

Formula Sheet

Machinist Level 4

1. $WD = 2.157 / DP$ and $WD = 2.25 / DP$

2. $\frac{RPM}{TPI} = \text{feed rate}$

3. $L = \frac{LS}{Ph} \times W$

L = Labour cost

LS = Lot size

Ph = Parts per hour

W= wage

4. $\frac{\text{Lead of Helix}}{\text{Lead of Machine}} = \frac{\text{Product of the Driven Gear}}{\text{Product of the Driver Gear}}$

5. $T = \frac{1.5708}{DP}$

6. $M = \frac{PD}{N}$

7. $PD = \frac{N}{DP}$

8. $CP = M \times \pi$

9. $\text{Tangent of helix angle} = \frac{\text{circumference of work}}{\text{lead of helix}}$