

Constructions et résistance des matériaux, topographie

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Type de document : travail d'élève

Période de création : 1er quart 20e siècle

Date de création : 1923

Matériaux et technique(s) : papier vergé, carton, toile

Description : Cahier broché, couverture rigide bleue, revers gris, dos toile bleu, 1ère de couverture avec "Résistance des matériaux" manuscrit en noir en haut. 4ème de couverture avec en haut à droite le nom de l'élève, en dessous "Topographie" souligné par une "virgule" hachurée. Pages de garde. Règlure de petits carreaux 0,5 cm, encre noire, crayon bleu; 5 feuilles à petits carreaux insérées dans le corps du cahier et 1 feuille bistre.

Mesures : hauteur : 21,6 cm ; largeur : 17,3 cm

Notes : Cours niveau terminale (d'après autres cahiers du même élève), cahier partagé en 2 parties. Partie I: principes de résistance des matériaux, déformation d'un solide (dilatations linéaire, angulaire, surface des dilatations, dilatation cubique), traction, compression, cisaillement simples, ruptures avec pression latérales, relations entre déformation et forces, applications (torsion d'un prisme, flexion circulaire ou simple d'un prisme)...calcul d'une poutre, poutres isostatiques, potentiel interne corps déformés, théorème de Castigliano...Poutre continues... charpente, pièces courbes, poussées de terrain, ciment armé. Partie II, topographie: généralités, cercles divisés, études des instruments (théodolite, boussole d'alignement, sextant), stadiométrie, mesures de hauteurs, procédés de levés de plan, nivellation, leviers souterrains. Il existe d'autres cahiers de l'élève.

Mots-clés : Physique (post-élémentaire et supérieur)

Filière : Post-élémentaire

Niveau : Post-élémentaire

Autres descriptions : Nombre de pages : Non paginé

Commentaire pagination : 107 p. manuscrites sur 138 p.

Langue : français.

ill. : Schémas faits par l'élève.

Lieux : Sceaux

H. Trinck

Constructions

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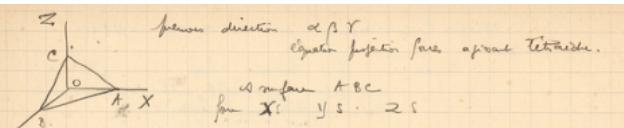
Résistance des matériaux.

Rôle de l'entraîneur -
 délimiter les dimensions
 donner résistance suffisante
 importance qualité matériaux.
 grande flèche marquée par fougé sur la matrice.
 Contrôle des matériaux premiers
 Recouvrement des éléments (au niveau illectronique et mécanique)
 (avec échelle pour les réductions) - chaque dimension est par l'enfoncé
 La rendue plus résistante.
 Des règles techniques fondamentales : Les formes courbes ne sont applicables
 qu'à ce ce l'échelle
 L'écrou de construction le demi cercle fait toutes tolérances admises.
 Résistance au rebroussement suffisante élément linéaire.
 Il n'y a donc pas de tolérance supplémentaire dans l'élément non coupé.
 Résistance et rigueur d'assemblage, par exemple, la construction
 Table d'un canon déformable permanente et parfaitement étanche
 et le système d'assemblage à échelle. Auto-serrage.

Principes de la Résistance des Matériaux

Élément court à côté d'autre différent qui n'est pas en tension mais en flexion. Pour quelques études.
 On peut faire un tableau pour les résultats que si distance théorique, c'est à dire
 Cependant cette vaste, deux effets orthogonaux.

Indépendance effet force.
 $\frac{F}{D_1}$ peut être soit déformé D_1
 $\frac{F}{D_2}$ soit déformé D_2


 force direction $\alpha \beta \gamma$
 équation fonction force apporté tétraèdre.
 sur la surface ABC
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