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RUTHUNA® 490 BLACK

RUTHENIUM ELECTROLYTE

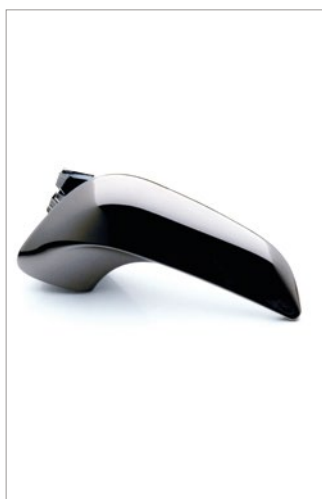


Dark Ruthenium Coatings Without Strike Gold Plating

RUTHUNA® 490 Black is a neutral electrolyte for brightnessretaining, dark grey to anthracite coatings. The black ruthenium electrolyte is easy to operate and has a good colour constancy.

RUTHUNA® 490 Black permits the direct plating of copper, nickel, brass or bronze. This means that strike gold plating or strike plating with palladium or palladium alloys is not necessary, which leads to enormous precious metal cost savings.

The black ruthenium electrolyte is suitable for decorative applications, above all in the clothing industry. It can be used for rack and barrel plating operations. Due to its high abrasion resistance, subsequent lacquering is not necessary, reducing the number of further process steps. Its positive features make themselves apparent even at a low ruthenium concentration of just 2 g/l.



Advantages

- Neutral black ruthenium electrolyte
- Simple bath maintenance
- Dark grey to anthracite coatings
- For decorative applications
- High abrasion resistance
- No lacquer finish is needed
- Good colour constancy
- Direct deposition on bronze or nickel possible
- No intermediate layers of expensive palladium or gold necessary
- Enormous precious metal cost savings
- Suitable for rack and barrel

Applications

- Accessories in the clothing industry
- Baby clothing
- Car interiors

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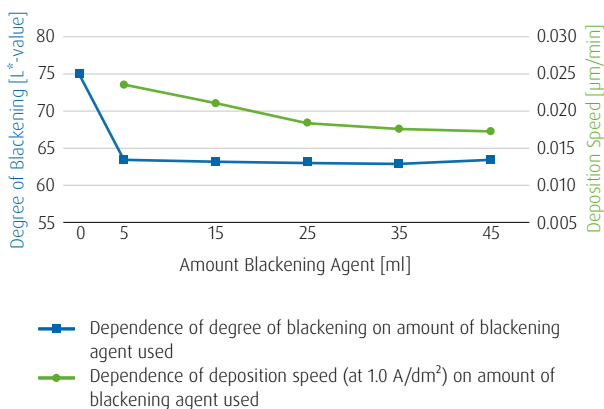
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TECHNICAL SPECIFICATIONS

| Electrolyte characteristics | | Coating characteristics | |
|-----------------------------|--|-------------------------|----------------------------|
| Electrolyte type | Neutral | Coating | Black ruthenium |
| Metal content | 2 (1.8 - 2.2) g/l Ru | Purity | 99 wt. % Ru |
| pH value | 7.0 (6.5 - 9.0) at 65 °C | Colour of deposit | Grey to anthracite (black) |
| Operating temperature | 65 (60 - 70) °C | Brightness | Bright |
| Current density range | 1.0 (0.5 - 3.0) A/dm ² | | |
| Plating speed | Approx. 0.02 µm/min at 1.0 A/dm ² | | |
| Anode material | Pt/Ti or MMO (type PLATINODE® 167 or 177) | | |

Influence of Blackening Agent (RUTHUNA® 490 Black)



YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation? Our specialist will be happy to help you with any technical questions you might have.



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