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APÊNDICES

10.1

Apêndice I - Calibração do rotômetro da Amônia

Para permitir o controle de vazão, foi realizado um estudo experimental para a calibração dos rotômetros utilizados na medição do fluxo dos gases.

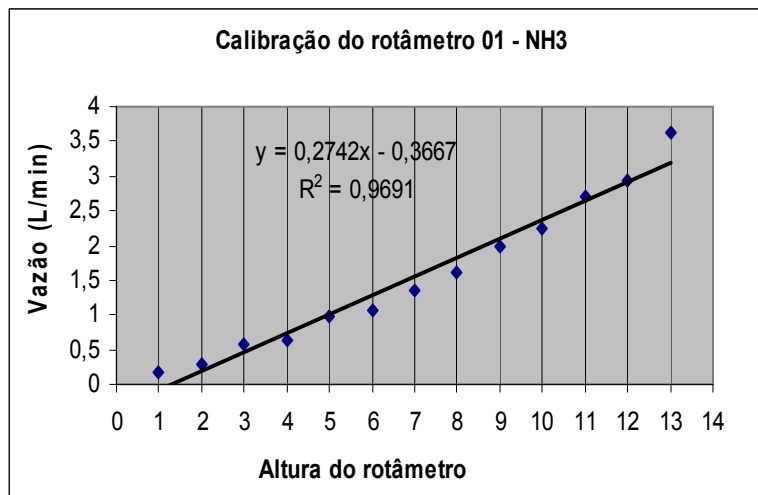


Figura 36 – Gráfico da calibração do fluxo de amônia na entrada do reator do sistema dinâmico na temperatura ambiente (25°C).

Tabela 12 – Tabela referente aos pontos de altura do rotômetro versus vazão média (L/min).

Altura do rotômetro	Vazão média (L/min) - NH ₃
1	0,1711719
2	0,275247267
3	0,572085475
4	0,644031669
5	0,983263598
6	1,072515213
7	1,354033291
8	1,612042683
9	1,978484565
10	2,252396166
11	2,708066581
12	2,941585535
13	3,615384615

10.2

Apêndice II - Calibração do rotâmetro do primeiro cilindro de Argônio

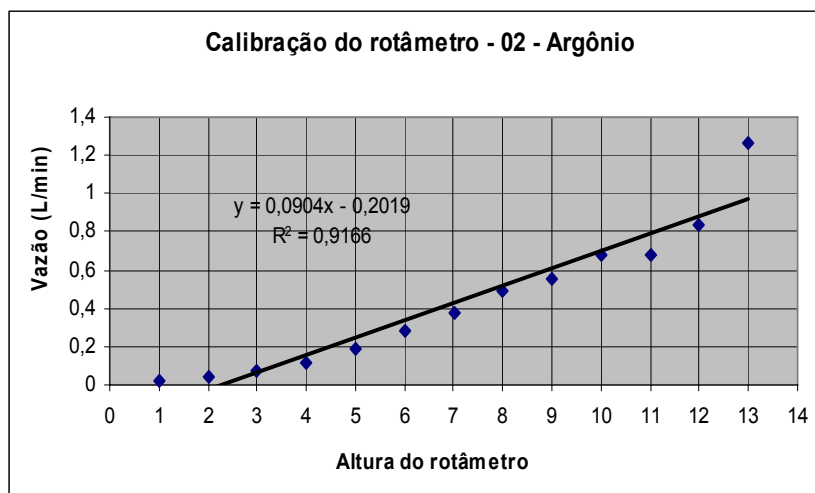


Figura 37 – Gráfico da calibração do fluxo do argônio na entrada do reator do sistema dinâmico na temperatura ambiente (25°C).

Tabela 13 – Tabela referente aos pontos de altura do rotâmetro versus vazão média (L/min) para o primeiro cilindro de Ar.

Altura do rotâmetro	Vazão média (L/min)
1	0,017487613
2	0,04637263
3	0,076413653
4	0,115562404
5	0,186451212
6	0,280024891
7	0,381194409
8	0,492610837
9	0,552825553
10	0,680272109
11	0,680272109
12	0,835654596
13	1,260504202

10.3

Apêndice III - Calibração do rotâmetro do segundo cilindro de Argônio

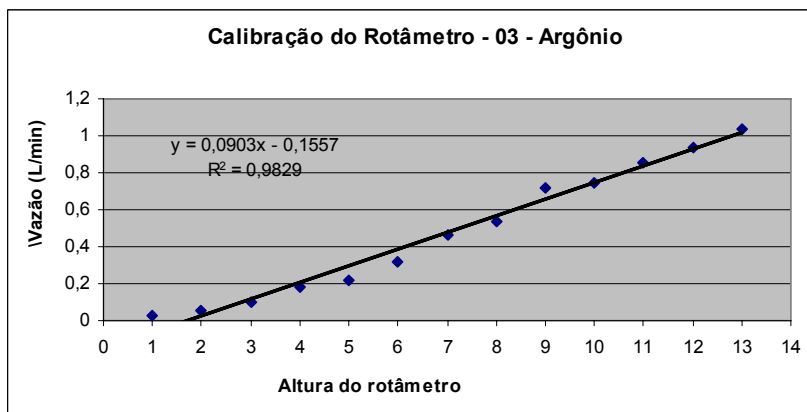


Figura 38 – Gráfico da calibração do fluxo do argônio na entrada do reator do sistema dinâmico na temperatura ambiente (25°C).

Tabela 14 – Tabela referente aos pontos de altura do rotâmetro versus vazão média (L/min) para o segundo cilindro de Ar.

Altura do rotâmetro	Vazão média (L/min)
1	0,023329963
2	0,054200542
3	0,101499944
4	0,178713264
5	0,222222222
6	0,31623331
7	0,461065574
8	0,540865385
9	0,721153846
10	0,747508306
11	0,855513308
12	0,932642487
13	1,040462428