

# TECHNICAL DATA SHEET

## Black Nickel Process (EB-200)

Black Nickel process is an electrolytic process, use for decorative purpose. Black Nickel process has a little corrosion resistance and suitable for articles such as camera fittings, optical and electrical instruments

### SOLUTION COMPOSITOIN:

Chemicals	RANGE	OPTIMUM
Black Nickel Salt EB-200	200 g/l	200 g/l

### OPERATING CONDITIONS:

Parameters	RANGE	Optimum
Cathode current density	0.5-1.0 A/dm <sup>2</sup>	0.75 A/dm <sup>2</sup>
Beum	12-13	13
Temperature	55-60°C	58°C
pH	5.7-6.0	6.0
Voltage	4-8	6

### BATH MAKE UP:

- Fill the tank with 2/3<sup>rd</sup> of warm water.(60-65°C)
- Add the required quantity of Black Nickel Salts.
- Maintain the temperature at 60-65°C.
- Raise the pH to 5.2-5.5 by adding nickel carbonate.
- Add 1 ml /litter hydrogen peroxide and start agitation for 1 hour.
- Add 2 gm /litter activated carbon and agitate for 2 hours and leave solution for settling overnight.
- Filter the solution till the solution is clear.
- Adjust the pH to 5.7-6.0
- Place the anodes

### EQUPMENTS:

- A mild steel tank lined with PVC, PP or similar materials is suitable to contain the Nickel solution.
- PP, PVC lined filters having capacity of 2-3 turnover per hour is recommended. Titanium, cased immersion heaters are recommended.