

Gold Recovery from Ultrasonic Cleaning



An east coast, jewelry manufacturing firm has always recovered gold from their ultrasonic cleaning. In gold manufacturing prior to this the amount of gold lost in the de-burring process was broken down as follows:

1. 25% could be recovered, if the sludge were allowed to settle and be refined.
2. 25% was in an emulsion with the ultrasonic cleaning solution.
3. 50% was considered “dissolved”.

Therefore 75% of the gold lost during this process was unrecoverable.

One client tried using Floccin HP in the treatment of the ultrasonic cleaning water. They processed 1640 gallons of ultrasonic cleaning water. They created 286 pounds of sludge. This sludge was refined and 14.5 ounces of gold was recovered. Their estimate, based on past experience, was that this was essential all of the lost gold. They are now recovering 4 times as much gold.

The average cost of using Floccin to recover the gold is equal to 7% of the value of recovered gold. The cost of smelting the gold is 15.8-18% of the cost of the recovered gold. For a 7% increase in cost they increased their yield by 300%, which they consider a very worthwhile investment.