Bulk Sample Plants

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Mobile, self contained, alluvial sampling plants

BSP-0.5 500kg per hour miniature sampling plant complete with wet/dry feed hopper, feed flume with water injection, 100mm wide x 150mm long Russell Jig, Honda petrol motor and belt driven water supply pump. Unit mounted in frame with pneumatic wheels.

BSP-2 2.0 tonne per hour wet or dry feed, petrol or diesel powered with independent water supply pump, suction hose, foot valve, delivery hose and fittings 300mm x 300mm Russell Jig primary concentrator, two 150mm acrylic concentrator bowl secondaries. Large
capacity scrubber trommel. Optional skid or wheel mountings. See detailed brochure. BSP-2C 2.0 tonne per hour, as per BSP-2 but with a larger scrubber for difficult clay conditions and a heavier duty main frame.

BSP-10 10 tonne per hour tandem axle mounted plant with water monitored feed hopper, fixed grizzly and water monitor work station. Optional dry feed hopper with sloped grizzly and variable speed belt feeder into scrubber / trommel. Model J3 Russell Jig primary with two 150mm acrylic concentrator bowl secondaries. Knudsen bowl concentrator optional. Trommel oversize, folding radial stacker conveyor with optional metal detector and nugget removal gate system. Demountable diesel generator and electric main water pump with 30m of cable (complete with plug tops and sockets) for remote connection. See brochure.

BSP-10C 10 tonne per hour as per BSP-10 but with larger scrubber (1000mm diameter x 1700mm long) and fitted with Russell Jig model J2/6. Dual concentrate pumps and larger 200mm concentrator bowl secondaries. Heavier duty 6.0 tonne suspension and larger capacity water pump.

The Russell Jig incorporated in the BSP-2 and BSP-10 was originally designed as a Gold Jig in the 1970's on the Kanowna alluvial gold fields near Kalgoorlie in Western Australia and has unique design features that improve the recovery of fine gold. A very high displacement ratio (diaphragm area to screen area) allows the use of lead balls as "ragging" on the standard stainless steel screens. The ball diameter is matched perfectly to the screen aperture to create a very uniform, dense and compact bed. This combination will not allow particles of a lower SG (specific gravity) than the lead and sufficient size, to displace the lead and block the screen apertures. Keeping the screen clean allows the Jig to operate at maximum efficiency at all times. As gold has a much higher SG than lead it can displace it and be captured. The Russell Jig can also be used for the recovery of Platinum, Tin, Tantalum, Diamonds and Sapphires.