



CASE STUDY

MACON BOWL CONCENTRATOR BC-200 PERFORMANCE IN RECYCLING



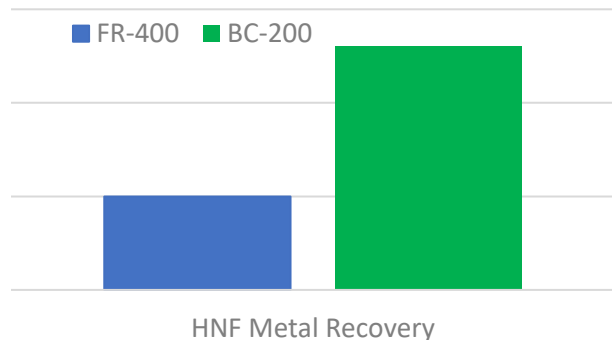


Brantner Oesterreich GmbH operates a recycling plant near Vienna, Austria, processing bottom ash (IBA) and fluidized bed ash, both residues from municipal waste incineration. In 2017, an expansion to the existing washplant, employing two SB/FR-400 gravity concentrators, enabled the recovery of fine heavy metals (- 2mm), primarily fine copper, lead, zinc and precious metals.

In 2024, a purpose-built low-G-Force bowl concentrator model BC-200 replaced one of two existing concentrators. The BC-200 is a direct SB/FR-400 replacement, enabling installation in the same space, with identical slurry piping connections and utilizing the existing automation system or come with an independent automation system.

The new polyurethane bowl is larger, yet un-fluidized, no longer requiring ultra-clean process water to prevent plugging of fluidization water holes, thus eliminating the need for diligent water filtration. The newly developed maintenance-friendly hinged lid design enables access to the bowl for cleaning and maintenance, a feature recognized by the experienced operator. Valves and housed in a corrosion resistant enclosure and wear is reduced due to a slower rotational speed of the bowl - designed for the recycling industry.

The increased riffle capacity of the BC-200 bowl design provides more space for heavy metal concentrate as opposed to a SB/FR bowl designed for only gold recovery. In comparison, the BC-200 recovered **+160% more metal** in each concentrating cycle. As a result of the trial, Brantner Oesterreich GmbH is replacing their remaining equipment with the new BC-200 model.



	FR-400	BC-200
Bowl Ø	13"	24"
G-Force	100	5
# of Riffles	6	13
Feed Rate	10 t/h	10 t/h
Cycle Time	5 Min	5 Min
Concentrate (per cycle)	3.9 Kg	23.3 Kg
Metal (per cycle)	-baseline-	+ 160%