



Recuperación de Oro  
Recuperação de Ouro  
Récupération de l'or  
Добыча золота

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Patents Pending

***iCON Gold Recovery is proud to present the  
IGR 500 Alluvial Plant***



***Recovery of all Precious Metals  
Without Mercury - Without Cyanide***

*Specifically designed for pre-classified material such as:*

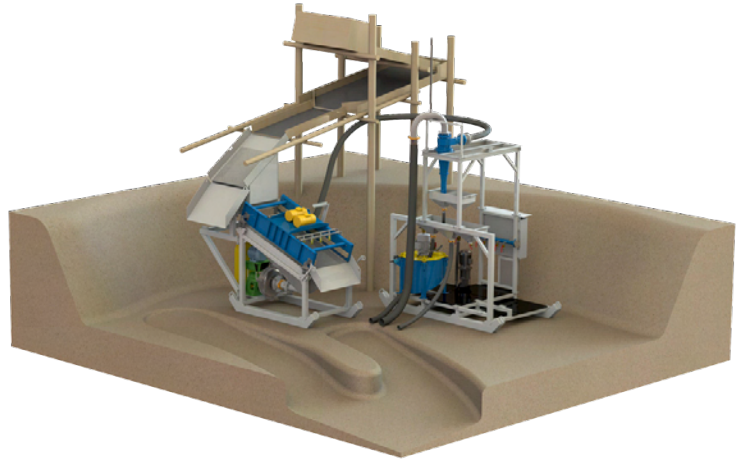
- *Brazilian Land Dredge with or without Clay*
- *River Dredge*
- *Trommel Fines*
- *Screen Deck Underflow*
- *Sluice Tails (New or Old)*

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## ***IGR focuses on the recovery of the Fine Gold and Processing Clay.***

This plant is ideal to enhance the recovery from a Brazilian Land Dredge with or without Laterite/Saprolite Clay.

A Land Dredge is an effective way to break up and transport clay. Through the action in the impellor and turbulence within the hose, the land dredge is one of the most economical means of dispersing and transporting clay.



## **The IGR 500 is a Modular Plant Using a Cyclone for Dewatering to Maximize the Efficiency of the iCON for Maximum Fine Gold Recovery.**

- The plant is ideally placed at the end of your existing sluice
- Your sluice will act as an efficient nugget trap for the large gold
- The IGR 500 will be dedicated to the recovery of fine gold

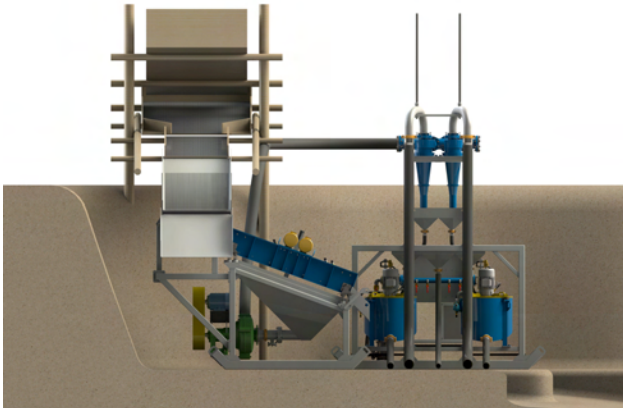
### **The Process**

- Your sluice tails may be screened to -90mm and 10% to 15% solids
- A static grizzly is used to scalp the oversize rock and allows only 12mm- material to pass to vibrating screen
- The 12mm+ grizzly overflow passes by gravity to the tails
- The slurry is distributed over the inclined single deck polyurethane vibrating screen
  - o The +2mm screen oversize pass to tails
  - o The -2mm material is pumped at say 3% to 8% solids to the Hydro Cyclone to remove excess water
- The Cyclone Overflow is essentially 99% water and ultrafine silt/clay/slime. This can be recirculated or passed to the tails
- The Cyclone Underflow passes by gravity to the i350 Concentrator. Ideally this feed is 10 tons per hour of solids and 30 m<sup>3</sup> of total slurry. This is equivalent to 28% solids by weight.

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## What's Included

One (1)	Static Grizzly with 12mm openings
One (1)	Sepro 1.0m X 2.0 m inclined vibrating screen with 2mm; polyurethane screen media, dual electric vibrating drive motors 2 x 2HP (4 HP), spray bar assembly with nozzles
One (1)	30 HP heavy duty slurry transfer pump.
Two (2)	Skid frame assemblies for mounting vibrating screen, cyclone, concentrator, slurry pump water manifold, electrical control panel
1 or 2	iCON i350 Concentrator(s) complete with VFD drive and push button rinse operation, 5 hp electric motor, iCON components mounted in a custom steel frame assembly
1 or 2	5 inch Dewatering Cyclones
One (1)	Electrical controls for all plant equipment including variable frequency drives for slurry transfer pump, i350 concentrator(s) all mounted in a single protective enclosure. All VFDs are NEMA 4, rain proof.
Internal slurry piping and plumbing	
Wiring for on plant equipment (suitable for 220/50-60hz/3 phase, 166 FLA) or (380/50-60/3 Phase/96 FLA)	



The IGR 500-2 is ideal to use in conjunction with a 6" land dredge. The 2 cyclones can process 800 gpm of slurry. The 2 i350 concentrators can process 20 tph of -2mm solids with surges to 30 tph. Land dredges and sluices normally have a very thin slurry. The cyclones are used to remove the excess water and provide an efficient slurry density to the concentrators.

## What's Not Included

Clean Water Pump: 22 USGPM per i350. Suggested pump is Goulds 3196

Generator: 220 or 380/50-60/3 phase.

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## IGR 500 Plant Capacity

The IGR 500 is available in 2 configurations

### IGR 500-1

- Slurry Capacity of 400 GPM
- Efficient Solids Capacity of 10 TPH of -2mm
- 15 TPH Maximum



### IGR 500-2

- Slurry Capacity to 800 GPM
- Efficient Solids Capacity of 20 TPH of -2mm
- 30 TPH Maximum



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