# Altbier

1. History
	1. Pre-lager Germany
	2. From region around Düsseldorf
2. Characteristics
	1. Most are in the amber/copper spectrum,10-20 SRM
	2. Malty and med-full bodied yet dry
	3. Can be bitter but doesn’t have to be
	4. Moderate gravity
	5. High attenuation, dry
	6. Creamy, long-lasting head
	7. Variations
		1. Sticke – higher gravity, more bitter
		2. Barleywine – imperial sticke alt
3. Commercial Examples
	1. Old World
		1. Zum Uerige – very hoppy & aromatic w/ long-lasting malty finish
		2. Diebels – full-bodied, deep copper
		3. Frankenheim – Lighter & hoppier
		4. Füchschen – brilliant copper w/ aromatic dry hop finish
	2. New World
		1. Alaskan Amber – low in hop flavor, dry finish
		2. St. Stan’s Amber – very malty w/ slightly aromatic hop finish
		3. Widmer – balances malt w/ assertive bitterness
4. Brewing
	1. Pils malt base
		1. Long, low temp mash for max fermentability (148-149°)
		2. Can also include alpha rest (~156°F)
		3. Include protein rest (122-131°F) to enhance body
	2. Munich or Vienna (up to 50%)
	3. Wheat (5-15%)
	4. Crystal malt (up to 15%), < 60°L
	5. Roasted malt, for color
	6. Water, sulfate to sharpen hops
	7. Sugar, 5-10%
	8. Hops, 25-50 IBUs, can use significant late addition hops
		1. Noble varieties best, Hall. Mitt., Perle or Spalt
		2. American “nobleish” hops –Mt. Hood, Liberty, Crystal, Perle
		3. Significant leeway w/ regard to finishing hops
	9. Yeast WY 1007
	10. Lager 2-8 weeks @ 32-40°F

# Recipe

OG: 1.050 (12°P), FG: 1.010

60 IBUs

70 min. boil

96% pils malt

2.5% CaraMunich III

1.5% Carafa

125°F – 20 min.

144°F – 60 min.

158°F – 20 min.

169°F – 15 min.

24 IBU Hallertauer Mittelfrüh (70 min.)

26 IBU German Opal (70 min.)

2.5 oz. Spalter Spalt (15 min.)