**能量方程(伯努利方程)实验报告**

学号 姓名

实验日期 年 月 日

1.测记有关常数

均匀段   缩管段 

扩管段  上管道轴线高程  

2.实验数据记录及计算结果。

**表1 管径记录表 单位：**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 测点编号 | | 1\* | | 2  3 | | 4 | | 5 | | 6\*  7 | | 8\*  9 | | 10  11 | | 12\*  13 | | 14\*  15 | | 16\*  17 | | 18\*  19 | |
| 管径 | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| 间距 | 4 | | 4 | | 6 | | 6 | | 4 | | 13．5 | | 6 | | 10 | | 29 | | 16 | | 16 | |  | |

**表2 测记（）数值表 单位：**  （基准面选在标尺的零点上）

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 测点  编号 | | 2 | 3 | 4 | 5 | 7 | 9 | 10 | 11 | 13 | 15 | 17 | 19 |  |
| 实  验  次  数 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |

**表 3 流速水头**  **单位：**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 管径 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

**表4** 总水头（）**单位**：****

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 测点  编号 | | 2  3 | 4 | 5 | 7 | 9 | 10 | 11 | 13 | 15 | 17 | 19 |  |
| 实  验  次  数 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |

绘制上述成果中最大流量下的总水头线和测压管水头线（可直接绘在如下轴向尺寸图上）



**动量方程实验报告**

学号 姓名

实验日期 年 月 日

**1、**记录有关常数：

管嘴内径= ， 活塞直径** = 

**表1 测量记录表及计算表**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 测  次 | 体积 | 时间 | 管嘴作用水头 | 活塞作用水头 | 流量 | 流速 | 动量修正系数 |
| **1** |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |
| **6** |  |  |  |  |  |  |  |

# 雷诺演示实验报告

学号 姓名

实验日期 年 月 日

1. 层流的流态及运动学特性、动力学特性
2. 紊流的流态及运动学特性、动力学特性

3. 为何认为上临界雷诺数无实际意义。而采用下临界雷诺数作为层流与紊流的判别？

# 水面曲线演示实验报告

学号 姓名

实验日期 年 月 日

1. 描述并画出明渠恒定非均匀流棱柱体渠道中的十二种水面曲线特征

2. 描述平坡、倒坡、临界坡、陡坡和缓坡的水流衔接现象