



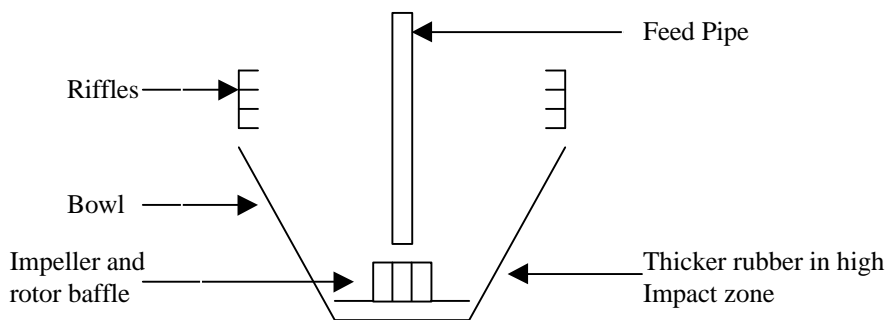
FALCON FINE RECOVERY

Falcon has been involved with gravity concentration for the last 13 years, having designed two distinct ranges of equipment; a semi-continuous Falcon SB range for installation into grinding circuits and the recently released Falcon C range for pre-concentration and scavenging in a wide range of mineral industries.

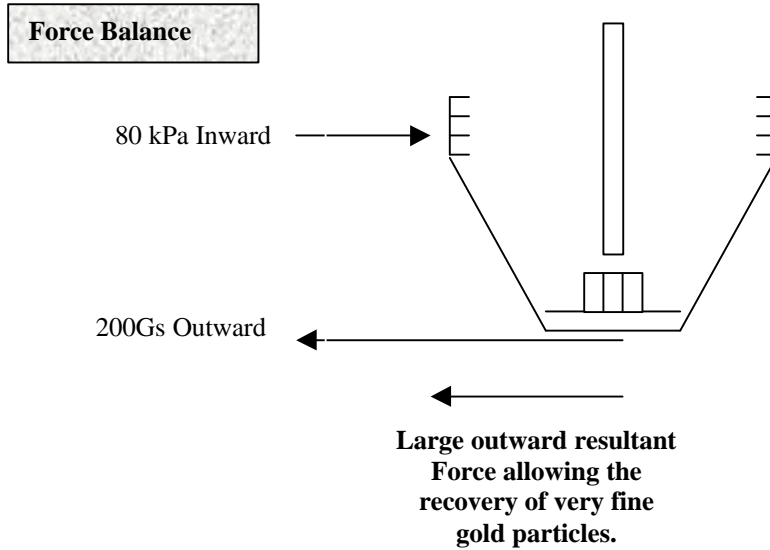
Our biggest selling units are the SB21 and SB38 semi-continuous Falcons, the SB38 being of 38 inches in bowl diameter with a concentrating surface area of 16720cm². The reason why I have included the surface area (in section 4 of this booklet there is a complete list of the Falcon SB specifications with each individual units concentrating surface area) is that centrifugal gravity concentrators are similar to concentrating tables in that they can only treat a certain tonnage per given surface area. For this reason **Falcon specifically designed deep bowls to ensure that a bigger tonnage could be treated** using the same given bowl diameter.

A centrifugal device, like a Falcon, acts as a pump forcing the material up the sidewalls. The faster that the bowl is spun, the higher the G-forces and hence the greater the tonnage that can be treated by the unit. **Falcon operates its equipment at G-forces of 200Gs.**

Falcon has also designed their bowls to be extremely plant friendly in the sense that the bowl is **not fabricated from any exotic materials**, in other words most of the maintenance can be carried out onsite without having to import exotic materials from Canada. Below is an exploded schematic of the Falcon bowl on which I would like to focus your attention.



Falcon has spent a major amount of time adhering to our motto, “designing simple and cost effective equipment that can be easily maintained onsite”. The riffles are manufactured from 304 stainless steel and are independent of the bowl. This means that **the riffles can be replaced at a fraction of the cost** without having to purchase an entire new bowl. The bowl has also been designed to be a long wear life item in that it has a sacrificial rotor baffle that can easily be replaced, and increased rubber thickness in the areas where there is a change in direction of the pulp i.e. adjacent to the impeller. Falcon rarely replaces bowls and prides itself in this unique design which is definitely a cost advantage to you the client.



Falcon prides itself in the recovery of very fine gold particles (below 10 microns), this can only be achieved with the use of low water pressures to fluidize the concentrate riffles (50 – 80 kPa) and with high outward G-forces (200Gs). Other equipment encountered in the industry make use of high water pressures and lower G-forces resulting in the ejection of fine gold from the collected concentrate.