Decide with Confidence

STAR TRACE®
PRIVATE LIMITED

Gold Processing Plant

Single Source

Incorporated testing, design engineering, fabrication and services are provided to conform tailor-made Gold Processing Plant

www.goldprocessingplants.com

Single Source Complete Solutions

STAR TRACE

Star Trace Pvt Ltd is a source of India's one of the largest installed paramount of original equipments, enhance products, technologies and services incomparable with the Gold processing plant & equipments. Star Trace delivers a complete flow sheet of products and processes to support for all the Gold processing plant & equipments solutions from ground zero to the client. Since our inception, we have made indelible mark for ourselves in the engineering industry as a respectable manufacturer and exporter in India. In addition to our manufacturing abilities, we have also come to be known of our ability to provide turnkey solutions to our customers. The company possesses more than two and half decades experience in this business arena that enables it to offer innovative products in the Gold processing plant & equipments in market.

Our products like Gold Concentrator, Shaking Table , Mineral Jig , Gold De-watering Screen, Ball Milling , Gold Spirals, HydroCyclones , Crushing Machineries for Gold, Vibratory Feeder & Grizzly Feeder are known for their long durability, easy handling and low maintenance, which are possible with use of the best raw materials that go into the manufacturing of our expensive product line.

PROCESSING OF GOLD ORE

Star Trace's range of services covers all processes needed for the recovery of gold, from ore to Dore bar and so on.

- Converting run-of-mine (ROM) ore into saleable Gold & Silver products.
- Integrating engineering and process know-how in development and optimization of plant designs using state of art of technology.
- Delivering processing facilities to global environmental standards with localized vision.

INFRASTRUCTURAL PROCESS

Star Trace Pvt Ltd has a state-of-the-art infrastructure that boasts of cutting edges technologies. Our production unit is equipped with a facility for different processes at six different locations in Chennai. Our infrastructure is very efficiently handled by our highly qualified professionals. Their skill coupled with our technically advanced production mechanisms have resulted in products that have long work life, require less maintenance, give high performance, and have zero-defects. Our dexterous team consists of mechanical engineers, technocrats, installation personnel, quality control personnel and allied staff to provide on-site installation and erection services.

ASSURED QUALITY

Being an ISO 9001: 2008 certified company, we have been continually working to live up to our reputation in the industry through stringent quality checking methods. Abiding by international standards and regular upgradation of quality standards, we ensure that none of our products leaves our premises unchecked. In addition to our ISO certification, we have also received certification from the following: NABCB-QM0II and D&B.

INSPECTION AND TESTING

Our strict inspections and testing have ensured that all our products achieve a high level of performance even in harsh conditions and portray distinct features like power ruggedness, greater magnet holding, precision and performance. It has been possible for us to achieve these features by taking cognizance of the client's views apart from arrival of new applications. We are also one of the few companies known for implementing the best project management comprising of high precision standards in variety of activities on site other than Fabrication, Erection and Installation.

CUSTOMER SATISFACTION

Since we are engaged in manufacturing as well as in offering turnkey projects to our customers, we pay utmost attention to customer's specific demands and requirements. We take pride in our ability to tend to all the demands made by the customers concerning designing, fabrication, erection, installation or any other work. We have segregated our workforce for taking care of designing and production work as well as for rendering services for turnkey projects.

MISSION

Our mission is to support our customers to achieve their business objectives by providing innovative solutions with best services on time with equitable price.

VISION

Our vision is to be a global machine manufacturing company with a turnover of One billion dollars in the year 2014.

GOLD ORE PROCESSING

Gold ore processing plant includes different types of process namely,

- Crushing
- Grinding process
- Beneficiation
- Smelting

Gold ore processing plants should be started with the feeder and it will take the extracted materials uniformly to the crusher for the first process.

This process is used for resize and pulverize the gold ores into smaller than particles. For secondary crushing, conveyor will take these materials into the cone crusher. To separate unsized materials vibrating screen has been used and these materials again sent to the crusher for reach the desired size. After this process, the crushed gold ore should be grinded by using ball mill. The uses of beneficiation equipment is to remove the impurities from the gold ores.

Gravity separator is used to remove the undesired material and the magnetic separator will remove the magnetic material from the gold ore. Finally through smelting, the high grade and pure gold ore can be obtained.

GOLD EXTRACTION FROM TAILINGS

Star Trace has been providing a standard technique for extracting the mineral contents from the mining tailings. Star Trace will start the process by sample testing through the mineral content of the tailings.

After the successful result, Star trace will supply the equipment and training process to extracting the mineral concentration. And also we will provide the client for the concentrated extraction. Tailings is always an unnecessary byproduct of the mining from an environment. The damaging materials into surrounding soil have leach environmentally by these tailings are also left in the piles.

This process is mostly affects the water tables and wildlife for years to come. Star Trace process radically reduces the acid forming in the content of mineral by tailings using the extraction process of mineral.

Thus, in the result of the tailings of the cleaner and the process of extraction in the significant amounts of the invaluable minerals. By using our products it provides the profit to the clients and our technology is use to stop damage to the environment.

Gold Extraction from Tailings Consist of following method:

- Gravity Separation
- Flotation
- Leaching – Cyanidation
- Electrowinning

GOLD ORE HANDLING AND PREPARATION

JAW CRUSHER

Rocks are crushed between a fixed jaw and a moving jaw within the jaw crusher. Rocks are crushed to a size generally less than 20 cm.The crushing chamber of Jaw Crusher is composited by stationary jaw and movable jaw. The crushing work simulates the movement of animals which use two jaw crushers to crush materials.

Jaw Crusher is widely used in quarry, mining, metallurgy industry, building material, highway, railway and chemical industry etc.

The largest compression resistance of the material to be crushed is 320m pa. It is ideal for the primary crushing. It features high reduction ratio, easy operation, simple construction, repeatable performance, easy maintenance and low consumption.

CONE CRUSHER

Rocks are crushed between a large solid steel cone shape that moves back and forth and around within a steel casing. Rocks generally crushed to around 2 cm.

STAR TRACE Cone Crusher adopts the international advanced techniques to develop this equipment. The design of spring cone crushers structure is distinguish from traditional design and it compiles other advantage of various type of cone crusher. So it is applicable to fine crush of superfine crush various ores, rocks, slag and refractories.

To adopt the techniques of concave and mantle after machining process to connecter with cone surface to instead the anciently complicate techniques, Star Trace cone crusher raise efficiency in rock crushing.

It has overload hydraulic cavity and refrigeration lubricating system, which fully ensure the safety and stability of operation. It is widely used in metallurgical mining, architectural, rock & railway etc.

BALL MILL FOR GOLD

A Ball Mill a type of grinder is a cylindrical device used in grinding (or mixing) materials like ores, chemicals, ceramic raw materials and paints. Ball Mills rotate around a horizontal axis, partially filled with the material to be ground plus the grinding medium. Different materials are used as media, including ceramic balls, flint pebbles and stainless steel balls. An internal cascading effect reduces the material to a fine powder.

Industrial ball mills can operate continuously fed at one end and discharged at the other end. Large to medium-sized ball mills are mechanically rotated on their axis but small ones normally consist of a cylindrical capped container that sits on two drive shafts (pulleys and belts are used to transmit rotary motion).

BELT CONVEYORS

Fine crushed ore is transported to the fine ore bin. Conveyor belts transport the ore to the grinding mill. STAR TRACE takes the pleasure to introduce itself as one of the top most manufacturing, exporting and supplying units of Belt Conveyors based in India. Designed to perfection, these belt conveyors are widely used in diverse industrial applications.

We make use of good quality raw materials for manufacturing of these belt conveyors. Thus our Belt Conveyors provide reliable performance and are very durable too. Made available in varied specifications, these belt conveyors are very affordable.

Applications Of Conveyor Belt:
*E-waste recycling plant, *Mining, *Metallurgy, *Coal industries

TROMMEL SCREEN

Vibrating trommel screen are used to separate materials into various sizes for further processing, or for end use.

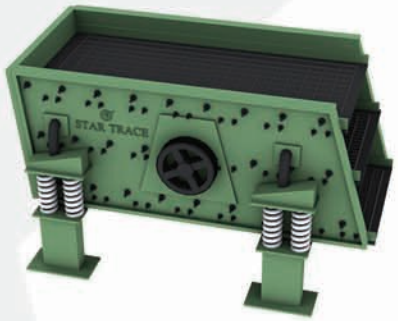
Depending on particular need, the material is separated by passing it through a vibrating "screen box" which has a number of different sized screens or meshes, which the material falls through like a sieve, the material falls onto attached conveyors which stock pile the end products.

The end products can then be used in the building and construction industries.

Features of Vibrating Trommel Screen:

1) High screening efficiency
2) High capacity and reliability
3) Long bearing lifetime
4) Easy maintenance

VIBRATING SCREEN



The type universal Vibro Screen is a new generation vibratory screening machine characterized by low profile, efficient protection of support structure from vibrating masses and virtually noiseless operation.

The various versions of these Vibro Screens permit its use for

- Wet and dry screening
- Coarse and fine separations and are widely used in steel mills
- Mineral beneficiation plants
- Chemical
- Mining food and fertilizer industries
- Coal preparation plants and many others.

The standard range of screens from 300x900mm to 3000x9000mm in single and multi deck configuration.

SLURRY PUMPS

- Fine ore rock enters the grinding mill
- Mixed with water to make the slurry feed

STAR TRACE is one of the most well recognized manufacturers of heavy duty,

*Medium duty slurry
*Process pumps
*Vertical slurry pumps
*Ash slurry pumps

process pumps in India today. Our company manufacturers advanced slurry pumps and process pumps. Our pump handle tougher abrasive solids and slurry found in mining, steel and glass industries.

SCREW CLASSIFIER

Screw sand washing machine is mainly used for sand processing, electric pole factory, building work site and concrete dam, various sands classifying and dewatering.

The Screw Washer adopts inclination 15°, under the water tub, three weir plates form the sediment pool, the screw head is immersed in this pool, the screw is driven by electric motor through reducer rotating continuously, the fresh water is feeding from porous plate at bottom of sediment pool, this machine have three functions of washing, dewatering, classifying.

PRE-CONCENTRATION

MINERAL JIG FOR GOLD

Theory Of Operation:

The In-line pressure Jig is unique in its design and use of jigging concepts. The unit is fully encapsulated and pressurised and combines a circular bed with a moveable sieve action. The encapsulation allows the STPL to be completely filled with slurry and water. As a result, slurry velocity is slowed and water surface tension eliminated improving recovery potential. The screen is pulsed vertically by a hydraulically driven shaft. Length of stroke and speed of up and down stroke can be varied to suit the application. Screen aperture and ragging dimension and material can also be altered for the application.

Applications:

STAR TRACE pressure Jig is a high yield, high recovery gravity separation device. It has been successfully installed in both alluvial and hard rock applications. Significant advantages have been achieved in grinding circuits where coarse heavy minerals or waste material have been recovered for preferential treatment prior to over grinding. The mineral jig operated to recover free gold, sulphides, native copper, native silver, tin/tantalum, diamonds and garnet. Installations are also planned for coal, lead remediation, magnetite, mineral sands and iron ore recovery. Typically units are installed in the recirculating load with STPL feed consisting of up to 14mm mill discharge or cyclone underflow.

GRAVITY CONCENTRATOR

SEMI-CONTINUOUS GOLD CONCENTRATOR

Since the introduction of the Semi–Continuous Gold Concentrator, this revolutionary technology has become an integral component in many of the most prolific precious metal recovery plants the world over. The Semi–Continuous Gold Concentrator is widely recognized and proven to be the most effective enhanced gravity recovery device available to the mineral processing industry.Centrifugally enhanced gravitational force and a patented material fluidization process combine to make the Semi–Continuous Gold Concentrator the unrivaled leader in the recovery of free-milling precious metal.

BENEFITS

- Unmatched recovery performance
- Environmentally friendly (requires no chemical additives or reagents)
- Total process automation provides complete concentrate security
- Unsurpassed feed to concentrate reduction ratio
- Quality manufacturing provides high unit availability, generally + 98%
- Quick payback on investment, typically less than 3 months

OPERATION OF THE SEMI-CONTINUOUS GOLD CONCENTRATOR

During feed processing in the Semi–Continuous Gold Concentrator, particles are subjected to an enhanced gravitational field to enable recovery of even micron-sized particles, previously thought to be unrecoverable.Appropriate "G" force selection combined with a patented fluidization process enables the Semi–Continuous Gold Concentrator to achieve unsurpassed recovery results while maintaining industry leading equipment availability rates and low maintenance costs. During operation the Semi–Continuous Gold Concentrator subjects all particles to an enhanced gravitational field which corresponds to the specific application. The determination of optimum rotor speed is based on a number of metallurgical factors such as lab test results, specific gravity of target and background minerals, particle size distribution and ore grade. In addition to this detailed metallurgical assessment, a review of practical considerations such as circuit water balance, affect on downstream processes and operating costs must be fully examined prior to making final rotor speed selection.

How it works – First, water is injected into the rotating concentrating cone through a series of fluidization holes.

The feed slurry is then introduced through the stationary feed tube. Once the slurry reaches the bottom of the cone it is forced outward and up the cone wall, filling each ring to capacity to create a concentrating bed. Here, once optimum fluidization has been achieved, high specific gravity particles are retained in the concentrating cone. When the concentration cycle is complete, concentrates are flushed from the cone into the concentrate launder through a patented multi-port hub. This procedure can be completed automatically in less than 1 minute in a totally secure environment.

SEMI-CONTINUOUS GOLD CONCENTRATOR EXTENDED DUTY SERIES

APPLICATION

Rugged design and a high degree of quality manufacturing ensures that every Semi-Continuous Gold Concentrator will provide many years of reliable, trouble-free operation in even the most severe application and environment. The Semi-Continuous Gold Concentrator has been successfully applied in the recovery of gold, platinum, silver, mercury and native copper.

PRODUCT CATEGORIES

With unit capacities ranging from laboratory scale to 650 tonnes of solids per hour, Semi-Continuous Gold Concentrators are suitable for a variety of applications; laboratory testing, in-field exploration, small to medium scale production or even high tonnage open pit mining.

The Semi-Continuous Gold Concentrator is available in three model types:

EXTENDED DUTY SERIES

The Star Trace Extended Duty Extended Duty Series is the premium class of semi- continuous centrifuge concentrators available in the mining industry today. The Extended Duty Series series was specifically designed to withstand the severe operating conditions inherent to the hardrock milling circuit.

Compact design, stainless steel construction and the highest quality components make Extended Duty Series the unit of choice for the most demanding precious metal recovery application.

MANUAL DISCHARGE SERIES

Star Trace offers laboratory and pilot-scale concentrators for bench-scale testwork, in-plant sampling and in-field alluvial exploration projects.

Lab and pilot-scale Semi-Continuous Gold Concentrators have become standard in all state-of-the-art metallurgical laboratories around the world. Ranging in throughput size, are all built with the same strict quality standards as the larger throughput capacity Semi-Continuous Gold Concentrators.

CENTRE DISCHARGE MILD STEEL SERIES

Until the introduction of the Extended Duty Series, the Gold Centre Discharge series (Centre Discharge Mild Steel Series) was the industry workhorse and most widely used centrifugal recovery device available. The Centre Discharge Mild Steel Series has now become the machine of choice for most alluvial mining operators where conditions are generally less severe than those present in hard rock mill environments.

The Centre Discharge Mild Steel Series is also an economical alternative for applications where project economics may not support the purchase of a premium class Gold Extended Duty unit. While the Centre Discharge Mild Steel Series provides a cost effective alternative to the Extended Duty Series through the use of carbon steel construction, it still provides precisely the same high level of metallurgical performance as the Extended Duty Series model line.

SPIRAL SEPARATOR

Spirals are gravity concentrators and separate minerals of different specific gravity according to their relative movement in response to gravity, centrifugal force and other forces in the fluid medium. It has extremely good performance and effects in processing placer of beach, riverside, seashore and stream.
STAR TRACE spirals are made of polyurethane lined fiber glass with wearable corundum inner surface. Generally there are 5 turns in one start, single, twin, triple and quad starts available per column to suit capacity requirements.

Applications:
*Rutile, ilmenite and zircon concentration. *Iron ore, chromite and manganese beneficiation.
*Tin, tantalum and ore concentration. *Gold, native copper and base metal recovery.
*Silica sands processing. *Titano-magnetite concentration.

SHAKING TABLE FOR GOLD

Construction:

Head Motion:

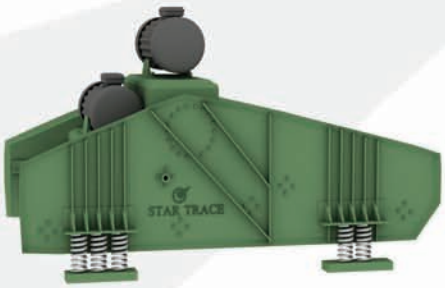
The head motion is of rugged construction and requires minimum maintenance.
Its internal mechanism is splash lubricated from an integral oil sump.

Decks: The decks are built of 16mm zircon-reinforced fiberglass with fabricated steel frames at the bottom and are easy to clean, requiring little maintenance. The specific gravity of fiberglass made into decks is one third of that of steel, while its strength reaches as high as 70% that of steel. This fiberglass deskc also has the characteristic of water-resistance and corrosion resistance and can hold the shape unchangeable at ±50°C.

Applications: Concentrating Tables are designed to wet gravity based separation of minerals and other granular materials. There are many applications where the concentrating table is of particular value and cannot be equaled for economical and efficient performance. They are effective in processing precious and base metal, rare metal and non-metallic minerals.

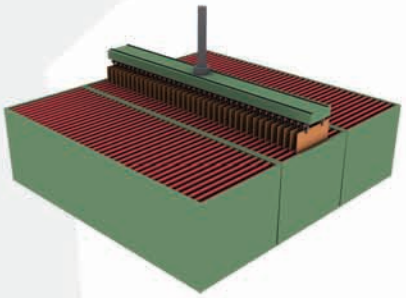
DEWATERING SCREEN FOR GOLD

Whilst enjoying immense popularity for many years on small horizontal and inclined screens, STAR TRACE is the first company in the India to perfect this simple drive arrangement on large horizontal and inclined screens. This single development has resulted in tremendous advantages as far as reduced maintenance, compactness and simplicity are concerned. Besides the simplicity of the drive, many other features have been incorporated to provide a machine which is specifically designed for heavy duty applications, long life and low operating and maintenance costs at a competitive price. The standard range of screens from 300x900mm to 3000x9000mm in single and multi-deck configuration.



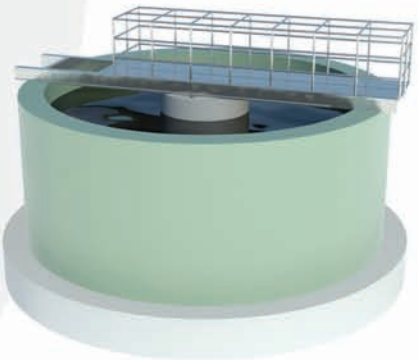
ELECTROWINNINGS

Electrowinning also called electroextraction, is the electrodeposition of metals from their ores that have been put in solution or liquefied. In electrowinning, a current is passed from an inert anode through a liquid leach solution containing the metal. So that the metal is extracted as it is deposited in an electroplating process onto the cathode. In electrorefining, the anodes consist of unrefined impure metal and as the current passes through the acidic electrolyte.The anodes are corroded into the solution so that the electroplating process deposits refined pure metal onto the cathodes.



LEACHING PROCESS

Scrap printed circuit boards were selectively smelted at 1200°C to produce a metallic alloy having three phases. These phases were identified as a lead-rich phase, a low tin content alpha bronze phase and a high tin delta phase. Electrochemical leaching method on this alloy were done in 1 mol/dm3 sulfuric acid or in 2 mol/dm3 hydrochloric acid (adjusted to an ionic strength of 3 mol/dm3). The lead rich phase was more strongly passivated in sulfate media and in this medium the high tin content delta bronze was more resistant to corrosion than the lower tin alpha bronze phase.In chloride medium the lead phase and both bronze phases corroded readily, but with current densities about an order of magnitude lower than in sulfate medium (static conditions) for the bronze phases. The high tin delta bronze phase was found to form a passivating layer in sulfate media. A similar layer was not seen in chloride medium.The leaching method in sulfate medium also showed the existence of an alpha bronze phase of lower tin content in the centres of the alpha phase grains. This phase was quite resistant to leaching in sulfate medium.STAR TRACE offer complete leaching process with highly cost-effective and environmental friendly process.



GOLD REFINING

Gold is purified by means of a smelting process, which utilizes pressure, high heat and chemicals to accomplish the task. Like any metal that appears naturally in the earth, there are impurities that must be removed. Removing minerals and other impurities allows gold to be used in its purest form.
The cathodes are washed down and the gold is collected and then smelted at more than 1000°C.
The molten material is poured to make gold bars.The gold is collected and taken to the gold refinery and then on-sold for use in a wide range of products.

HYDROCYCLONE

Hydrocyclone widely applied in mine-chosen technique in various metal mines. It mainly shows in the following works:

1. Classification for closed circuit grinding.
2. Regrinding for fine mine classification.
3. Mud-removing before selection and after selection.
4. Dam and backfill for gangue.

In closed circuit grinding system, it features high classification efficiency and fine overfall fineness under high mine concentration. Classification efficiency is higher for 5-10% than common screw grader. It benefits for enhancing grader utilizing choose proper specification and mode of cyclone according to grinding processing capacity, overfall fineness and sedimentation concentration. This is precondition of getting the most optimized work condition. Star Trace is able to offer standalone, parallel connection machine or machine series in such specification as Ø50, Ø75, Ø100, Ø125, Ø150, Ø200, Ø300, Ø350, Ø500, Ø660.

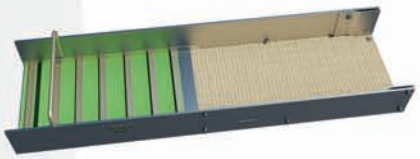
FLOATATION MACHINE

STAR TRACE designs and manufactures all sizes of flotation cells. Multiple impeller/diffuser configuration can be used to either enhance or restrain mixing depending upon the nature of the ore being treated. The robust design allows the structure to be self-supporting and thus fewer supporting beams are requires for installation.

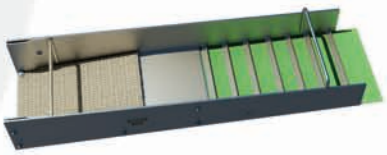
Metallurgically the hydrodynamic shape eliminates short-circuiting and prevents sanding. Specially profiled impellers and diffusers enhance efficient pumping of the slurry.

Excellent dispersion of the external air feed and homogeneous mixing of the air and slurry all contribute to superior recoveries and grades being obtained. The impellers and diffusers are moulded rubber or polyurethane coated for abrasion resistance.

SLUICE BOXES



Our Star Trace Sluice Boxes are designed to adapt to our new “Marvel Mat” that is placed under the classifier screen for superior recovery. A lighter design for portability as well as rolled top edges for superior strength on 2.5” and up models only. Included is a large classifying screen that covers over half of the riffle section, miners moss for fine gold recovery and wire mesh screen over ribbed carpet to give you simply the best fine gold recovery one could expect with a sluice box.



3 Stage Flare Sluice Boxes:
The 3 Stage Sluice Box is simply the lightest, most compact sluice box you can find for superior fine gold recovery. The secret is in our 3 Stage Sluice System that enables us to say that our sluice can out perform any double or triple sluice on the market.

This sluice box features heavy duty latches, rolled top edges that provide greater strength and safety, a longer rubber damper for more even distribution and an adjustable flow metering plate for the lower sluice.

GOLD PANS

Pan three times as fast as a conventional gold pan.
Has three surfaces that perform specialized tasks.
The coarse riffled area is used to "rough out" the majority of the material.
The textured area is used to pan any remaining black sands.
Use the “smooth surface” until only gold remains. Green color. Lifetime guarantee. Shipping weight 2 lbs.

PORTABLE GOLD TROMMEL PLANT

Our gold mining equipment plant has a full power 4 point drive system (which eliminates the chain drive) is fully reversible, and has a full variable speed control. Our Gold Trommel has a extra heavy shell and is completely lined with abrasion resistant plate in all wear areas, Gold Trommels have additional reinforcement in drive locations, and incorporates oversized shafts and bearings. Testing showed that some of the biggest complaints with Trommels is screen blockage, so we have taken and installed full polyurethane Tapered Relief octagon screening media to help eliminate this issue, and expensive but needed adaptation. Another advantage with this screen media is it has 10 to 15 times of life of steel. Additionally, the screen media snaps into place which only take minutes instead of days or weeks as with some other systems.

SPECIFICATIONS AND INFORMATION

TEST RESULTS

With machine properly equipped and proper screen sizing and even fed material test plant was able to achieve up to 150 Tons Per Hour, ST rates this machine between 75 to 100 ton per hour with material as follows:

- **60% at (-) 20mm**
- **25% at 40mm to 75mm**
- **15% at (+) 75mm**
- **3000 liters per min**

Results will vary depending screens, water and material conditions. Does not include generator or water pump.

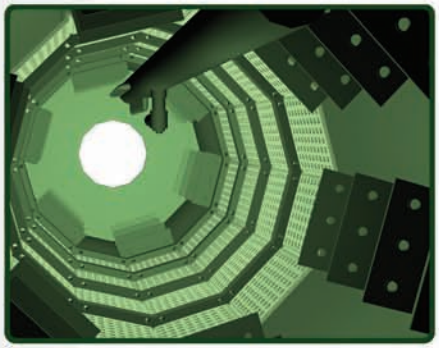
TROMMEL

Trommel design uses a 12 sided polygon,1150mm diameter drum,2700mm of pre-scrub area with reinforced drive rings for Trommel drives.

- **Polygon allows maximum break up of materials.**
- **Plant is designed to operate level or at 1 degree slope and by design, requires material flytes, which move material and ads additional mixing and breaking action.**
- **A side benefit of using a polygon design is that replacement parts do not have to be Rolled.**

Trommel has replaceable wear plates in all wear areas including Flytes.

Trommel uses Polyurethane screens with tapered relief holes which we recommend.



- **Polyurethane Screens almost eliminates the plugging issues that haunt trammels.**
- **Polyurethane life can be up to 10 to 15 times that of steel.**
- **Screens can be change in minutes instead of days.**
- **Trommel design allows for steel (flat) punch if desired.**

Trommel drive:

- **We incorporate a 4 point live drive system (Which eliminates the chain).**
- **Fully hydraulic.**
- **Full variable speed control.**
- **Oversized gear boxes, bearings and shafts.**

Internal spray tube with interchangeable brass spray nozzles for final rinsing action.

VIBRATORY FEEDER

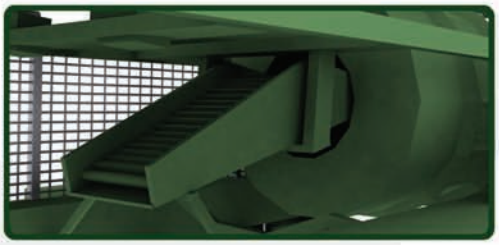
- **Horizontal design allows for longer scrubbing action.**
- **Dramatically lowers feed height.**
- **Bolt in wear plates for easy replacement.**
- **Hydraulic driven.**
- **Full variable speed control.**
- **Independent spray bars (not attached to vibratory unit, eliminates spray bar breakage).**
- **Each spray bar has its own valve and interchangeable brass spray nozzles.**
- **Can use either tapered Grizzly bars or punch plate in screening area.**

GRIZZLY

- Radio controlled hydraulic dumping feature.
- Uses a remote control similar to a garage door opener.
- Allows loader operator to stay in his machine.
- Fold up wings to allow more volume and help eliminate spillage. Wings fold down for shipping.
- Feed area has a built in back wall, to build dirt ramp up to grizzly to lower dump height if wanted.

NUGGET TRAP

- Material moves across a nugget trap prior to entering trommel.
- In most cases 40 to 60% of gold is caught here.
- Folds down for easy cleaning.
- Size 1575mm x 350mm



SLUICE BOXES

- 1800mm (W) X 4200mm (L) sluice boxes, with center divider to maintain riffle hold down.
- Hydraulically folds up for transport in seconds.
- While in operation each box can be hydraulically leveled to a different pitch to obtain maximum recovery.

DISCHARGE CONVEYOR

- Hydraulic Driven.
- Folds up in seconds for transport.
- Moves oversize material away from unit to allow placement of stacker conveyor.
- Longer gold up sections available.
- Size 2550mm X 500mm

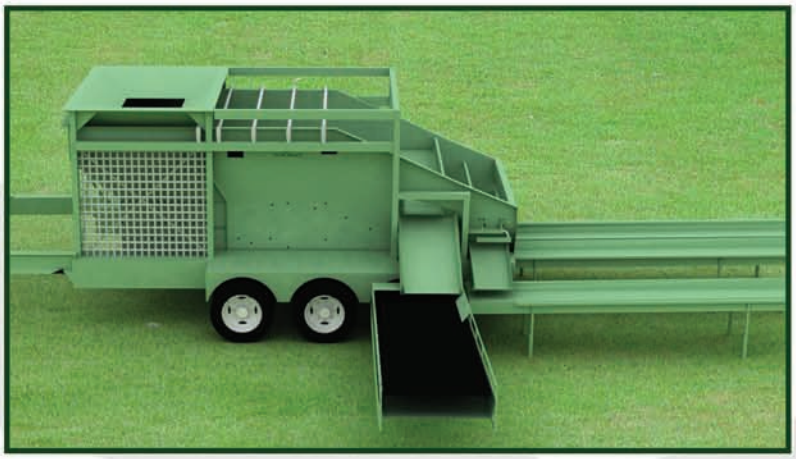
CHASSIS

- Utilizes wide flange high tensile beam.
- Independent 4 point Hydraulic leveling system.
- Tri axle wheel chassis with 8 bolt hubs, electric brakes (all axles) and over rated (10 ply) tyres.

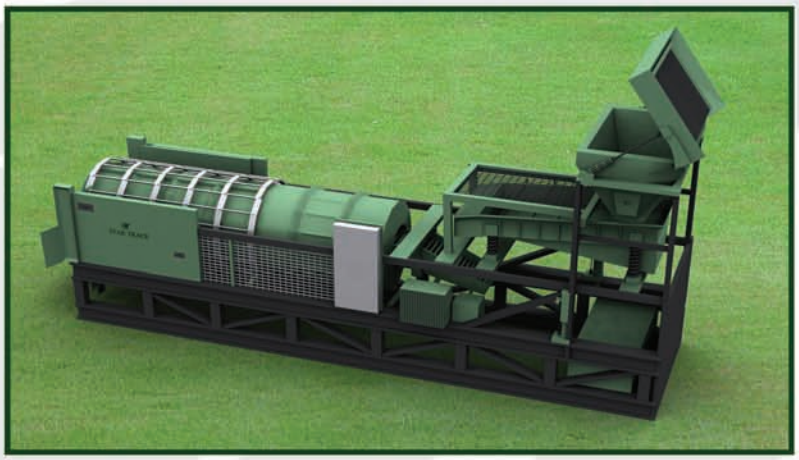
Note:

1. Technical data and specification subject to change
2. Special Gold Trommel Plant can be made on request, Please send us Your's Technical data and application,required for our engineers to provide

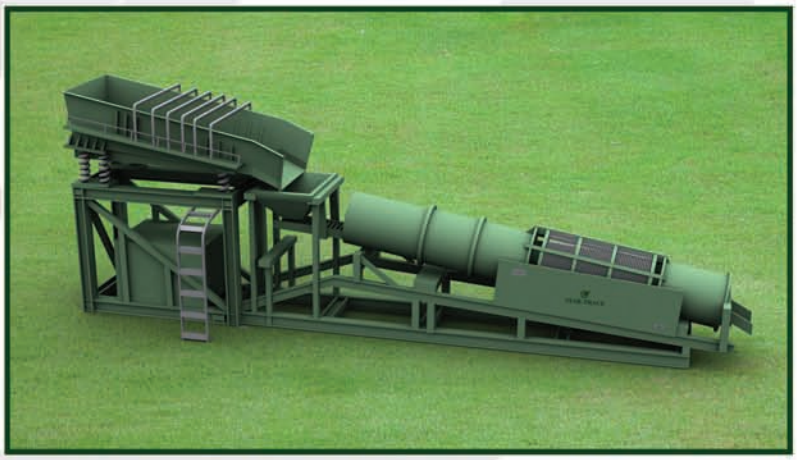
OUR OTHER GOLD TROMMEL PLANT



Portable Gold Wash Plant (100+ TPH)

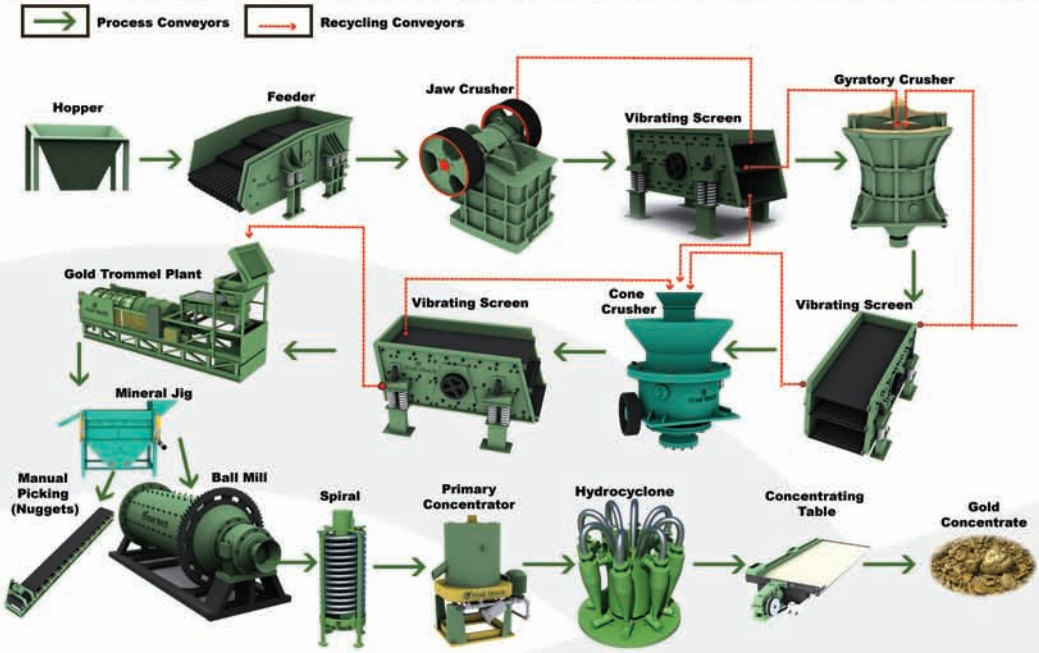


Gold Trommel Plant (100+ TPH)

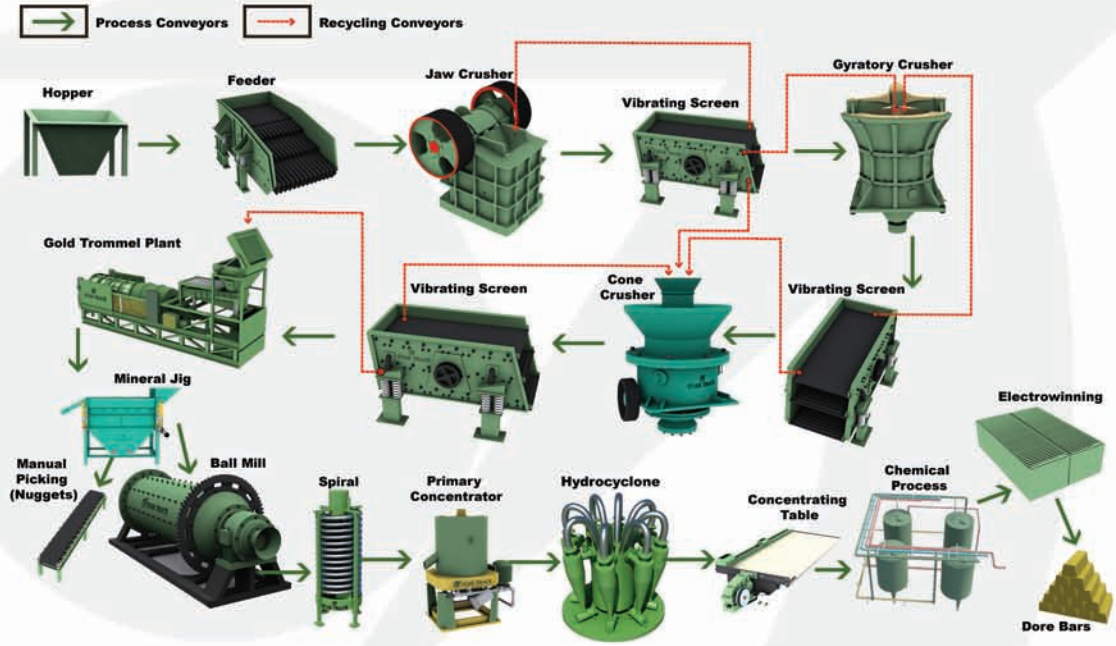


Gold Trommel Plant (200+ TPH) & (300+ TPH)

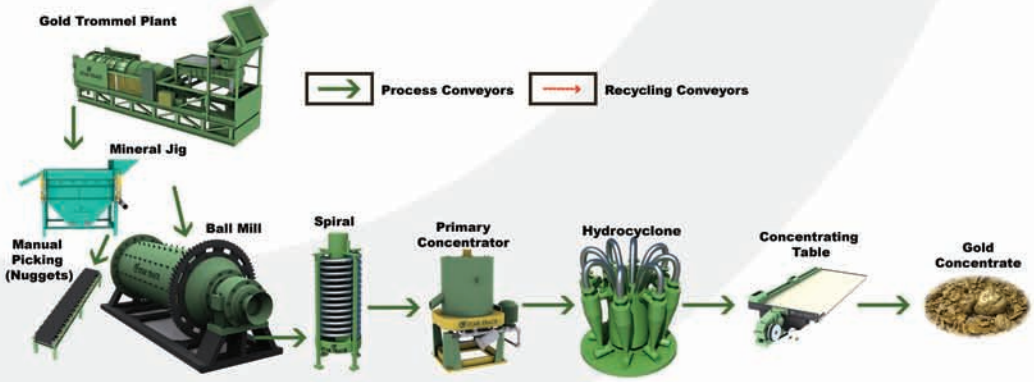
GOLD ORE CONCENTRATE PROCESSING PLANT



GOLD ORE CONCENTRATE WITH CHEMICAL & ELECTROWINNING PROCESSING PLANT

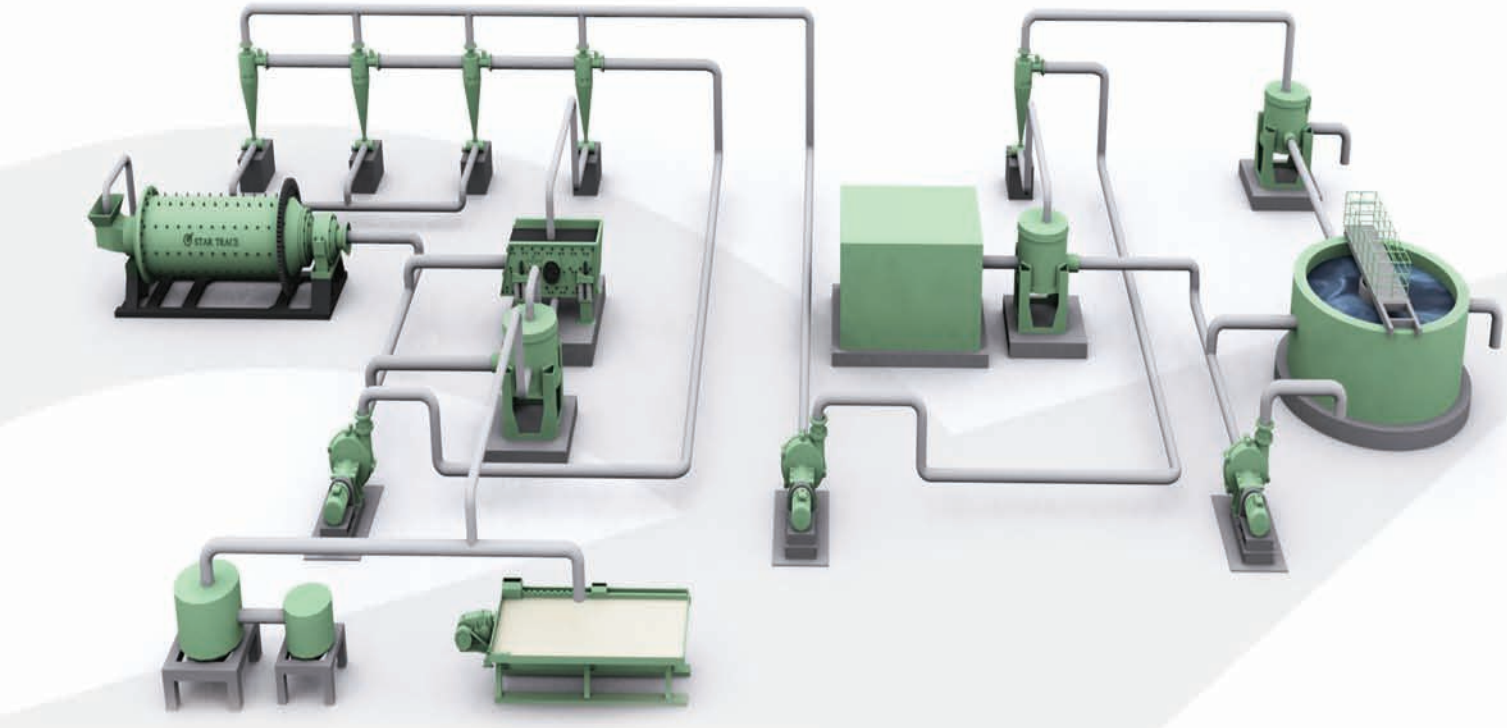


GOLD ORE CONCENTRATE WITH CHEMICAL & ELECTROWINNING PROCESSING PLANT



HARD ROCK FLOWSHEET

CONVENTIONAL GRINDING CIRCUIT **EXTREME GRAVITY CIRCUIT**



MERCURY REMOVAL

Mercury is a health hazard, especially when in gas form. To remove this hazard, before smelting, gold precipitates from electrowinning are usually heated in a retort to recover any mercury present, that would otherwise cause health and environmental problems due to its release during smelting. The mercury present is not usually from the mercury amalgamation process that is no longer used by formal gold mining companies, but from mercury in the ore that has followed gold through the leaching and precipitation processes.

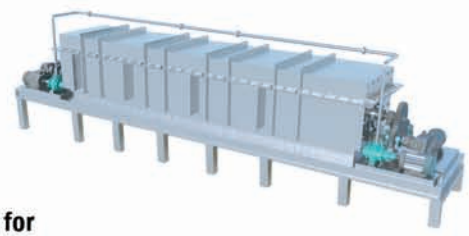
In the event that there are high levels of copper or silver present, leaching of the precipitate using nitric or sulfuric acids may be required.

IRON REMOVAL

Nitric acid or forced air oven oxidation can also be used to dissolve iron from the electrowinning cathodes before smelting. Gravity concentrates can often contain high grinding steel contents, and so their removal using shaking tables or magnets is used before smelting. During smelting iron can be oxidized using nitre. Excessive use of nitre will corrode the smelting pot, increasing both maintenance costs and the risk of catastrophic leaks (known as run-aways, or holes in the pot through which the molten charge is lost).

MERCURY RETORTS

STAR TRACE Retorts and Vacuum distillation ovens ranging from 0.5 cubic feet to 40 cubic feet material capacity. Both fuel fired and electric models are available.



Mercury condensing and handling systems are included with all retort systems.

Custom condensing and mercury handling systems can be provided to meet specific customer requirements.

Our latest generation of 30 and 40 cubic foot electrically heated retorts have no equal for processing high volume, high mercury materials.

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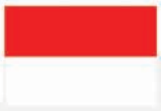
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- Establishing demo plant for processing low grade Gold ores.

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