



EXPLORERTM

PORTABLE PROCESSING PLANTS

6 MODELS TO CHOOSE

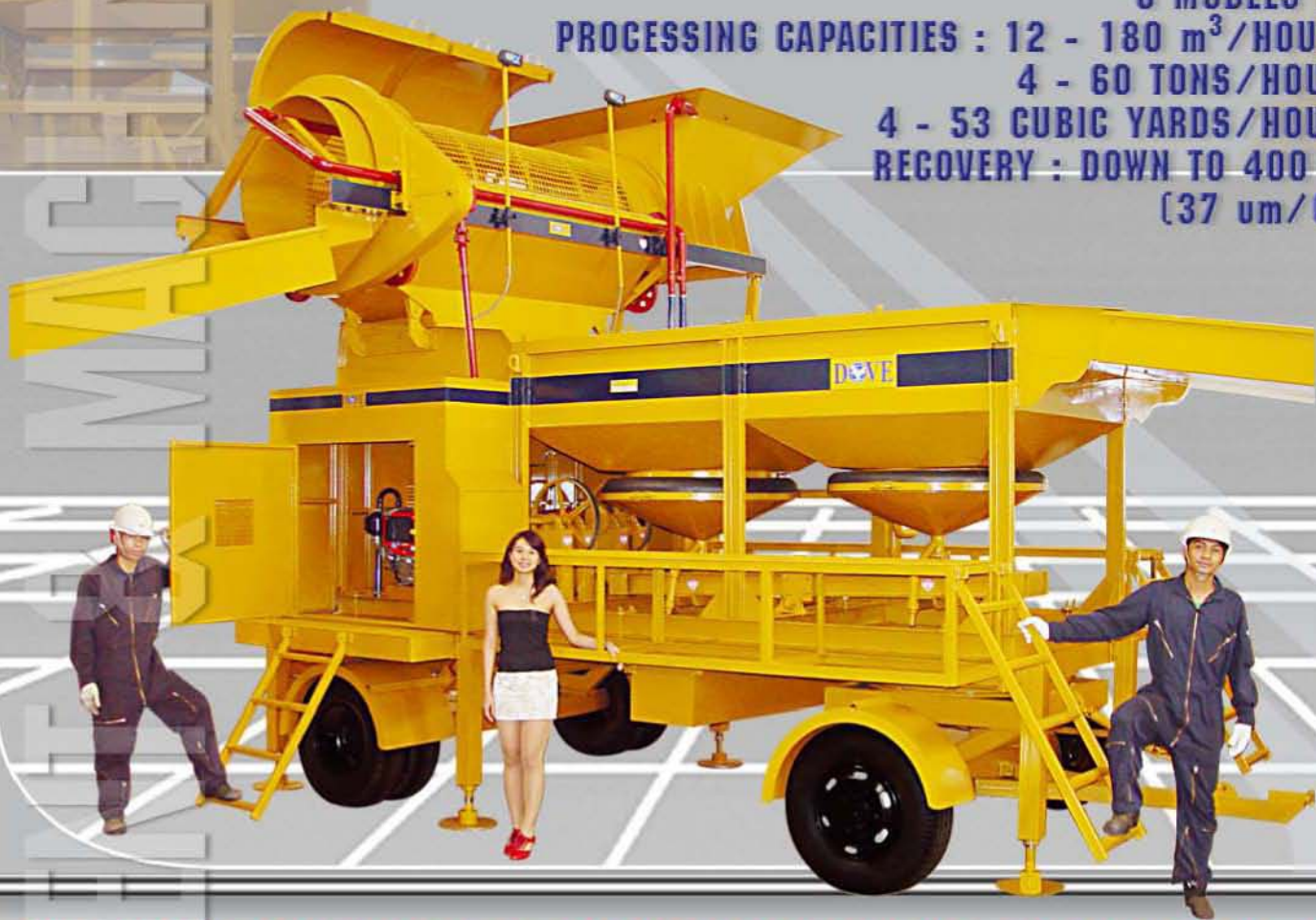
PROCESSING CAPACITIES : 12 - 180 m³/HOUR(SLURRY)

4 - 60 TONS/HOUR(SOLIDS)

4 - 53 CUBIC YARDS/HOUR(SOLIDS)

RECOVERY : DOWN TO 400 MESH SIZE

(37 um/0.037 mm)



THE MOST PRACTICAL & ECONOMICAL MEANS OF MINERALS RECOVERY

- Economical, Practical, Easy to Operate & Low maintenance.
- Rapid Field Assembly, Installation & Operation.
- Continuous minerals recovery, without operator interference.
- Recovery of Gold, Diamonds & Other Minerals Simultaneously.
- Production Locked Inside Jig, Preventing the Theft.
- 100% minerals recovery, over the selected screen size.
- Do not Require Fresh Water, Use Dirty Re-Cycled Water.
- Built to Last (Highest Quality Material Fabrication).
- One Year Manufacturer Warrantee.



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LEADER IN SURFACE MINING TECHNOLOGY

Mining For Precious Stones, Gold and other metals made Easy & Economical

Mining for Gemstones, Gold and other Minerals once thought to be the exclusive activity and expertise of a few large companies around the world, with requirements for large investment capital is now made Easy, Practical & Economical, with EXPLORER™ portable processing plants.

EXPLORER™ range of portable processing plants (Gravity separation plants), are designed & developed exclusively by DOVE for rapid Exploration, Exploitation and recovery of Diamonds, Color Gemstones, Gold, other precious metals, Base metals, Ferrous metals, and other heavy minerals.

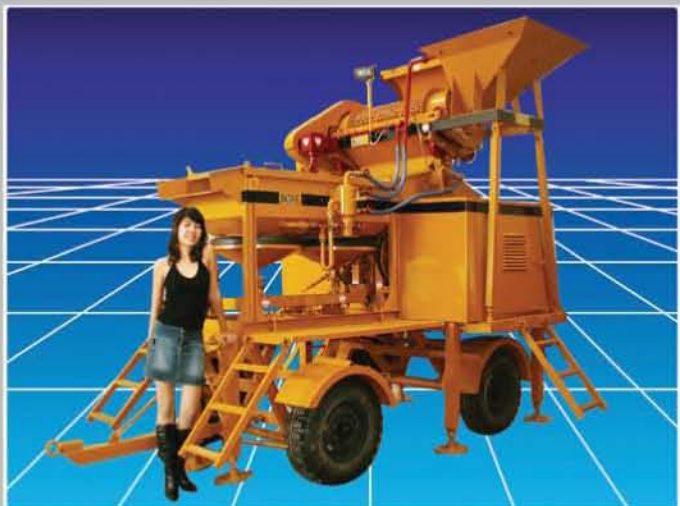
EXPLORER™ Plant are capable of recovery of Gold, Diamonds and other minerals simultaneously.



EXPLORER™ - IV (SIDE VIEW)



EXPLORER™ - IV (SIDE VIEW)



EXPLORER™ - 150

EXPLORER™ portable plants are equipped with the security cover and locking mechanism, where the operators cannot access and see the production of the Gemstone & Gold. This will allow the machine to be left in the field with the operators, without any worry of loss & theft of production, until the end of the shift, when the production is removed. The operator will only feed the machine. EXPLORER™ portable plants are configured with one or two axles and 4 - 6 wheels heavy duty trailer, for rapid transport and logistics in the field.

EXPLORER™ range of processing plants are practical, simple to operate and economical. These full-fledged Gravity-Separation Plants are configured to be used as a pilot plant, for small to medium size mining operation or for exploration activity. EXPLORER™ processing plants are configured for automatic separation and recovery of Precious & Semi-Precious Gemstones, Metals & Other Minerals.

EXPLORER™ portable gravity separation plants are now available in six models with processing capacity range of 12 - 180 m³/ hour of slurry feed, or 4 - 60 tons/hour of solids. Given these processing capacities and the low ownership cost of the plants, the machine can be paid for, just in a matter of a few weeks.

EXPLORER™ processing plants are simple to use and maintain and are extremely accurate. The soil is continuously introduced into the hopper of the plant and all Gemstone or Gold content of the soil is automatically separated and recovered by the machine and kept (locked) inside the compartment of the Jig Concentrator. The concentration and separation process is automatic and based on the specific gravity differentials of minerals. The soil could be feed either manually or through automated means (for larger models). EXPLORER™ is designed in order to handle every type of ore (i.e. sandy, light clay, heavy clay, rocky, etc.).

OVER FORTY FIVE YEARS OF MANUFACTURING EXPERTISE

PLANT COMPONENTS

EXPLORER™ plants are configured with Trommel/Classifier and Jig Concentrator, installed on a Heavy duty Trailer.



- A** Trommel Drive Mechanism is Chain-Drive housed and secured with canopy, with locking mechanism.
- B** Trommel & Jig Concentrator, are each independently powered by a single engine (Gasoline or Diesel) or Electric motor. All models include a removable engine canopy for the protection of the engine components, as well as easy 3 - ways access doors for engines/motors maintenance.
- C** Internal Hydraulic Network is configured with easy to remove steel pipes, for long life. All water pressures throughout the system and the water manifold are adjustable by Taps. The system is supplied with water pump and required high pressure piping (30 meters).



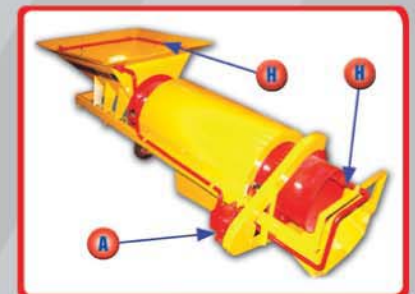
D EXPLORER™ range of Wash Plants are supplied with an optional sluice channel for collection of undersize Gemstones, Gold and other Metals. Jig mesh size could be changed according to your requirement in the field. Also as an option for Continuous/Automatic & Closed circuit concentration & recovery of the fine mesh down to 400 mesh (37 um/0.037 mm), the undersize outlets of the Jig is designed to be connected to the VBS™ CONCENTRATOR (manufactured by DOVE).



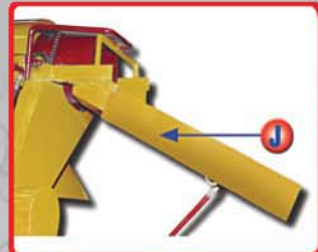
- E** Jig Concentrator is supplied with security cover and locking mechanism, in order to prevent the production theft.
- F** Jig Concentrator is configured with a sluice reject channel and adjustable stands.
- G** All models of EXPLORER™ are supplied with spot lights for night operation.



H Trommel Hopper and the Cylinder are equipped with high pressure hydraulic spray bar system, built all around the Hopper, as well as throughout the Cylinder, in order to speed up ore breakup and through put, and facilitate the classifying function by pre-wetting the ore.



I EXPLORER™ is equipped with catwalk & ladders on both side of the plants, as well as heavy duty adjustable stands, used for rapid balancing & plant permanent positioning.



- J** Classifier includes a foldable/adjustable over size Reject channel for all models.
- K** Classifier is equipped with the Slope Adjusting Mechanism, in order to adjust the angle of the trommel slope, during the operation, thereby adjusting of ore through put speed.



EFFECTIVE PARTNER FOR YOUR MINING OPERATIONS



APPLICATION :

EXPLORER™ Portable Gravity Separation Plants (Wash Plants), are designed and manufactured by DOVE for rapid Exploration, or as Pilot Plant for small to medium size Mining Operation. EXPLORER™ is configured for rapid field deployment and designed for the automatic separation and continuous recovery of various Minerals & Metals, including Diamonds, Color Gemstones & Gold.

EXPLORER™ Portable Plants are configured for the following application :

- Exploitation & Recovery of minerals in placer/alluvial deposits.
- To be deployed after the crushing circuit for the Gravity Separation & Recovery of precious and semi-precious metals, from Hard Rock/Primary Deposits.

UNIQUE FEATURES :

- **CAPACITY:** For the small Portable Processing Plant, the ore through put capacity of the EXPLORER™ range is the highest in the industry. (see Specification Table)
- **QUALITY:** The EXPLORER™ range is manufactured with the highest quality material and workmanship for a long & trouble free life. Manufactured with solid steel for long life. The engine/motor is the best brand names in the industry (HONDA™, KUBOTA™, ELEKTRIM™). All Internal Piping of the machine is configured with steel pipes, all piping is designed for easy & speedy detachment. The revolving screen in the classifier is manufactured from solid/high grade steel. The JIG Screen of the concentrator is built from stainless steel.
- **COST:** Considering the capacities & unique features of the EXPLORER™ Portable Plants, they are yet priced economically in order to be affordable for a small mining operation.
- **INSTANT FIELD MOBILITY:** For the ease of transport in almost every trail, all models of EXPLORER™ are supplied with four or six wheels (detachable) Trailer. The Trailer includes a Hitch Mechanism to be connected behind your 4 wheel drive or truck. EXPLORER™ can be assembled & disassembled in the field, within only a few hours.
- **CONTINUOUS OPERATION:** Automatic recovery of Gemstones, Gold & other Heavy Minerals, continuous feeding either by hand, Conveyor Belt (optional), or Gravel Pump (optional), or Slurry Channel/Pipe.
- **PLANT BALANCE ADJUSTMENT:** Plant balance indicator gauge, for highest yield & performance. Plant is also supplied with 4-6 sets of stands with adjustment feature, for rapid balancing in the field.
- **SECURITY:** All models of EXPLORER™ are equipped with Jig Security Cover & Pad Locks to prevent the theft of the production, as well as Security Cover for Trommel and Canopy Pad Lock for engine housing.
- **POWER:** EXPLORER™ II, III, IV & V are equipped with two separate engine/motors for the independent operation & speed adjustment of Trommel and Jig Concentrator.
- **NIGHT OPERATION:** All models of EXPLORER™ are equipped with a Self-Powered Generator & Spot Light, to enable the night operation. EXPLORER™ are supplied either with Diesel or Gasoline engines or Electric Motors.
- **COLLECTION OF UNDER SIZE:** All models of EXPLORER™ are equipped with Classifier Slope Adjustment Mechanism. Slope adjustment stands for rapid adjustment of Trommel Slope in the field.
- **CLASSIFIER SLOPE ADJUSTMENT:** All models of EXPLORER™ are supplied with complete accessories (Water Pump, Complete set of External Piping (30 m), tools kit, etc.).
- **ACCESSORIES:** All models of EXPLORER™ are configured with an optional long detachable Sluice Box for collection of the undersize minerals. All minerals over 1.0 mm shall be recovered and collected by Jig.
- **WARRANTY:** All models of EXPLORER™ are covered by "One Year" DOVE standard manufacturer warranty.

MOST PRACTICAL & ECONOMICAL MEANS OF MINERALS RECOVERY

EXPLORER™ TECHNICAL SPECIFICATION TABLE

COMPONENTS		UNIT	EXPLORER-I		EXPLORER-II	EXPLORER-III	EXPLORER-IV	EXPLORER-V			
			(EXP-100)	(EXP-150)	(EXP-200)	(EXP-300)	(EXP-400)	(EXP-500)			
PLANT PROCESSING CAPACITY (ORE THROUGH PUT)	SLURRY	m ³ /HR	9 - 12	30 - 45	45 - 60	60 - 90	120 - 150	150 - 180			
	SOLIDS	TONS/HR	3 - 4	10 - 15	15 - 20	20 - 30	40 - 50	50 - 60			
		yd ³ /HR	2.7 - 4	10 - 13	13 - 19	19 - 27	36 - 45	45 - 53			
OVERALL DIMENSION (W x L x H)		cm.	268 x 340 x 300	308 x 373 x 313	334 x 394 x 315	420 x 580 x 390	470 x 660 x 390	540 x 510 x 420			
TROMMEL & HOPPER OVERALL DIMENSION (W x L)		cm.	82 x 237	108 x 267	108 x 287	120 x 420	140 x 450	160 x 520			
HOPPER DIMENSION (W x L)		cm.	65 x 65	70 x 70	80 x 80	120 x 120	140 x 140	160 x 160			
HOPPER CAPACITY		m ³	0.20	0.35	0.50	1.20	1.65	2.07			
JIG TYPE		DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX	DUPLEX			
JIG OVERALL DIMENSION (W x L x H)		cm.	97 x 250 x 118	102 x 275 x 121	107 x 315 x 123	114 x 394 x 163	133 x 367 x 148	155 x 490 x 170			
TRAILER (REMOVABLE) INCLUDING HITCH		TYPE	2 WHEELS	4 WHEELS	6 WHEELS	6 WHEELS	6 WHEELS	6 WHEELS			
TRAILER GROUND CLEARANCE		cm.	80	80	80	90	90	90			
PLANT MAIN ENGINES/ MOTORS TROMMEL & JIG SPEC	GASOLINE ENGINE	MANUAL START	POWER	QTY/HP(kW)	1/5.7 (4.2)	2/4.8 (3.5)	2/7.2 (5.3)	2/8.2 (6.0)	2/8.2 (6.0)	2/11.7 (8.6)	
			RATE SPEED	RPM	3600	3600	3600	3600	3600	3600	
		ELECTRIC & MANUAL START	FUEL CONSUMPTION	g/m ³ /HP/HR	230	230	230	230	230	230	
			TYPE	BRAND	HONDA	HONDA	HONDA	HONDA	HONDA	HONDA	
	DIESEL ENGINE	MANUAL START	POWER	QTY/HP(kW)	1/5.7 (4.2)	2/4.8 (3.5)	2/7.2 (5.3)	2/8.2 (6.0)	2/8.2 (6.0)	2/10.0 (7.4)	
			RATE SPEED	RPM	3600	3600	3600	3600	3600	3600	
		ELECTRIC & MANUAL START	FUEL CONSUMPTION	g/m ³ /HP/HR	315	315	315	315	315	315	
			TYPE	BRAND	SAKARI	SAKARI	SAKARI	SAKARI	SAKARI	SAKARI	
	ELECTRIC MOTOR	MANUAL START	POWER	QTY/HP(kW)	1/7.0 (5.1)	2/7.0 (5.1)	2/7.0 (5.1)	2/8.0 (5.9)	2/8.0 (5.9)	2/10.5 (7.72)	
			RATE SPEED	RPM	2400	2400	2400	2400	2400	2400	
		ELECTRIC & MANUAL START	FUEL CONSUMPTION	g/m ³ /HP/HR	210	210	210	210	210	210	
			TYPE	BRAND	KUBOTA	KUBOTA	KUBOTA	KUBOTA	KUBOTA	KUBOTA	
	ELECTRIC MOTOR			POWER	QTY/HP(kW)	1/3.0 (2.2)	2/3.0 (2.2)	2/5.5 (4.0)	2/7.5 (5.5)	2/10.0 (7.5)	
	RATE SPEED			RATE SPEED	RPM	1425	1425	1435	1450	1450	
	WATER PUMP SIZE		(INLET X OUTLET X STAGE)	Inch	2 x 2 x 1	3 x 3 x 1	3 x 3 x 1	4 x 3 x 1	4 x 3 x 1	5 x 4 x 1	
WATER PUMP ENGINE/ MOTOR SPEC	GASOLINE ENGINE	MANUAL START	POWER	QTY/HP(kW)	1/3.5 (2.6)	1/5.7 (4.2)	1/5.7 (4.2)	N/A	N/A	N/A	
			RATE SPEED	RPM	3600	3600	3600	N/A	N/A	N/A	
		ELECTRIC & MANUAL START	FUEL CONSUMPTION	g/m ³ /HP/HR	230	230	230	N/A	N/A	N/A	
			TYPE	BRAND	HONDA	HONDA	HONDA	N/A	N/A	N/A	
	DIESEL ENGINE	MANUAL START	POWER	HP(kW)	7.0 (5.1)	8.0 (5.9)	8.0 (5.9)	N/A	N/A	N/A	
			RATE SPEED	RPM	2400	2400	2400	N/A	N/A	N/A	
		ELECTRIC & MANUAL START	FUEL CONSUMPTION	g/m ³ /HP/HR	210	210	210	N/A	N/A	N/A	
			TYPE	BRAND	KUBOTA	KUBOTA	KUBOTA	N/A	N/A	N/A	
	ELECTRIC MOTOR			POWER	HP(kW)	7.0 (5.1)	8.0 (5.9)	8.0 (5.9)	84.0 (62.0)	84.0 (62.0)	100.0 (75.0)
	RATE SPEED			RATE SPEED	RPM	2400	2400	2400	2500	2500	3400
	ELECTRIC MOTOR			FUEL CONSUMPTION	g/m ³ /HP/HR	210	210	210	119	119	119
	RATE SPEED			TYPE	BRAND	KUBOTA	KUBOTA	KUBOTA	ISUZU	ISUZU	ISUZU
	HIGH PRESSURE WATER PIPE		m.	30	30	30	30	30	30		
	JIG GROSS WEIGHT (WITHOUT CRATE)		kg.	300	580	650	1410	1640	1880		
	TRAILER WEIGHT		kg.	225	270	330	940	1250	1600		
EXPLORER TOTAL WEIGHT		kg.	980	1250	1480	3480	4360	5380			

EXPLORER™ is economical, easy to transport on the back of a truck, or drag behind your 4x4. It is easy to assemble and install in the field. The total (first time) assembly and installation time at the mining site, is about 2-4 hours. It is easy to operate with minimum operator interference. EXPLORER™ I, II, III, IV & V are designed for rapid exploration, testing or as Pilot Plant for small mining operation. Considering the capacity of 4 tons/hour to 60 tons/hour (solids), it is possible in one working shift of 8 hours to process 32 tons to 480 tons of solids. With EXPLORER™ you have an option to use only workers to dig the ground and manually feed the machine, or you can use a small Loader Backhoe on wheels, to do the digging, stock pile and feeding



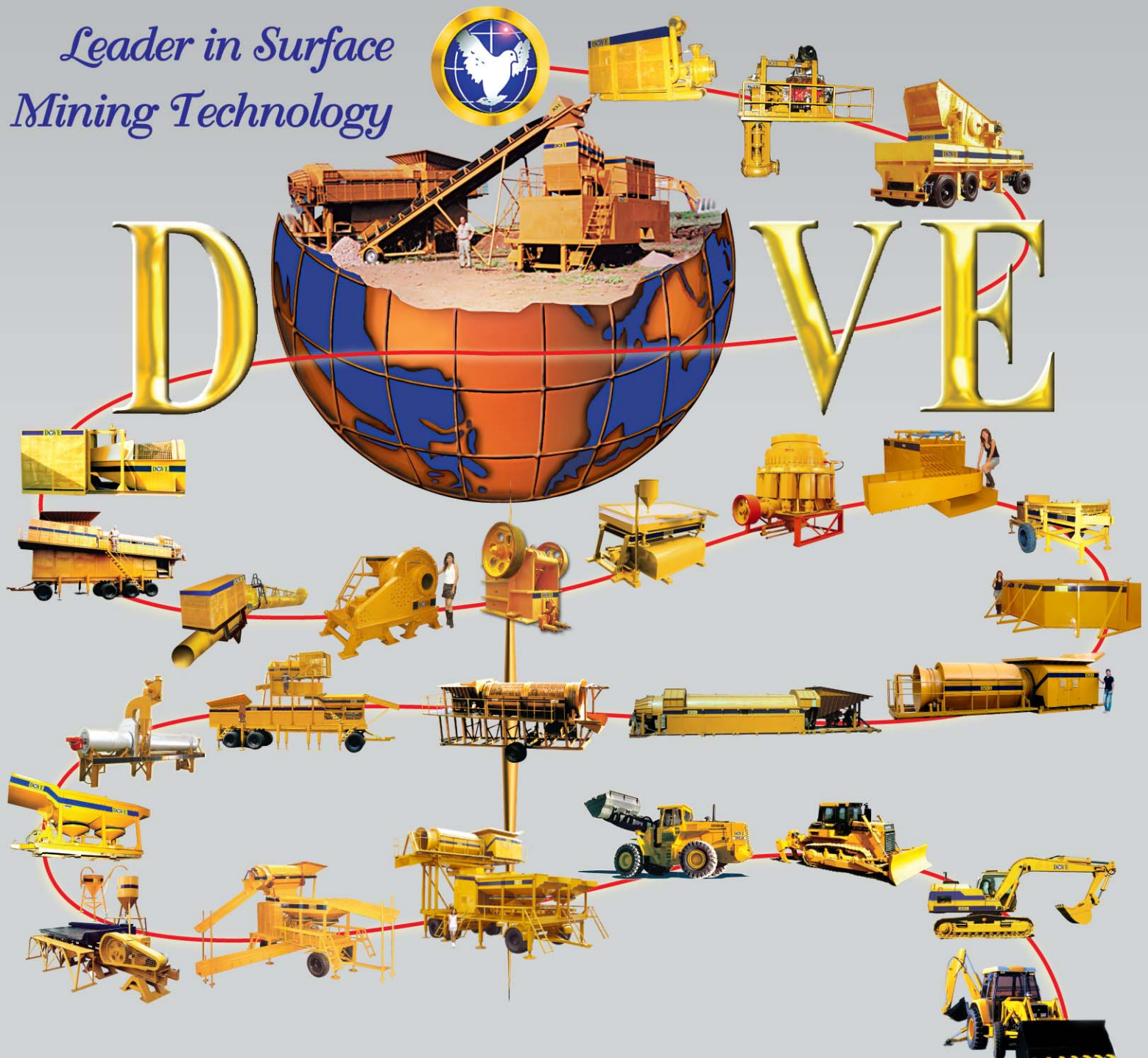
through a conveyor belt or a gravel pump (optional) or direct channel. EXPLORER™ Wash Plants are designed for automatic separation & recovery of Diamond, Color Gemstone, Gold, Ferrous Metals, Base Metals and Light Metals.

DEDICATED TO PROVIDE YOU WITH THE ULTIMATE SERVICE, SUPPORT & TECHNOLOGY

*Leader in Surface
Mining Technology*



DOVE



**MANUFACTURER OF THE LARGEST RANGE OF MINING EQUIPMENT & ACCESSORIES
PROVIDING FULL RANGE OF TECHNICAL SERVICES WORLD WIDE**

- PORTABLE PROCESSING PLANTS
- SEMI FIXED RECOVERY PLANTS
- DRY PROCESSING PLANTS
- FLOATING PLANTS/ DREDGE
- CLASSIFIERS / TROMMELS
- CONCENTRATORS / JIGS
- GRIZZLY SEPARATORS
- CONCENTRATING (SHAKING) TABLE
- VBS™ CONCENTRATORS
- DRY CONCENTRATORS
- MAGNETIC SEPARATORS
- VIBRO SEPARATORS
- DUAL FLOW ROTARY DRYERS
- VIBRATING SCREENERS
- CONVEYORS
- SLURRY (GRAVEL) PUMPS
- CENTRIFUGAL PUMPS
- FLOOD LIFTERS
- MONITORS
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