## EXAM \#2 REPORT

|  | Number of Students |
| :---: | :---: |
| Total | 36 |
| Submitted | 36 |
| Not Submitted | 0 |

GRADE DISTRIBUTION


DISTRIBUTION PER PROBLEM


## INDIVIDUAL PROBLEM BREAKDOWN

|  | Problem1 | Problem 2 | Problem3 | Total |
| :--- | :--- | :--- | :--- | :--- |
| Average | 8.10 | 8.63 | 8.51 | 84.12 |
| Std Dev | 1.76 | 1.52 | 1.36 | 12.50 |



## COMPARISON WITH LAST 4 YEARS



## SPECIAL COMMENTS

## Problem 1

- Most students did well on Pi/similarity, with a few students making mistakes in the number of Pi's or getting non-dimensional Pi's, or using similarity between model and prototype.
- Some students made mistake in reducing the angular momentum equations and find the bending moment.
- Some students did not replace velocity from continuity equation to get equation as a function of $Q$.


## Problem 2

- A few students made incorrect assumptions when reducing z-momentum equation.
- A few students did not correctly integrate the z-momentum equation.
- A few students did not use the correct boundary conditions.
- Most errors were made applying B.C.s to find constants of integration.


## Problem 3

- Many students made mistakes for finding hydraulic diameter: just one section instead of two sections. As a result, following Re, friction factors are solved for one section.
- Many students also made mistakes for finding velocity with flux $Q$ : the students assumed the cross section circular shape instead of square.
- Some of students missed efficiency factor for finding the power of blower.

