Lycée André Chamson

ANNEXES DU MÉMOIRE LA LÉGENDE DES TOURBILLONS

Mémoire préparé sous la direction de M. Magnoux

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Annexe 1 : Le dispositif expérimental



Figure 1 - L'agitateur magnétique

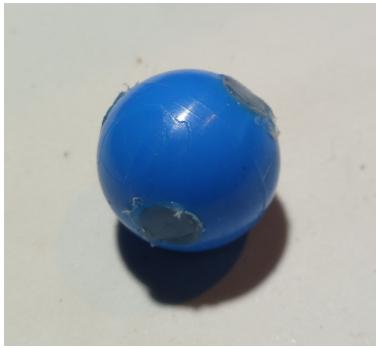


Figure 2 - L'objet



Figure 3 - Le barreau



Figure 4 - Le trépied

Annexe 2 : La trajectoire de l'objet

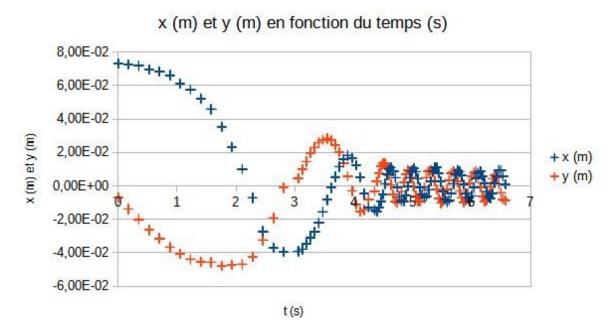
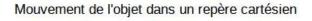


Figure 5



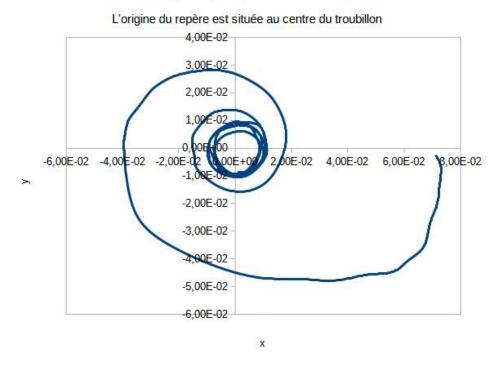


Figure 6

Vitesse (m/s) en fonction du temps (s)

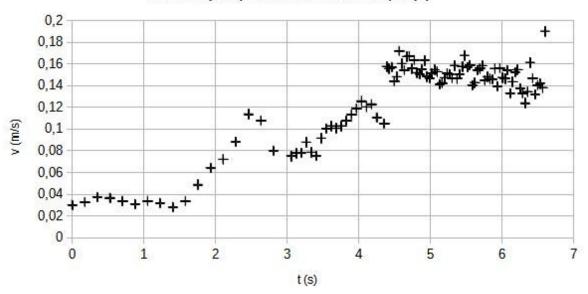


Figure 7

Accélération (m/s²) en fonction du temps (s)

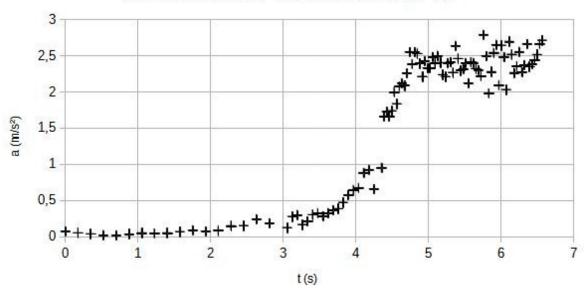


Figure 8

Rayon (m) en fonction du temps (s)

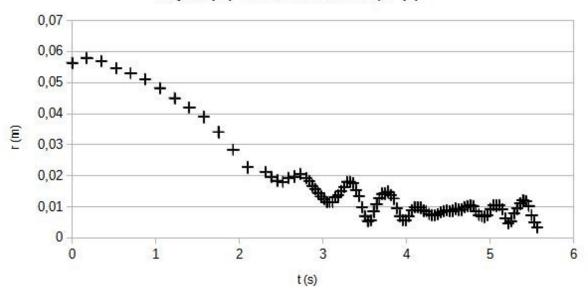


Figure 9

Vitesse (m/s) en fonction du rayon (m)

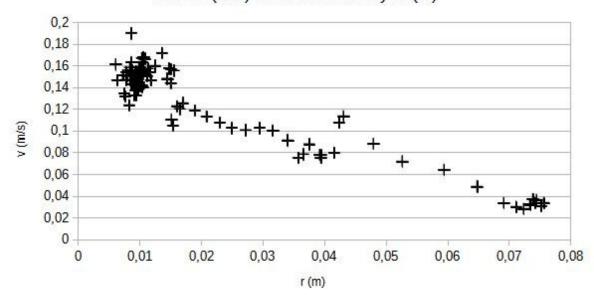


Figure 10

Annexe 3 : Temps restant

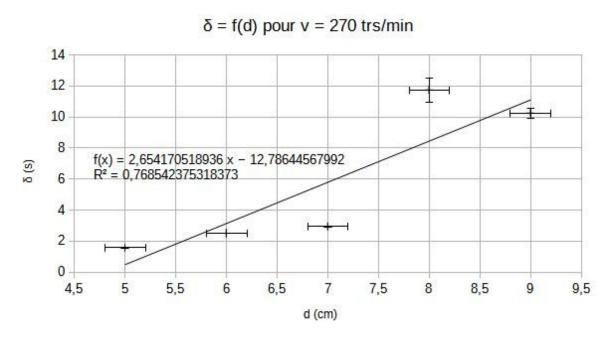


Figure 11

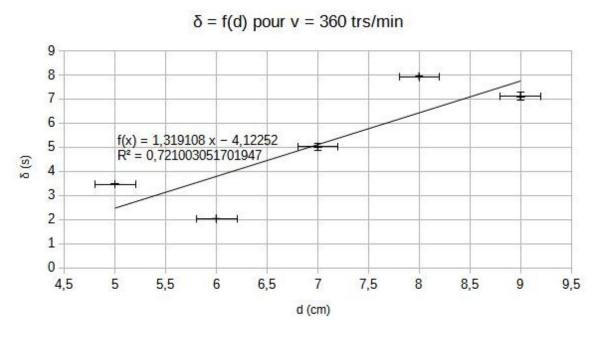
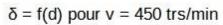


Figure 12



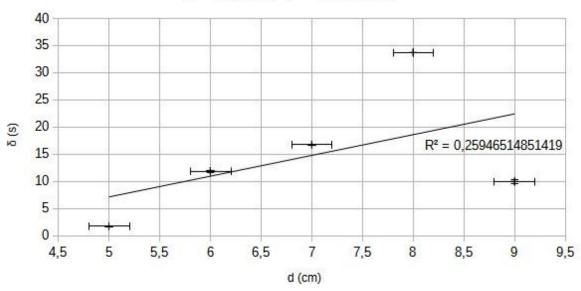
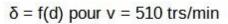


Figure 13



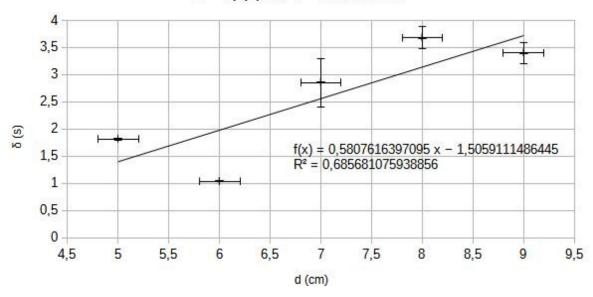
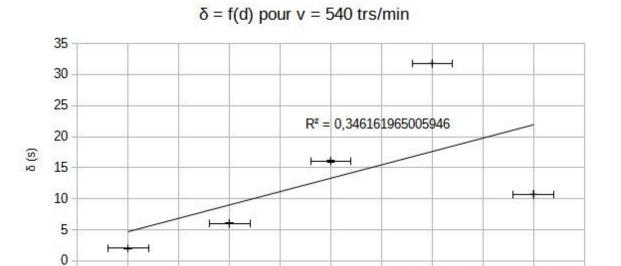


Figure 14



d (cm)

7,5

8

8,5

9

9,5

6,5

6

Figure 15

4,5

5,5

5

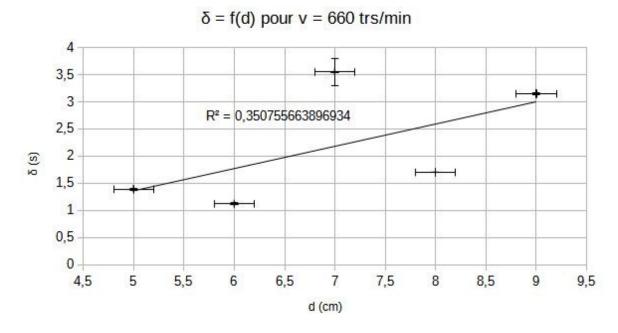
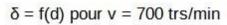


Figure 16



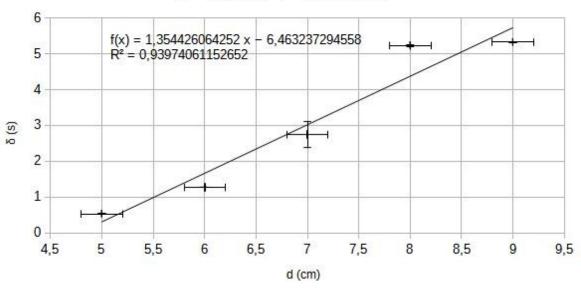


Figure 17

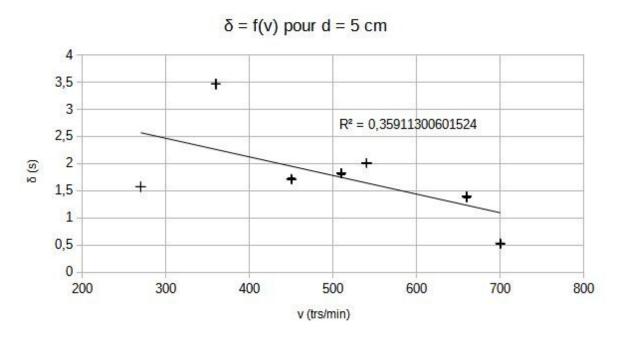


Figure 18

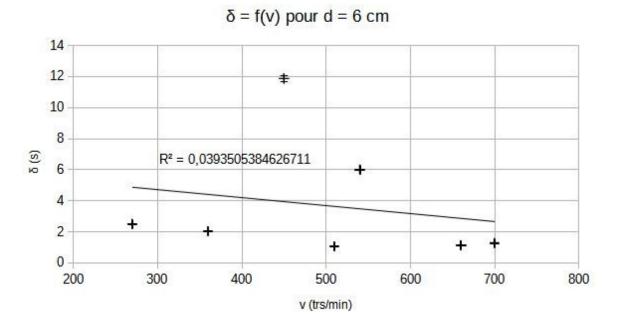


Figure 19

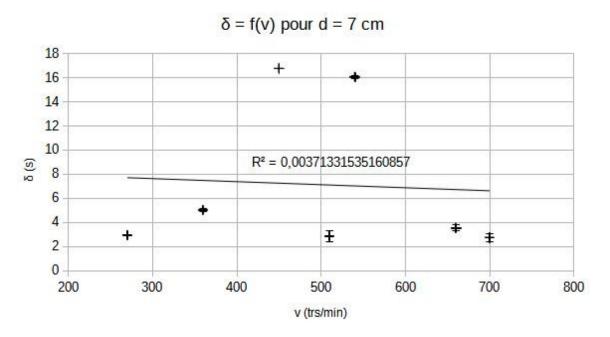


Figure 20

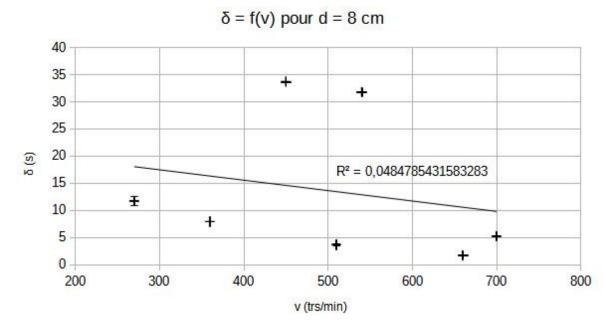


Figure 21

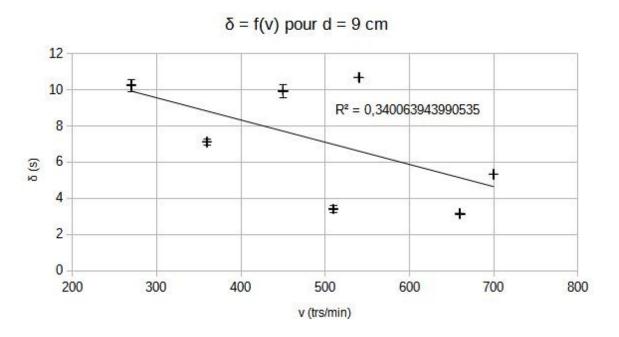


Figure 22

Annexe 4: V_{max}

Vmax en fonction de la distance pour v = 270 trs/min

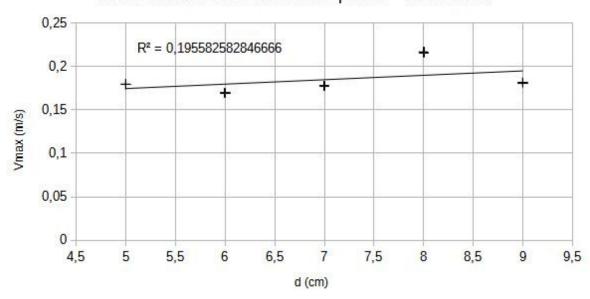


Figure 23

Vmax en fonction de la distance pour v = 360 trs/min

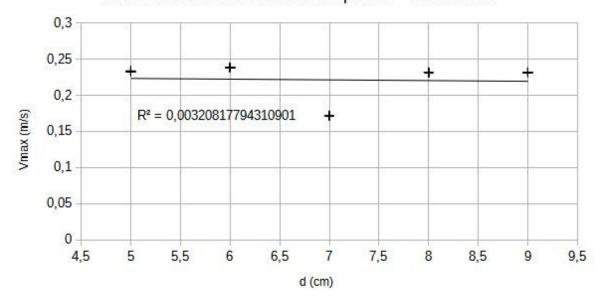


Figure 24

Vmax en fonction de la distance pour v = 450 trs/min

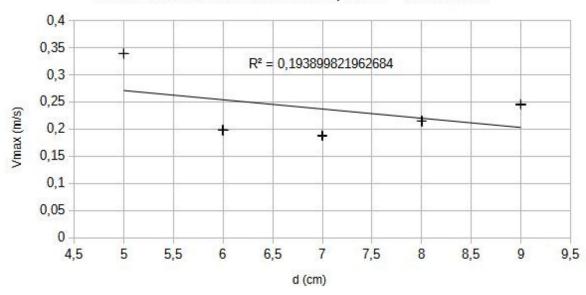


Figure 25

Vmax en fonction de la distance pour v = 510 trs/min

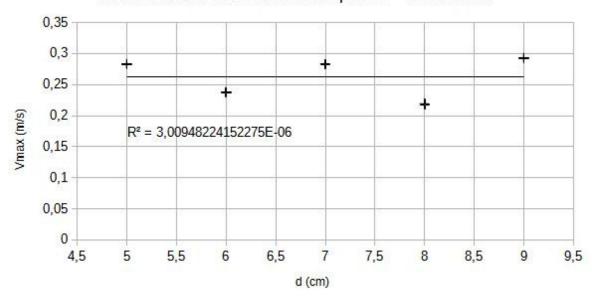


Figure 26

Vmax en fonction de la distance pour v = 540 trs/min

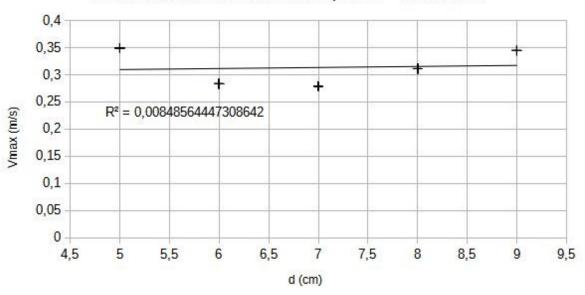


Figure 27

Vmax en fonction de la distance pour v = 660 trs/min

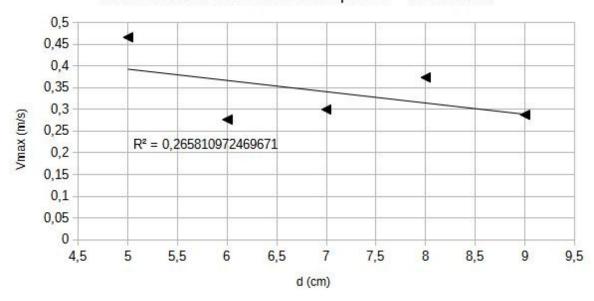


Figure 28

Vmax en fonction de la distance pour v = 700 trs/min

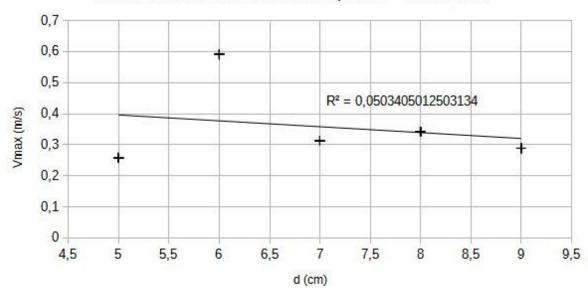


Figure 29

Vmax en fonction de la vitesse du barreau pour d = 5 cm

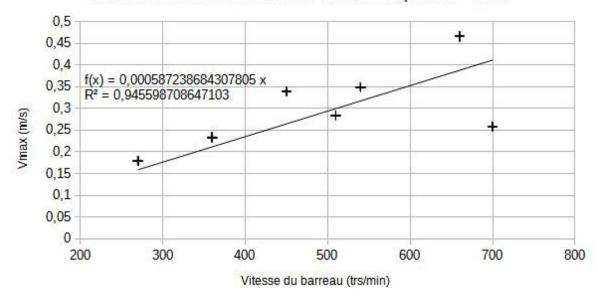


Figure 30

Vmax en fonction de la vitesse du barreau pour d = 6 cm

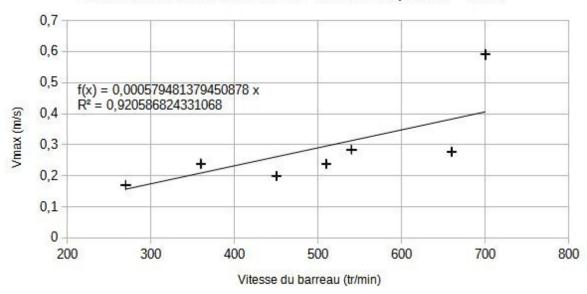


Figure 31

Vmax en fonction de la vitesse du barreau pour d = 7 cm

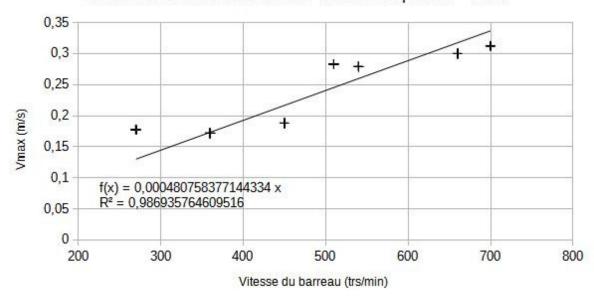


Figure 32

Vmax en fonction de la vitesse du barreau pour d = 8 cm

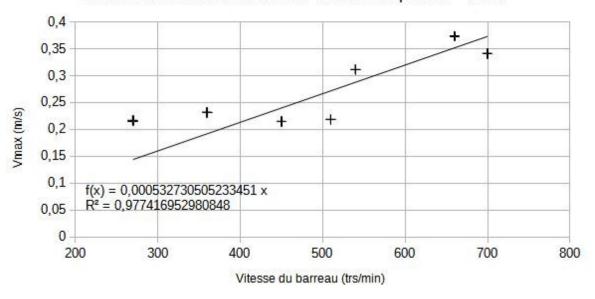


Figure 33

Vmax en fonction de la vitesse du barreau pour d = 9 cm

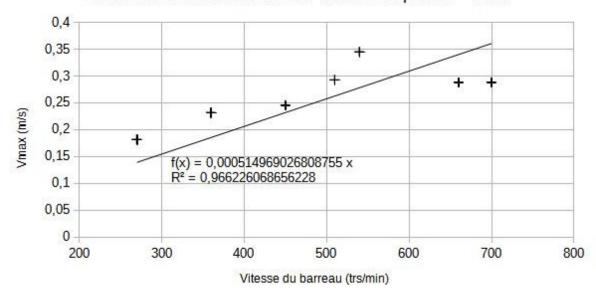


Figure 34