

# Bestion™ Ion Exchange Resin for hydrometallurgy Applications

Ion exchange is increasingly used in hydrometallurgical applications for the recovery or purification of metal solutions and pulps, Since the ion exchange resin can enrich the adsorbed metal ions from the dilute solution by ion exchange reaction and has different selectivity to the mixed metal ions, the ion exchange resin is particularly suitable for use in low-grade minerals, tailings immersion liquid or slurry. Extracting the separated metal while playing a crucial role in separating metals with similar properties.

离子交换越来越多地用于湿法冶金应用中以回收或纯化金属溶液和矿浆,由于离子交换树脂能从稀溶液中通过离子交换反应富集吸附金属离子,而且对混合金属离子具有不同的选择性,因而离子交换树脂特别适应于从低品位矿物,尾矿的浸液或矿浆中提取分离金属,同时在分离性能相近的金属方面起着至关重要的作用。



## **Uranium**

Туре	Typical Application
BD706	For extraction of uranyl sulfate complex from acid leaching solution. 酸性浸出液中提取硫酸铀酰络合物。
PM611	For extraction of uranyl sulfate complex from ISL acid leaching solution. 从 ISL 的酸性浸出液中提取硫酸铀酰络合物
BD200	Higher adsorption to uranyl complex. Suitable for RIP process. 对铀酰络合物具有更高的吸附性。 适用于 RIP 工艺
D299	For extraction of uranyl sulfate complex from acid leaching solution of ISL.It can concentrate and purify uranium from waste water and mineral fluids, concentrate and purify thorium and plutonium-uranium in the nuclear industry, and recover vanadium from waste water in the ammonia industry.  ISL 的酸性浸出液中提取硫酸铀酰络合物。 它能从废水和矿液中浓缩和提纯铀矿, 在核工业中浓缩和提纯 钍和钚铀, 在氨工业从废水中回收钒。
PM612	Uranium recovery from sulfuric acid solution 硫酸溶液中回收铀
PM615	Extraction of uranyl sulfate complexes from clean sulfuric acid solutions 从清洁的硫酸溶液中提取硫酸铀酰复合物
PM610	Uranium extraction by acid and carbonic acid leaching 酸浸和碳酸浸出工艺铀提取

## Gold

Туре	Typical Application
PM404	Recovery of gold from gold cyanide, hydrochloric acid solution. 氰化金,盐酸溶液中回收金
PM601	Recovery of gold complex after alkaline cyanidation. 金矿碱性氰化后的络合物的回收
PM603	Gold cyanide extraction, with better adsorption and desorption properties 氰化金提取,更好的吸附和解吸性能
PM405	Extraction of gold and uranium from thiosulfuric acid, cyanidation, chloride solutions. 硫代硫酸、氰化、氯化金提取
PM405S	Extraction of gold from thiosulfuric acid, cyanidation, chloride solutions. 硫代硫酸、氰化、氯化金提取
BMTN/BMTR	Selective adsorption of gold 选择性吸附金

## **Precious Metal Recovery**

Туре	Typical Application
PM841S	Recovery of precious metal from alkali leaching 碱浸出贵金属回收
PM401	Recovery of precious metal from alkali leaching 碱浸出贵金属回收
PM605	Removal of heavy metals, especially complex states; Platinum group metal removal 重金属去除,尤其是络合态;铂族金属去除
BMTN	Recovery of precious metal from acid leaching 酸浸出贵金属回收
ВМТХ	Separation and recovery of precious metals in hydrometallurgical process, ceramic metal recovery in leaching water, palladium catalyst recovery in organic matter 湿法冶金过程贵金属的分离回收,淋洗水中烤瓷金属回收,有机物中钯催化剂回收
BMTR	Recovery of precious metal from acid leaching 酸浸出贵金属回收
PM871	Anionic precious metal extraction 阴离子型贵金属提取

# **Molybdenum and Rhenium**

Туре	Typical Application
PM602	Recovery of rhenium and molybdenum from sulfuric acid solution which produces molybde and copper, recovery of molybdenum from molybdenum nitrate extraction process. Recove rhenium and molybdenum from high pressure leaching liquid of molybdenum concentrate. 从钼和铜生产的硫酸溶液中回收铼和钼,硝酸提钼工艺中回收钼。辉钼精矿高压浸出液提取钼和铼
PM604	Separation of rhenium from molybdenum 从钼元素中分离铼元素
PM401	Convert sodium tungstate to ammonium tungstate 钨酸钠转化为钨酸铵
PM403	Molybdenum extraction resin 钼提取树脂
PM606	Removal of tungsten impurities from molybdate. 从钼酸盐中去除钨杂质



# **Copper, Cobalt and Nickel**

Туре	Typical Application
ВМАН	Extract divalent transition metals such as Cu, Ni, Zn and Cd from ore, electroplating, acid bath and waste water. 应用于从矿石、 电镀层、 酸洗浴、废水提取二价过渡金属如铜、 镍、 锌、 镉等。
ВМАС	Copper extraction in RIP process RIP 过程铜冶炼
BMAL	Removal or recovery of divalent metals from feed fluids 从料液中去除或回收二价金属
ВМСС	Removal and recovery of copper, cobalt, nickel and other metals 铜钴镍等金属去除及回收

#### **Vanadium**

Туре	Typical Application
PM401	Resin for extraction vanadium
	提钒树脂
PM403	Resin for extraction vanadium
	提钒树脂
PM402	High adsorption rate of vanadium, simply regenarate
	回收钒吸附量高,再生简单

#### **Rare Earth**

Туре	Typical Application
PM619	Removal of thorium from rare earth elements 稀土元素中去除钍
PM618	Removal of uranium from rare earth elements 稀土元素中去除铀
PM951	Recovery of rare earth metals from acidic solutions 酸性溶液中回收稀土金属
PM981H	Recovery of rare earth metals from acidic solutions 酸性溶液中回收稀土金属
PM961H	Recovery of rare earth metals from acidic solutions 酸性溶液中回收稀土金属

