



Hose Package Allowance

Hose Type, Length & Sections Recommendations

If we are building a typical Brewhouse for you (size range 3.5-10bb), consisting of a Kettle/Whirlpool, Mash/Lauter Tun, Hot Liquor Tank & Brewer's Platform, then the hose lengths and number of sections described below is a recommendation that will work well and provide reasonable versatility. There are variables that may change it up some and those are listed below each Hose type (Hot Hose and Cellar/Transfer).

The Hose Package Allowance amount on your final estimate and invoice will generally cover the recommendations we offer here, which include Hot Hoses for Hot Side Operations, and Cellar/Transfer hoses which have a narrower ID, and are less expensive. The reasoning for a narrower ID on the Transfer hoses is to reduce loss of finished beer that remains in the hose after a process is complete.

Perhaps you have sketched out your tank placement on the floor of your space, or have a set of drawings that show your tanks to scale. If so, you can pre-determine your hose length requirements, and we can get those ordered for you prior to receiving your brewhouse and cellar tanks. Alternatively, to make the best choice on hose lengths and number of sections, it may be optimal to be in receipt of all your equipment, with the tanks placed where they will live. You can then evaluate all the operations and measure distances from the Brewhouse to Fermenters and Jacketed Brights, and any Single Wall Serving/Bright Tanks that you may have in a Cold Room. By the time your venting is installed on your Kettle, and other brewhouse installations are complete, such as the power burner and controller, the hoses you chose will most likely have arrived, allowing you to begin the initial CIP cycle and passivation of your new tanks. Then it's Brew Time!

The Hose Package is completely customizable for your particular needs and represents a budgetary allowance. If you don't use all the budget allotted, we will credit your final invoice or refund you if the final invoice has already been paid. If over the budget, we will add this to your final bill or bill you separately for the balance. This package should cover your primary Hot and Cold side operations but there may be other customized hoses you require that may not be afforded by the allowance.

NOTE: We strongly recommend the use of a Grant for your Vorlauf and Lauter processes. This serves two purposes; First, a guarantee that you will never pull a vacuum under the false floor screen, which can significantly damage the screen even with a slight vacuum. Secondly, a grant provides you eyes on your wort, providing ease of evaluating clarity and the performance of the grain bed's filtering. You can even choose to incorporate a strainer with the grant to capture any grist that passes through the screen or outer edge of the false floor. Forgeworks offers grants in three sizes, a 12 gallon, 20 gallon, and the CIP30 Brewer's Multi Tool at 30 gallons. The 20 and 30 gallon versions can also be used as a CIP Reservoir, and the CIP-30 Multi-Tool offers a Keg Cleaning capability. The 20 and 30 gallon versions fit up to the Mash Tun drain with a 6" spool (section of 1.5" ID Tubing with Tri-Clamp connections on both ends), and the gravity feed is controlled by a Micro Adjustment Valve on the Mash Tun's drain (included with the Forgeworks Fittings Package).

HOT SIDE OPERATIONS

Function	Pump Inlet Source	Inlet Hose	PUMP #	Outlet Hose	Pump Outlet Destination
Hot Liquor-Strike Water	Kettle Drain Port	5' Section #1	PUMP 1	15' Section	Mash Tun Grist Hydrator or Fill Port
Hot Liquor-Transfer Balance	Kettle Drain Port	5' Section #1	PUMP 1	15' Section	Hot Liquor Tank Fill Port
Vorlauf	Mash Tun Drain Port	12" Spool Connection	GRAVITY FEED	N/A	Grant Fill Port
	Grant Drain Port	5' Section #1	PUMP 1	15' Section	Mash Tun Vorlauf Port
Sparge/Lauter	Hot Liquor Tank	10' Section	PUMP 2 Or GRAVITY FEED	15' Section	Mash Tun Sparge Port
	Mash Tun	12" Spool Connection	GRAVITY FEED	N/A	Grant
	Grant	5' Section #1	PUMP 1	5' Section #2	Kettle Drain Port or Fill via Racking Arm
Whirlpool	Kettle Drain Port	5' Section #1	PUMP 1	5' Section #2	Kettle Whirlpool Port
Knock Out	Kettle Racking Arm Port	5' Section #1	PUMP 1	5' Section #2	Heat Exchanger
	Heat Exchanger	Cellar Hose 15'		N/A	Fermenter

Novabrew Novaflex Hot Hoses (1-1/2" ID with 1-1/2" Sanitary Tri-Clamp Fittings, and protective bumper)
Function: Brewhouse Operations



(Section 1) @ 5'

(Section 2) @ 5'

(1 Section) @10' (variable, depending on location of Hot Liquor Tank)

(1 Section) @ 15'

If not using a grant (direct to pump via a flowmeter), or not using a spool connection from the Mash Tun to the Foreworks grant, then add a 4' section of hot hose.

Totals: 35 Feet, 4 sections

Variables to Consider

- Location of Hot Liquor Tank Relative to the Brewhouse, the 10' hose above may need to be longer?
- Are you utilizing a Grant? If so, is it a Forgeworks Grant? If not, a short additional section may be needed for your gravity feed from the Mash Tun to your grant.
- Proximity of Heat Exchanger, one of the 5' hoses may need to be longer?

COLD SIDE (CELLAR) OPERATIONS

Continental Nutriflex Cellar/Transfer Hose (1" ID with 1-1/2" Sanitary Tri-Clamp Fittings, and protective bumper)

Function: Heat Exchanger to Fermenter, Fermenter to Jacketed Bright/Single Wall Bright Serving Tanks. Cellar Tank CIP process.



- (2) @ 7' (Fermenter or Jacket Bright to Pump, either Transfer or CIP)
- (2) @15' (Heat Exchanger to Fermenter, or Pump to Jacketed Bright/Cold Room Bright/Serving Tank)

Totals: 44 feet, 4 sections

Variables to Consider

- Distance from Heat Exchanger to the most distant Fermenter
- measurement from most distant Fermenter to the Jacketed Bright, or Single Wall Serving Tanks in the Cold Room