

B. LAMPIRAN PERHITUNGAN

Perhitungan *Ultimate Tensile Strength* (UTS)

$$\sigma_{70} = \frac{F}{A} = \frac{68,421 \text{ KN}}{143,139 \text{ mm}^2} = 478,0039 \text{ MPa}$$

$$\sigma_{80} = \frac{F}{A} = \frac{67,486 \text{ KN}}{138,929 \text{ mm}^2} = 485,7589 \text{ MPa}$$

$$\sigma_{90} = \frac{F}{A} = \frac{69,548 \text{ KN}}{138,929 \text{ mm}^2} = 500,6010 \text{ MPa}$$

$$\sigma_{100} = \frac{F}{A} = \frac{75,326 \text{ KN}}{145,267 \text{ mm}^2} = 518,5348 \text{ MPa}$$

$$\sigma_{110} = \frac{F}{A} = \frac{74,166 \text{ KN}}{141,026 \text{ mm}^2} = 525,9030 \text{ MPa}$$

$$\sigma_{120} = \frac{F}{A} = \frac{74,520 \text{ KN}}{141,026 \text{ mm}^2} = 528,4132 \text{ MPa}$$

$$\sigma_{130} = \frac{F}{A} = \frac{76,730 \text{ KN}}{143,139 \text{ mm}^2} = 536,1523 \text{ MPa}$$

$$\sigma_{140} = \frac{F}{A} = \frac{77,841 \text{ KN}}{143,139 \text{ mm}^2} = 543,8141 \text{ MPa}$$

$$\sigma_{150} = \frac{F}{A} = \frac{77,754 \text{ KN}}{141,026 \text{ mm}^2} = 551,3451 \text{ MPa}$$

$$\sigma_{160} = \frac{F}{A} = \frac{74,785 \text{ KN}}{132,732 \text{ mm}^2} = 563,4285 \text{ MPa}$$