

INTEGRITY PROCESS



DIAMONDS ENTER THE LABORATORY FROM THE CUSTOMER



WEIGH

Stones are weighed to 6 decimal places for security purposes. This is equal to 1 millionth of a carat or 20millionths of a gram.



SARINE

We then utilise Sarine technology to measure and record all of the diamonds' proportions and angles in order to assign a cut proportions grade later in diamond grading.



Every diamond submitted for grading at De Beers Group Institute of Diamonds will be passed through at least two individual Sarine instruments to ensure accurate measurements are taken.



VERIFY & REPACKAGE

Stones are stripped of all customer identification, being allocated their own small case containing a Radio Frequency Identification tag attached (RFID).



This allows the stones to be tracked and recorded around the laboratory anonymously.



PRODUCT INTEGRITY (PI)

Stones are then tested on our screening and verification instruments – **DiamondSure** and **DiamondView**.



Any stones that still require further testing will be passed onto a physicist who will examine the diamonds light absorption properties using spectroscopy to ensure 100% diamond integrity.



GRADING PROCESS

INTEGRITY, GRADING, INSCRIPTION PROCESS

QUALITY

A human grader examines the diamond using a microscope, identifying Clarity, Symmetry & Polish features, illustrating them on a diamond plot.



Next, they view and grade the diamond with an eye loupe at 10x magnification as industry standard. The grader will also evaluate the proportions, symmetry and polish grades in order to set a Cut grade.



A second human grader will conduct the same process with no access to any previous results.

COLOUR GRADING



Two blind colour grading opinions are then conducted by two independent human graders using a De Beers Group Institute of Diamonds' natural colour master stone set.



Once the second human colour grader has finalised their initial impression of the stone they will have access to the Falcon colour results and first human colour grade so an informed second decision can be made on the colour grade.



FALCON & EAGLE

Automated grading checks are then carried out on each and every stone.



The Falcon Machine conducts a colour scan measuring the saturation & fluorescence intensity. It assigns a colour letter & fluorescence grade.



The Eagle Machine conducts a clarity scan, creating a 3D image of the diamond. Highlighting the size, location and density of inclusions, it also assigns a Clarity grade.



FINAL GRADING

Final Grading is performed by a senior grader, whose job is to review all past colour and quality results in order to allocate the finalised grades that will be printed on a diamond grading report.



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Through our grading process, every diamond is assessed by our technologically advanced machine and at least three different human graders.

INSCRIPTION PROCESS

A unique identification number is then inscribed onto the diamond by one of two methods.

TABLE INSCRIPTION

An etching is placed onto the table of the diamond using De Beers Technology propriety technology, it can not be duplicated. The etching is 1/5000ths the width of a human hair and poses no alteration to the diamonds quality.



GIRDLE INSCRIPTION

The girdle inscription is applied utilising Photoscribe technology. The Photoscribe utilises cold lasers to prevent any damage that may be cause by applying high temperatures to nearby clarity features during the girdle inscription process.



If there are any discrepancies on any quality grade, we have built a failsafe into our system that will send the diamond to a third human grader.



The third grader will perform a full quality process. Once this is completed they will have access to all previous quality results, so an informed decision can be made on each grade.



We only grade and inscribe diamonds that are 100% natural and treatment free. Our specially developed industry leading proprietary instruments allow us to be confident that all diamonds we grade are natural and free of treatments as we spearhead the movement of bringing diamond grading into the 21st Century.

Our confidence extends further to the consistency and accuracy of our grading throughout all our global laboratories.

We believe buyers should have confidence when purchasing a diamond and therefore we strive to offer a level of professionalism and integrity unrivalled in the industry.

STONES ARE RETURNED TO CUSTOMER

QC & PACKAGING

Diamonds are then transferred into parcel papers, labelled with a summary and paired with thematching printed grading report.



INSCRIPTION QC & SECURITY PHOTO

The inscription is checked to ensure a clean finish and a security photo is taken of it. The photo is for internal use only to record the microscopic details of the inscription for security purposes.



This the final inspection before the diamond journey continues towards being set in a piece of jewellery.

