

# Production of Aniline by Hydrogenation of Nitrobenzene

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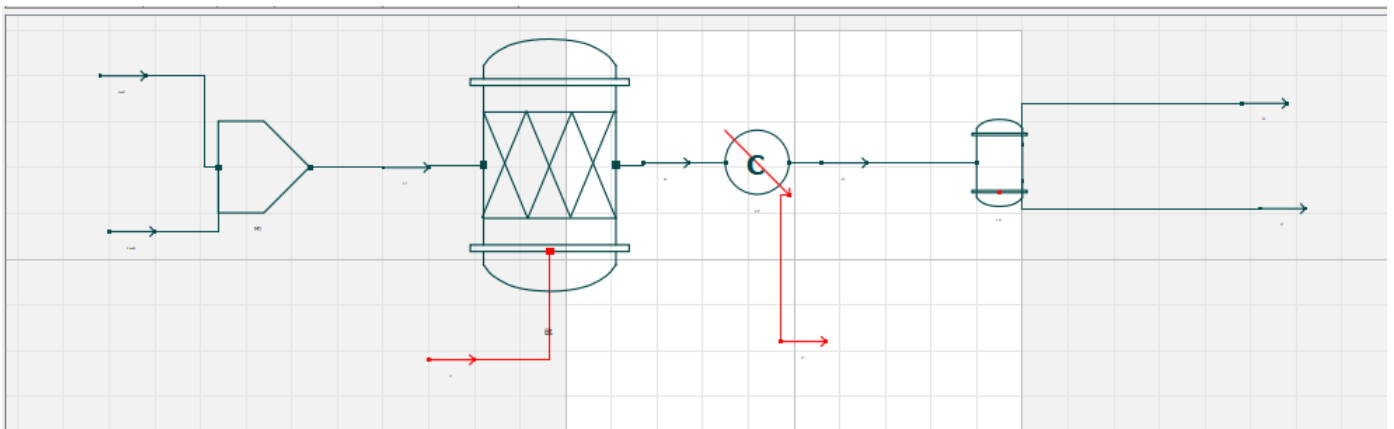
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## Background & Description:

Hydrogenation of Nitrobenzene is one of the ways of producing aniline with water as the byproduct. The flowsheet includes mixing pure hydrogen and nitrobenzene streams in 3:1 ratio (at 600K, 1 atm, and total mass flow 600 kg/s) and sending them through a conversion reactor with 99.9% conversion.

The stream is then sent through a compound separator to give the required results.

## Flowsheet:



**Results:**

<i>Mole fraction</i>	Feed 1	Feed 2	Product	Bottoms
<i>Nitrobenzene</i>	1	0	0.0021	0.0003
<i>Hydrogen</i>	0	1	0	0
<i>Aniline</i>	0	0	0.9995	0.0042
<i>Water</i>	0	0	0.0002	0.9955