

# MSX 500T CMod

Proprietary commercial metal waste processing plant that can be co-located to relevant client facilities to recover High-Purity Cobalt, Nickel, and other metals such as Tantalum, Tungsten, Copper, and Rare Earth metals.

#### **ABOUT THE 500T CMOD**

Designed and built on the foundational Core 100 block design, the 500T CMod is a commercial plant that can be designed, built, and delivered to any location to process Cobalt, Nickel, and a variety of other metals\*.

The modular system combined with the moderate operating conditions facilitated by the MSX Core Technology allows for a small footprint, low water and energy requirements, and short delivery times. The commercial offering options include Build, Own, Operate, and Manage (BOOM), Turnkey Plant Delivery, or Design License. The end product states are flexible for capture of High-Purity Cobalt and Nickel.

\*Process under development

## **KEY COMPONENTS**

The 500T CMod design includes the proprietary MSX process including the pre-treatment (PREX), MSX treatment (MSX), and a post-treatment (POSTX) section. With an option to be fully automated, the system can handle 500 tons per year of the raw material with a cycle time of about 24 hours from raw material to product. Depending on the client's preferred end product state, the unit can be tailored appropriately for fabrication and delivery. Cobalt and Nickel can be recovered at >95% yields at desirable purities.



**KEY CHARACTERISTICS** 

Processing capacity:

500 tons per year

Cycle time:

24 hours

**Utilities**:

Fit for Purpose

Footprint:

20,000 sq ft

Yields:

>95%





#### **INPUTS**

The 500T CMod is tailored to handle metal waste production scrap that contains critical minerals and metals that need to be extracted. Best-in-class personal protective equipment will be recommended depending on the quality of the raw material.

### **OUTPUTS**

The range of outputs from the 500T CMod are: Nickel hydroxide/sulfate hexahydrate, other metallic salts, and Cobalt hydroxide/sulfate heptahydrate.



Metal waste



>92% recovery rate of High-Purity Cobalt



Production scrap



>95% recovery rate of High-Purity Nickel