Tabel Perhitungan Head loss Line 1 sampai 6

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| PERHITUNGAN *HEAD LOSS* | | | | | | | | | | |
| **NO** | **NAMA** | **ITEM**  **(*Inch)*** | **JUMLAH** | **D (cm)** | **f** | **K** | **L (cm)** | **V (cm/s)** | **g (cm/s²)** | HASIL (cm/s) |
| 1 | Ins. Pipa *Line* 1 | pipa 1,5 |  | 3,81 | 3,77 |  | 4500 | 1.213 | 981 | 5.702.467,72 |
| pipa 1/2 |  | 1,27 | 6,67 |  | 600 | 1.213 | 981 |
| *knee reducer* 1,5 x 1/2 | 1 |  |  | 1 |  | 1.213 | 981 | 8.924,17 |
| *knee kran* 1/2 x 3/4 | 4 |  |  | 1 |  | 1.213 | 981 |
| *knee* 1,5 | 1 |  |  | 0,9 |  | 1.213 | 981 |
| *tee reducer* 1,5 x 1/2 | 3 |  |  | 2 |  | 1.213 | 981 |
| ***HEAD LOSS* TOTAL** | | | | | | | | | | 5.711.391,89 |

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| PERHITUNGAN *HEAD LOSS* | | | | | | | | | | | |
| **NO** | **NAMA** | **ITEM**  **( *inch)*** | **JUMLAH** | **D (cm)** | **f** | **K** | **L (cm)** | **V (cm/s)** | **g (cm/s²)** | **HASIL(cm/s)** | |
| 2 | Ins. Pipa *Line* 2 | pipa 1,5 |  | 3,81 | 3,77 |  | 5000 | 1.213 | 981 | 4.891.868,38 | |
| pipa 1/2 |  | 1,27 | 6,67 |  | 300 | 1.213 | 981 |
| *Knee reducer* 1,5 x 1/2 | 1 |  |  | 1 |  | 1.213 | 981 |
| *knee kran* 1/2 x 3/4 | 2 |  |  | 1 |  | 1.213 | 981 | 4.499,58 | |
| *tee reducer* 1,5 x 1/2 | 2 |  |  | 2 |  | 1.213 | 981 |
| ***HEAD LOSS* TOTAL** | | | | | | | | | | | 4.896.367,96 |

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| PERHITUNGAN *HEAD LOSS* | | | | | | | | | | |
| NO | **NAMA** | ***ITEM***  **(*Incch)*** | **JUMLAH** | **D (cm)** | **f** | **K** | **L (cm)** | **V (cm/s)** | **g (cm/s²)** | **HASIL(cm/s)** |
| 3 | Ins. Pipa *Line* 3 | pipa 1,5 |  | 3,81 | 3,77 |  | 4500 | 1.213 | 981 | 5.111.672,87 |
| pipa 1/2 |  | 1,27 | 6,67 |  | 450 | 1.213 | 981 |
| *knee reducer* 1,5 x 1/2 | 1 |  |  | 1 |  | 1.213 | 981 | 7.349,31 |
| *knee kran* 1/2 x 3/4 | 3 |  |  | 1 |  | 1.213 | 981 |
| *tee* 1,5 | 1 |  |  | 1,8 |  | 1.213 | 981 |
| *tee reducer* 1,5 x 1/2 | 2 |  |  | 2 |  | 1.213 | 981 |
| *HEAD LOSS* TOTAL | | | | | | | | | | 5.119.022,18 |

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| PERHITUNGAN *HEAD LOSS* | | | | | | | | | | |
| NO | **NAMA** | **ITEM**  **(*Inch)*** | **JUMLAH** | **D (cm)** | **f** | **K** | **L (cm)** | **V (cm/s)** | **g (cm/s²)** | **HASIL(cm/s)** |
| 4 | Ins. Pipa *Line* 4 | pipa 2 |  | 5,08 | 3,5 |  | 3050 | 1.213 | 981 | 4.098.892,40 |
| pipa 1,5 |  | 3,81 | 3,77 |  | 3400 | 1.213 | 981 |
| *valve* 2 | 1 |  |  | 0,15 |  | 1.213 | 981 | 3.712,15 |
| *reducer* 2x 1,5 | 1 |  |  | 0,3 |  | 1.213 | 981 |
| *knee* 2 | 1 |  |  | 0,9 |  | 1.213 | 981 |
| *knee* 1,5 | 2 |  |  | 0,9 |  | 1.213 | 981 |
| *tee* 1,5 | 1 |  |  | 1,8 |  | 1.213 | 981 |
| *HEAD LOSS* TOTAL | | | | | | | | | | 4.102.604,55 |

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| PERHITUNGAN *HEAD LOSS* | | | | | | | | | | |
| NO | **NAMA** | ***ITEM***  **(*Inch)*** | **JUMLAH** | **D (cm)** | **f** | **K** | **L (cm)** | **V (cm/s)** | **g (cm/s²)** | **HASIL(cm/s)** |
| 5 | Ins. Pipa *Line* 5 | pipa 1,5 |  | 3,81 | 3,77 |  | 1800 | 1.213 | 981 | 6.652.779,02 |
| pipa 1/2 |  | 1,27 | 6,67 |  | 1350 | 1.213 | 981 |
| *knee* kran 1/2 x ¾ | 7 |  |  | 1 |  | 1.213 | 981 | 16.423,47 |
| *tee reducer* 1,5 x ½ | 7 |  |  | 2 |  | 1.213 | 981 |
| *knee* 1,5 | 1 |  |  | 0,9 |  | 1.213 | 981 |
| *HEAD LOSS* TOTAL | | | | | | | | | | 6.669.202,48 |

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| PERHITUNGAN *HEAD LOSS* | | | | | | | | | | |
| NO | **NAMA** | ***ITEM***  **(*Inch)*** | **JUMLAH** | **D (cm)** | **f** | **K** | **L (cm)** | **V (cm/s)** | **g (cm/s²)** | **HASIL(cm/s)** |
| 6 | Ins. Pipa *Line* 6 | pipa 1,5 in |  | 3,81 | 3,77 |  | 2500 | 1.213 | 981 | 3.627.264,42 |
| pipa 1/2 in |  | 1,27 | 6,67 |  | 450 | 1.213 | 981 |
| *knee* *reducer* 1,5 x ½ | 1 |  |  | 1 |  | 1.213 | 981 | 5.999,44 |
| *knee kran* 1/2 x ¾ | 3 |  |  | 1 |  | 1.213 | 981 |
| *tee reducer* 1,5 x ½ | 2 |  |  | 2 |  | 1.213 | 981 |
| *HEAD LOSS* TOTAL | | | | | | | | | | 3.633.263,86 |