ADVANCED REACTOR ASSEMBLY

Revision 3

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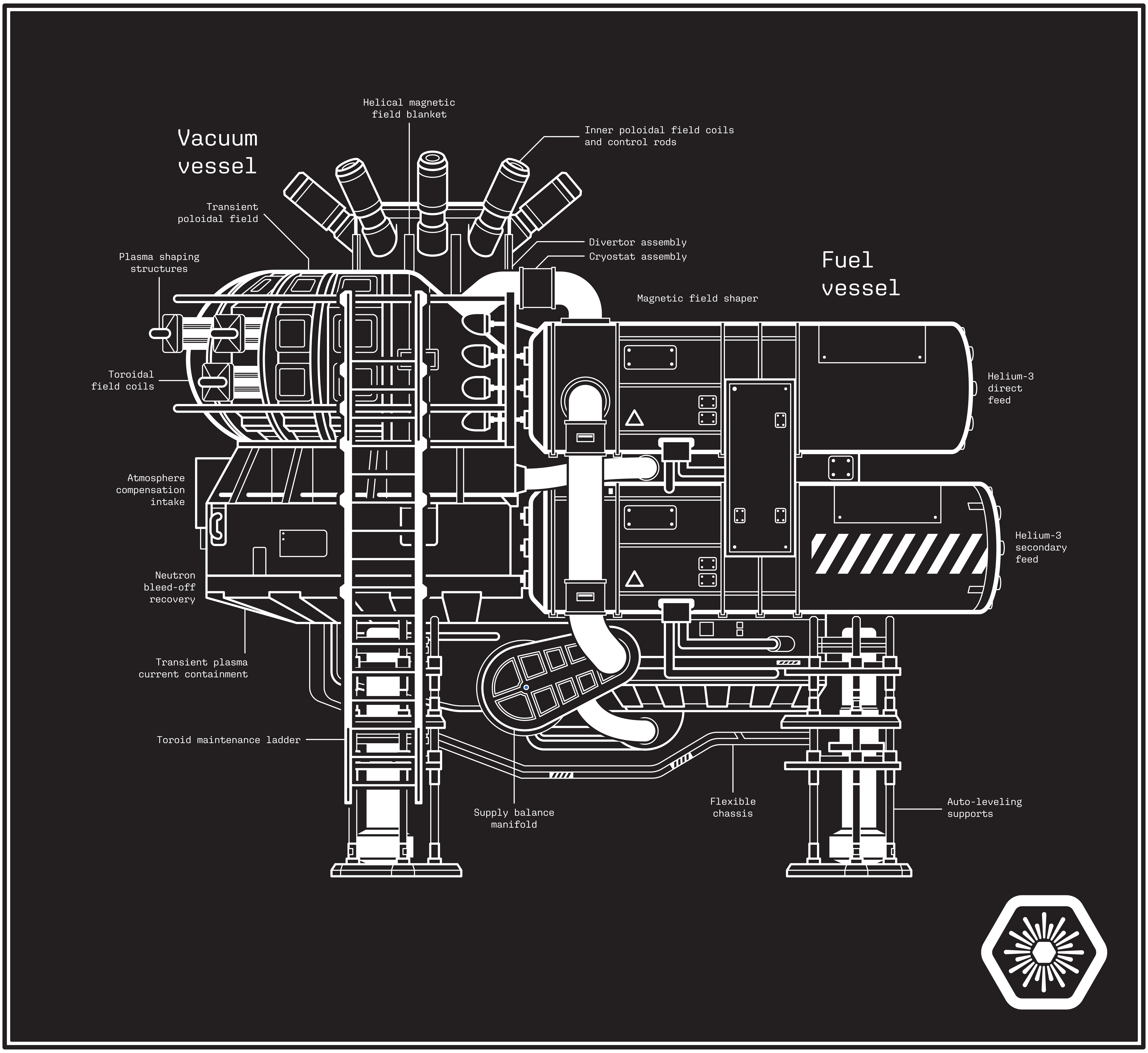


OWNER'S MANUAL

MANUFACTURING AND LOGISTICS OF ESSENTIAL REACTOR COMPONENTS

CONSTRUCTION REQUIREMENTS

- **SPECIAL PROJECTS RANK 4**
- **PLANETARY HABITATION RANK 4**
- **OUTPOST ENGINEERING RANK 1**
- **MANUFACTURING RANK 2**

10 STAR SYSTEMS

CARRIER

OUTPOST CONSTRUCTION

STARFIELD OUTPOST POCKET REFERENCE

A COMPOSITIONAL OVERVIEW

SYMBOL REFERENCE

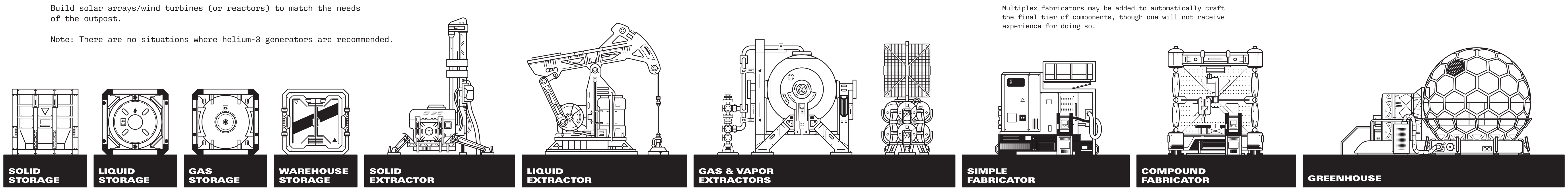
Throughout this manufacturing guide are flow charts and construction notes to optimally craft advanced nuclear reactor components. Every system may be scaled up with additional extractors, storage, and fabricators as needed.

Build solar arrays/wind turbines (or reactors) to match the needs of the outpost.

Note: There are no situations where helium-3 generators are recommended.

It might be tempting to avoid automated fabricators to maximize experience gains by manually crafting everything. The time commitment and logistic challenges far outweigh the relatively small gains. It's best to automate the common and rare components.

Multiplex fabricators may be added to automatically craft the final tier of components, though one will not receive experience for doing so.



BASIC OUTPOST KIT

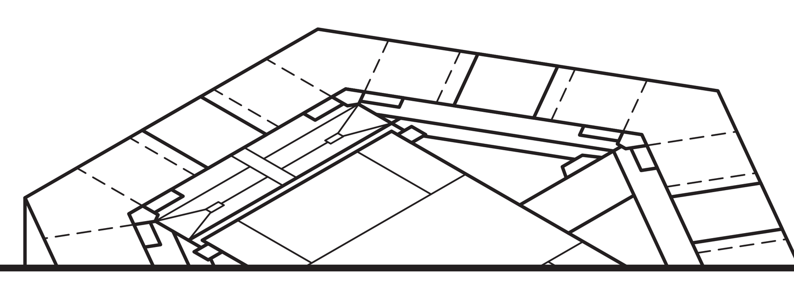
It's not uncommon to set up an ad hoc outpost to mine some rare materials, then tear it down and move on. In order to be up and running quickly, here is a basic all-purpose kit.

Keep in mind this is beginner-level tech and doesn't require fancier or heavier components. However, science upgrades provide more advanced options for power, storage, extraction, and automation.

- **04** SOLID EXTRACTORS
- **02** LIQUID EXTRACTORS
- **02** GAS EXTRACTORS
- **10** SOLAR ARRAYS
- **10** WIND TURBINES
- **04** SOLID STORAGE CONTAINERS
- **04** LIQUID STORAGE CONTAINERS
- **04** GAS STORAGE CONTAINERS
- **01** SOLID EXTRACTORS
- **01** SOLID EXTRACTORS
- **01** TRANSFER CONTAINER
- **01** HYDROPONIC HAB WITH AIRLOCK
- **01** STORAGE CRATE
- **01** SLEEPING BAG
- **01** INDUSTRIAL WORKBENCH
- **01** LARGE LANDING PAD WITH SHIPBUILDER
- **01** LOCAL CARGO LINK

Note: This kit does not account for the occasional greenhouse, fabricator, or warehouse storage necessary to craft reactor components.

Additionally, there are many local and intersystem cargo links needed to fully route and fabricate the components for advanced nuclear reactors.



BASIC OUTPOST KIT: RAW MATERIALS

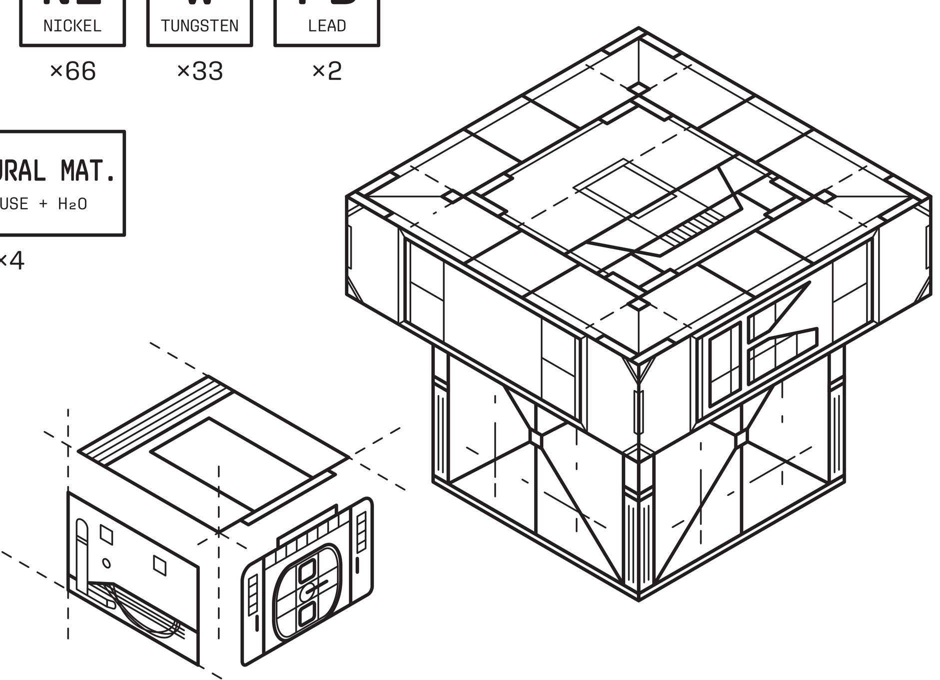
CARGO MASS REQUIREMENTS	405

FE IRON	AL ALUMINUM	C6H6 BENZYNE	BE BERYLLIUM	CO COBALT	CU COPPER	PB LEAD	NI NICKEL	W TUNGSTEN	PB LEAD
×115	×207	×6	×24	×20	×60	×2	×66	×33	×2

ADAPTIVE FRAME (IRON + ALUMINUM)	ZERO WIRE (SILVER + COPPER)	LUBRICANT (GREENHOUSE + H_2O)	STRUCTURAL MAT. (GREENHOUSE + H_2O)
×54	×4	×4	×4

MEMBRANE (GREENHOUSE + H_2O)	SEALANT (GREENHOUSE + H_2O)	FIBER (GREENHOUSE + H_2O)
×8	×7	×2

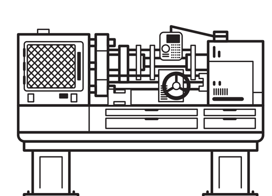
It's important to have a ship with at least 1000 mass available in the cargo hold. This will allow two full basic outposts, including extra materials for greenhouses, fabricators, and warehouse storage, as well as more advanced structures.



CRAFTING COMPONENTS

The industrial workbench can be used to craft everything, provided one has invested enough time in the ***special projects*** skill.

Manually crafting unique components will yield the most experience, with vytinium fuel rods being the highest value item of the lot.



INDUSTRIAL WORKBENCH

COMMON

ADAPTIVE FRAME
1 IRON
1 ALUMINUM

AUSTENITIC MANIFOLD
2 NICKEL
1 IRON
1 REACTIVE GAUGE

COMM RELAY
1 ISOCENTERED MAGNET
1 TAU GRADE RHEOSTAT

ISOTOPIC COOLANT
1 TETRAFLUORIDE
1 IONIC LIQUID

ISOCENTERED MAGNET
1 COBALT
1 NICKEL

MAG PRESSURE TANK
2 ALUMINUM
1 NICKEL

MONOPROPELLANT
2 ALKANES
1 MAG PRESSURE TANK
1 REACTIVE GAUGE

POLYTEXTILE
2 FIBER
1 COSMETIC

REACTIVE GAUGE
2 ALUMINUM
1 COPPER

TAU GRADE RHEOSTAT
1 COPPER
1 BERYLLIUM

ZERO WIRE
1 COPPER
1 SILVER

RARE

DRILLING RIG
3 TUNGSTEN
2 LUBRICANT
1 REACTIVE GAUGE

MOLECULAR SIEVE
2 IONIC LIQUIDS
1 MAG PRESSURE TANK
2 MEMBRANE

PARAMAGNON CONDUCTOR
1 NEODYMIUM
1 GOLD
3 ZERO WIRE

POSITRON BATTERY
2 VANADIUM
2 ANTIMONY
1 TAU GRADE RHEOSTAT

SEMIMETAL WAFER
2 GOLD
2 ANTIMONY
1 ZERO WIRE

SUPERCOOLED MAGNET
3 NEODYMIUM
1 ISOCENTERED MAGNET
1 ISOTOPIC COOLANT

ZERO-G GIMBAL
2 TANTALUM
1 ISOCENTERED MAGNET
2 LUBRICANT

EXOTIC

CONTROL ROD
3 DYSPROSIUM
1 AUSTENITIC MANIFOLD
1 ISOTOPIC COOLANT

MICROSECOND REGULATOR
2 LITHIUM
4 EUROPIUM
1 SUPERCOOLED MAGNET
1 TAU GRADE RHEOSTAT

NUCLEAR FUEL ROD
3 URANIUM
1 SEMIMETAL WAFER
2 SOLVENT

POWER CIRCUIT
4 PALLADIUM
2 POLYMER
1 POSITRON BATTERY
1 PARAMAGNON CONDUCTOR

STERILE NANOTUBES
2 VANADIUM
1 MOLECULAR SIEVE
2 SOLVENT

UNIQUE

ALDUMITE DRILLING RIG
1 DRILLING RIG
1 MICROSECOND REGULATOR
2 CAESIUM
4 ALDUMITE

INDICITE WAFER
2 CAESIUM
4 INDICITE
1 SEMIMETAL WAFER
2 SOLVENT

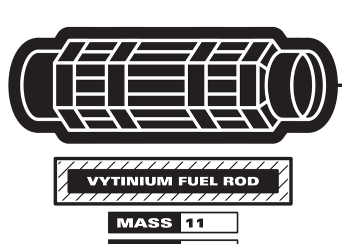
ROTHICITE MAGNET
4 ROTHICITE
1 SEMIMETAL WAFER
1 SUPERCOOLED MAGNET
2 LITHIUM

SUBSTRATE MOLECULAR SIEVE
2 STERILE NANOTUBES
2 BIOSUPPRESSANT
3 MEMORY SUBSTRATE
1 MOLECULAR SIEVE

TASINE SUPERCONDUCTOR
4 TASINE
2 PALLADIUM
1 PARAMAGNON CONDUCTOR
2 POLYMER

VERYL-TREATED MANIFOLD
4 VERYL
2 YTTERBIUM
1 AUSTENITIC MANIFOLD
2 LUBRICANT

VYTINIUM FUEL ROD
2 PLUTONIUM
4 VYTINIUM
1 NUCLEAR FUEL ROD
1 INDICITE WAFER



SHIPYARDS/STARYARDS

▬ Notable for unique parts and more.

NEW ATLANTIS SHIPYARD
ALPHA CENTAURI SYSTEM—JEMISON

GAGARIN LANDING SHIPYARD
ALPHA CENTAURI SYSTEM—GAGARIN

▬ **DEIMOS STARYARD**
SOL SYSTEM—DEIMOS

CYDONIA SHIPYARD
SOL SYSTEM—MARS

▬ **NEW HOMESTEAD SHIPYARD**
SOL SYSTEM—TITAN

▬ **STROUD-EKLUND STARYARD**
NARION SYSTEM—DALVIK

▬ **STROUD-EKLUND SHOWROOM**
VOLII SYSTEM—VOLII ALPHA

NEON CITY SHIPYARD
VOLII SYSTEM—VOLII ALPHA

▬ **TAIYO SHOWROOM**
VOLII SYSTEM—VOLII ALPHA

AKILA CITY SHIPYARD
CHEYENNE SYSTEM—AKILA

THE DEN STARYARD
WOLF SYSTEM—CHTHONIA

▬ **THE KEY STARYARD**
KRYX SYSTEM—SUVOROV

PARADISO SHIPYARD
PORRIMA SYSTEM—PORRIMA II

THE RED MILE SHIPYARD
PORRIMA SYSTEM—PORRIMA III

HOPETOWN SHIPYARD
VALO SYSTEM—POLVO

▬ **HOPETECH SALES**
VALO SYSTEM—POLVO

THE ELEOS RETREAT SHIPYARD
IXYLL SYSTEM—IXYLL II

AN IDEAL HOME: THE 24TH OUTPOST

Manufacturing advanced nuclear reactors requires 23 outposts, leaving only a single outpost to spare. Here are several additional resource-rich planets and moons that would make a fantastic location for the final, 24th outpost. Many of these offer unique and hard-to-find resources.

Or simply choose a beautiful location, regardless of resources.

1 — **CODOS—CHEYENNE SYSTEM**
ORGANIC: ANALGESIC, SOLVENT
INORGANIC: H2O
ALSO: AL, AR, NI, BE, CO

1 — **SUMATI—NARION SYSTEM**
ORGANIC: HYPERCATALIST
INORGANIC: F, H2O, XF4
ALSO: NUTRIENT, SEALANT, CL, CU, NI, SIH3CL

10 — **PROCYON III—PROCYON A**
ORGANIC: FIBER, ANTIMICROBIAL, SEDATIVE
INORGANIC: H2O, IL
ALSO: METABOLIC AGENT, NUTRIENT, SEALANT, STRUCTURAL, MEMBRANE, AR, CU, F, XF4, NE

30 — **ALPHA ANDRASTE III—ALPHA ANDRASTE**
ORGANIC: HALLUCINOGEN, BIOSUPPRESSANT
INORGANIC: H2O, XE
ALSO: SEALANT, SEDATIVE, AR, CL,PB, SIH3CL

35 — **TIRNA VIII-C—ALPHA TIRNA**
ORGANIC: FIBER, PIGMENT
INORGANIC: H2O, W, TI, DY
ALSO: METABOLIC AGENT, SEALANT, ANTIMICROBIAL, LUBRICANT, FE, PB, HNCN, TA

40 — **BETA TERNION I—BETA TERNION**
ORGANIC: STRUCTURAL, STIMULANT
INORGANIC: H2O, LI
ALSO: METABOLIC AGENT, CL, SIH3CL

45 — **LINNAEUS II—LINNAEUS**
ORGANIC: HIGH-TENSILE SPIDROIN (UNIQUE)
INORGANIC: H2O, AG, PB
ALSO: SEALANT, FIBER, AR, C6HN

50 — **ZETA OPHIUCHI I—ZETA OPHIUCHI**
ORGANIC: FIBER, SPICE, POLYMER
INORGANIC: H2O, TA, YB
ALSO: METABOLIC AGENT, NUTRIENT SEALANT, CL, FE, PB, AG, HNCN
NOTE: ONLY KNOWN PLANET TO HAVE NEUROLOGIC BUT CANNOT BE HARVESTED AT OUTPOST.

60 — **ZELAZNY III—ZELAZNY**
ORGANIC: IMMUNOSTIMULANT (UNIQUE), MEMBRANE
INORGANIC: H2O, CS
ALSO: HALLUCINOGEN, STRUCTURAL, METABOLIC AGENT, NUTRIENT, SEALANT, TOXIN, AR, PB, W, CL

65 — **CHARYBDIS II—CHARYBDIS**
ORGANIC: NUTRIENT, ADHESIVE, AMINO ACIDS
INORGANIC: H2O, ND, EU
ALSO: FIBER, SEALANT, STRUCTURAL, TOXIN, ANTIMICROBIAL, MEMBRANE, ORNAMENTAL, PIGMENT, AL, AR, CL, BE, SIH3CL
NOTE: SWIMMING IN ORGANIC RESOURCES AND ADVANCED WIND TURBINES GENERATE 25 POWER EACH!

65 — **LEONIS III—LEONIS**
ORGANIC: ORNAMENTAL, AROMATIC
INORGANIC: H2O, PU
ALSO: TOXIN, U, IR

65 — **SCHRÖDINGER II—SCHRÖDINGER**
INORGANIC: AD (UNIQUE), SIH3CL, CL
ALSO: PB, U, W, TI, PU

65 — **SCHRÖDINGER III—SCHRÖDINGER**
ORGANIC: LUXURY TEXTILE (UNIQUE), NUTRIENT, METABOLIC AGENT, TOXIN
INORGANIC: H2O
ALSO: ANALGESIC, SEDATIVE, CL, FE, NI, CO, ND, AR

70 — **BARDEEN III—BARDEEN**
ORGANIC: GASTRONOMIC DELIGHT (UNIQUE), LUBRICANT
INORGANIC: R-COOH, H2O
ALSO: AMINO ACIDS, SEALANT, NUTRIENT, METABOLIC AGENT, ANALGESIC, COSMETIC, TOXIN, AR, CL, FE, NI, CO, SIH3CL
NOTE: NEEDS FIBER TO MANUFACTURE GASTRONOMIC DELIGHT, NOT FOUND IN THIS SYSTEM.

70 — **VERNE I—VERNE**
INORGANIC: VR (UNIQUE), NE, C6HN, AR
ALSO: U, IR, PU

75 — **FERMI III—FERMI**
ORGANIC: FIBER, SEALANT, COSMETIC
INORGANIC: H2O, V
ALSO: NUTRIENT, STRUCTURAL, U, IR, HNCN, FE, C6HN

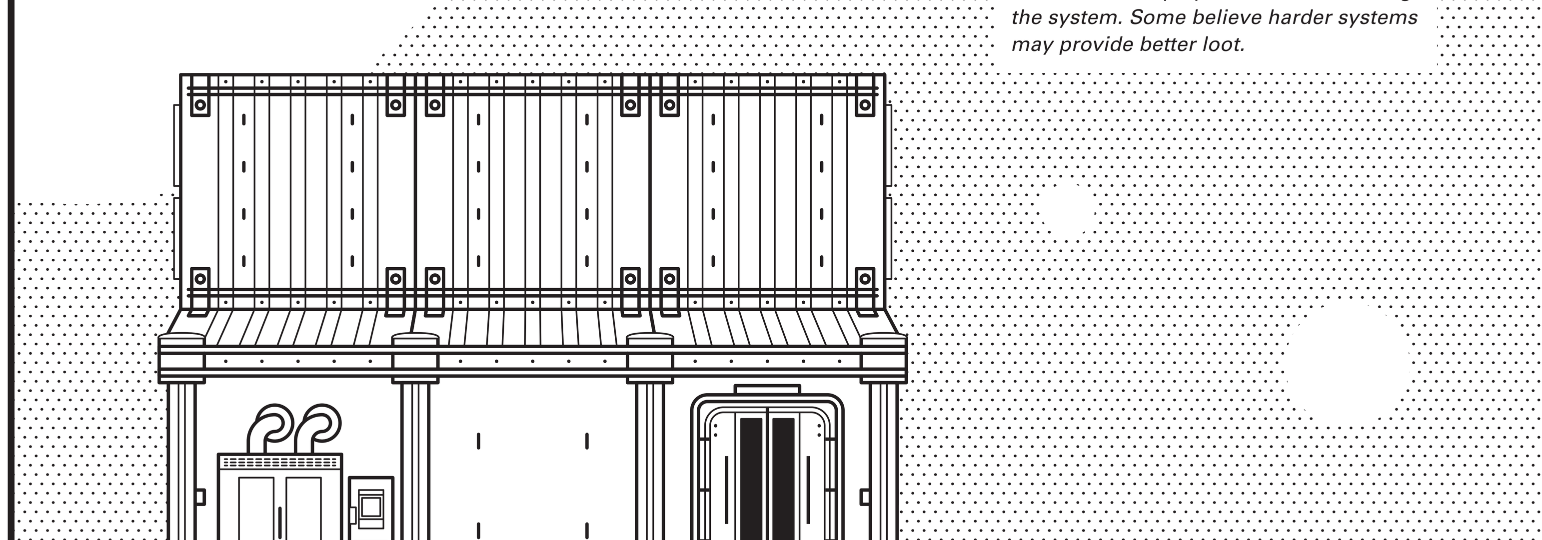
75 — **FERMI VII-A—FERMI**
ORGANIC: MEMORY SUBSTRATE (UNIQUE)
INORGANIC: PT, PD
ALSO: F, H2O, NI, CO, U, CU
NOTE: NEEDS H2O AND FIBER FOR MEMORY SUBSTRATE, SEND VIA LOCAL LINK FROM OUTPOST AT FERMI III FOR AUTOMATION.

Note: There are 2 organic and 2 inorganic resources that can only be harvested manually: caelumite (found near gravitational anomalies), aqueous hematite (Cydonia mines on Mars), neurologic (harvested from a plant on Zeta Ophiuchi I), and quark-degenerative tissues (random dead alien loot).

DIFFICULTY

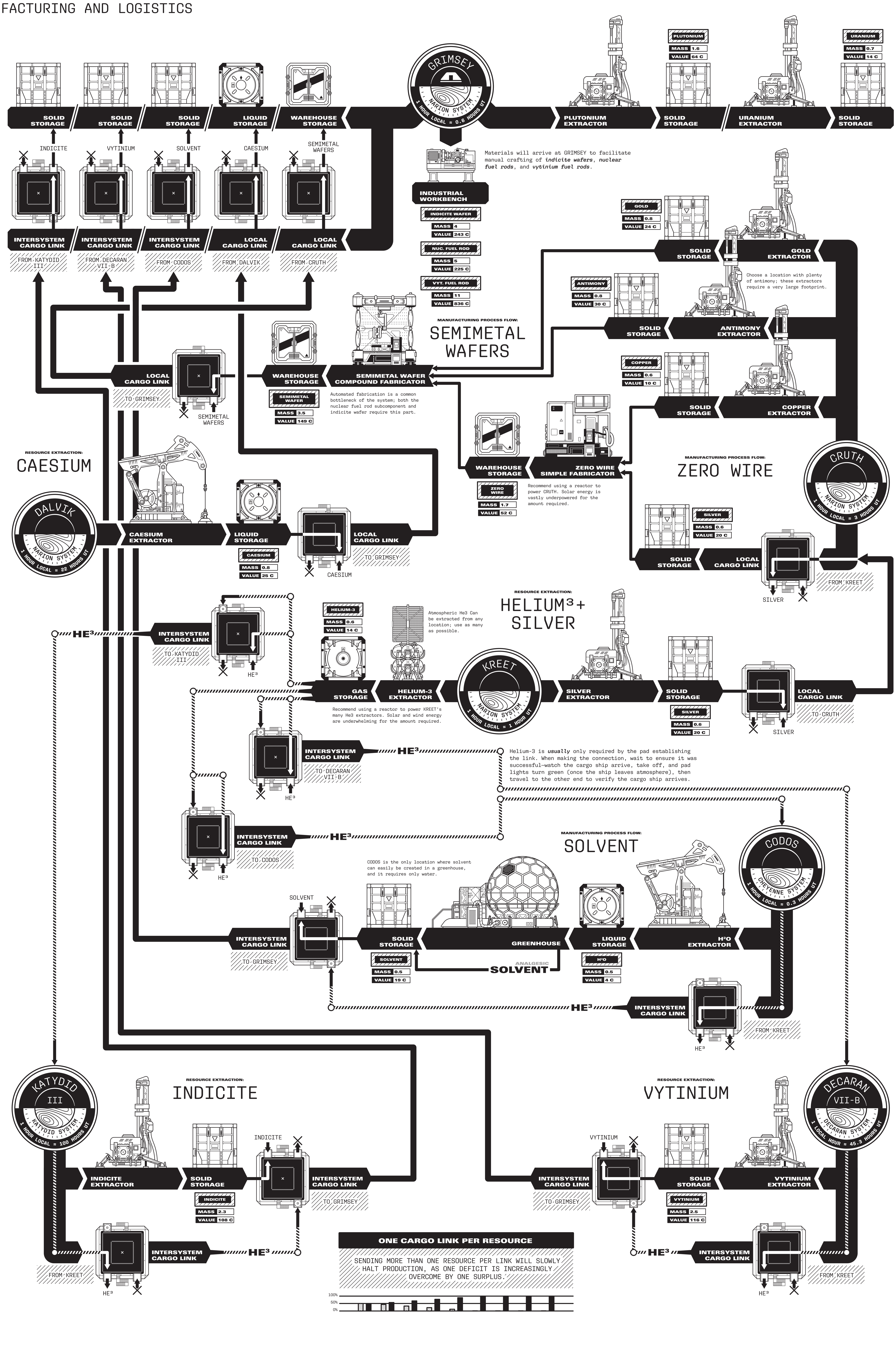
5	15	25	35	55+
EASY		INTERMEDIATE		HARD

Recommended player level when visiting the system. Some believe harder systems may provide better loot.



VYTINIUM FUEL RODS

MANUFACTURING AND LOGISTICS



COLLECTION TITLE

ADVANCED REACTOR ASSEMBLY

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PROJECT DESCRIPTION

Manufacture, logistics, and component fabrication of the parts required for advanced nuclear reactors.

This sheet focuses on the complexities of crafting vytinium fuel rods at an industrial workbench. This part notably provides the largest sum in credits and experience of all craftable goods—though it requires a minimum of 7 outposts across 4 systems.

ADVANCED REACTOR PART LIST

		OUTPOST ENGINEER 4
VYTINIUM FUEL ROD	4	8
LEAD	10	20
CONTROL ROD	2	5
POWER CIRCUIT	1	3
ADAPTIVE FRAME	5	10
TASINE SUPERCONDUCTOR	2	4
ROTHICITE MAGNET	2	5

VYTINIUM FUEL ROD

PLUTONIUM	2
INDICITE WAFER	1
VYTINIUM	4
NUCLEAR FUEL ROD	1

NUCLEAR FUEL ROD

SEMIMETAL WAFER	1
SOLVENT	2
URANIUM	3

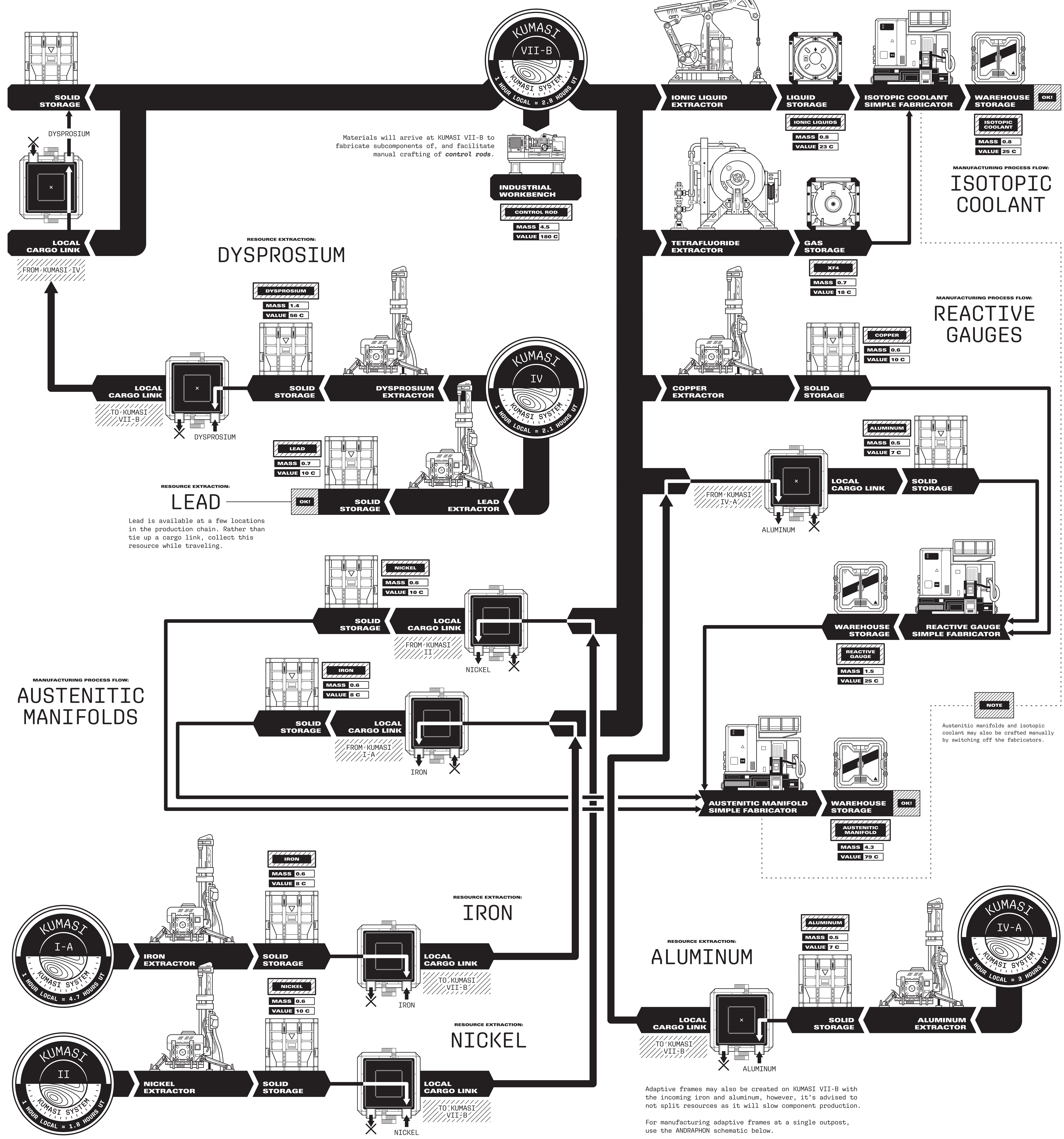
INDICITE WAFER

SEMIMETAL WAFER	1
SOLVENT	2
INDICITE	4
CAESIUM	2

* RESEARCH METHODS REDUCES MATERIAL COSTS

CONTROL RODS

MANUFACTURING AND LOGISTICS



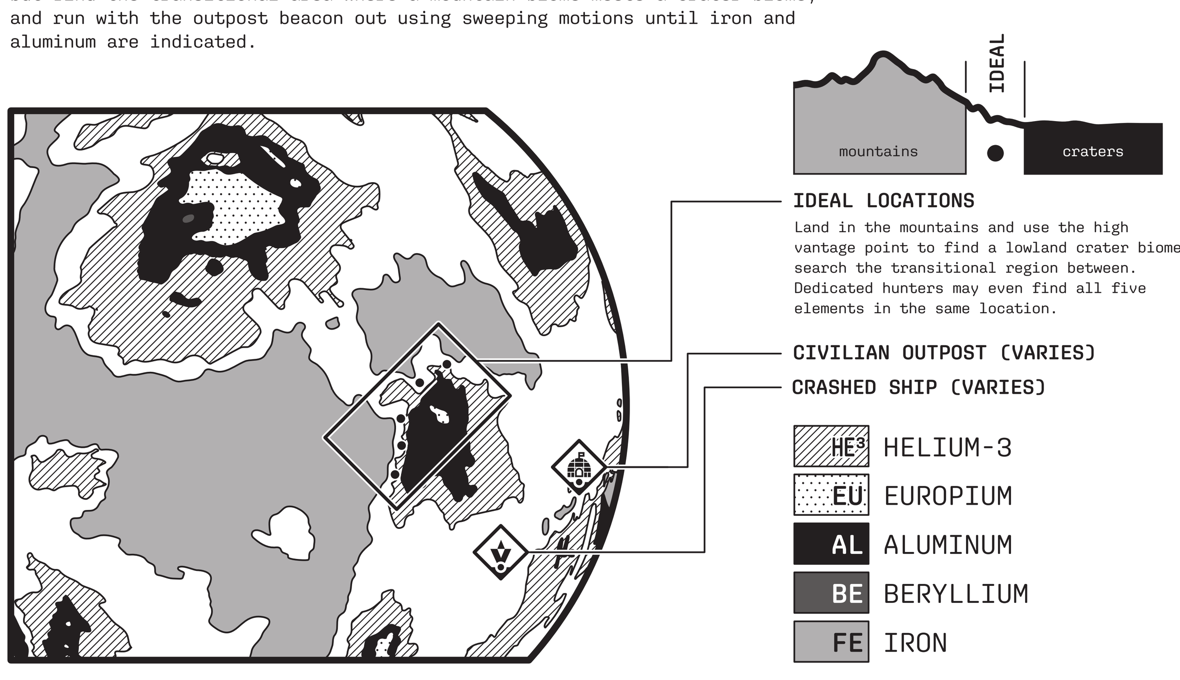
Adaptive frames may also be created on KUMASI VII-B with the incoming iron and aluminum, however, it's advised to not split resources as it will slow component production.

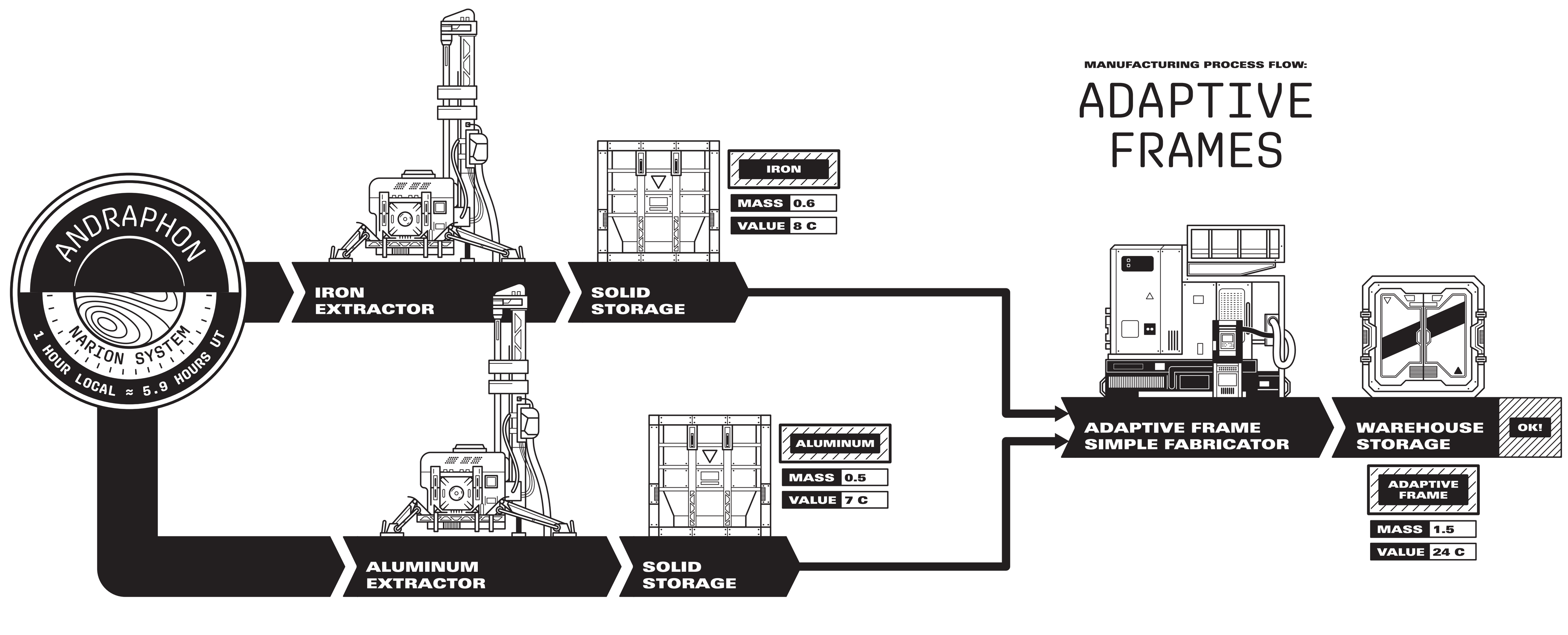
For manufacturing adaptive frames at a single outpost, use the ANDRAPHON schematic below.

ADAPTIVE FRAMES

SINGLE OUTPOST FABRICATION

ANDRAPHON has the rare distinction of being a location where both iron and aluminum can be extracted at the same outpost. It might take some searching, but find the transitional area where a mountain biome meets a crater biome, and run with the outpost beacon out using sweeping motions until iron and aluminum are indicated.





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Manufacture, logistics, and component fabrication of the parts required for advanced nuclear reactors.

This sheet focuses on the logistics and automation of a few simpler subcomponents needed to complete a reactor installation.

ADVANCED REACTOR PART LIST

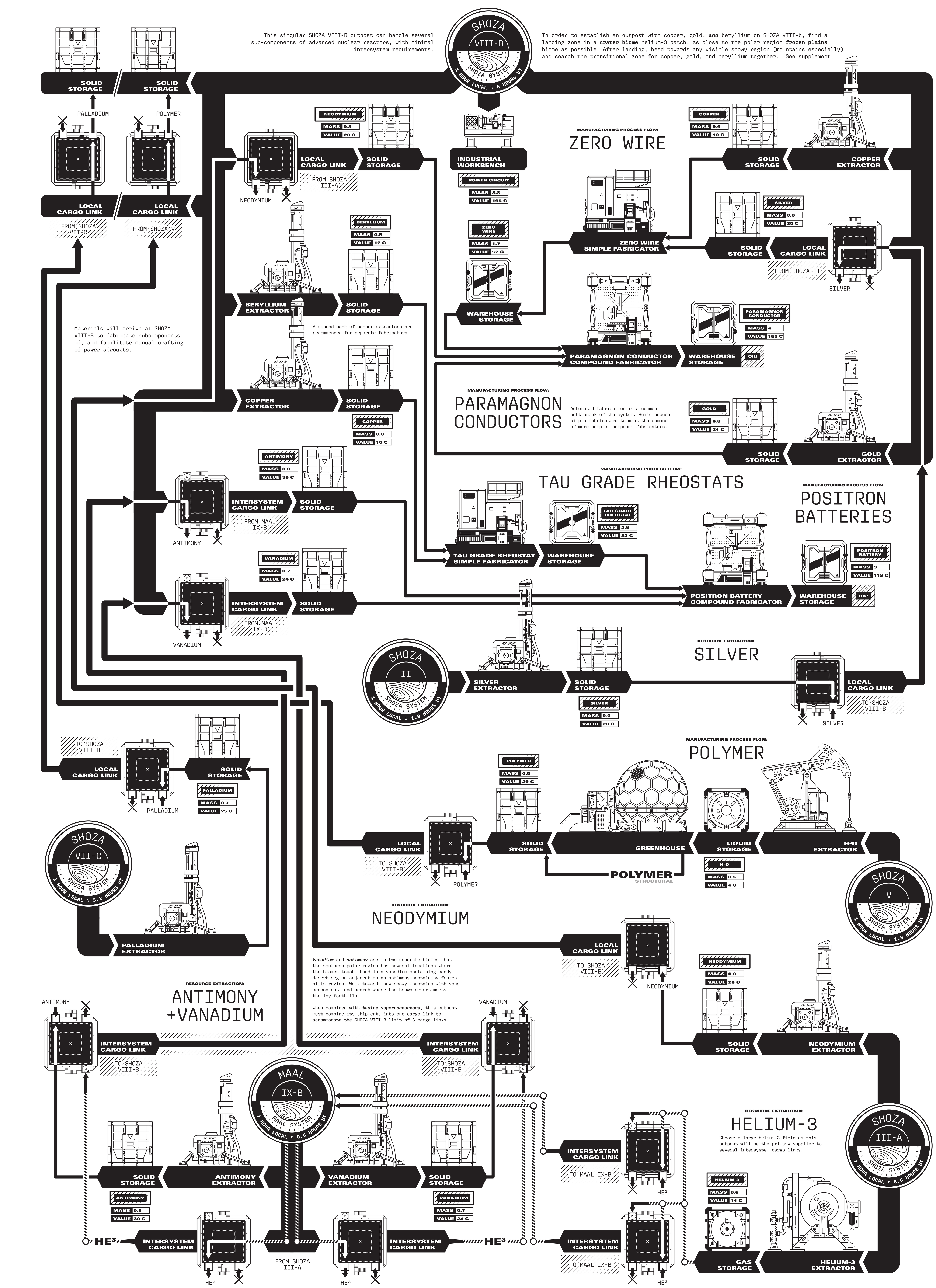
		OUTPOST ENGINEER 4
VYTINIUM FUEL ROD	4	8
LEAD	10	20
CONTROL ROD	2	5
POWER CIRCUIT	1	3
ADAPTIVE FRAME	5	10
TASINE SUPERCONDUCTOR	2	4
ROTHICITE MAGNET	2	5

CONTROL ROD		ADAPTIVE FRAME		AUSTENITIC MANIFOLD	
DYSPROSIUM	3	IRON	1	REACTIVE GAUGE	1
AUSTENITIC MANIFOLD	1	ALUMINUM	1	IRON	1
ISOTOPIC COOLANT	1			NICKEL	2

* RESEARCH METHODS REDUCES MATERIAL COSTS

POWER CIRCUITS

MANUFACTURING AND LOGISTICS



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ADVANCED REACTOR ASSEMBLY

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PROJECT DESCRIPTION

Manufacture, logistics, and component fabrication of the parts required for advanced nuclear reactors.

This sheet focuses on the optimal logistics and automation of many exotic subcomponents needed to complete a reactor installation, in parallel with another component sheet.

ADVANCED REACTOR PART LIST

		OUTPOST ENGINEER 4
VYTINIUM FUEL ROD	4	8
LEAD	10	20
CONTROL ROD	2	5
POWER CIRCUIT	1	3
ADAPTIVE FRAME	5	10
TASINE SUPERCONDUCTOR	2	4
ROTHICITE MAGNET	2	5

POWER CIRCUIT	
PALLADIUM	4
POLYMER	2
PARAMAGNON CONDUCTOR	1
POSITRON BATTERY	1

TAU GRADE RHEOSTAT	
COPPER	1
BERYLLIUM	1

POSITRON BATTERY	
VANADIUM	2
ANTIMONY	2
TAU GRADE RHEOSTAT	1

* RESEARCH METHODS REDUCES MATERIAL COSTS

NUCLEAR COMMERCE

SETTLED SYSTEMS STARMAP WITH CARGO AND TRANSPORT ROUTING.

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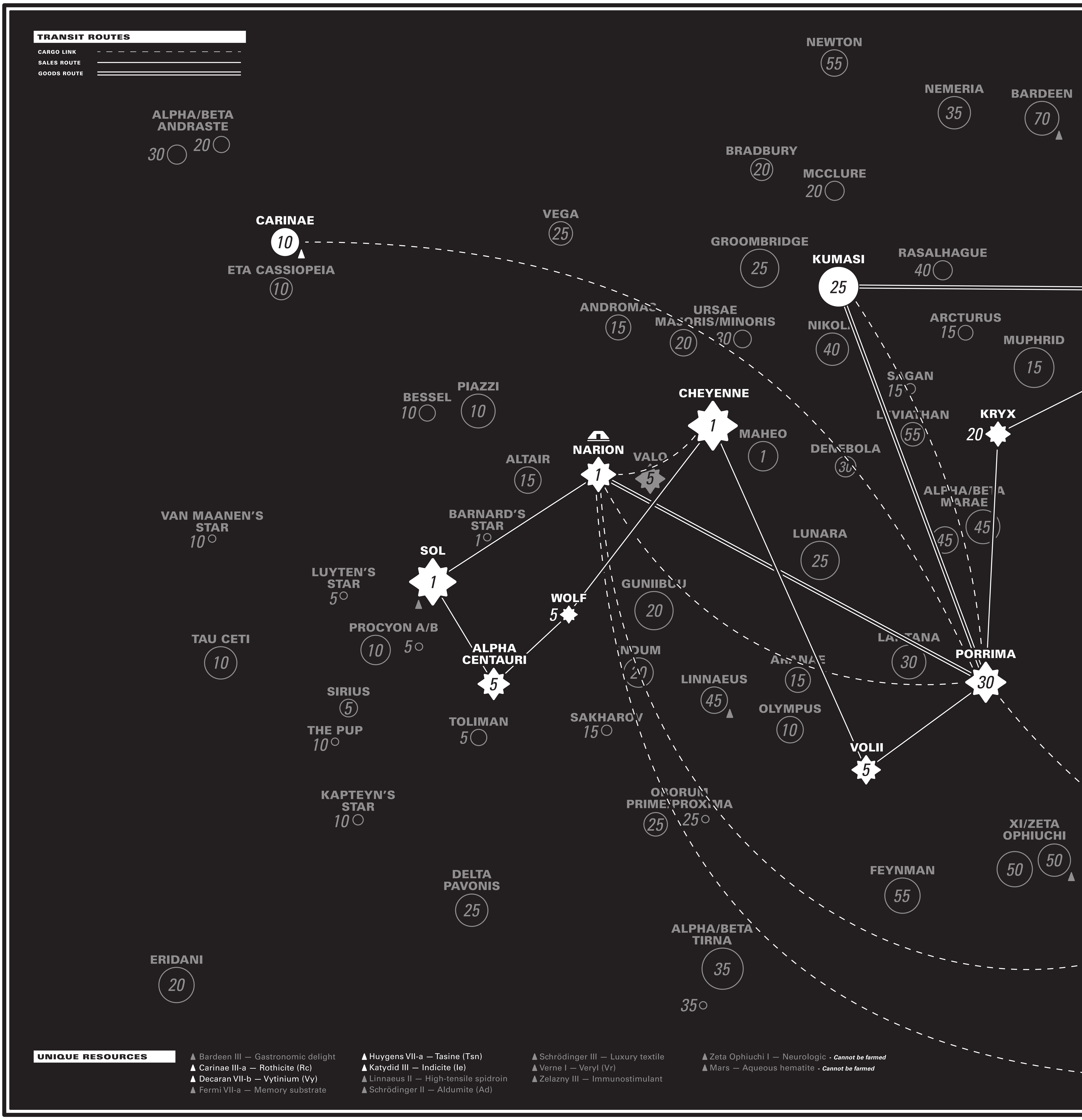


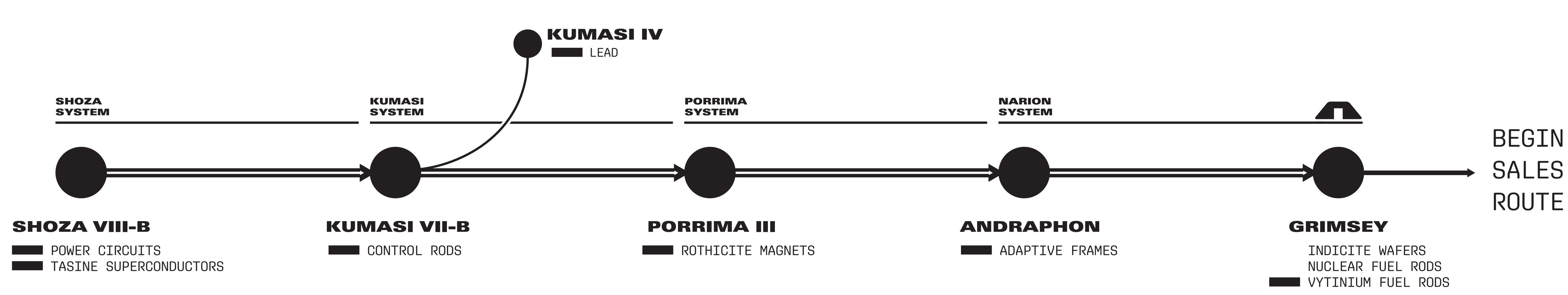
MANUFACTURING ROUTE

An optimized and efficient production route is essential to the business of advanced nuclear reactors. Each primary outpost in the chain, and the automated feeder outposts supplying sub components, have been carefully tailored to minimize the stops needed for collecting essential reactor parts.

The loop begins at the furthest outpost: SHOZA VIII-B, and ends in the NARION system, with the heaviest materials crafted last, near civilization. Noted below each outpost are the goods that need to be manually crafted then collected to sell.

Spacecraft will need large jump capacity (27+ LY) and a healthy fuel reserve to make the round trip.

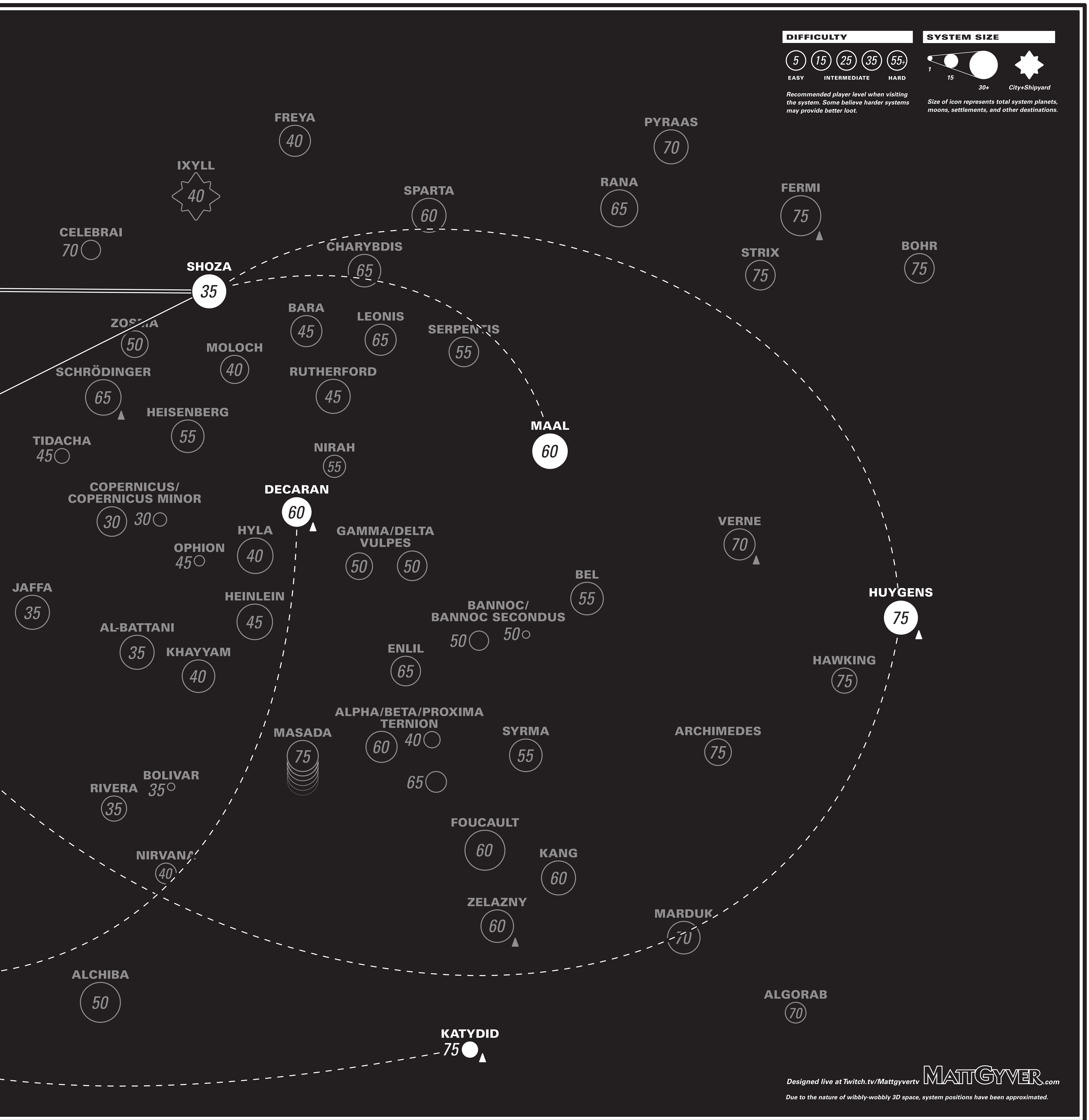
UNIFIED TRANSPORT



CARGO MANIFEST & HAUL MASS

Calculations on cargo space required to haul components.

INDIVIDUAL MASS	1×ADV.REACTOR	OUTPOST ENGINEER 4		10×ADV.REACTORS	OUTPOST ENGINEER 4		50×ADV.REACTORS	OUTPOST ENGINEER 4	
11 EA.	VYTINIUM FUEL ROD	4	8	VYTINIUM FUEL ROD	40	80	VYTINIUM FUEL ROD	200	400
0.7 EA.	LEAD	10	20	LEAD	100	200	LEAD	500	1000
4.5 EA.	CONTROL ROD	2	5	CONTROL ROD	20	50	CONTROL ROD	100	250
3.8 EA.	POWER CIRCUIT	1	3	POWER CIRCUIT	10	30	POWER CIRCUIT	50	150
1.5 EA.	ADAPTIVE FRAME	5	10	ADAPTIVE FRAME	50	100	ADAPTIVE FRAME	250	500
5 EA.	TASINE SUPERCONDUCTOR	2	4	TASINE SUPERCONDUCTOR	20	40	TASINE SUPERCONDUCTOR	100	200
4.6 EA.	ROTHICITE MAGNET	2	5	ROTHICITE MAGNET	20	50	ROTHICITE MAGNET	100	250
TOTAL MASS	MASS	90.5	193.9	MASS	905	1939	MASS	4525	9695



SALES ROUTE

The sales route starts where the manufacturing route ends: in the NARION system. From here, a round trip begins in the SOL system at CYDONIA to sell stock, eventually ending back at SHOZA VIII-B, beginning the circuit again.

To maximize profits and provide clean, nuclear power to the settled systems, this recommended sales route is tailored to visit every Trade Authority store and major urban center.

TRADE AUTHORITY

OPTIONAL

TITAN
NEW HOMESTEAD
3 vendors

GAGARIN
GAGARIN LANDING
3 vendors

SOL SYSTEM

MARS
CYDONIA
4 vendors
Trade Authority is located on the main level.

ALPHA CENTAURI SYSTEM

JEMISON
NEW ATLANTIS
15 vendors
Trade Authority is located in the Well; elevator around the side of Jemison Mercantile.

WOLF SYSTEM

CHTHONIA
THE DEN
2 vendors
Trade Authority is inside to the left.

CHEYENNE SYSTEM

AKILA
AKILA CITY
9 vendors
Trade Authority is in an alley between Galbank and the Hitching Post.

VOLII SYSTEM

VOLII ALPHA
NEON
16 vendors
Trade Authority is in the main common area.

PORRIMA SYSTEM

PORRIMA III
THE RED MILE
1 vendor
The bartender will buy anything, and has a lot of credits.

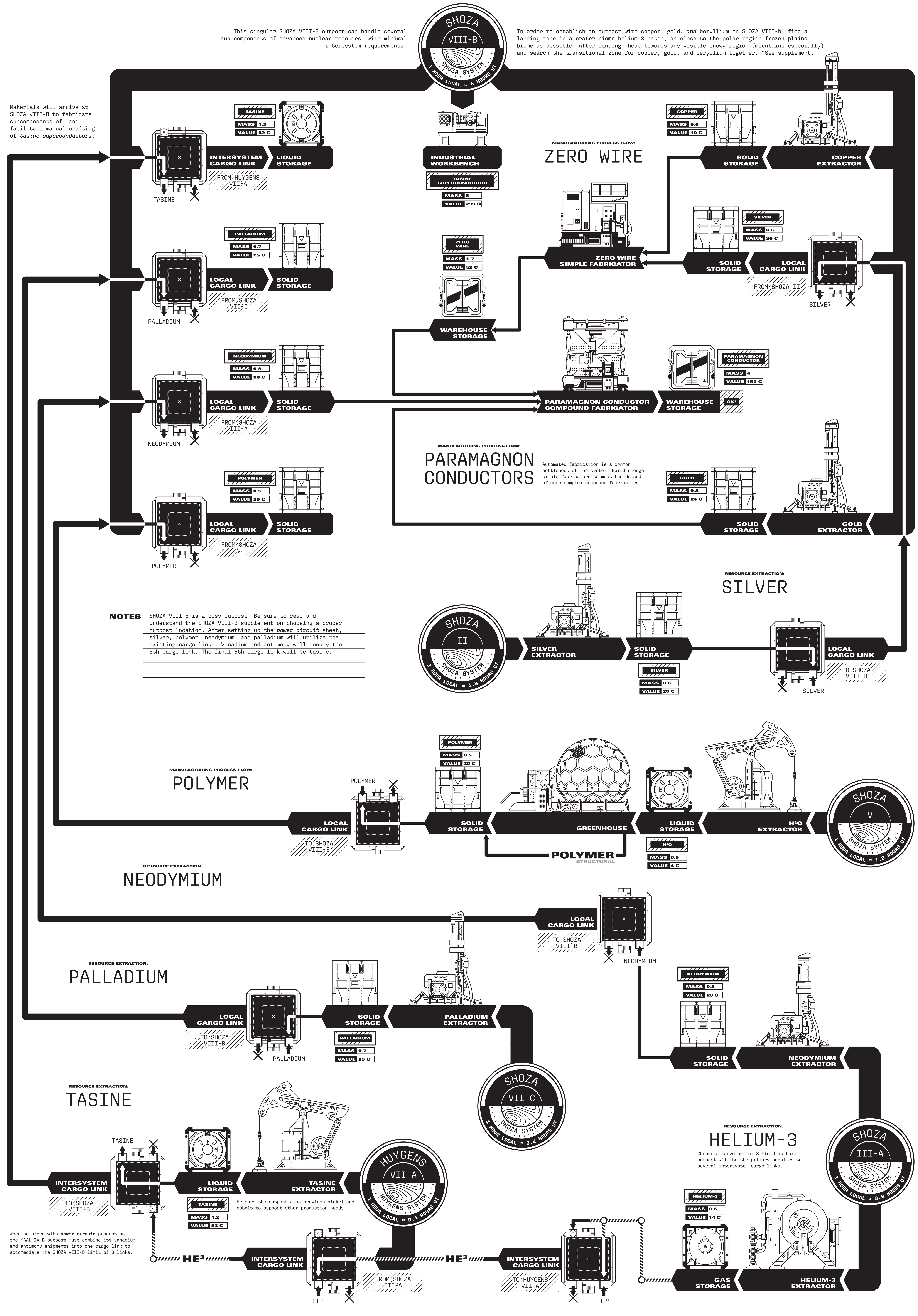
KRYX SYSTEM

SUVOROV
THE KEY
6 vendors
Trade Authority is in the maze of vendors to the right. You must be a member of the Crimson Fleet.

BEGIN MANUFACTURING ROUTE

TASINE SUPERCONDUCTORS

MANUFACTURING AND LOGISTICS



NOTES SHOZA VIII-B is a busy outpost! Be sure to read and understand the SHOZA VIII-B supplement on choosing a proper outpost location. After setting up the ***power circuit*** sheet, silver, polymer, neodymium, and palladium will utilize the existing cargo links. Vanadium and antimony will occupy the 5th cargo link. The final 6th cargo link will be tasine.

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VYTINIUM FUEL ROD	4	8
LEAD	10	20
CONTROL ROD	2	5
POWER CIRCUIT	1	3
ADAPTIVE FRAME	5	10
TASINE SUPERCONDUCTOR	2	4
ROTHICITE MAGNET	2	5

TASINE SUPERCONDUCTOR

PALLADIUM	2
POLYMER	2
PARAMAGNON CONDUCTOR	1
TASINE	4

PARAMAGNON CONDUCTOR

GOLD	1
NEODYMIUM	1
ZERO WIRE	3

* RESEARCH METHODS REDUCES MATERIAL COSTS

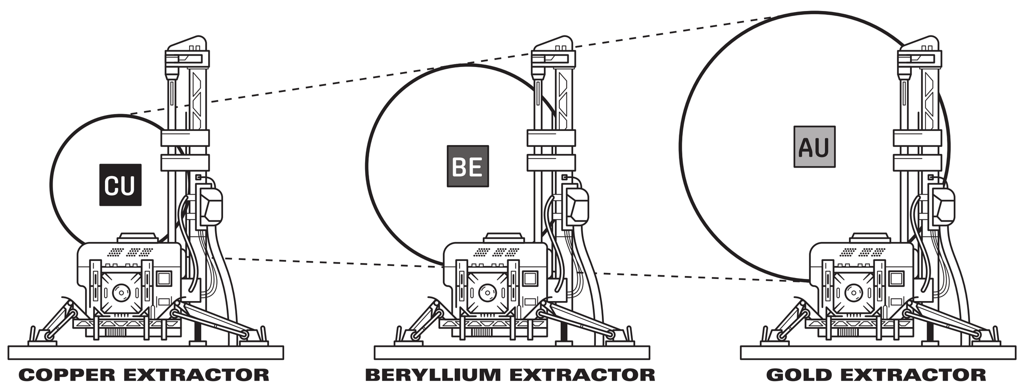
SHOZA VIII-B SUPPLEMENT

RESOURCE LOCATION GUIDE

RESOURCE EXTRACTION

For the purposes of this outpost, maximize the gold extraction first, then beryllium, then copper.

The relative size of extractor footprint limits the amount of gold that can be extracted, as well as beryllium. Copper extractors have the smallest footprint and will generally operate efficiently in a small copper field.

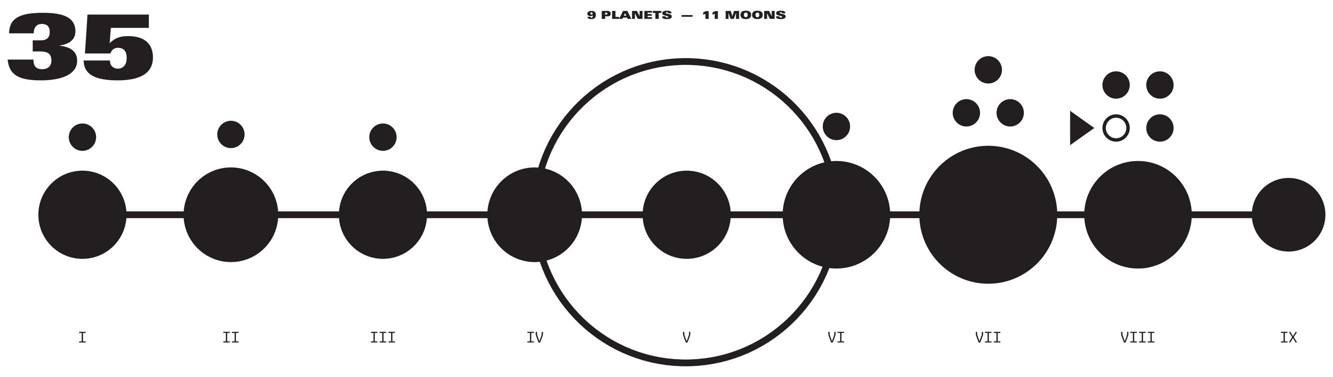


EXTRACTOR FOOTPRINT SCALE

LEVEL
35

SHOZA SYSTEM

9 PLANETS — 11 MOONS



SHOZA VIII-B

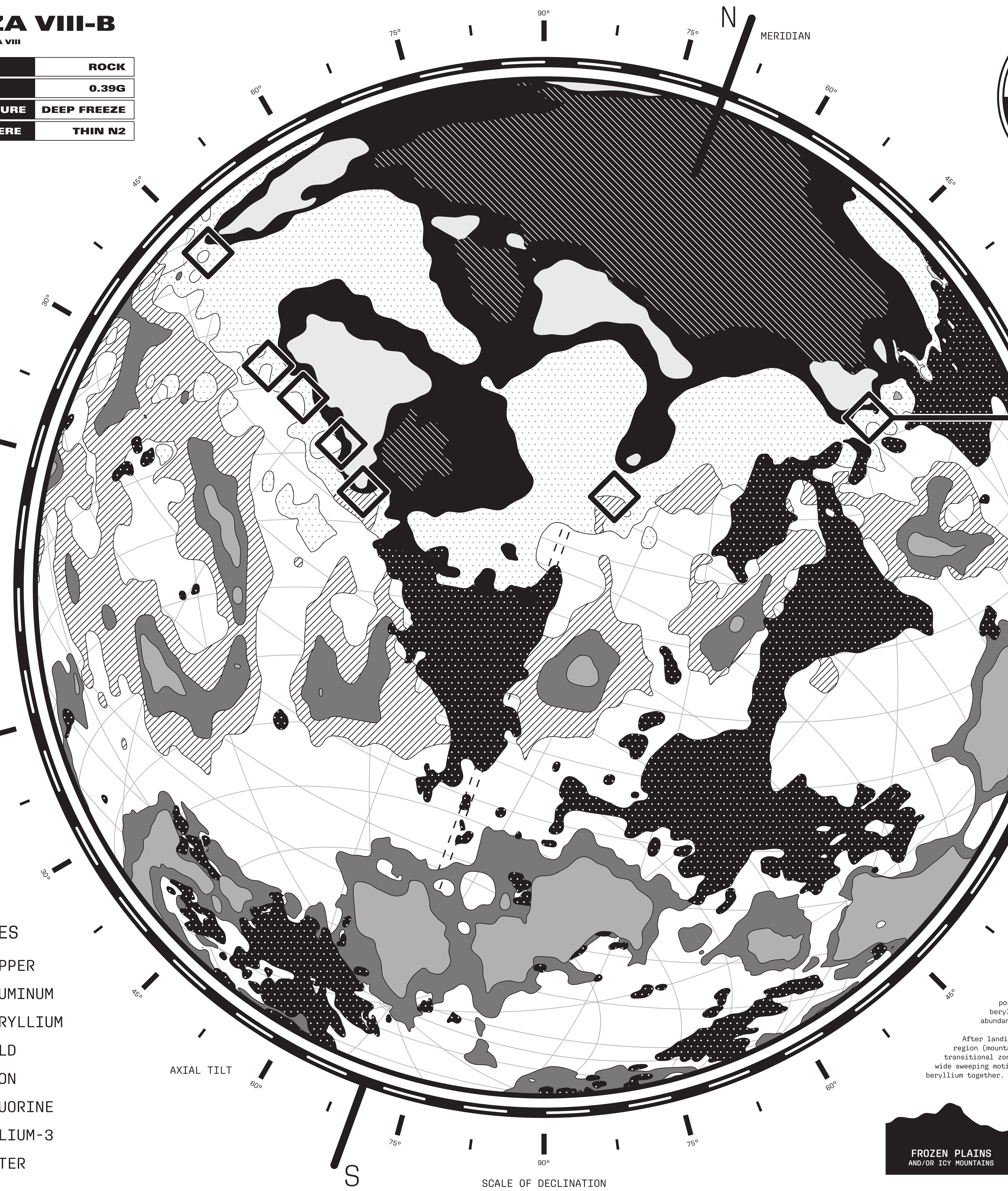
MOON OF SHOZA VIII

TYPE	ROCK
GRAVITY	0.39G
TEMPERATURE	DEEP FREEZE
ATMOSPHERE	THIN N2

FAUNA
0/0

FLORA
0/0

WATER
NONE



REQUIRES PLANETARY HABITATION RANK 1

CU
BE
AU

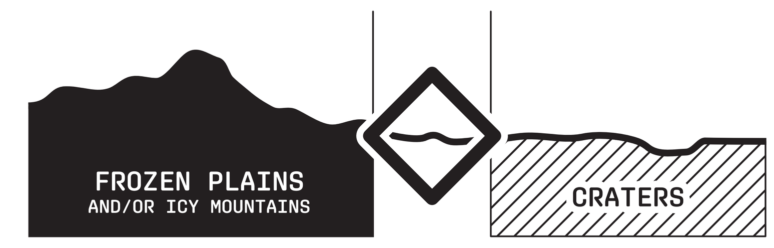
RESOURCES

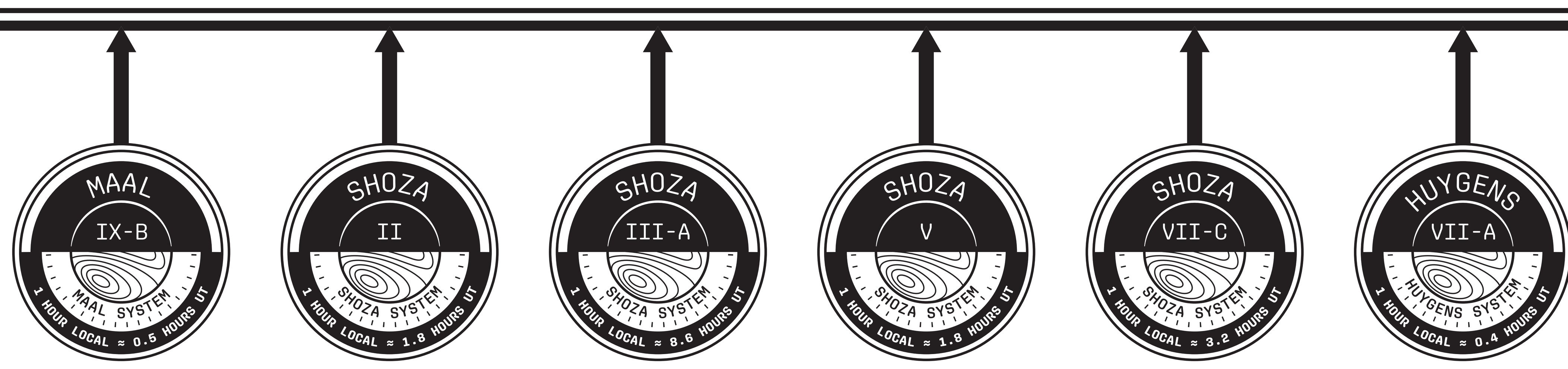
CU	COPPER
AL	ALUMINUM
BE	BERYLLIUM
AU	GOLD
FE	IRON
F	FLUORINE
HE^3	HELIUM-3
H_2O	WATER

IDEAL LOCATIONS

Land in a **crater biome** as close to the polar region **frozen plains** biome as possible. You do not need to land in a beryllium or aluminum region, both are abundant in any crater biome.

After landing, head towards any visible snowy region (mountains especially) and run along the transitional zone with the outpost beacon out. Use wide sweeping motions to search for copper, gold, and beryllium together.





SHOZA PRODUCTION ARM

POWER CIRCUITS

TASINE SUPERCONDUCTORS

MAAL IX-B	SHOZA II	SHOZA III-A	SHOZA V	SHOZA VII-C	HUYGENS VII-A
ANTIMONY VANADIUM	SILVER	NEODYMIUM HELIUM-3	POLYMER	PALLADIUM	TASINE

OUTPOST SETUP

SHOZA VIII-B serves as a centralized hub for two of the six advanced nuclear reactor components: ***tasine superconductors*** and ***power circuits***.

The minimal outposts and intersystem linking are as optimal as possible. Tasine, a unique resource, is extracted and imported from HUYGENS VII-A. While antimony and vanadium are brought in from MAAL IX-B. This is the only known location in the settled systems that can produce both minerals at a single outpost (though they must ship together from a single cargo link).

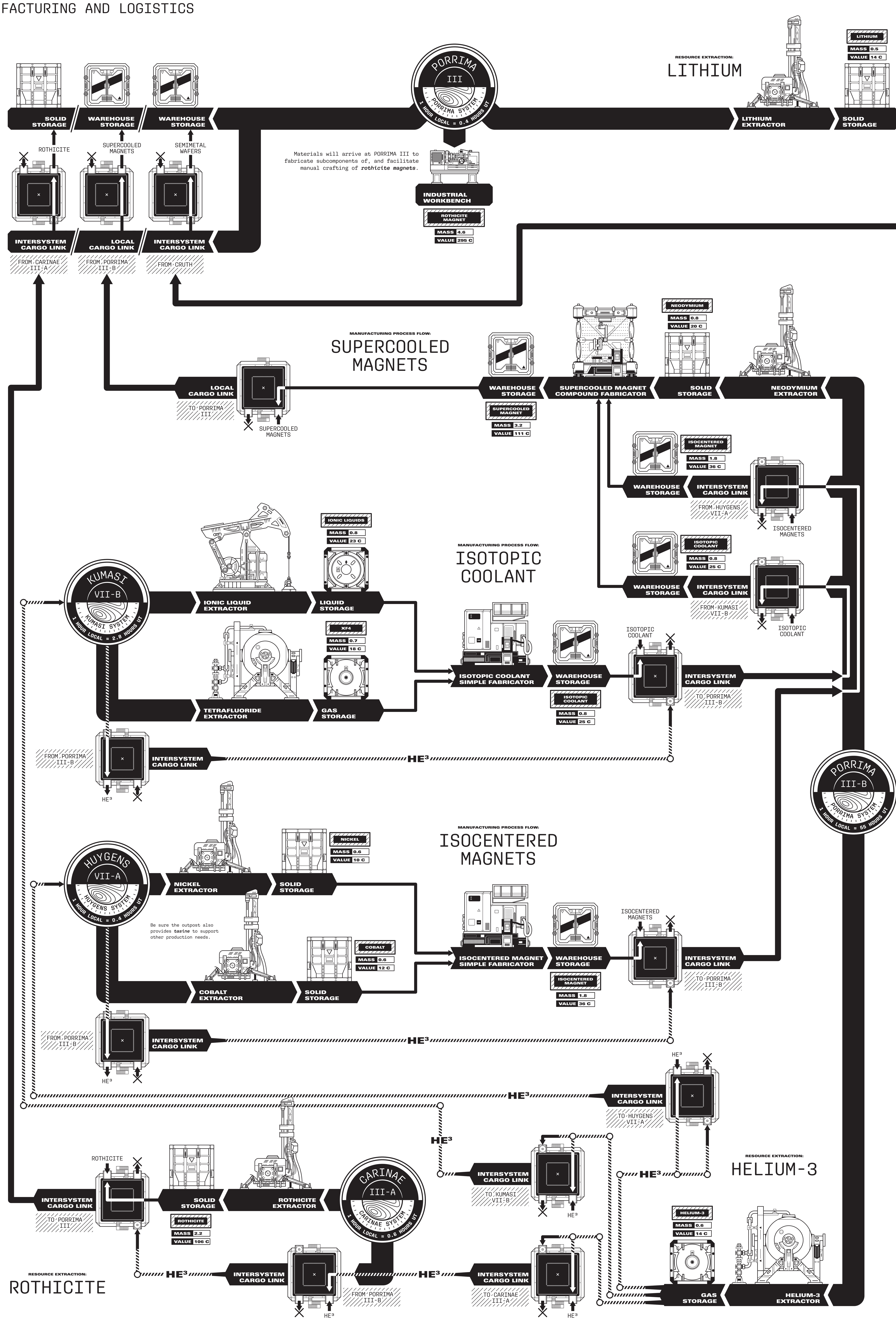
Dedication and patience will be required to set up SHOZA VIII-B and MAAL IX-B (as well as Andraphon) because all three outposts require recognizing and searching the transitional space between biomes.

SYSTEM-WIDE RESOURCES

AL	AR	CL	CU	FE	PB	NI	U	H_2O	C_6HN
BE	AU	CO	F	HE^3	IR	AG	W	R-COOH	
LI	ND	PT	EU	PD	YB	SIH_3CL			

ROTHICITE MAGNETS

MANUFACTURING AND LOGISTICS



COLLECTION TITLE

ADVANCED REACTOR ASSEMBLY

MATTGYVER.COM

PROJECT DESCRIPTION

Manufacture, logistics, and component fabrication of the parts required for advanced nuclear reactors.

This sheet focuses on the logistics and automation of exotic subcomponents needed to complete a reactor installation. Many of these connected outposts are already established from prior sheets.

ADVANCED REACTOR PART LIST

		OUTPOST ENGINEER 4
VYTINIUM FUEL ROD	4	8
LEAD	10	20
CONTROL ROD	2	5
POWER CIRCUIT	1	3
ADAPTIVE FRAME	5	10
TASINE SUPERCONDUCTOR	2	4
ROTHICITE MAGNET	2	5

ROTHICITE MAGNET

LITHIUM	2
ROTHICITE	4
SEMIMETAL WAFER	1
SUPERCOOLED MAGNET	1

ISOCENTERED MAGNET

NICKEL	1
COBALT	1

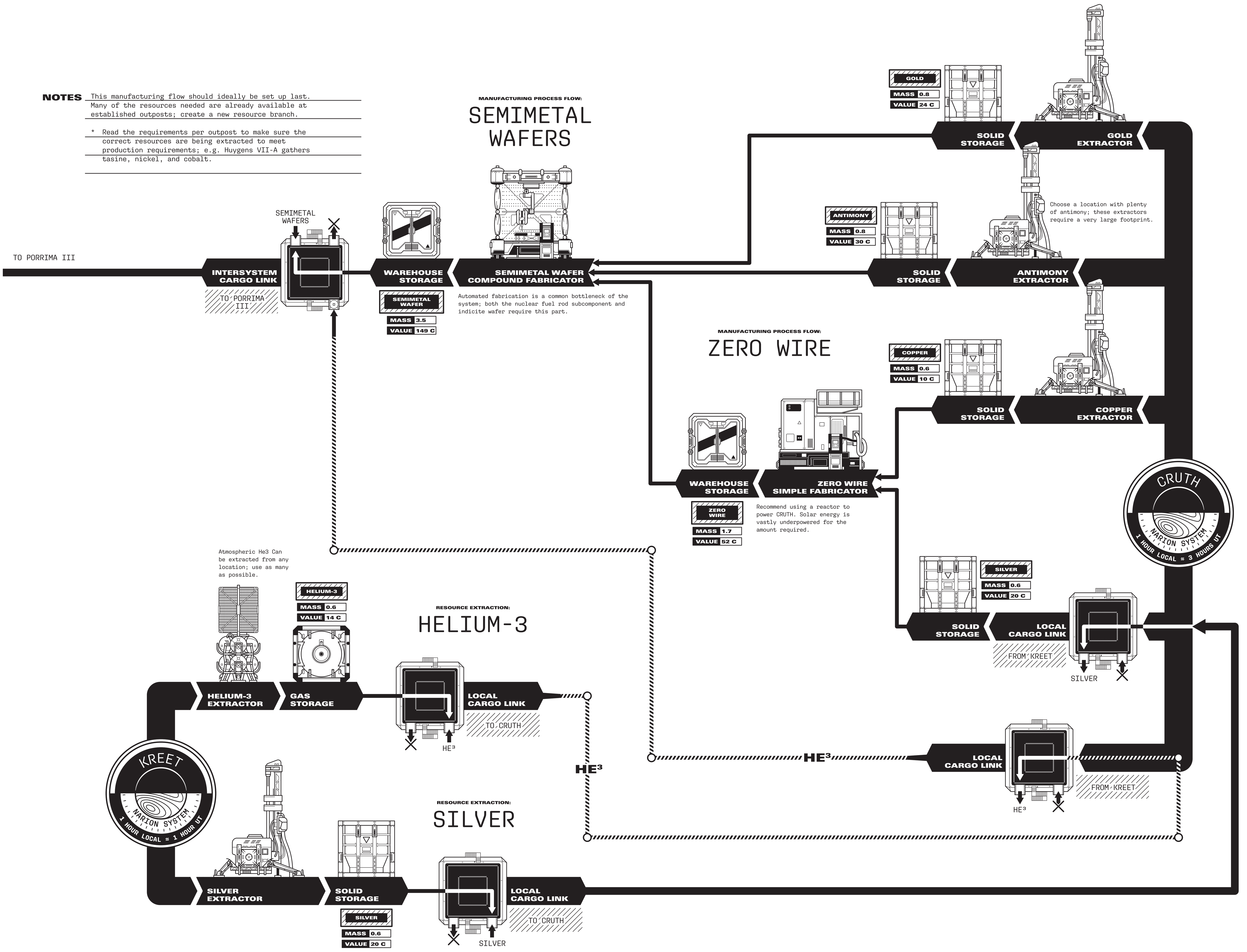
SUPERCOOLED MAGNET

ISOCENTERED MAGNET	1
ISOTOPIC COOLANT	1
NEODYMIUM	3

* RESEARCH METHODS REDUCES MATERIAL COSTS

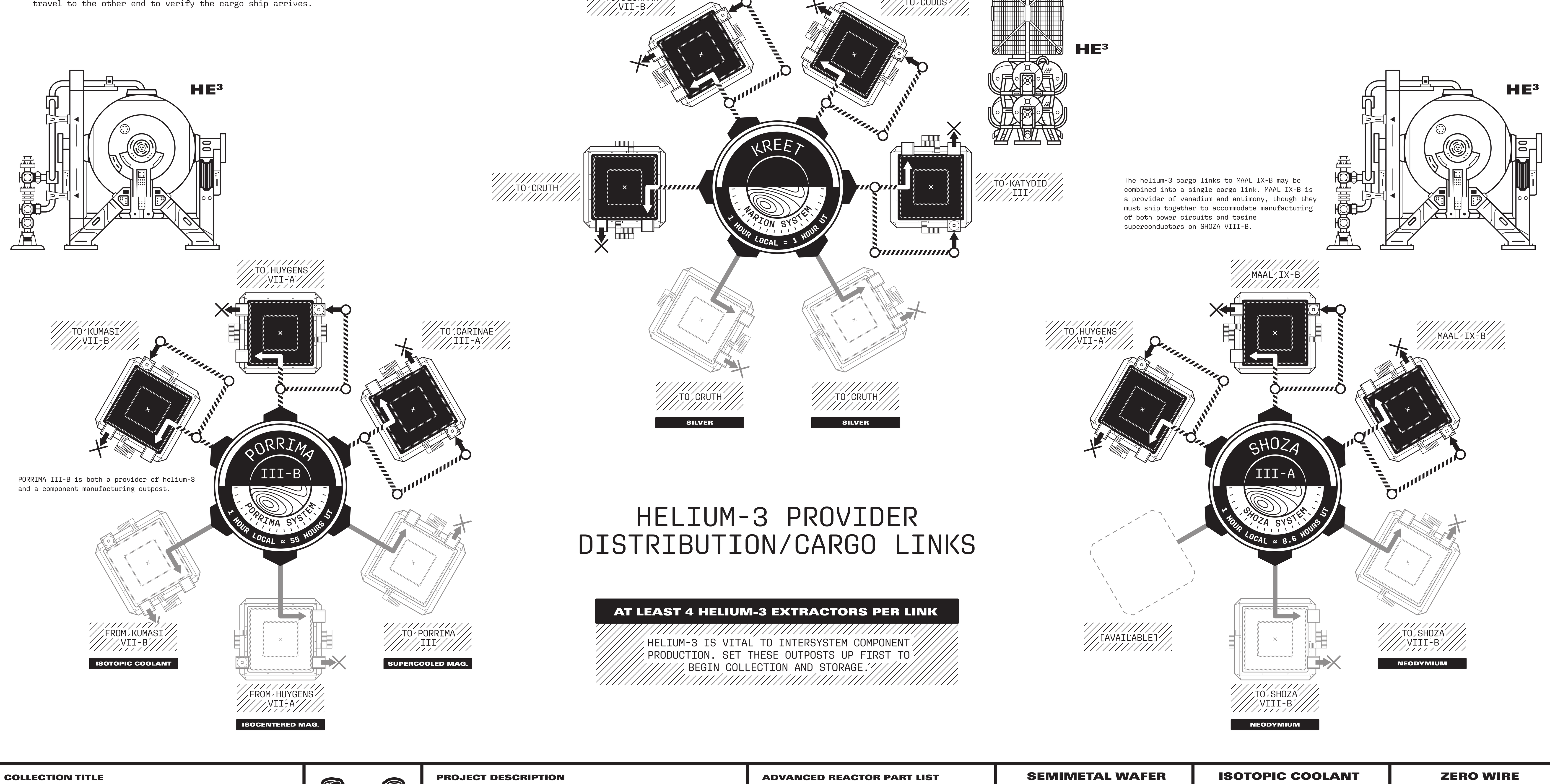
NOTES This manufacturing flow should ideally be set up last. Many of the resources needed are already available at established outposts; create a new resource branch.

* Read the requirements per outpost to make sure the correct resources are being extracted to meet production requirements; e.g. Huygens VII-A gathers tasine, nickel, and cobalt.



HELIUM-3 FREIGHT

Helium-3 is ***usually*** only required by the pad establishing the link. When making the connection, wait to ensure it was successful—watch the cargo ship arrive, take off, and pad lights turn green (once the ship leaves atmosphere), then travel to the other end to verify the cargo ship arrives.



HELIUM-3 PROVIDER DISTRIBUTION/CARGO LINKS

AT LEAST 4 HELIUM-3 EXTRACTORS PER LINK

HELIUM-3 IS VITAL TO INTERSYSTEM COMPONENT PRODUCTION. SET THESE OUTPOSTS UP FIRST TO BEGIN COLLECTION AND STORAGE.

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PROJECT DESCRIPTION

Manufacture, logistics, and component fabrication of the parts required for advanced nuclear reactors.

This sheet focuses on the logistics and automation of exotic subcomponents needed to complete a reactor installation.

The helium-3 freight diagram is an at-a-glance view of extraction and distribution.

ADVANCED REACTOR PART LIST

		OUTPOST ENGINEER 4
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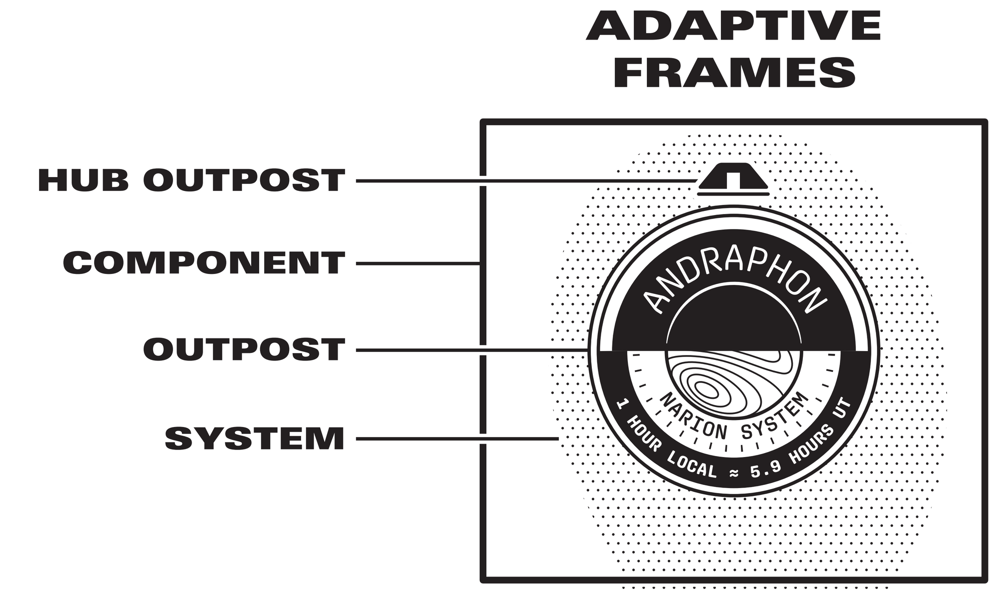
TASINE SUPERCONDUCTOR	2	4
ROTHICITE MAGNET	2	5

SEMIMETAL WAFER		ISOTOPIC COOLANT		ZERO WIRE	
GOLD	2	TETRAFLUORIDES XF4	1	COPPER	1
ANTIMONY	2	IONIC LIQUIDS	1	SILVER	1
ZERO WIRE	1				

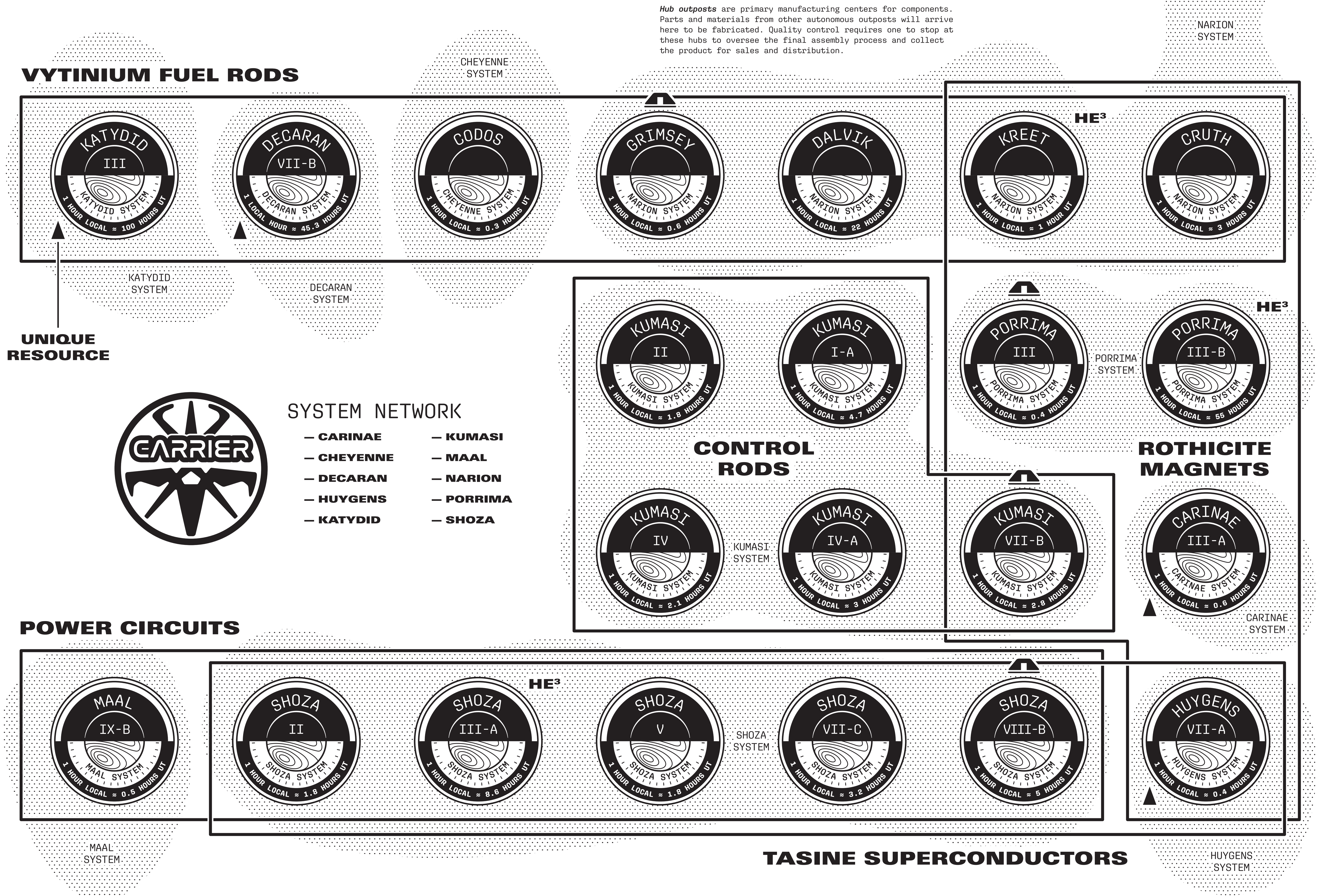
* RESEARCH METHODS REDUCES MATERIAL COSTS

OUTPOST SUMMARY

A VISUAL SYNOPSIS OF THE **23** OUTPOSTS NEEDED TO MANUFACTURE COMPONENTS FOR ADVANCED NUCLEAR REACTORS.



Hub outposts are primary manufacturing centers for components. Parts and materials from other autonomous outposts will arrive here to be fabricated. Quality control requires one to stop at these hubs to oversee the final assembly process and collect the product for sales and distribution.



NOTES The full manufacturing flow for advanced nuclear reactors requires 23 outposts, the 24th (final) outpost should be a beautiful and accessible showroom/home on any choice planet.

First: Recommended to establish helium-3 extraction first to build up stock.
Second: Establish primary hubs for manufacturing.
Third: Build local cargo links and subcomponent manufacturing.
Last: Connect intersystem cargo links and work out system glitches.

HOME PLANET AND SHOWROOM

ADVANCED REACTOR PARTS

	OUTPOST ENGINEER 4	
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