



## **STATE DIAMOND TRADER**

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### **Diamond Industry ABC Guide on The Manufacturing Process of Diamonds:**

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#### **Examining of Diamonds**

- The rough diamonds are examined to determine how it should be cut in order to get the best value from the stone.

#### **Marking/Planning of the Diamonds**

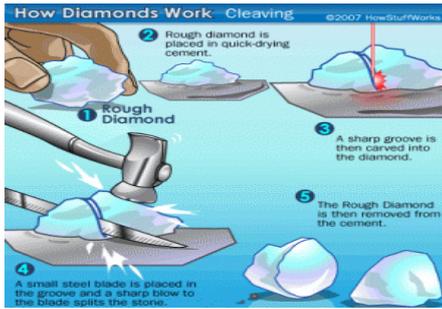
- The rough Diamond shape and the number and location of the imperfections it has must be considered when marking the stone.
- The cleaving grain and sawing grain will determine the shape of the polished stone.
- Scanning devices are used to find an optimal way to cut the stone as it shows a 3-dimensional computer model of the stone as well as the inclusions.

#### **Sawing or Cleaving:**

- Sawing is the use of a diamond saw or laser to cut the rough diamond into separate pieces.
- Cleaving a separation of a piece of rough diamond into pieces, that become separate pieces.

#### **Board members**

Mrs D.D. Mokgatle (Chairperson), Ms P.N. Zikalala Mvelase (CEO), Mr I. Goondiwalla, Mr N.A. Kelder (Alternate), Mr M.A. Luhlabo, Ms Z.P. Manase, Ms S. Mohale, Ms M. Kobe (Alternate), Brigadier N.H. Mokoena, Major-General P.J. Arendse (Alternate), Mr T. Montoedi, Ms N.F. Mpuntsha, Mr S.M. Motloung, Ms S.T. Nxumalo, Mr G.L. Rapoo



### Bruting/Girdling

- Bruting is the process whereby two diamonds are set onto spinning axles turning in opposite directions; they grind against to shape each other into a round shape.

### Polishing/Faceting

- This is done by setting the stone in a mechanical clamp and holding it down on a revolving cast-iron lap (Scaife) that has been rubbed with diamond dust.
- It is of upmost importance to have a highly skilled polisher for this process as the angles need to be exact in order to yield maximum brilliancy.



### Conclusion:

- The diamond manufacturing process is a very unique process .