The essential tool for professionals, Vision XR features a 3.33 inch cryogenically heat-treated stainless steel Tanto blade for increased strength and general purpose use, and ultra-grip G10 handle.

SOG's XR Lock enables smooth ambidextrous single-handed opening in three different ways with innovative solid blade-lock once open, delivering fixed-blade-like feel and confidence. SOG Vision XR is at the peak of performance and capability.



\$166.95 MSRP

SERIES MK3	WEIGHT 4.3oz/122g	BLADE LENGTH 3.33in/85mm
CLOSED LENGTH 4.67in/118.6mm	OVERALL LENGTH 8.00in/203.3mm	
STEEL CRYO CTS XHP	HANDLE G10	FINISH TITANIUM NITRIDE



CONFIGURATIONS

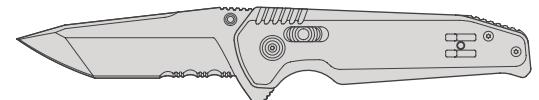
BLACK OUT



TANTO



TANTO PARTIALLY SERRATED





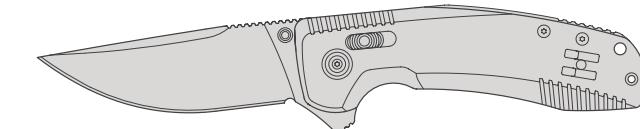
PROFESSIONAL

SOG-TAC XR

FOLDING KNIFE

The go-to solution for uniformed professionals, SOG-TAC XR features a 3.4 inch cryogenically heat-treated stainless steel D2 blade and ultra-grip G10 handle.

SOG's XR Lock enables smooth ambidextrous single-handed opening in three different ways, with extremely secure blade-lock once open. The next generation of designed and engineered performance.



\$88.95 MSRP

SERIES MK2	WEIGHT 4.8oz/136g	BLADE LENGTH 3.4in/86mm
CLOSED LENGTH 4.64in/118mm		OVERALL LENGTH 9.03in/229mm
STEEL CRYO D2	HANDLE G10	FINISH TITANIUM NITRIDE



XR LOCK



CRYOGENICALLY
HARDENED STEEL



AMBIDEXTROUS
DESIGN



ULTRA-GRIPT
G10 HANDLE

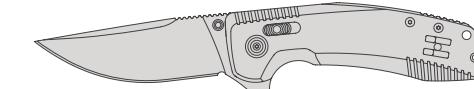
CONFIGURATIONS

BLACK OUT



OLIVE DRAB + BLACK

CLIP POINT



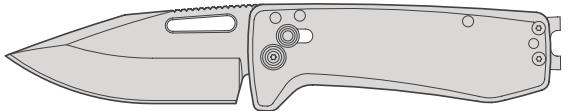
CLIP POINT PARTIALLY SERRATED



ULTRA XR

FOLDING KNIFE

Lightweight, slim and discreet, SOG Ultra XR is designed for understated everyday carry. With its super-slim pocket profile, Ultra XR features a CRYO CPM S35VN Titanium Nitride coated stainless steel blade, carbon fiber handle and smooth ambidextrous single-handed opening. Its titanium pocket clip doubles as a money clip, making Ultra XR the ultimate in versatility.



\$138.95 MSRP

SERIES MK2	WEIGHT 1.2oz/34g	BLADE LENGTH 2.8in/71mm
CLOSED LENGTH 3.61in/92mm	OVERALL LENGTH 6.4in/163mm	
STEEL CRYO S35VN	HANDLE CARBON FIBER	FINISH TITANIUM NITRIDE



CONFIGURATIONS



CLIP POINT

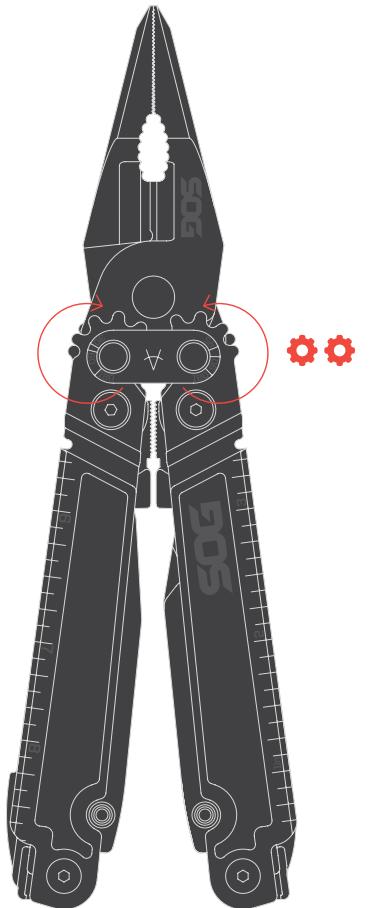


COMPOUND LEVERAGE

Anyone can take a multi-tool and cram it with as many components as possible. But if you want your multi-tool to do more for you, it needs a more substantial improvement. Compound Leverage delivers on that improvement, granting SOG multi-tools more power where it counts: grip and cutting power.

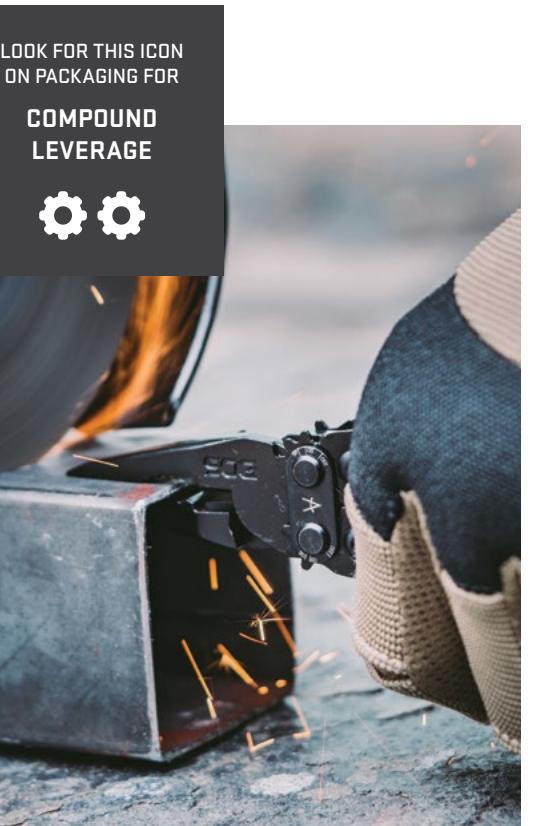
SOG's proprietary Compound Leverage technology works by employing multiple pivot points that generate greater handle travel in relation to plier movement.

The result is a leverage advantage of approximately twice the power of a conventional multi-tool, which makes every cut smoother and stronger grip easier.



KEY BENEFITS OF COMPOUND LEVERAGE

- Twice the power of equivalent competitor multi-tools
- Increased cutting and grip power
- One-handed open
- Smooth opening action
- Fast and convenient deployment



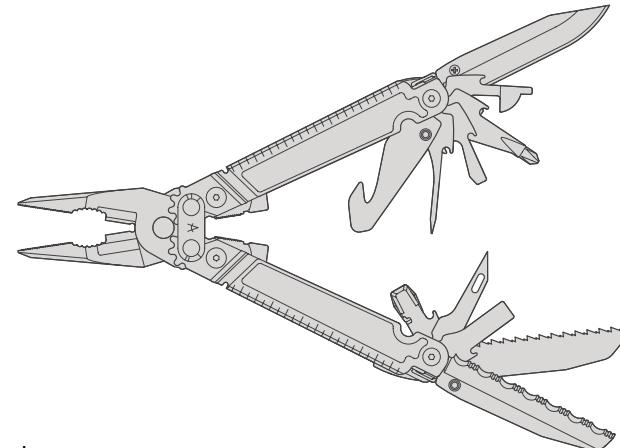


DAILY

POWERACCESS ASSIST MT

MULTI-TOOL

PowerAccess Assist MT is the ultimate daily use multi-tool. With one-handed assisted open access to multiple frequently used knife blades and tools that lock securely in place once open. SOG's patented gear-driven Compound Leverage mechanism features twice the cutting and gripping power of conventional pliers, with a center axis magnetic hex bit driver for enhanced capability.



\$99.95 MSRP

SERIES MT	WEIGHT 6.4oz/181g	BLADE LENGTH 2.74in/70mm
CLOSED LENGTH 4.54in/115mm	OVERALL LENGTH 6.82in/173mm	
STEEL 5Cr15MoV	HANDLE N/A	FINISH STONE WASHED OR BLACK OXIDE



CONFIGURATIONS

BLACK STONEWASHED



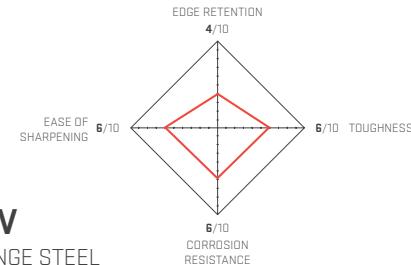
MATERIALS

Every material used on every SOG product has been specified to ensure that it meets or exceeds the rigorous demands of specific users and the use-cases it has been designed for. Steel and material choices are deliberate by design, providing the right balance of function and performance for the lifetime of the product.

8CR13MOV

UPPER MID-RANGE STEEL

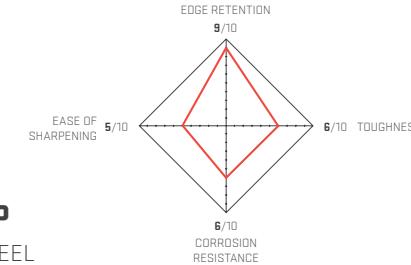
8CR13MOV is a Chinese stainless steel known for its edge holding ability and corrosion resistance. It has an increased carbon content and added alloying elements such as molybdenum, vanadium and nickel to improve its hardness, wear resistance and toughness. It is tempered to a Rockwell hardness of 56-58.



CTS XHP

PREMIUM STEEL

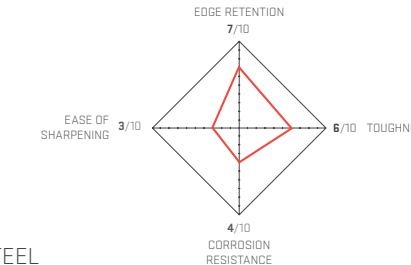
CTS XHP is a powder-made stainless steel developed by Carpenter Steel and known for its increased corrosion resistance, equal to medical grade stainless steels, and high level of hardness. The chemistry of the steel promotes the even distribution of vanadium carbides, which are harder and more effective at cutting than chromium carbides. In addition, vanadium carbides give the steel a very refined grain that further adds to the sharpness and toughness of its edge.



D2

HIGH-END STEEL

D2 Tool Steel is a versatile high-carbon, high-chromium, air-hardened tool steel that is characterized by a relatively high attainable hardness and numerous large chromium-rich alloy carbides in the microstructure. These carbides provide good resistance to wear from sliding contact with other metals and abrasive materials. D2 provides an effective combination of wear resistance, toughness, performance and price.



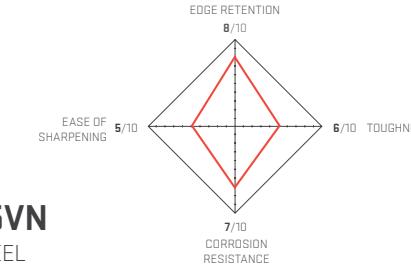
When it comes to relentlessly redesigning the boundaries of resilience, there's no room for error. That's why we use only strategically selected steels that we've observed as being able to embrace adversity head on without compromising or yielding under pressure.



CPM S35VN

PREMIUM STEEL

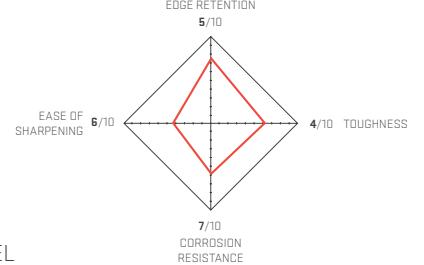
CPM S35VN is a powder-made stainless steel developed by Crucible Materials Corporation, known for its corrosion resistance and toughness. Its chemistry promotes the formation and even distribution of vanadium carbides, which are harder and more effective at cutting than chromium carbides. In addition, vanadium carbides give the steel a very refined grain that further adds to the sharpness and toughness of its edge.



VG-10

HIGH-END STEEL

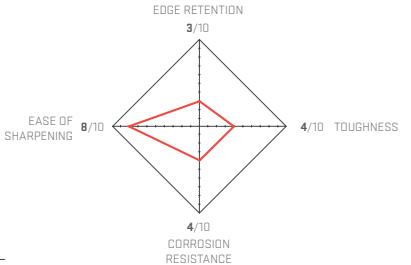
VG-10 is a well-known, high-end premium Japanese steel. It contains vanadium, which is renowned for its toughness. The steel is specifically designed for high-quality blades used in cutlery. VG-10 can be sharpened to a fine edge that is very durable and can maintain a Rockwell hardness of 60 without becoming brittle.



AUS-8

HIGH-END STEEL

AUS-8 is a heat treated, high-grade chromium Japanese steel with a relatively low carbon content, known for its toughness and strength and characterized by its edge holding ability and corrosion resistance. It contains vanadium, which is renowned to give the steel more hardness. Typical Rockwell hardness is 56-58.



CRYOGENIC HEAT TREATMENT

To optimally temper the steels used in our knives and tools, SOG has developed unique cryogenic heat treatment processes that slowly decreases the temperature of the blade steel after heat treatment in a highly controlled procedure.

This process typically lowers the temperature to -300 degrees Fahrenheit and then back up to room temperature. This treatment relieves stresses in the blade material on an atomic level, resulting in an overall increase in toughness and heightened wear-resistance.

The result is prolonged first cut sharpness right out of the box, with SOG knife edges staying sharper longer, and demonstrate a significant decrease in micro-fracturing and edge-chipping.

LOOK FOR THIS ICON
ON PACKAGING FOR
CRYOGENICALLY
TEMPERED STEELS



CRYO D2



HANDLE MATERIALS

While blade steel often gets all the glory, handle material is as if not more important, as it's how users directly interact with our products. You can be assured that as much care goes into handle material selection as does into steel choice.

Below is a list of some of the materials SOG regularly uses and why we use them in our knives and tools.

GLASS REINFORCED NYLON

Glass Reinforced Nylon (GRN) is a high-strength, light-weight, abrasion, and impact resistant thermoplastic polyamide formulation of the family more commonly known as nylon. Often with varying degrees of glass fibers – from 13% to 60%, added for extra stiffness. GRN also offers chemical resistance to common chemicals, such as motor oil, transmission fluid and methanol. GRN allows little thermal expansion.

G-10

G-10 is a very durable reinforced material that is made up of fiberglass soaked in resin, then highly compressed and baked. This process makes it impervious to liquid and is physically stable under extreme temperature fluctuations. G-10 is most commonly black but is available in various colors and typically includes a non-slip finish.

ALUMINUM

Aluminum comes in many grades. It has good mechanical properties and is one of the most common alloys for general-purpose use, primarily based on its light weight. Aluminum is typically anodized for extra protection and color, with hard anodized coatings offering superior scratch resistance.

LINEN MICARTA

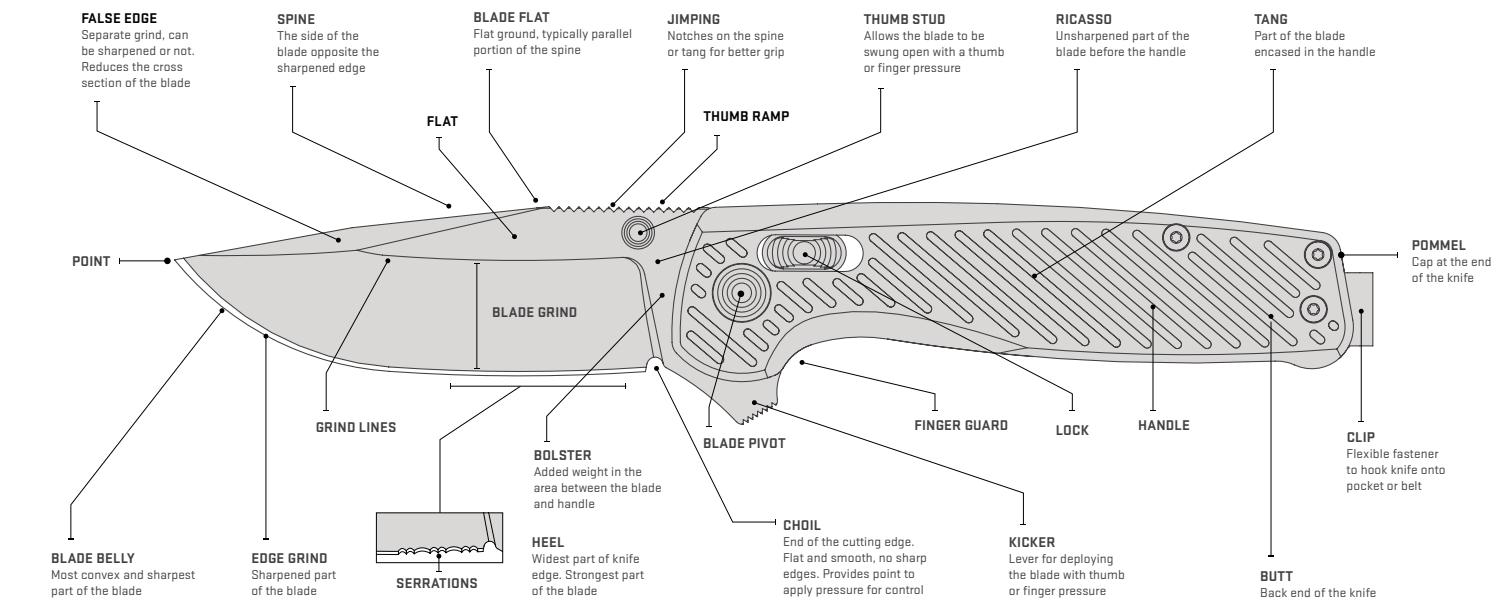
Linen Micarta is created from soaking layers of linen cloth in resin, then pressing them together. When machined, the edge exposes the strands of linen, providing a softer feel in the hand than G-10. Linen Micarta is somewhat absorbent, developing an elegant patina from use over time.

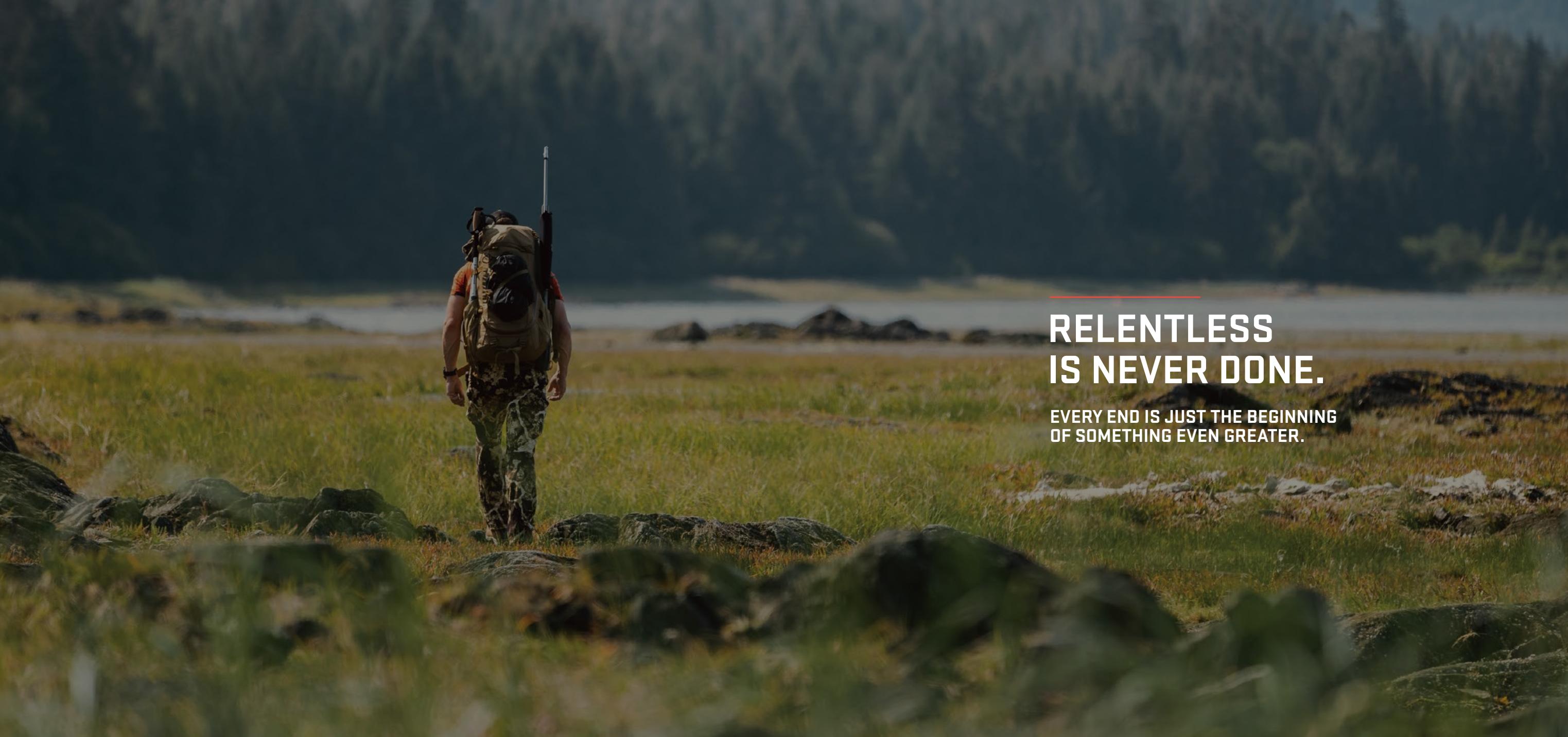
NATURAL MATERIALS

Natural materials often include wood, leather, and offer a more traditional look. These are typically applied directly onto the liners of the knife.



ANATOMY OF A KNIFE





RELENTLESS
IS NEVER DONE.

EVERY END IS JUST THE BEGINNING
OF SOMETHING EVEN GREATER.



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