# 

# 1. Organisation fonctionnelle et structurelle de la chaîne de puissance:

Agir

# Chaîne de puissance

MODULER

ALIMENTER

TRANSMETTRE

CONVERTIR

# 2. Performances limites

**2-1 Fonction CONVERTIR**

Mesure : Nmot = \_ \_ \_ \_ \_ \_ \_ \_

Résistance R : \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Simulation :Nmot = \_ \_ \_ \_ \_ \_ \_ \_

Justification gain : \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

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**2-2 Fonction TRANSMETTRE**

**Train Central :** rapport de transmission **=** \_ \_ \_ \_ \_ \_ \_ \_ \_

**Train Arrière / Train Avant :** rapport de transmission **=** \_ \_ \_ \_ \_ \_ \_ \_ \_

**Roues et vitesse de déplacement :**

Mesure : Nroue = \_ \_ \_ \_ \_ \_ \_ \_ \_

Simulation : Nroue = \_ \_ \_ \_ \_ \_ \_ \_ \_

Diamètre roues : d = \_ \_ \_ \_ \_ \_ \_ \_ \_

Vitesse de déplacement voiture=\_ \_ \_ \_ \_ \_ \_ \_ \_

**Le terrain :**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Charge | En charge | | | | | |
| Pente % | 0 | 1 | 2 | 3 | 4 | 5 |
| Courant moteur (A) |  |  |  |  |  |  |
| Vitesse voiture (km/h) |  |  |  |  |  |  |

Conclusion :

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**2-3 Performances et configurations**

**Pignons moteur**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pignons moteur |  |  |  |  |  |
| Vitesse voiture (km/h) |  |  |  |  |  |

Conclusion :

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**Usure des pneumatiques**

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| Pignons moteur |  |  |  |  |  |
| Vitesse voiture (km/h) |  |  |  |  |  |

**2-4 Instrumentalisation du modèle**

- La puissance absorbée ( W ) : \_ \_ \_ \_ \_ \_ \_ \_ \_

- La puissance sortie ( W ) : \_ \_ \_ \_ \_ \_ \_ \_ \_

- Le rendement ( % ) : \_ \_ \_ \_ \_ \_ \_ \_ \_

# 3 Voiture DS3 :

Pneus: **195/55R16 87 T**. Vitesse 130km/h Compte tour 2200 rpm

**3-1** **Rapport de transmission**

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**3-2** **Usure pneumatiques**

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