

OIL SKIMMER

WELL PLUM TECH CO., LTD



CE

專利: M317283

油水分離機製造 Oil Skimmer Manufacturing
超音波產品設計 Ultrasonic Product Design
LED燈生產製造 LED Light Manufacturing



wellplum@gmail.com



www.wellplum.com.tw



NO.66-7 Yutain Village Yuanli Township
Miaoji County 358

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安全須知 SAFETY PRECAUTIONS

本機器圓盤部份安裝須裝置於水箱板金以下以防刮傷人體。

The disk part of the machine must be installed below the metal plate of the water tank to prevent scratching the human body.

**本機器需安裝於電源電壓依實際電壓源 如AC220V必須電壓範圍在AC200~235V。
若電壓AC110V必須電壓範圍在AC90~120V。**

This machine needs to be installed in the power supply voltage according to the actual voltage source, such as AC220V, the voltage range must be AC200~235V.

If the voltage is AC110V, the voltage range must be AC90~120V.

機器不可安裝含有易燃油脂品。

The machine cannot be installed with products containing flammable oils and fats.

機器不可安裝於水溫50度以上。

The machine cannot be installed in a water temperature above 50 degrees.

勿自行拆解或改裝本產品。勿觸碰由於摔落或其他意外事故而外露的內部零件。

若不遵守此注意事項, 可能會導致觸電或其他傷害。

Do not disassemble or modify this product by yourself. Do not touch exposed internal parts due to a drop or other accident.

Failure to observe this precaution may result in electric shock or other injury.

若發現任何不正常現象, 如本產品冒煙、發熱或異味等, 請立即取出電池或斷開電源。

若在此情形下繼續使用, 可能會導致起火、灼傷或其他傷害。

If any abnormal phenomenon is found, such as smoke, heat or peculiar smell from the product, please remove the battery or disconnect the power supply immediately.

Continued use under this condition may result in fire, burns or other injuries.

勿用濕手接觸插頭。若不遵守此注意事項, 可能會導致起火或觸電。

Do not touch the plug with wet hands. Failure to observe this precaution may result in fire or electric shock.

在強雷雨天氣時進行充電或使用 AC 變壓器的情況下, 請勿觸碰插頭。

若不遵守此注意事項, 可能會導致觸電。

Do not touch the plug while charging during strong thunderstorms or using an AC adaptor.

Failure to observe this precaution may result in electric shock.

勿將本產品長時間放置在極其高溫的地方, 如封閉的車內或直射陽光下。

若不遵守此注意事項, 可能會導致起火或產品故障。

Do not leave this product in an extremely high temperature place for a long time, such as in a closed car or in direct sunlight.

Failure to observe this precaution may result in fire or product failure.

系列介紹 SERIES INTRODUCTION

產品特性 Product Features

- ▶ 全護罩設計,防塵防污
Full cover design, dust and pollution.
- ▶ 一體式底座,易安裝
Compact easy to install.
- ▶ 二種電壓選擇,觸控按鍵模式選擇,內部電路保護 Fuse1A
Two voltage options, touch button mode selection, internal circuit protection Fuse 1A.
- ▶ 可調式油水分離盒
Adjustable oil-water separation box.
- ▶ CE認證及中華民國專利(M317283號)
CE certification and the Republic of China patent(M317283).

規格介紹 Specification Introduction

DG-220TS

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 340*210*120mm |
| 吃水深 Depth | 130mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 15W |
| 效能 Capacity | 8L/hr |
| 標配 Option | 分離盒/加長管 |



DG-260TSL

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 360*240*120mm |
| 吃水深 Depth | 146mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 15W |
| 效能 Capacity | 10L/hr |
| 標配 Option | 分離盒/加長管/蓄油桶 |



DG-310TSL

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 340*240*140mm |
| 吃水深 Depth | 170mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 15W |
| 效能 Capacity | 12L/hr |
| 標配 Option | 分離盒/加長管/蓄油桶 |



D-300TBL

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 460*240*190mm |
| 吃水深 Depth | 95mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 25W |
| 效能 Capacity | 12L/hr |
| 標配 Option | 分離盒/蓄油桶 |



圓盤式 DISK

皮帶式 BELT

泵浦式 PUMP

D-300BLS

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 480*300*350mm |
| 吃水深 Depth | 120mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 25W |
| 效能 Capacity | 12L/hr |
| 標配 Option | 分離盒 |



D-400BLS

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 580*300*400mm |
| 吃水深 Depth | 170mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 25W |
| 效能 Capacity | 25L/hr |
| 標配 Option | 分離盒 |



DG-400TSL

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 560*260*195mm |
| 吃水深 Depth | 210mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 15W |
| 效能 Capacity | 15L/hr |
| 標配 Option | 分離盒/蓄油桶 |



DG-550TBL

| | |
|----------------|---------------|
| (長L)*(寬W)*(高H) | 530*240*295mm |
| 吃水深 Depth | 290mm |
| 電壓 Voltage | AC110/220V/1Ø |
| 馬力 Horsepower | 25W |
| 效能 Capacity | 20L/hr |
| 標配 Option | 分離盒/蓄油桶 |



系列介紹 SERIES INTRODUCTION

產品特性 Product Features

- ▶ 全護罩設計,防塵防污
Full cover design, dust and pollution.
- ▶ 一體式底座,易安裝
Compact easy to install.
- ▶ 二種電壓選擇,觸控按鍵模式選擇,內部電路保護 Fuse1A
Two voltage options, touch button mode selection, internal circuit protection Fuse 1A.
- ▶ 可調式油水分離盒
Adjustable oil-water separation box.
- ▶ 體積小,適合空間小的水槽,皮帶深度製作最長2000mm
Small size, suitable for sinks with small space, Belt maximum depth is 2000mm.
- ▶ CE認證及中華民國專利(M317283號)
CE certification and the Republic of China patent(M317283).

圓盤式 DISK

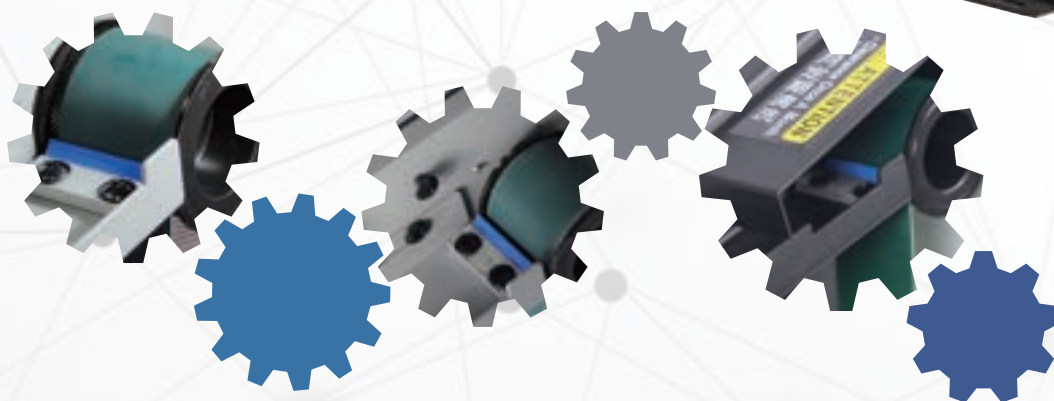
皮帶式 BELT

泵浦式 PUMP

規格介紹 Specification Introduction

| 型號 Model | (長L)*(寬W)*(高H) | 吃水深 Depth |
|----------|----------------|-----------|
| BT4014 | 260*180*160mm | 140mm |
| BT4021 | 260*180*160mm | 210mm |
| BT4031 | 260*180*160mm | 310mm |
| BT4045 | 260*180*160mm | 450mm |

*請盡量裝置於抽水泵浦旁邊,效果最佳。



系列介紹 SERIES INTRODUCTION

圓盤式 DISK

皮帶式 BELT

泵浦式 PUMP

產品特性 Product Features

- ▶ 深(大)水槽專用抽水馬達方式設計
Deep (large) water tank dedicated pumping motor design.
- ▶ 將浮球丟入水箱,就能輕鬆吸取表面浮油等髒汙
Just throw the float into the water tank to absorb the surface oil.
- ▶ 不銹鋼濾網易於清潔,無耗材
The stainless steel filter is easy to clean and has no consumables.
- ▶ 一機可配多臺CNC設備使用
One machine can be used with multiple CNC equipment.
- ▶ 可選配定點及移動浮球設計
Optional fixed-point and moving float ball design.

規格介紹 Specification Introduction

| 型號 Model | (長L)*(寬W)*(高H) | 功率 Power | 重量 Weight |
|----------|----------------|----------|-----------|
| FL-30 | 570*380*750 mm | 1/4HP | 28Kg |
| FL-200 | 500*730*1000mm | 1/2HP | 50Kg |



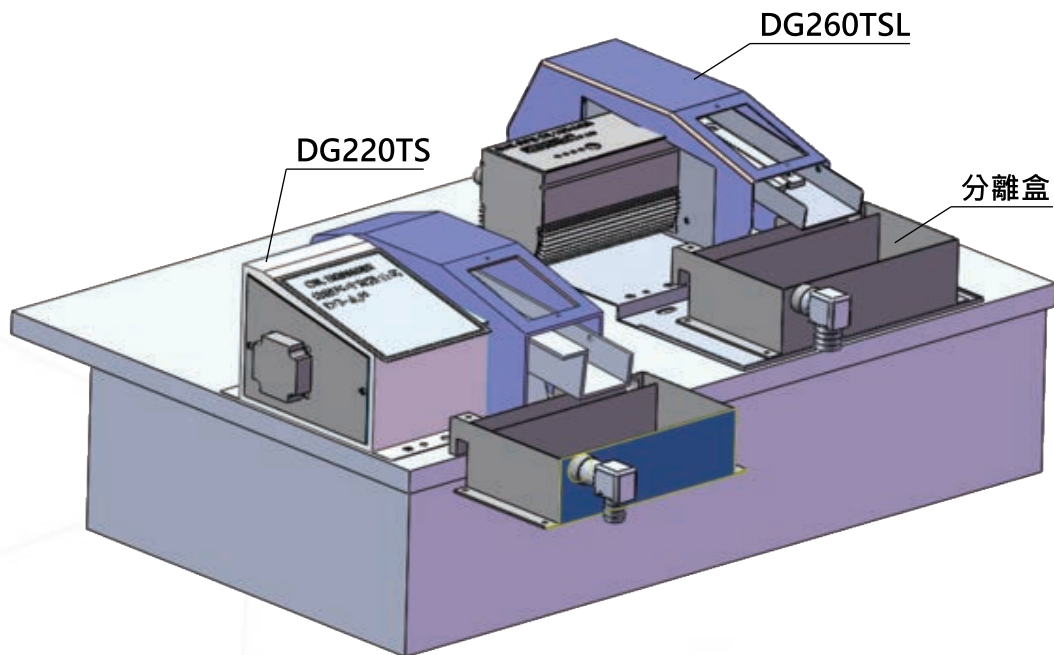
安裝說明 INSTALLATION NOTES

圓盤式 DISK

皮帶式 BELT

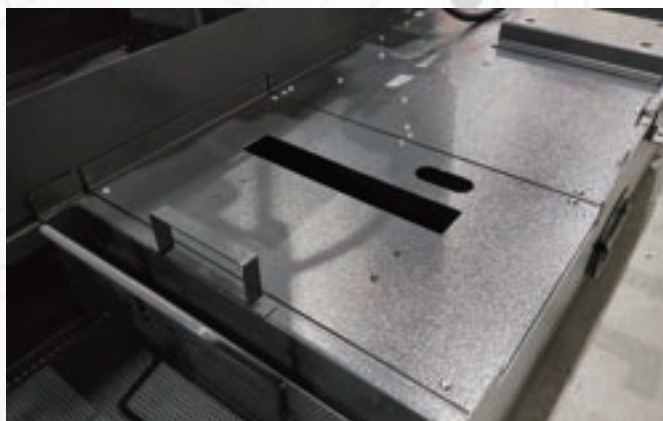
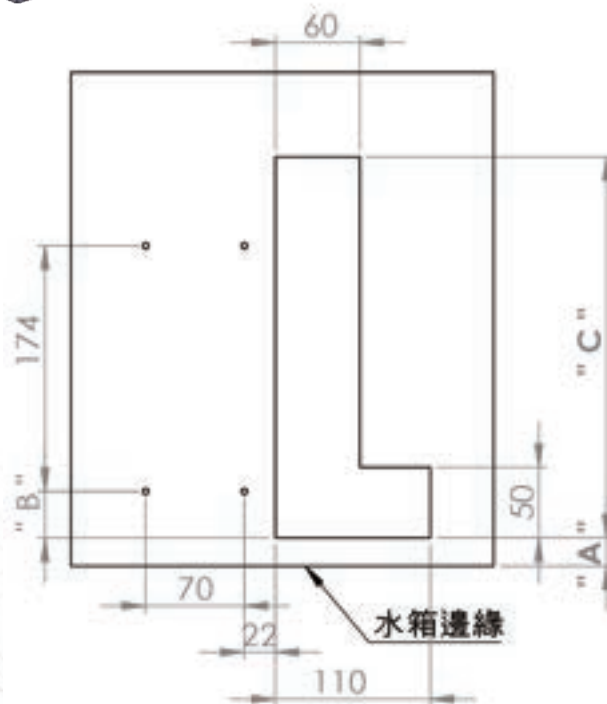


水平調整螺絲共四支



DG 系列開孔尺寸建議:

- DG 220TS : 尺寸 A: 15 mm
B: 15 mm
C: 250 mm
- DG 260TSL : 尺寸 A: 120 mm 以上
B: 35 mm
C: 280 mm
- DG 310TSL : 尺寸 A: 140 mm 以上
B: 75mm
C: 350 mm
- DG 400TSL : 尺寸 A: 190 mm 以上
B: 105 mm
C: 420 mm



參考附圖(水箱蓋開孔尺寸)如下所示,切割水箱蓋鍍金,使油水分離機皮帶得以置入。

Refer to the attached drawings (the size of the opening of the water tank cover) as shown below, Cut the sheet metal of the water tank cover so that the oil-skimmer belt can be inserted.

圓盤式 DISK

皮帶式 BELT

油水分離機務必安裝並固定於水箱上。

The oil-skimmer must be installed and fixed on the water tank.

分離盒調整螺絲方法如下：

1.DG220TS

先將B螺絲鎖附上去約1/2牙深，再調整A1.A2螺絲水平。

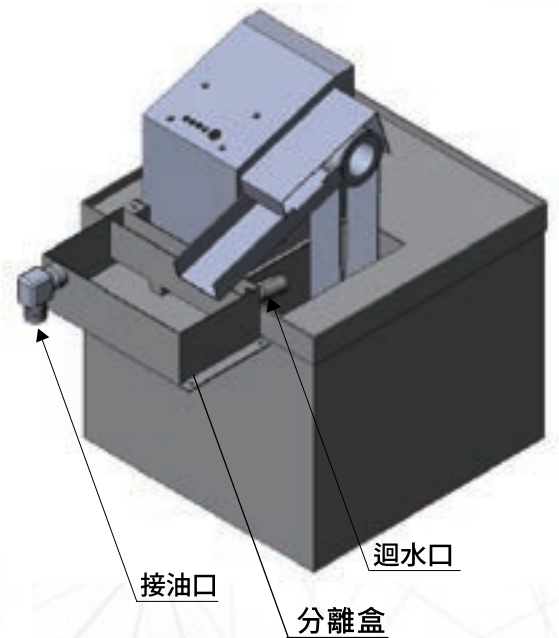
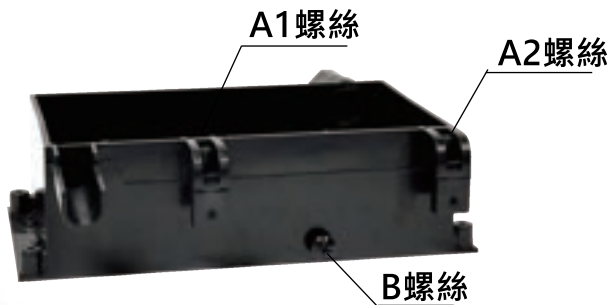
將分離盒勾於水槽邊緣，讓分離盒處於水平置放的角度。

The method for adjusting the screws of the separation box is as follows:

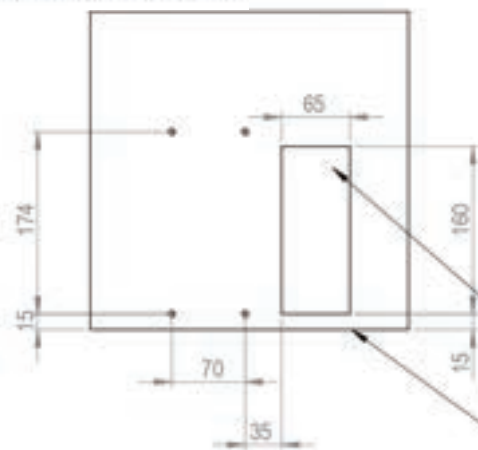
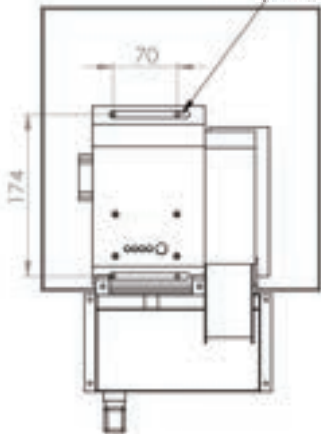
1.DG220TS

First, lock the B screw to a depth of about 2/1, and then adjust the level of the A1 and A2 screws.

Hook the separation box on the edge of the sink so that the separation box is at a horizontal angle.

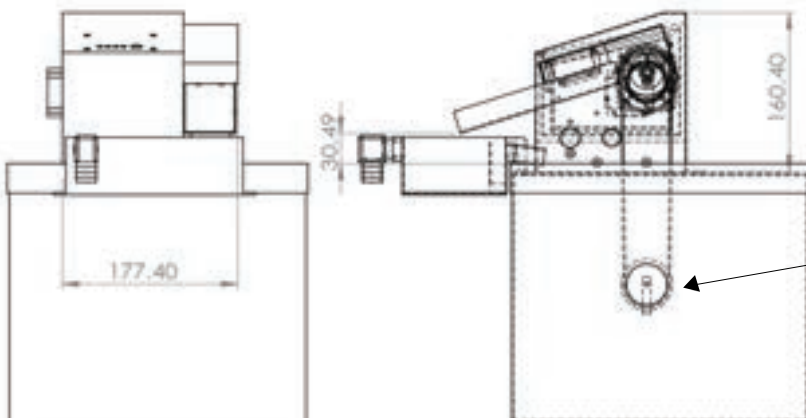


建議開孔螺絲定位尺寸70*174 mm



皮帶滾輪置入孔

1. 水箱邊緣凸出處
2. 油水分離盒掛勾處



皮帶寬*長(吃水深): 40*140 mm
40*210 mm
40*310 mm
40*450 mm

操作說明 INSTRUCTIONS

此下列型號 (DG220TS、DG260TSL、DG310TSL、D300TBL、DG400TSL、DG550TBL) 為此操作說明如下

The following models (DG220TS, DG260TSL, DG310TSL, D300TBL, DG400TSL, DG550TBL) are described below for this operation

當接上電源時ON(運轉燈)會亮,表示此時正在運轉 若要停止請按MODE(模式鍵)指示燈OFF亮,即便停止。

When the power is connected, the ON (function light) will be on. At this time, the display is running and stop, please press the MODE (mode key) indicator OFF lights up and may stop.

當按壓MODE鈕時模式會改變同時閃一下紅燈,表示記憶該模式。關機後,再開機就會執行上次所選擇的模式。

When the MODE button is pressed, the mode will change and the red light will flash once, indicating that the mode is memorized. After shutting down, restarting will execute the last selected mode.

※M1:表示馬達運轉15分鐘後,會停10分鐘,再繼續運轉。

※M2:表示馬達運轉25分鐘後,會停10分鐘,再繼續運轉。

※M3:表示馬達運轉35分鐘後,會停10分鐘,再繼續運轉。

停10分鐘的用意在於,讓油/水達到充份靜置時間,才可達到最有效分離。

※M1: It means that after 15 minutes of mobile function, it will stop for 10 minutes.

Then continue the function.

※M2: It means that after 25 minutes of mobile function, it will stop for 10 minutes.

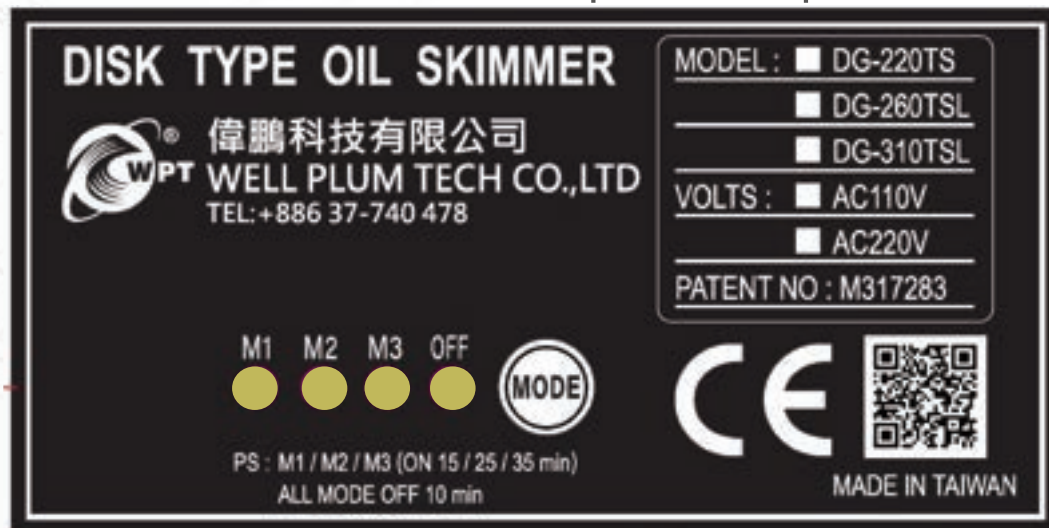
Then continue the function.

※M3: It means that after 35 minutes of mobile function, it will stop for 10 minutes.

Then continue the function.

The purpose of stopping for 10 minutes is to allow the oil/water to reach a sufficient standing time to achieve the most effective separation.

按鍵面板說明 Button panel description



此下列型號 (D300BLS、D400BLS) 為此操作說明如下

The following models (D300BLS, D400BLS) are described below for this operation

透過上位(PLC)去執行此油水分離機之馬達(圓盤)之運轉。

Execute the operation of the motor (disk) of the oil-water separator through the upper position (PLC).

電控 ELECTRONICALLY CONTROLLED

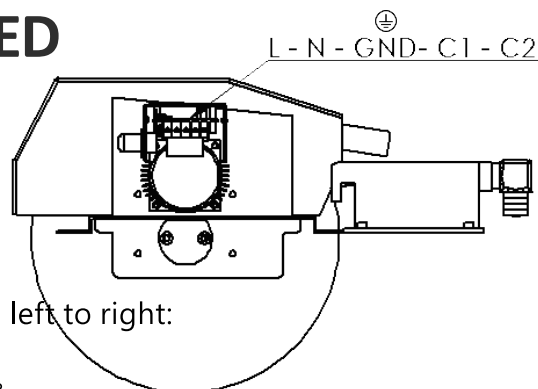
(L) - (N) - (接地) - (電容) - (電容)
(110/220 V)-(110/220V)-(ground)-(capacitor)-(capacitor)

將電源線(AC110V/220V)接於端子台由左至右分別為:
Connect the power cord (AC110V/220V) to the terminal block from left to right:

在接上電源前,請務必確認電壓與油水分離機上註明之電壓是否相符。
Before connecting the main power, advance the voltage is the same as shown on the machine.

為遵循電控安全規範,電源供應需在 AC110V/220V 單相電壓為限。
In order to comply with electrical control safety regulations, the power supply must be limited to AC110V/220V 1phase.

電壓選定110V或220V因出廠電壓規格已設定,不可任意更改電壓以免損壞馬達與電路板。
Voltage selection 110V or 220V Because the factory voltage specification has been set, the voltage cannot be changed arbitrarily to avoid damage to the motor and circuit board.



維護及保養 MAINTENANCE

每週檢查刮油片,清理刮油片上的油垢,每月清理油水分離盒並於使用前注滿水。
Check the oil scraper every week, clean the grease on the oil skimmer, clean the oil-skimmer separation box every month and fill it with water before use.

若遇圓盤無法轉動,請檢查齒輪箱及刮油片有無卡剎。
If the disk cannot be rotated, please check whether the gear box and the oil scraper are stuck.

相關耗材規格:

【DG/BT系列15W馬達】

(AC110V或220V/60HZ/功率13 ~ 15W//轉速:15rpm 減速比2:1(標準品)及3:1(選配)

【D系列25W馬達】

(AC110V或220V/60HZ/功率25W//轉速:1500rpm 減速比180:1)

【刮油片】

標配:(155*18mm) / 選配:(200*18mm) / 皮帶式專用:(40*18mm)

Related consumable specifications:

【DG/BT series 15W motors】

(AC110V or 220V/60HZ/power 13 ~ 15W//speed: 15rpm, reduction ratio 2:1 (standard product) and 3:1 (optional)

【D series 25W motor】

(AC110V or 220V/60HZ/power 25W//speed: 1500rpm, reduction ratio 180:1)

【Oil scraper】

Standard:(155*18mm)/Optional:(200*18mm) / Belt type:(40*18mm)

啟動電容:

AC110V:450V/ 1.5 μ F(15W馬達) ; 450V/6 μ F(25W馬達)

AC220V:630V/0.33 μ F(15W馬達) ; 450V/1.5 μ F(25W馬達)

Starting capacitor:

AC110V: 450V/1.5 μ F (15W motor) ; 450V/6 μ F(25W motor)

AC220V: 630V/0.33 μ F (15W motor) ; 450V/1.5 μ F(25Wmotor)

有任何商品上的問題,請送偉鵬維修中心進行維修,或是聯繫偉鵬官方帳號,將有專員一對一回覆問題。
If you have any problem with the product, please send it to the Weipeng repair center for repair, or contact the Well Plum official account, and a specialist will answer the question one-on-one.

故障排除 TROUBLESHOOTING

此下列型號 (DG220TS、DG260TSL、DG310TSL、DG400TSL) 為此說明

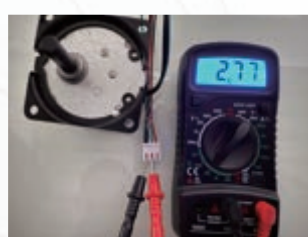


油水分離機馬達轉動系統

| 項次 | 故障現象 | 故障原因 | 解決方案 | 解決步驟SOP/圖面 |
|----|-----------|--------------------------------------|--|--|
| 1 | 圓盤(皮帶)不動作 | 1 檢查電源有無輸入AC110V/AC220V? | 電壓表量測 | |
| | | 2 通電時面板LED燈是否M燈恆亮燈閃爍表示間歇狀態此時馬達不轉為正常. | 模式按壓確認會改變燈號 | |
| | | 3 燈有亮·模式選擇會改變但圓盤(皮帶)不動 | 檢查齒輪箱有無卡死或小齒輪止付螺絲鬆脫、脫落 | |
| | | 4 燈有亮·模式選擇會改變但馬達(皮帶)不動 | 以三用電表歐姆檔量測馬達2組線圈阻值約: 2.5~2.9k Ω(220v馬達) 0.4~0.6k Ω(110v馬達) | 如下圖片 |
| | | 5 燈不亮/或全亮 | 檢查IC電路板有無沾滿油/水 | 更換電路板 |
| 2 | 圓盤(皮帶)正逆轉 | 1 檢查電壓AC110V/AC220V | 電壓量測不得低於100V(210V) | 更換電容器 |
| | 圓盤需手撥動才轉 | 2 電壓突波太大易造成啟動電容異常 | 電壓量測不得高於125V(235V) | AC110(1.5UF/450V) AC220V(0.33UF/450V) |
| 3 | 刮油效果不佳 | 1 檢查水箱有無凝固物阻擋圓盤吸取浮油? | 清洗水箱 | |
| | | 2 滑道油對剷削液的排水性要“強”效果才佳 | 更換剷削液試試看(合成/非合成 有差異) | |
| 4 | 油水分離不佳 | 1 檢查油水分離盒每月是否清洗一次? | 1.清洗分離盒 2.調整分離盒水平螺絲適當角度 | |



110v 15W馬達

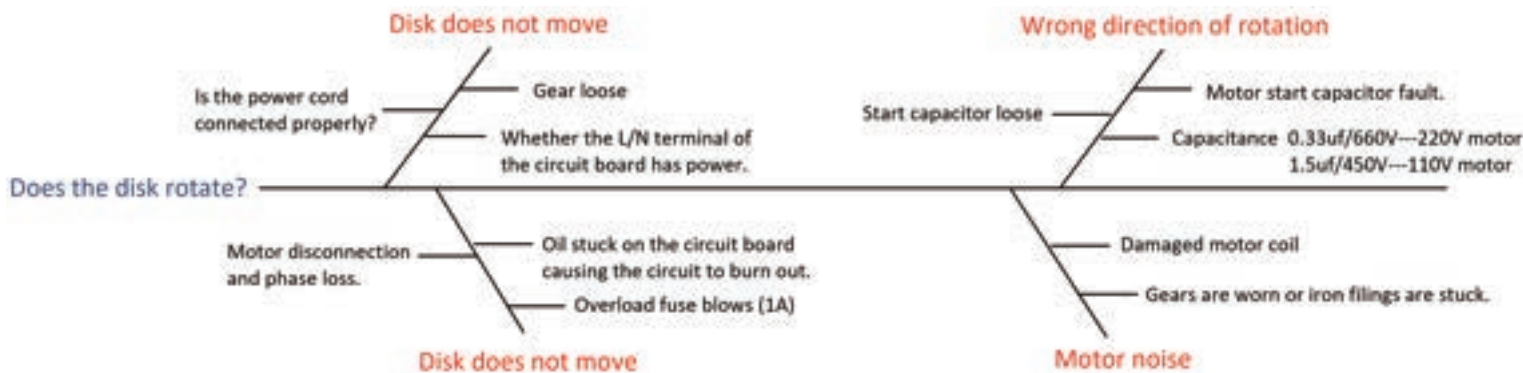


220v 15W馬達



故障排除 TROUBLESHOOTING

The following models (DG220TS, DG260TSL, DG310TSL, DG400TSL) describe this



Oil-skimmer separator motor rotation system

| Item | Fault phenomenon | | Cause of issue | Solution | Solution Step SOP/photo |
|------|-------------------------------------|---|--|---|---|
| 1 | Disk (belt) does not operate | 1 | Check whether the power supply has input AC110V/AC220V? | Voltmeter measurement. | |
| | | 2 | Whether the panel LED light M light is always on when the power is turned on? Blinking means that the motor does not turn to normal in the intermittent state. | Mode press to confirm will change the light. | |
| | | 3 | The light is on, the mode selection will change but the disc (belt) does not move. | Check the gearbox for stuck or small teeth. The wheel stop screw is loose and falls off. | |
| | | 4 | The light is on, the mode selection will change but the motor (belt) will not move. | Measuring the motor with digital multimeter. The resistance value of 2 sets of coils is about : 2.5~2.9kΩ(220v motor) 0.4~0.6kΩ(110v motor) | As picture below |
| | | 5 | The light is off/or fully on | Check if the IC board is covered with oil/water. | Replace the circuit board |
| 2 | Disk (belt) forward and reverse | 1 | Check voltage AC110V/AC220V | Voltage measurement must not be lower than100V(210V) | Replace the capacitor AC110(1.5UF/450V) AC220V(0.33UF/450V) |
| | The disk needs to be turned by hand | 2 | Too much voltage surge can easily cause abnormal startup capacitors | Voltage measurement shall not be higher than125V(235V) | |
| 3 | Poor oil scraping | 1 | Check whether the water tank is blocked by solids, so that the disk cannot absorb the oil slick? | Cleaning water tank | |
| | | 2 | The drainage of the slide oil on the cutting fluid should be "strong" for the best effect. | Try changing the cutting fluid (Synthetic/non-synthetic difference) | |
| 4 | Poor oil-skimmer separation | 1 | Check whether the oil-skimmer separation box is cleaned once a month? | 1.Cleaning the separation box 2.Adjust the appropriate angle of the horizontal screw of the separation box | |



110v 15W Motor

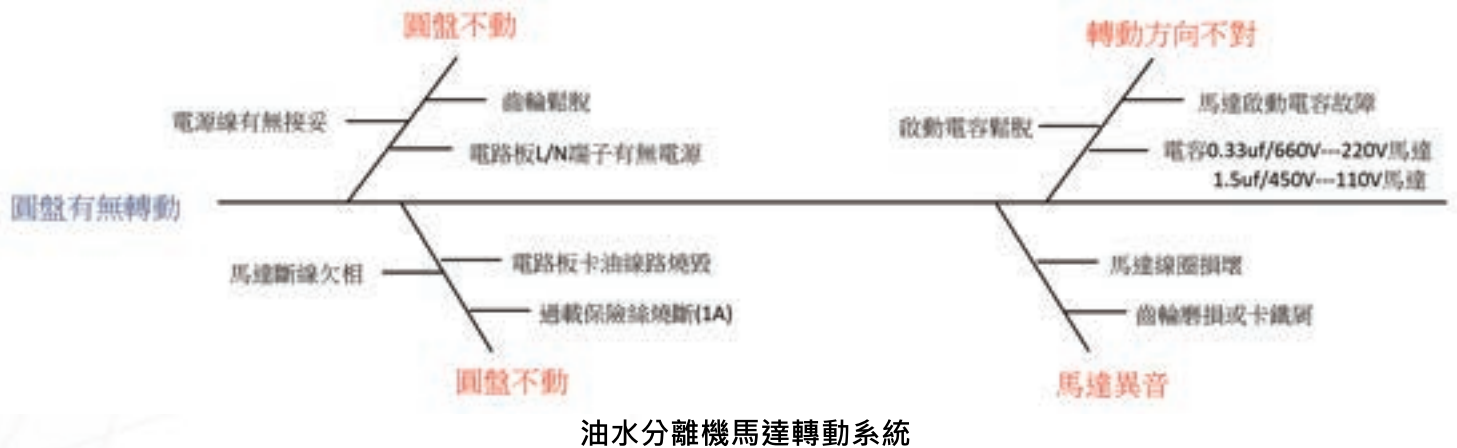


220v 15W Motor



故障排除 TROUBLESHOOTING

此下列型號 (D300TBL、DG550TBL) 為此說明



| 項次 | 故障現象 | 故障原因 | 解決方案 | 解決步驟SOP/圖面 |
|----|--------|--------------------------|---|--------------------|
| 1 | 圓盤不動作 | 1 檢查電源有無輸入AC110V/AC220V? | 電壓表量測 | 如下圖片 |
| | | 2 檢查馬達電壓是否有無異常? | 以三用電表歐姆檔量測馬達 2組線圈阻值約: 110v馬達 (28~35 Ω) 1Φ220v馬達 (160~190Ω) | 如下圖片 |
| 2 | 圓盤正逆轉 | 1 檢查啟動電容是否故障? | 更換電容測試 | 更換電容 |
| | | 2 檢查電壓AC110V/AC220V是否足夠? | 電壓量測不得低於100V及(210V) | AC220V 約1.5μF/450V |
| 3 | 刮油效果不佳 | 1 檢查水箱有無凝固物阻擋圓盤吸取浮油? | 清洗水箱 | |
| | | 2 滑道油對剝削液的排水性要“強”效果才佳? | 更換剝削液試試看 (合成/非合成 有差異) | |
| 4 | 油水分離不佳 | 1 檢查油水分離盒每月是否清洗一次? | 1.清洗分離盒 2.調整分離盒水平螺絲 適當角度 | |



110v 25W馬達

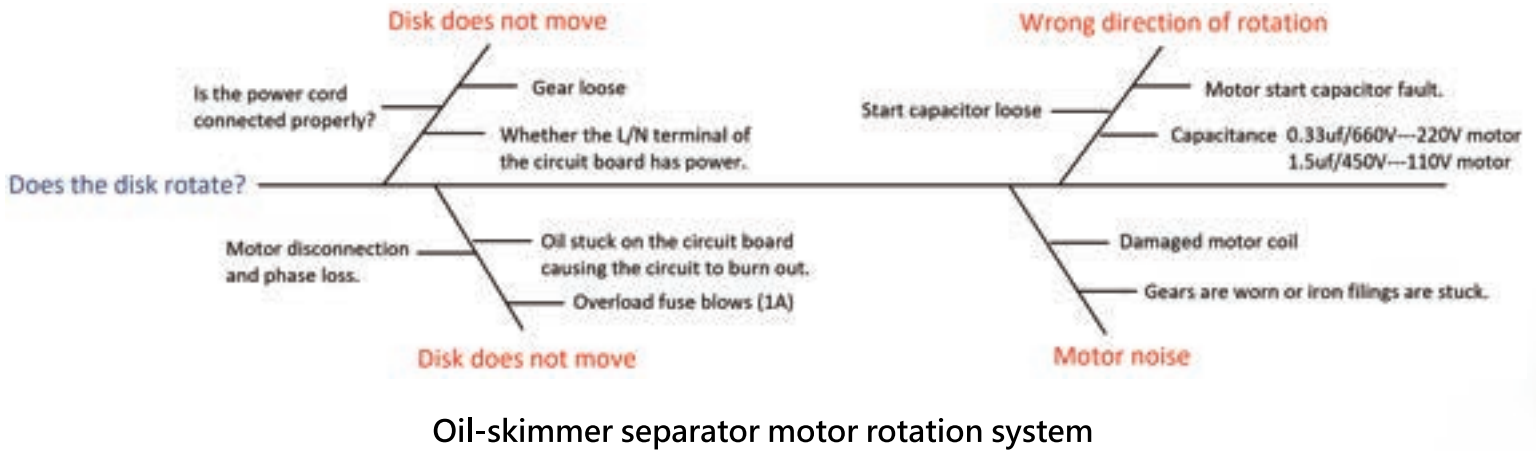


220v 25W馬達



故障排除 TROUBLESHOOTING

The following models (D300TBL, DG550TBL) describe this



| Item | Fault phenomenon | | Cause of issue | Solution | Solution Step SOP/photo |
|------|-----------------------------|---|--|--|-------------------------|
| 1 | Disk does not operate | 1 | Check whether the power supply has input AC110V/AC220V? | Voltmeter measurement. | As picture below |
| | | 2 | Check whether the motor voltage is abnormal? | Measuring the motor with digital multimeter. The resistance value of 2 sets of coils is about : 110v motor (28~35 Ω) AC1Φ220v motor (160~190Ω) | As picture below |
| 2 | Disk forward and reverse | 1 | Check if the starting capacitor is faulty? | Replace capacitor test | Replace capacitor |
| | | 2 | Check voltage AC110V/AC220V | Voltage measurement must not be lower than 100V(210V) | AC220V About 1.5μF/450V |
| 3 | Poor oil scraping | 1 | Check whether the water tank is blocked by solids, so that the disk cannot absorb the oil slick? | Cleaning water tank | |
| | | 2 | The drainage of the slide oil on the cutting fluid should be "strong" for the best effect. | Try changing the cutting fluid (Synthetic/non-synthetic difference) | |
| 4 | Poor oil-skimmer separation | 1 | Check whether the oil-skimmer separation box is cleaned once a month? | 1.Cleaning the separation box 2.Adjust the appropriate angle of the horizontal screw of the separation box | |



110v 25W馬達



220v 25W馬達





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FAX:+886-37-744-438



NO.66-7 Yutain Village Yuanli Township Miaoli County 358
358苗栗縣苑裡鎮玉田里66-7號(大甲幼獅工業區旁)

