

MSX 1000T BMod

Proprietary commercial black mass processing plant that can be co-located to black mass and/or production scrap facilities to recover High-Purity Lithium, Cobalt, Nickel, and Copper.

ABOUT THE 1000T BMOD

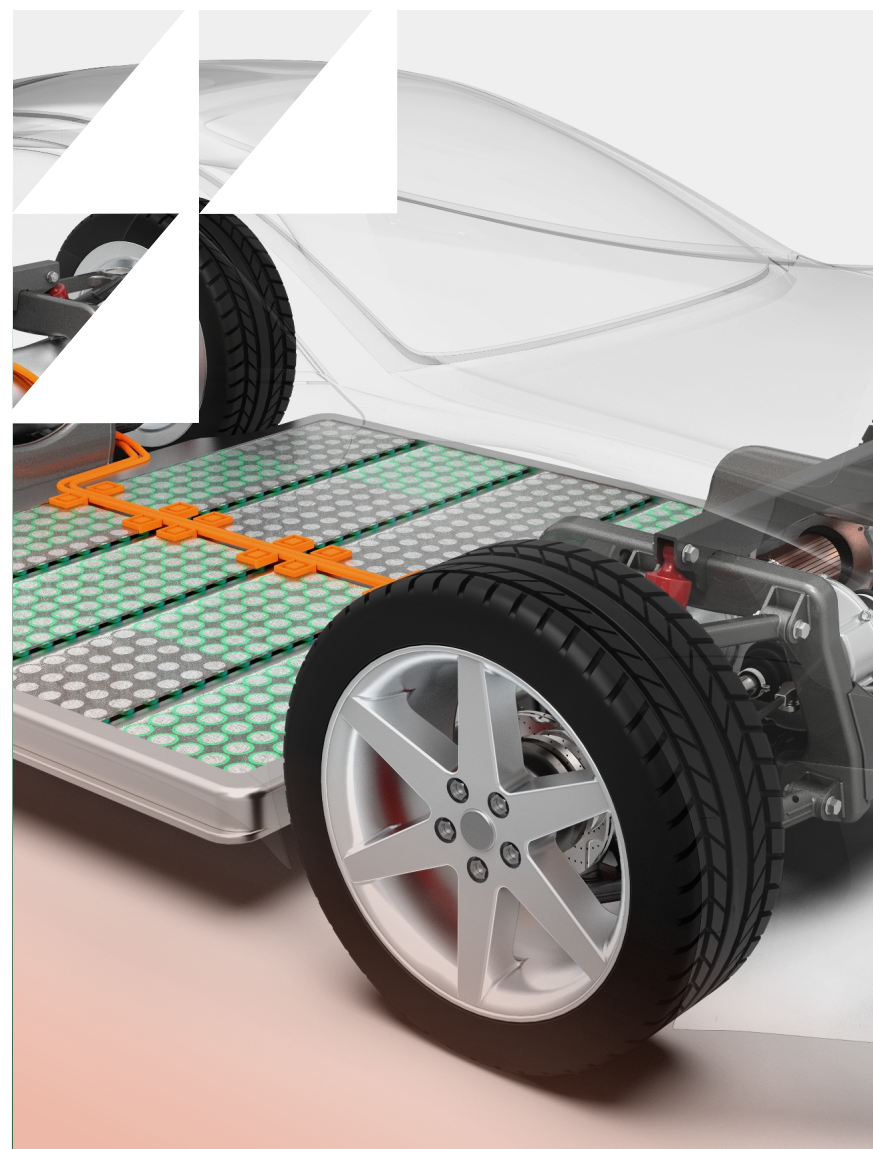
Designed and built on the foundational Core 100 block design, the 1000T BMod is a commercial plant that can be designed, built, and delivered to any location to process black mass and production scrap.

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 BOOM (Build, Own, Operate, and Manage,) Turnkey Plant Delivery, or Design License. The end product states are flexible for capture of High-Purity Cobalt, Lithium, Nickel, and Copper.

KEY COMPONENTS

The 1000T BMod 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 1000 tons per year of raw material with a cycle time of 30 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. Lithium, Cobalt, Nickel, and Copper can be recovered at >80%, >92%, >95%, and >98% at desirable purities.



KEY CHARACTERISTICS

Processing capacity:

1000 tons per year

Cycle time:

30 hours

Utilities:

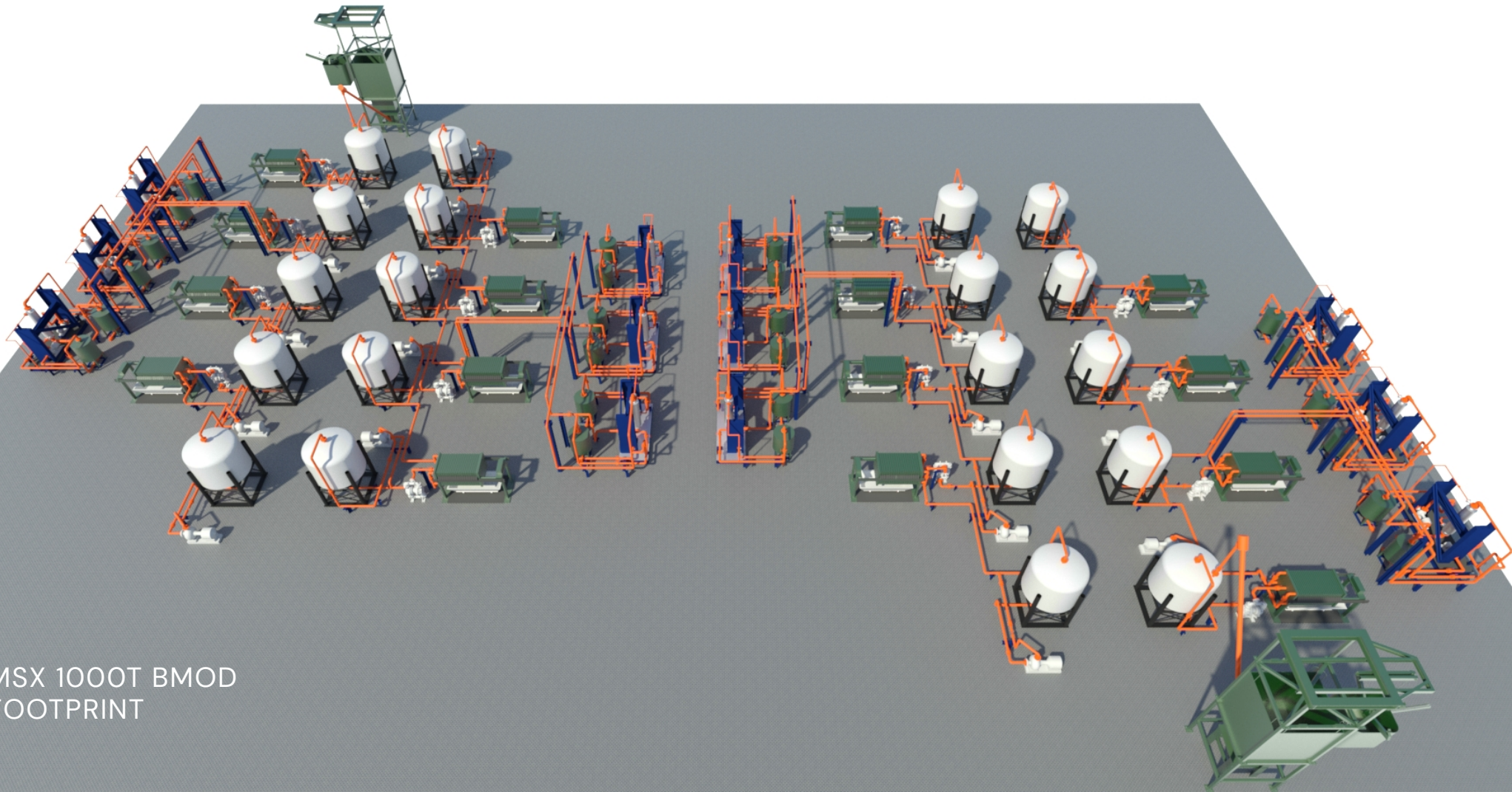
Fit for Purpose

Footprint:

30,000 sq ft

Yields:

>92%



MSX 1000T BMOD
FOOTPRINT

INPUTS

The 1000T BMod is tailored to handle black mass and 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.



Black mass



Production scrap

OUTPUTS

The range of outputs from the 1000T BMod are: Lithium chloride/hydroxide/carbonate, Cobalt hydroxide/sulfate heptahydrate, Nickel hydroxide/sulfate hexahydrate, Copper sulfate/hydroxide, and Graphite.



>82% recovery rate of High-Purity Lithium



>92% recovery rate of High-Purity Cobalt



>95% recovery rate of High-Purity Nickel



>98% recovery rate of High-Purity Copper