



UPSTREAMTM
TECHNOLOGY

3D TRACKER TECHNOLOGY

VECTOR M

*Meeting the demand for provenance, traceability,
and accurate diamond profiling through leading-edge,
advanced digital technology.*



◆ EASY TO USE INTERFACE

◆ 99% ACCURATE MEASUREMENTS

◆ AUTONOMOUS TECHNOLOGY

◆ HIGH DIAMOND SCAN RATE

*Under optimal conditions, the
Vector M scans over*

1 000

DIAMONDS PER HOUR

PIONEERING PRECISION IN DIAMOND TRACEABILITY

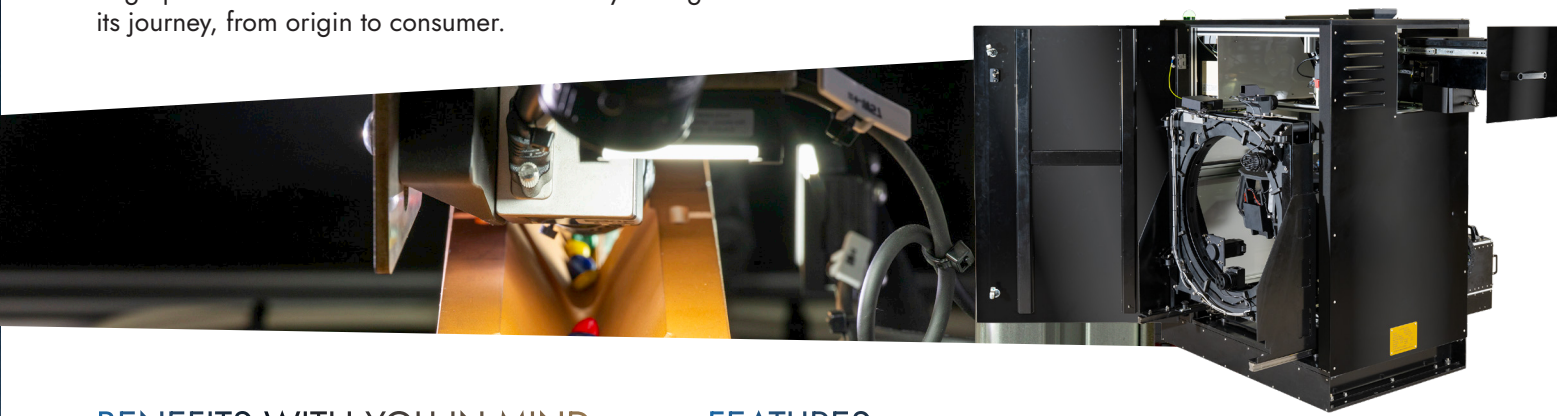
In response to the diamond industry's demand for provenance and accountability, Upstream Technology presents the Vector M. The latest Digital Twinning technology in Upstream Technology's 3D Tracker range.

As a hallmark of digital innovation, **Vector M establishes new benchmarks for diamond traceability precision, efficiency and ease-of-use.**

EMPOWERING PROVENANCE WITH UNMATCHED ACCURACY

The **Vector M system enables the scanning of natural diamonds at their country of origin.** Leveraging cutting-edge automation and machine learning, it processes large volumes of rough diamonds to generate unique, high-precision digital fingerprints for every diamond. This fingerprint ensures each diamond's traceability throughout its journey, from origin to consumer.

The resulting data, including accurate and detailed 3D models, precise weight measurements, and origin data, is securely uploaded to cloud-based diamond databases within seconds. This robust and streamlined process enables traceability at scale with exceptional accuracy levels of 99%.



BENEFITS WITH YOU IN MIND

- ◆ Easy to use machine and user-friendly interface
- ◆ Accurate measurements of stone metadata and 3D models of each diamond are available immediately and uploaded after scanning
- ◆ The technology is automated: once a batch of diamonds is loaded, no human intervention is required
- ◆ A high diamond scan rate is achieved through batch processing

FEATURES

- ◆ Combines 21 high fidelity images, creating precision 3D models rapidly with no blind spots and no need for painting of the stones
- ◆ Measures individual stone carat (ct) mass to 3 decimal places
- ◆ Maximum batch size of up to 10000ct
- ◆ Scan rate in excess of 800 stones/hour, with a success rate of over 99%
- ◆ Active 3D model and mass measurement validation during scanning
- ◆ Internal calibration and per-stone accuracy verification eliminates post-scan data cleanup
- ◆ Mass accuracy verified for 0.67ct to 10.8ct diamonds
- ◆ Remote troubleshooting and diagnostics enabled

MACHINE SPECS

MACHINE SIZE	CRATED MASS	VOLTAGE	FREQUENCY	POWER APPARENT
1.51m height 1.06m width 0.77 m depth	600 kg	230 VAC	50 Hz	0.6 kVA

TECHNICAL SUPPORT

The Vector M (3D Tracker) is backed by 24/7 on-line support and a team of expert support technicians to install, set up, train and service your Vector M Machines on your site.

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