

FACTORIO: TABLETOP EXPEDITION

Official Rulebook v1.0 • Engine Building & Defense Strategy for 3D Miniatures

MISSION OVERVIEW

You are an Engineer stranded on Nauvis. Build a self-sustaining industrial network using 3D-printed buildings, generate energy, automate production, manage environmental pollution, and repel local alien forces to build and launch the Rocket Silo.

1. COMPONENTS & MAP ARCHITECTURE

SETUP

Hexagonal Map Tiles

The planet board is built from modular hex tiles. Place the **Crash Site Hex** in the center, surrounded by Resource Patches (Iron, Copper, Coal, Stone, Uranium, Water) and Outer Biter Nests.

3D Print Tokens & Figures

Structures: Drills, Furnaces, Assemblers, Steam Engines, Solar Panels, Turrets, Walls, Silo.

Units: Player Engineer, Biters (Small, Medium, Large, Behemoth).

2. ELECTRICITY & POWER GRID RULES

CORE SYSTEM

Your factory relies on electrical power. At the start of Phase 1, calculate your power output against total factory consumption.

POWER GENERATOR	FUEL REQUIRED	ENERGY OUTPUT	NOTES
Steam Engine	1 Coal Token / Turn	+3 Power	Requires adjacent Water Hex connection.
Solar Panel	None	+1 Power (Day)	Produces 0 Power during night cycles (Even Rounds).
Accumulator	Stored Charge	+1 Power	Stores 1 unconsumed Power during Day for Night use.

POWER GRID DEFICIT (BLACKOUT)

If total active building demand exceeds total energy output, your entire facility suffers a **Brownout**. All drill and assembler outputs are halved (rounded down) for that turn, and automated turrets fire at -1 die penalty.

3. TURN STRUCTURE (4 PHASES)

GAMEPLAY LOOP

1 Resource Gathering & Smelting Phase

Each Mining Drill generates 2 Raw Ores from its resource patch. Furnaces automatically consume 1 Coal + 1 Raw Ore to produce 1 Refined Metal Plate.

2 Factory Assembly & Build Phase

Players spend refined resources to craft items, erect new 3D printed structures on adjacent hexes, or conduct research using Science Packs.

4. CRAFTING BLUEPRINT TABLE

RECIPES

STRUCTURE / ITEM	RESOURCE COST	POWER COST	FUNCTIONALITY / EFFECT
Electric Mining Drill	2 Iron Plates, 1 Circuit	1 Power	Extracts 2 Raw Ores per turn from patch.
Assembling Machine	2 Iron Plates, 1 Circuit	1 Power	Automates creation of Circuits, Ammo, or Components.
Gun Turret	3 Steel Plates, 1 Circuit	0 Power	Fires automated shots at Biters in range (Uses Ammo).
Stone Wall	2 Stone / Concrete	0 Power	Provides 10 HP defense barrier blocking hex passage.
Laser Turret	5 Steel, 3 Blue Circuits	3 Power	High damage automated attack (No ammo required).
Rocket Silo	20 Steel, 20 Blue Circuits, 20 Concrete	5 Power	Required structure to fulfill Victory Condition.

5. POLLUTION SYSTEM & BITER THREAT LEVEL

ENVIRONMENTAL MECHANIC

Industrialization attracts local fauna. Each active Drill, Furnace, and Steam Engine adds **1 Pollution Token** **P** to its hex during Phase 3.

Pollution Spread

When a hex reaches **3 Pollution Tokens**, remove them and advance the **Global Threat Track** by +1 step. Excess pollution spreads to adjacent unoccupied hexes.

Evolution Factor

As the Threat Track reaches higher tiers, Biters evolve from Small **S** to Medium **M**, Large **L**, and Behemoth **B** status, gaining increased HP and damage.

6. BITER ATTACKS & COMBAT RESOLUTION

PHASE 4 COMBAT

Combat Steps:

- Spawn:** Roll D6 + Threat Level to determine spawned Biters at the nearest active Nest.
- Movement:** Biters march 2 hexes towards the factory sector emitting highest total pollution.
- Turret Defense Phase:** Turrets fire automatically at incoming units within 2 hexes range.
- Melee / Structure Damage:** Surviving Biters strike walls or buildings in their hex.

BITER CLASS	HEALTH (HP)	ATTACK DAMAGE	SPECIAL ATTRIBUTES
Small Biter	2 HP	1 DMG	Fast movement (3 hexes/turn).
Medium Biter	5 HP	3 DMG	Standard combat unit.
Large Biter	12 HP	6 DMG	Ignores 1 point of incoming armor damage.
Behemoth Biter	25 HP	12 DMG	Cleaves target and damages adjacent walls.

7. WINNING THE GAME

VICTORY CONDITIONS

Cooperative Mode: Construct the **Rocket Silo** and contribute 100 Rocket Parts (crafted via 1 Steel + 1 Processing Unit + 1 Rocket Fuel per part). Successfully launch the rocket before the Global Threat Track reaches maximum and your