

SOURCE CERTIFICATION

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Note from the Publisher

SOURCING

Lots of people say the secret to making money in the diamond business is to buy right. As the Yiddish saying goes: What a fool can buy in five minutes a wise man cannot sell in a year.

So what does buying right mean? At the most basic level, it means buying at the lowest price. But that's not really correct. You need the right kind of diamonds that meet your customers' needs, a very good eye for detail, and real market experience. Ideally, you are a consistent buyer of the same types of diamonds from a variety of competing suppliers.

For over 100 years, that was all you needed to become a successful diamond trader. And then things began to change. Anti-money laundering (AML), counter-terrorist funding (CTF), and now sanctions with irrational Office of Foreign Assets Control (OFAC) regulations. Where you buy and how you buy have become as important as what you buy.

There are three important factors to consider.

1) Where the diamond was mined. 2) How you document your supply chain. 3) How you capture the added value of source certification.

The idea that some buyers will pay more for a diamond if you can document the legitimate source of the diamond is a defensive strategy for brands, but it is not enough to support our broad markets for all types of goods.

The fact that a diamond is not bad is not good enough for us to make decent profits. We must add value to our diamonds by sourcing diamonds that make the world a better place and then selling that benefit to consumers.

It's not just altruism. Adding value through selective sourcing based on benefit to the people from where the diamonds originate and benefits to the workers that manufacture the diamonds is a business proposition. Adding value by differentiating and communicating the benefits that your diamonds bring society is an important and vital way to increase your profitability.

There is a reason G-d gave diamonds to the poorest people in the world and made the richest desire them. Bridging that gap is "tikkun olam" — fixing the world.

That is why the diamond trade exists.

RAPAPORT SOURCE CERTIFICATION

Our independently audited certificate verifies not only a diamond's origins, but also its ethical credentials — a crucial element in today's market.

By Martin Rapaport

Source certification creates added value for good diamonds. A polished diamond with a trusted document that discloses where the diamond was mined is worth more money than a similar diamond from an unknown source. While not everyone everywhere cares where their diamonds were mined, enough consumers, ethical retailers and brands do care. Source certification is required because bad diamonds that are involved with human rights abuses, money laundering and terrorist funding are mixed into the diamond pipeline. Furthermore, knowing where a diamond comes from empowers diamond sellers to promote good diamonds and tell the story about how good diamonds make the world a better place.

If you are a US consumer who has an opportunity to buy either a synthetic diamond made with solar energy, or a natural diamond from an unknown source that might be a blood diamond, which would you buy for an engagement ring? Now, let's say you were also offered a diamond with a source certificate from Botswana, where diamonds support an entire country's development, including healthcare, education, clean water, roads and future economic development. Which diamond would you buy? How much more is the good diamond worth than the unknown diamond? Source certification helps us capture that added value of good diamonds.

EMOTIONAL, SOCIAL AND LEGAL ADDED VALUE

There are three types of added value that source certification provides: emotional, social and legal. The emotional added value is most important when the diamond gift celebrates emotional commitment. This is especially true for natural-diamond engagement rings, which are under extreme ethical attack and competition from synthetic diamonds. No bride wants to celebrate a diamond engagement ring that caused the death or rape of someone. It

should be clear that the natural-diamond trade is fighting for its survival. The key battleground is the engagement ring market. Natural diamonds have already lost 2024 to synthetics, and we will lose 2025 if we do not resolve the ethical problem of blood diamonds.

Let me make it clear: There are many positive aspects to source certification, but there is a more dangerous negative aspect to not providing source certification. If we do not separate good diamonds from bad diamonds, the natural-diamond business as we know it today will cease to exist. We can't make a living selling luxury products that cause death, rape, destruction or other severe human rights violations. The fact that almost all diamond trade organizations support the Kimberley Process (KP), which certifies blood diamonds as being legitimate, has set the stage for the destruction of our industry. If we do not separate good diamonds from bad diamonds, we do not deserve to be in business.

The positive emotional added value of source certification for good diamonds is not only a defense against bad diamonds. Source certification also creates real positive value. A woman receiving a diamond that can be shown to have made the world a better place is proud of the diamond, proud of her husband and proud of herself. She wears the diamond with honor and tells her friends the diamond's story. Creating this emotional value is what the diamond business must be about. It is at the core of who we are and what we do.

Social added value transcends personal emotions, as it creates a groupthink based on society's ethical values. Groupthink is extremely important as new generations of consumers develop new models of decision-making dominated by social media. Values are now more important and more easily manipulated. Truth and authenticity are vital marketing tools that have become difficult to communicate.

A key issue is that society now recognizes that we are responsible for how we spend our money. We are responsible for the unintended consequences of our purchases. It's not just legal constraints related to money laundering or terrorist funding. Ethical considerations now control our consumption. Global warming is focusing us on environmental and other ethical group considerations. It's not just theoretical; we feel the heat. Selling diamonds into this new world is a changed business. We dare not ignore societal norms of ethical behavior in a world where consumers move together like fish in trend groupings. Natural diamonds have become uncool due to ethical competition from synthetics and industry support of KP-certified blood diamonds. Source certification provides a lifeline for our good diamonds, ensuring that legitimate diamonds from legitimate sources catch the attention and desire of new generations of consumers.

Globalization and international economic cooperation are collapsing as East-West and North-South economic warfare develops. It's not just Russia and Ukraine. Trade is being weaponized across the board. The West is coming to the realization that China is using its huge global trade surplus (approximately \$3.37 trillion for 2020 to 2023) to militarize and seek global dominance in cooperation with Russia, Iran, North Korea and other non-Western nations. Essentially the world is breaking up economically if not yet militarily. There will be increasing economic sanctions and political boycotts that will impact the diamond, gem and jewelry business.

Source certification is important and can provide legal protection as responsible companies make honest efforts to meet sanction-compliance requirements. Unfortunately government agencies such as the US State Department are fundamentally dishonest (coming up with meaningless "Russian Origin" sanctions in 2022), and the US Office of Foreign Assets Control (OFAC), which is responsible for sanctions, creates irrational, misguided regulations that encourage

the whitewashing of Russian-diamond imports. It is obvious that government regulators don't know what they are doing and can't be trusted. The best protection for legitimate companies is to ensure that they know and can document the sources of their diamonds.

HOW RAPAPORT SOURCE CERTIFICATION WORKS

The foundation of source certification is traceability. This includes the ability to physically identify the diamond through scanning at all stages of production and trace the diamond's journey from rough to polished. Once the polished diamond is uniquely identified through scanning and/or a laboratory grading report, a Rapaport Source Certificate (RSC) is issued. The RSC travels with the polished diamond through the supply chain like a grading report. In this manner, small to medium-size dealers and retailers can freely trade the diamond on the wholesale polished market. There is no need for verticalization of distribution from the mining company direct to the retailer.

While physical traceability is an absolute requirement, it is not a sufficient condition for Rapaport Source Certification. Diamonds must be sourced from reputable mines and manufacturing sources that apply ethical standards. For example, we would not provide an RSC for diamonds mined in Zimbabwe, no matter how good the traceability was. Also, we would not provide an RSC for diamonds from Angola unless we had audited the conditions of the specific mine source and the transfer of purchase funds to legitimate parties. At this stage, RSCs will only be provided for diamonds that are mined according to Responsible Jewellery Council (RJC) standards and manufactured by RJC-audited members. While we have ethical concerns about the RJC, we believe at this stage that they provide the best standards for ensuring the legitimacy of companies handling diamonds. Furthermore, we believe that declarative statements from companies should be independently audited.

As outlined in our diagram, a key to traceability is the repeated scanning of the diamond throughout the production process. In addition, all of the scanned data must be uploaded to an authorized, independently auditable blockchain. All of the scanning and blockchain companies, technologies and systems must be approved by us and our independent auditors. Rapaport will initially support scanning and traceability reporting from the Gemological Institute of America (GIA), Sarine Technologies, Helix, De Beers and Tracr.

- 1. Thfirst step in traceability involves scanning the rough diamond. In most instances, the scanning will be done by the mining company or its scanning representative at the miner's rough-distribution center. When De Beers consolidates shipments, the individual mine or country source might not be available. In such cases, the mine source for the diamond will be "DTC." In all instances, the individual rough diamond will be scanned and its data uploaded to an approved blockchain.
- 2. The rough diamond is transferred to the diamond manufacturer and scanned again. The manufacturer's initial rough scan is compared and verified to match that of the mining company. The manufacturer's scan is entered into the blockchain along with the unique identification number the mining company has assigned to the rough, and an additional unique identification number assigned to the rough by the manufacturer. In some instances, artificial intelligence can be used to match the mining company's scan with the manufacturer's scan.
- **3.** The diamond is scanned numerous times during the manufacturing process, enabling the auditors to prove that the uniquely identified polished diamond(s) came from the specifically identified rough diamond. The scans and their unique identification numbers and locations are uploaded into the blockchain for independent

At every stage in the process information and data is The rough diamond is scanned entered into a reliable Blockchain that can be reviewed by the mining company by Rapaport's independent auditors. The rough diamond is scanned Rapaport Source upon entry into the diamond Certificate issued manufacturing process **BLOCKCHAIN** The finished polished The diamond is scanned diamond is scanned numerous times during the manufacturing process

auditing. In addition, the independent auditors will have access to the manufacturer's enterprise resource planning (ERP) system, letting them track the manufacturing process for diamonds receiving an RSC.

- 4. The finished polished diamonds are scanned and given unique polished-diamond identity numbers. The final scan gets uploaded to the blockchain for future reference. In some instances, the diamonds may also be graded by approved diamond grading laboratories, and the grading report number will also be entered into the blockchain.
- **5.** A uniquely numbered Rapaport Source Certificate will be created and entered into the blockchain. All of the data about the polished diamond including the miner's and manufacturer's rough scans, the production scans, and the final polished-diamond scan from the manufacturer will be linked in the blockchain to the RSC. This will ensure that the auditors have the ability to trace the RSC

diamond back to the original rough diamond.

The Rapaport Source Certificate is an independent document owned and operated by Rapaport Laboratories LLC. We will accept diamonds from qualified mining companies and use the technology of different scanning companies, blockchain companies and other resource providers that meet our standards and the standards of our independent auditors. While we are very concerned about the whitewashing of illegitimate diamonds by the Kimberley Process and other illegitimate source-certification systems, we will be open to honest tracing technologies and support legitimate existing auditing systems that meet our standards. We will be publishing a list of all approved companies and the systems we use as part of our RSC service.

RESPONSIBLE BUSINESS

At this time, the diamond trade is going through a very difficult transition period due to severe competition from synthetic diamonds. De Beers' 2023 sales were down by 36%, and we expect a







further 20% decline in 2024. By 2025, we expect natural-diamond demand to recover as the diamond markets bifurcate into synthetic and natural diamonds. It is likely that the natural-diamond trade will focus on more expensive diamonds for a wealthier clientele. We expect many new diamond jewelry brands to emerge, all of which will promote the legitimacy of their diamonds. Natural diamonds will face ethical competition from synthetics. It is therefore vital that the natural-diamond trade develop honest, reliable, effective, efficient and trustworthy source-certification systems.

Nobel prize-winning economist Milton Friedman was a strong proponent of unbridled capitalism. His seminal article from 1970 was titled "The Social Responsibility of Business Is to Increase Its Profits." Friedman was not a starry-eyed DEI socialist. He believed that the purpose of business was to make money for shareholders. So here is my understanding of Friedman: Business must be socially responsible, and make money by being so. The diamond trade is in trouble, and source certification is one of the ways forward. It won't happen by itself. We must proactively define, document and market our socially responsible good diamonds. We must sell the idea that good diamonds make the world a better place. Frankly, it's a matter of survival.

For additional information about Rapaport Source Certificates, please visit rapaport.com/source-certificate. You are also encouraged to read Avi Krawitz's articles on traceability on Pages 20 to 28 of this issue. Those interested in the role of government sanctions are invited to read our "Letter to OFAC" at

rapaport.com/diamond-sanctions-ofac-letter.

THE RACE TO TRACE

With the clock ticking to implement industry-wide diamond-tracking systems, technologists are pushing their platforms.

By Avi Krawitz

In 2015, while celebrating the company's 20-year anniversary, the management of Finestar Jewellery & Diamonds felt a need to do something different. Since the Surat-based diamond manufacturer was implementing new infrastructure, it decided to make traceability central to its systems and procedures.

The thinking was that the move would differentiate it from other manufacturers and provide a way for retailers to tell the origin story of the diamonds they were selling, recalls chief operating officer Nilesh Chhabria, who shifted positions to help manage the family business around that time.

Finestar felt empowered to make this move because it was buying rough directly from the mining companies rather than on the secondary market, where diamonds change hands several times before they get to the cutting wheel. When rough came into its factory, Finestar could record the origin of each stone with documentation, including the Kimberley Process (KP) certificate and the rough-purchasing invoice.

That was the easy part. It then set out to detail each stage of the cutting and polishing process, matching weight and other elements unique to each diamond and using video and images to maintain a constant record of the diamond's transformation, Chhabria explains. The process required each department in the factory to input and extract data as production moved through the different parts of the cutting process. The final stage, Chhabria continues, was to produce a traceability certificate — which today is a smart card accessible via QR codes — that retail jewelers could use to tell the diamond's story.

HIGH ON THE AGENDA

Finestar wasn't alone in taking this initiative. Several of the larger manufacturers, predominantly in India, began incorporating traceability into their systems and building apps that enabled storytelling. Their hope was that retailers would buy into the programs they were developing at the time.

A decade later, those early adopters are well positioned to navigate the push toward industry-wide traceability.

"Our systems are easily compatible with the likes of Tracr, Sarine and the Gemological Institute of America (GIA) programs," Chhabria states.

Traceability has never been so high on the agenda, according to Hans Schwab, CEO of consulting service OriginAll, which also provides

technology solutions. "There's no one that's not talking about it in the diamond industry."

That's largely due to the Group of Seven (G7) restrictions on Russian diamonds, which require importers to account for their stones. While most G7 governments currently mandate a self-declaration from importers that their polished goods did not originate in Russia, the European Union is working on a diamond-tracing mechanism that's scheduled to go into effect in March 2025. The US is reportedly exploring similar blockchain-enabled verification and is expected to push its deadline for the next phase of restrictions from this September to next March, in line with the EU timetable.

THE BROADER STORY

Another factor driving the spike in interest is that luxury brands are seeking to incorporate traceability in their wider sustainability programs, explains Vinit Jogani, director of Diatech, which developed the Diatrace blockchain platform.

THE SOCIAL AND "The broader story, particularly for the brands, is not about traceability; **ENVIRONMENTAL** they're much more interested in sustainability," agrees Frederik Degryse, CEO of Belgium-based solution iTraceiT. "Traceability is a building block, but companies need to be able to show the whole journey, which includes the social and environmental elements."

Luxury brands are less concerned about country of origin "and more about showing their corporate social responsibility (CSR) activities, largely because of the reputational damage that could come in," he adds.

Meanwhile, the threat of synthetic diamonds is motivating greater accountability in the naturaldiamond space.

In its 2023 sustainability mission report, Swiss watch brand Breitling set a target of achieving 100% traceable gold by 2025, adding that it would source only lab-grown diamonds for all new products "to ensure product integrity

and traceability." In particular, it will use only synthetics that third-party standards body SCS Global Services has certified as Sustainability Rated Diamonds.

A SHRINKING TIMELINE

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Given such pronouncements in the watch industry, and with the stricter G7 measures looming, there is a new urgency to making diamonds traceable.

Perhaps with those deadlines in mind, a moderator asked diamond tech execs at a Dubai forum in May what they considered "the main challenges to achieving full traceability by 2025." The event at the Dubai Multi Commodities Centre (DMCC) focused on "Provenance, Traceability, and Technology in the

> Diamond Industry," and like the question itself, the participants' responses offered a fair bit of provocation, highlighting the range of issues that still need ironing out.

"What does full traceability mean or look like?" retorted one executive. "Will there be one solution or many?" countered another — and if it's many, added a third, is interoperability between systems feasible? Further issues they raised

included scalability, the level of collaboration necessary between systems and companies, the challenge of getting every part of the industry to contribute, and how to bring the information to the end consumer in an easy-to-understand way.

Their answers reflected the varying ideas on how a diamond can be tracked, and from where — and showed that even the question of what constitutes traceability can be a contentious one.

MINE TO MARKET

Most agree that full traceability begins at the source: the mine. But not all systems are built to facilitate that, as their technologies focus on the diamond's journey from the polished stage.

For Klemens Link, director of Provenance Proof, it's a matter of transparency. "Ideally, a diamond should be traceable all the way back to the mine, but transparency can also start within the supply chain," argues Link, whose company uses nanotechnology to mark polished diamonds. "The important part is that the stakeholder must not pretend to give more transparency than it really can."

The degree of transparency possible differs with each traceability method. There are systems that match the diamond with a digital twin, science-based solutions that use physical markings or stone analysis, and solutions that compile user-provided declarations and digital processes to connect the stages of the diamond journey. Very few, if any, can cover

the entire pipeline on their own, and most require collaboration with other service providers to fill the gaps. Generally, the biggest gap lies between the roughmining stage and manufacturing the polished.

That has put the De Beersfunded Tracr program in the driver's seat, given the volume of rough goods it has access to. It uploads De Beers rough — which accounted for an estimated 25% to 30% of global production volume in 2023 — directly to its platform.

Tracr's challenge of onboarding more producers, however, is one that all traceability providers share, with varying levels of success. Very few miners have publicly announced collaborations with providers, even if they've disclosed that they're considering traceability technologies.

MINIMUM STANDARDS

Scalability is not a technological challenge, as most platforms can handle larger volumes of diamonds. Even the question of interoperability is considered a moot one. What interoperability really means is that there's a data layer enabling the different platforms to talk to each other, explains Tracr CEO Wesley Tucker.

"The question shouldn't be if the systems are compatible, because that's the beauty of technology; it has the architecture, and it's not a difficult thing," comments Margot Stuart, cofounder of OriginalLuxury — a collaborative venture that OriginAll helped establish. "The more pressing issue is to define the minimum viable standard of traceability."

That encompasses mapping out the expectations for each stage of the diamond's journey, she elaborates. "How do we ensure the transition of data from one stage to the other and verify that the diamond is what you're saying it is? There's a layer of complexity whereby within every phase, you need to define what these requirements are."

> In other words, says Schwab, providers must ensure a secure and efficient transfer of data as the diamond moves along the value chain, in a way that invokes trust among the stakeholders.

> This might require an open application programming interface (API) — a type of contract that lets different programs communicate with each other and that would lay out the specifications all providers would need to support, explains Diatech's Jogani.

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Setting such standards needs to be an industry effort and requires collaboration among all tech providers, even as they compete with one another, stress Schwab and Stuart.

External regulators are circling to impose their own standards, which "would be detrimental to the diamond industry," Stuart cautions. Collaborating as an industry would empower the trade to go to regulators, brands and consumers and say, "This is what we're doing and how we're doina it."

Meanwhile, many in the midstream have expressed concern about sharing their data with third-party providers. The issue of data ownership is a sensitive point, admits David

Block, CEO of diamond-equipment manufacturer Sarine Technologies. The data doesn't belong exclusively to the traceability provider, but to each of the entities at their given points along the supply chain. The participants agree to let the technology platform use the data for traceability purposes only, he explains.

Still, the concern is there, and it is among the reasons that larger manufacturers have built their own independent diamond-tracing programs, observes Vipul Sutariya, sales and marketing director at Surat-based manufacturer Dharmanandan Diamonds and director of Innovseed, which created the Diabot traceability system.

Regardless, more manufacturers are recognizing the need to adopt tracing measures — not because they may have to meet stricter G7 requirements, but as a tool to add value. Finestar's diamond-tracking program is one of the few things working for the company in today's difficult market environment, particularly among mom-and-pop jewelers, Chhabria relates.

This value addition is crucial, stresses Link: It enhances the market potential for retailers, creates more trust at the point of sale, and helps store owners manage their supply-chain risks. And that extends throughout the industry pipeline.

"For anyone who wants to add value to their asset, traceability not only shows they have nothing to hide, they have something to show off," he says.