

## Description of the Current Process



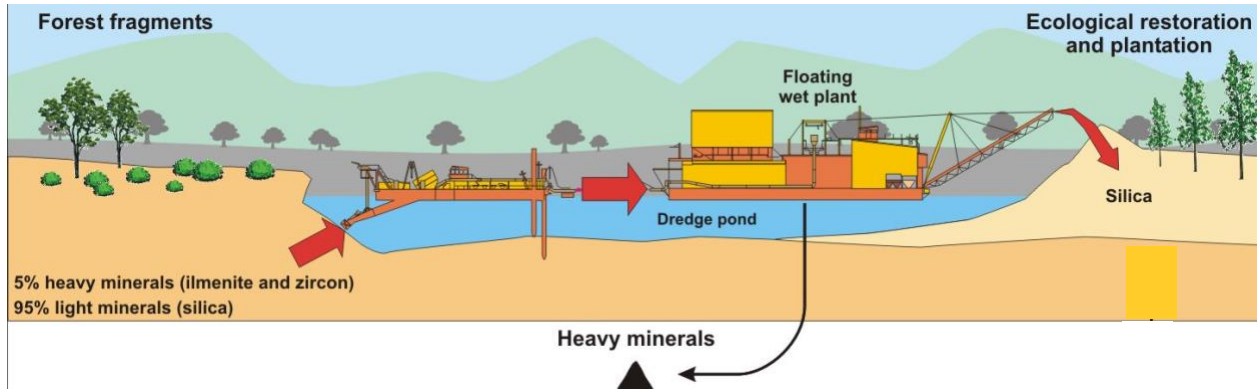
The current process consists of dredging and physically separating the valuable heavy minerals sand from silica sand using centrifugal spirals and electrostatic and magnetic separators (Average ratio of 5-10% HM to 90-95% silica). The process does not require chemical processing of the minerals. On average, Rio Tinto mineral sand dredging operations are mining approximately 100 to 200 Hectares of land yearly.

The mining preparation process implies that any vegetation remaining ahead of the dredge is removed before mining and a continuous process of ecological restoration or reforestation with fast-growing tree species is following immediately behind the dredge.

After dredging, the sand minerals are separated by feeding a mixture of sand and water through centrifugal spirals, in a plant floating behind the dredge. The fresh-water supply for this separation process is coming from nearby water sources. Freshwater is used for mineral separation to permit ecological rehabilitation of the land following mining.

Following initial separation at the floating wet plant, the heavy mineral concentrate is then pumped to a fixed mineral separation plant for final mineral separation.

In the fixed mineral separation plant, the ilmenite and small quantities of zircon are separated by additional centrifugal spirals and by electrostatic and magnetic separators. Both the ilmenite and small quantities of zircon are then transported by truck to shipping facilities, for export. The non-valuable minerals, resulting from the secondary separation are returned to the deposit area.



### Particle size distribution to be tested

