Factory Funner

1-6 Players
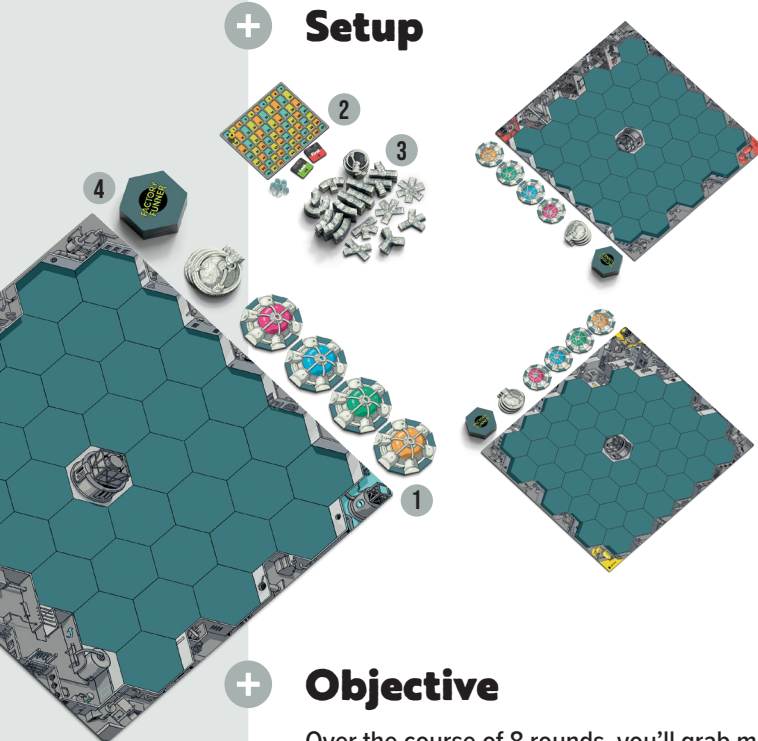
30 Min

Ages 14+

Components

Player Components:
- **A** 6 Double-sided Factory Boards
- **B** 6 Score Markers
- **C** 24 Supply Reservoirs
  (6 each in yellow, pink, green, and blue)
- **D** 18 Output Reservoirs

Shared Components:
- **E** 1 Money Track
- **F** 9 Black Output Reservoirs
- **G** 36 Clear Chips
- **H** 1 First Token
- **I** 1 Last Token
- **J** 154 Connectors
- **K** 48 Machine Tiles

Setup

1. Each player takes a factory board, 3 white output reservoirs and a supply reservoir of each of the four colors. Use side A of the factory board for a fair game. **Use side B to make it more difficult for some players.** (Difficulty rating: All As are equal, then B1, B2, etc with B6 being the most difficult.)
2. Place each player's score marker on the '$10' space of the money track.
3. Place the connector pipes, black reservoirs, clear chips, and First and Last Tokens into a supply accessible to all players.
4. Randomly give each player 8 machine tiles face down. No one should look at them. Return the remaining machines to the box.

Objective

Over the course of 8 rounds, you'll grab machines (in real time!) to add to your factory. Try to build your factory as efficiently as possible. Each machine provides some revenue and if you're able to chain machines together, you'll earn even more!

The "D-6 Quantizer" has 2 inputs (Pink and Yellow) and 1 Green output.

The "Cwalichecker" has 3 inputs: Blue, Green and Yellow and 1 Black output.

Note: If your input or output shows multiple colors (e), players are free to choose which color it is, and may change it later.

Machine Tiles

Each machine tile shows which of the four colors (pink, yellow, green, or blue) of product it needs as input(s), and which color it produces as output(s). The number of dots shows how much of each input the tile requires (a), and the numeral shows how much output it produces (b).

A black output (c) means that the machine produces an end product. No machines accept black as an input.

The number in the middle of the tile shows how much revenue (d) the tile gives you when placed in your factory.

Round Breakdown

Each round consists of three phases:
1. **Selection Phase:** Choose at most one machine tile to add to your factory.
2. **Connection Phase:** Place that tile on to your factory board.
3. **Bookkeeping Phase:** Calculate your revenue and expenses.

1. Selection Phase

When everyone is ready, one player counts down "3... 2... 1.... Flip!" When they yell "Flip!" everyone flips over one of their machine tiles to the table so all players can see and reach it.

Each player may now claim a machine. The first player to touch a machine claims it. There are no take backs or whoopsies. You touch it, you own it.

You are not required to claim a machine. If you claim a machine and do not place it in your factory, you will suffer a $2 penalty. If you take the last machine, you may choose not to place it **without paying the $2 penalty**. So feel free to pick it up and try.

If you are the first player to claim a machine, also take the First Token. If you take the last machine, also claim the Last Token. Do not use the First/Last Tokens on the first round. In a two player game, only use the Last Token.

If more than one machine remains unclaimed, then shuffle these remaining machines and give one to each remaining player. None of these players take the First/Last Token, and they are not subject to the $2 penalty if they choose not to place it.

2. Connection Phase

Players all simultaneously place their newly claimed machine onto their factory board. You must connect all of the machines inputs and outputs to either another appropriate machine or a reservoir. If you did not claim a machine, you do not do anything this phase.

In general, when placing machines and connectors, if it makes logical sense, it is legal. If it seems like wishful thinking, it probably is. Detailed placement rules on next page.

3. Bookkeeping Phase

Now adjust your position on the money track based on how much you spent and earned in the Connection Phase. If you placed a new machine in your factory, gain the revenue shown on its tile. Then, lose $1 for each additional component you placed in the previous phase.

If you claimed a machine and did not build it, lose $2. If you have the First Token, lose $1. If you have the Last Token and built your machine, earn $1.
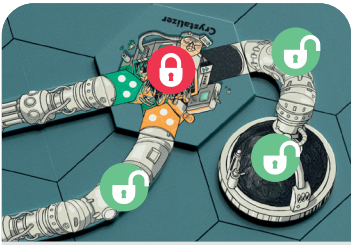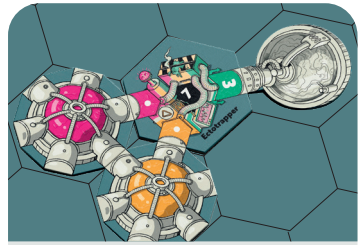
Connectors and reservoirs placed in previous turns may be removed at no cost. Machines placed in previous turns cannot be removed or moved in any way.
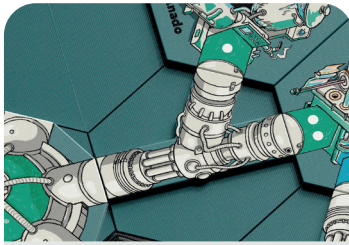
Input product can come from an input reservoir. Each player has one of each color. Input reservoirs have an infinite supply and can supply unlimited machines.


Each player is limited to 3 white reservoirs. Each reservoir may collect a single color. Black reservoirs are unlimited. They may only collect black.
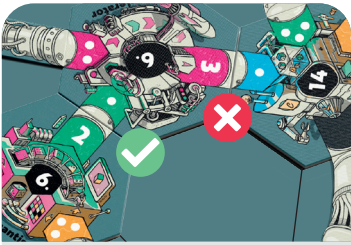

Colors must match and can't be mixed.

Core Placement Rules

- **It is free to place machines in your factory. Every other piece costs $1 to place.**
- **To move, rotate, or upgrade a piece, remove it for free, then pay to place a new piece.**
- **You may never move a machine placed in a previous turn.**
- **Pipes may cross each other, but cannot share a hex edge.**
- **Place clear chips over the input dots when a machines gets its input from another machine.**
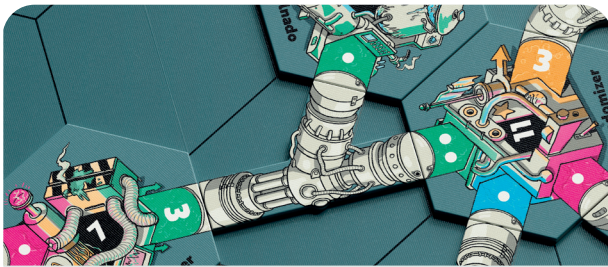
Input product can also come from the output of another machine. The total output number must be ≥ the total input number. You may combine outputs from multiple machines and/or split outputs into multiple machines as long as total output number ≥ total input number. You cannot merge machine output with reservoir output.
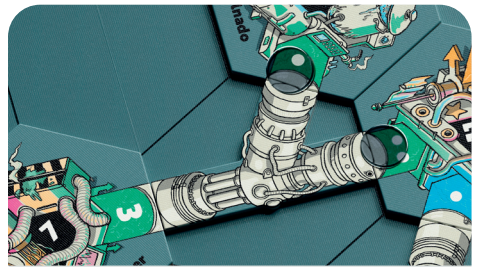

When supplying a machine in this way, place a clear chip over the input dots. Remove the clear chip if later the machine is supplied by a reservoir instead. Each dot covered with a clear chip is worth $3 at the end of the game.
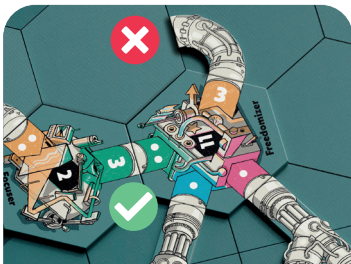

Output must be collected in an output reservoir or supplied to another machine. You can't have any dead end pipe. All reservoirs must connect to something.

Connectors can cross each other, but they cannot begin or end at the same hex edge. Each hex edge is only used once. You may not build pipes over machines or reservoirs. Machines and reservoirs can only be built in empty spaces.
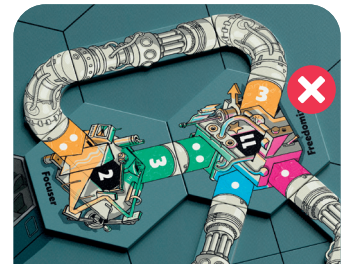
You cannot connect a machine's output to its own input, no matter how complex the path. No perpetual motion machines!
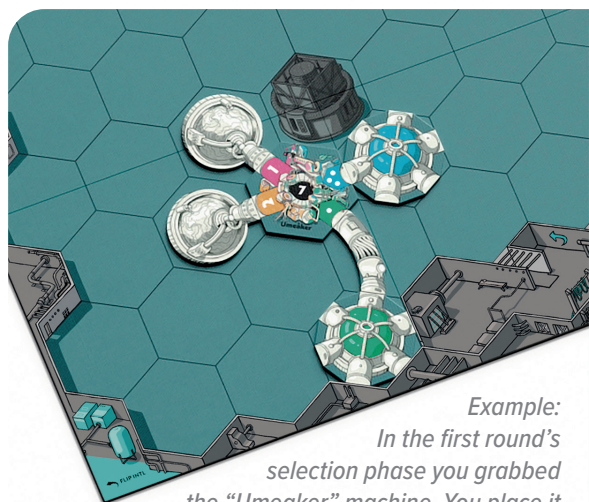
Example:
In the first round's selection phase you grabbed the "Umeaker" machine. You place it onto your factory as above, adding a Green and a Blue reservoir, as well as two output reservoirs.

During the bookkeeping phase, you earn $7 from the machine, but pay $5 for the 4 reservoirs and 1 connector you added, for a net gain of $2. You move your marker on the money track from $10 to $12.

In the second round, you are the first player to grab a tile, and you chose the "Ectotrapper" machine. You also take the First Token. In order to supply this machine with the Pink and Yellow product, you take 4 connectors from the supply. You also need to return two output reservoirs to your supply and place one output reservoir, ending up with the layout above.

You gain $7 from the "Ectotrapper", and pay $4 for the connectors, $1 to place the reservoir, and $1 for the First Token. Removing the two output reservoirs has no cost. This yields a total income of $1, moving you up to $13 on the money track. Since you connected the outputs of one machine to the inputs of another, place two clear chips over the input dots on the "Ectotrapper". Each chip earns $3 x the number of dots it covers at the end of the game.

Game End

The game ends after 8 rounds are complete. At this point, gain $3 for each dot covered by a clear chip in your factory. Whoever has the most money wins!

Solo Mode

Randomly take 8 machines to make a face down deck. Each turn draw and attempt to place the top machine from the deck. There is no penalty for choosing not to place a machine. Score as normal.

Play your first game with board A. If you score $50 or more, move to the next more difficult board. If you score $45 or less move to the next easier board (or stay on board A). Try to make it through all 6 boards.

No Speed Required Variant

No one takes any machines at the start of the game, instead shuffle all the machines into a facedown deck. Set 3 of these face up in the middle of the table.

Choose a starting player, that player chooses one of the face up machines and then places it in their factory following the normal placement rules. You may not touch the machines before making your decision. Draw a new machine from the deck to replace the one that was taken. Play continues to the left until all players have had eight turns.

There is no penalty for taking a machine that you cannot place. To speed up the game, the next player can start their turn as soon as a machine has been selected instead of waiting for the previous player to finish their placement. If the deck is empty, shuffle the machines that players chose not to place to make a new deck.

Each player gets 8 turns.