

RGZ-1





Urga's trommel centrifuge concentrator device is used to classify and subsequently to gravitationally concentrate granular materials. This applies especially to alluvial placer raw materials, with possible content of clay, or to pulverized ore material.

Aplications:

- geological and geochemical survey and prospecting
- sampling of placers with content of heavy metals (gold, platinum)
- sampling of pulverized ore materials with content of metals
- sampling of granulate materials, contaminated with heavy metals (lead,mercury)
- as a sub-unit in larger processing units or plants

Urga s.r.o. developed device which combination double of cvlindrical trommel screen and gravitational separator - centrifuge. Material is fed into the hopper manually or mechanically (conveyor belt or loader) and is washed via input control screen into the double sheath trommel screen. Undersized fraction -4 mm is washed down into the gravitational concentrator. The trommel screen and the centrifuge each have its own independent drive, the 3-phase Siemens 50/60 Hz motor with the belt transmission. Each motor has a separate AEG switch

breaker. and circuit Electrical installation is supplemented with Moeller current protection to comply with the European safety standards. The centrifuge can be pulled out of its position on a swivel arm and thus facilitate cleaning of the separator and ejection of the heavy concentrate. The separator pot can be completely removed.



Technical specifications:

Trommel		Centrifuge	
Hopper volume Control screen openings Drum length Drum diameter Outer drum openings Inner drum openings Input granularity	0.1 m ³ 20 mm 905 mm 454 mm d = 4 mm d = 8 mm < 20 mm	Throughput (solids) Input granularity Rotational vessel diameter Speed of rotation El. motor power	1,2 m ³ /hod 0-4 mm 312 mm 370 rev/min 0,55 kW
Speed of rotation El. motor power Water consumption	42 rev/min. 0,55 kW 60-80 l/min	Max. height Max. length Min. width Total weight	1460 mm 1500 mm 670 mm 262 kg

RGZ-1 is above all an excellent sampling device, small-scale or pilot processing device, best suited for processing of granular raw material containing gold or platinum, especially when the raw material contains high proportion of fine particle sizes of the metals under 1mm. The device features high recovery of gold and platinum under $100 \, \mu m$ and is capable of extracting the precious metals down to the particle sizes of $10 \, \mu m$. It is therefore capable of processing raw materials which cannot be processed by the conventional technologies except for chemical methods and as such complies with the requirements of BAT (Best available technology), both economically and from an environmental point of view.