

Precious metals strippers for efficient production

Precious metals are a major factor in both cost and sustainability. That is why it is worthwhile to consistently recover them wherever they serve no purpose.

Stripping processes help remove precious metal coatings from substrates or process materials in a controlled process – laying the foundations for profitable recovery and a more circular approach to surface technology.

Customized solutions for your specific needs

A structured approach to handling parts and process materials containing precious metals pays off. This allows you to reduce losses and efficiently recover precious metals from these example applications:

Rejects and reworked parts

e.g. incorrect coatings, damaged sample parts

Contacts & auxiliary tools

e.g. contact strips, wires, racks

Equipment/maintenance

e.g. equipment components such as rollers or protective devices

Continuous processes such as line/R2R systems

e.g. run-off or transition areas



The wide range of products ensures that there is a suitable precious metal stripper for almost any application

Which method works best for your process?

Anodic strippers offer maximum controllability. They are activated by the current and only strip when current is applied. The stripping rate increases with current density, enabling short processing times. Anodic systems are ideal for applications requiring fast and precise stripping (e.g., selective areas in continuous/R2R environments).

Chemical strippers operate without an external power source. This can be particularly advantageous when parts are complex or when geometries/shielding would prevent uniform current distribution: Chemical systems often enable more uniform stripping regardless of current density effects – a plus for many practical setups in production and the lab.



Stripper Portfolio

Umicore Stripper	Precious metal to be removed				Process		Cyanide-free		pH	Temperature	Stripping rate	Information Notes and special characteristics
	Silver Ag	Gold Au	Palladium Pd	Platinum Pt	chemical	anodic	Process	Supply				
638	●	○	○	○		✘	✘		alkaline	20 - 30 °C	proportional to the current density	Operating time greater than 12 months, strongly adherent deposition on the cathode plates, cyanide-free process
647	●	●	○	○	✘			✘	alkaline	20 - 35°C	0,5 - 1 µm/min	liquid, cyanide-free form of supply
648	●	●	○	○		✘	✘		alkaline	45 - 55°C	proportional to the current density	No attack on gold, silver, nickel and copper alloys in the electroless state, cyanide-free process
640	○	○	●	⊙	✘			✘	alkaline	20 - 30 °C	approx. 0.6 µm/min	liquid, cyanide-free form of supply, Excellent removal of platinum when adjusting parameters

**Legend
Precious metal
to be removed**

- Optimized
- ⊙ Suitable
- Not suitable

Cyanide-free and cyanide-based: Differences in forms of supply

- Cyanide-free forms of supply can offer advantages in terms of operational handling or help ensure compliance with import, export, and transit restrictions.
- Cyanide-containing forms of supply may be more efficient for facilities that already have established structures, infrastructure and routines for handling cyanide-containing process chemicals.



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