

DAFTAR NOTASI

| Simbol | Keterangan | Satuan |
|------------|--|-------------------------|
| Q | Laju perpindahan panas | Watt |
| k | Konduktifitas thermal bahan | $W/m^2\text{ }^\circ C$ |
| A | Luas penampang bahan | m^2 |
| h | Koefisien perpindahan panas konveksi | $W/m^2\text{ }^\circ C$ |
| T | Temperatur | $^\circ C$ |
| D_{os} | Diameter screw extruder | mm |
| L_s | Panjang screw extruder | mm |
| D_{is} | Diameter dalam screw | mm |
| k_s | Konduktivitas termal screw | $W/m\text{ }^\circ C$ |
| h | Channel depth screw | mm |
| D_{ob} | Diameter Luar Barrel | mm |
| D_{oe} | Diameter Luar exchanger barrel | mm |
| D_{ie} | Diameter dalam exchanger barrel | mm |
| D_{ib} | Diameter dalam Barrel | mm |
| K_b | Konduktivitas termal barrel | $W/m\text{ }^\circ C$ |
| L_{b1} | Panjang Barrel 1 | mm |
| L_{b2} | Panjang Barrel 2 | mm |
| D_{op} | Diameter Luar pipa TCU | mm |
| D_{ip} | Diameter dalam pipa TCU | mm |
| K_p | Konduktivitas termal pipa | $W/m\text{ }^\circ C$ |
| L_{pib1} | Panjang pipa TCU In Barrel 1 | mm |
| L_{pob1} | Panjang pipa TCU In Barrel 2 | mm |
| L_{pis} | Panjang pipa TCU In Screw | mm |
| L_{pih2} | Panjang pipa TCU In Head 2 | mm |
| L_{ps} | Panjang pipa dalam screw | mm |
| D_{pis} | Diameter dalam pipa dalam screw | mm |
| D_{pos} | Diameter luar pipa dalam screw | mm |
| k_{ps} | Konduktifitas thermal pipa dalam screw | $W/m\text{ }^\circ C$ |

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|-------------------|--------------------------------------|-----------------------------|
| L_{pih1} | Panjang pipa TCU In Head 1 | mm |
| SPGR | Spesific gravity rubber | g/dm^3 |
| MV | Mooney Viscosity | mooney |
| μ | Viscosity | Pa.s |
| $\dot{\gamma}$ | Shear rate | s^{-1} |
| C_p | Spesific Heat | $\text{J/Kg}^\circ\text{C}$ |
| N | Kecepatan putaran | RPM |
| R_{ps} | Tahanan thermal pipa screw | $^\circ\text{C/Watt}$ |
| ρ | Massa Jenis Air | kg/m^3 |
| ν | Viscosity Kinematic Air | m^2/s |
| Re | Reynold Number | - |
| Pr | Pradl Number | - |
| Nu | Nussolt Number | - |
| R_{pis} | Tahanan thermal pipa dalam screw | $^\circ\text{C/Watt}$ |
| U | Konduktifitas thermal persatuan luas | $\text{Watt/m}^2\text{C}$ |
| Re_ω | Bilangan reynold pada screw berputar | - |
| PHR | Per hundred rubber | % |