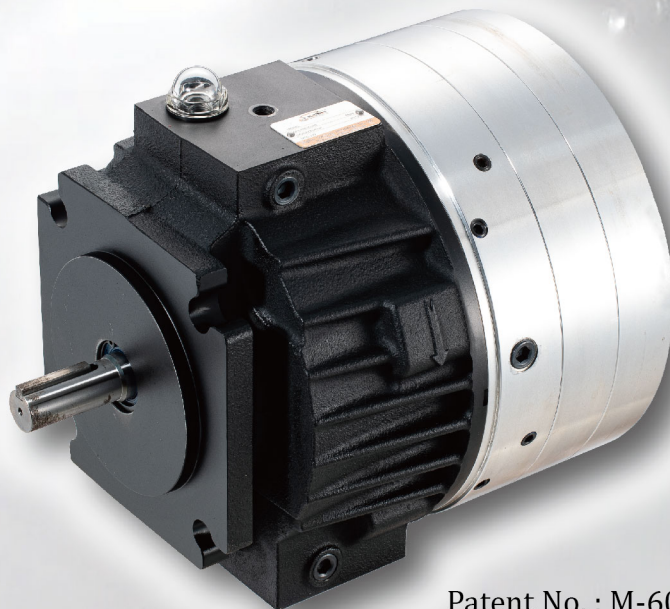
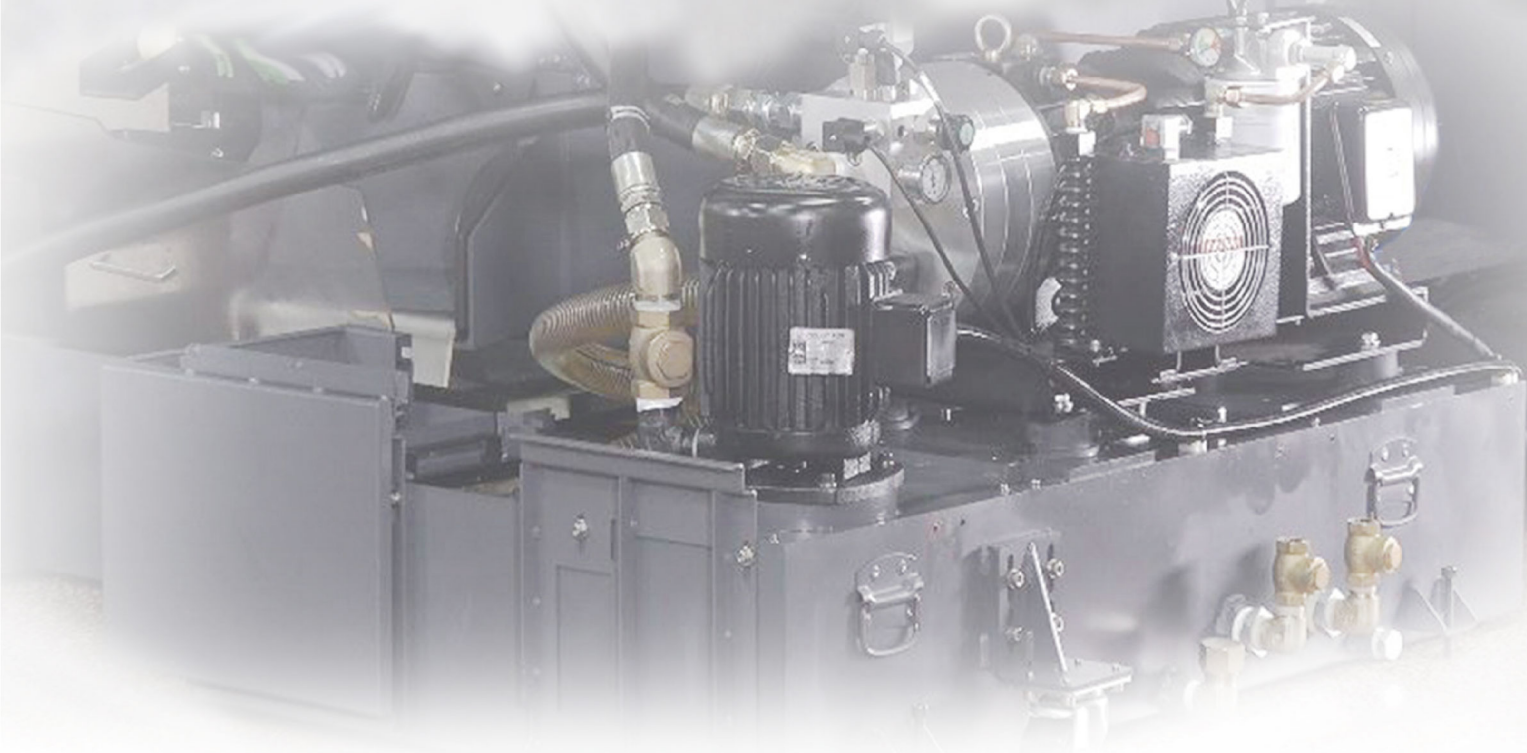


High Pressure Diaphragm Pump



Patent No. : M-607878

U.S. Patent No. : 11542934



<http://www.mighty-spray.com>

Tel: +886-4-2252-8036 Fax: +886-4-2251-8863

No. 15-2, Ln.1266, Wuquan W. Rd., Taichung, 40869, Taiwan

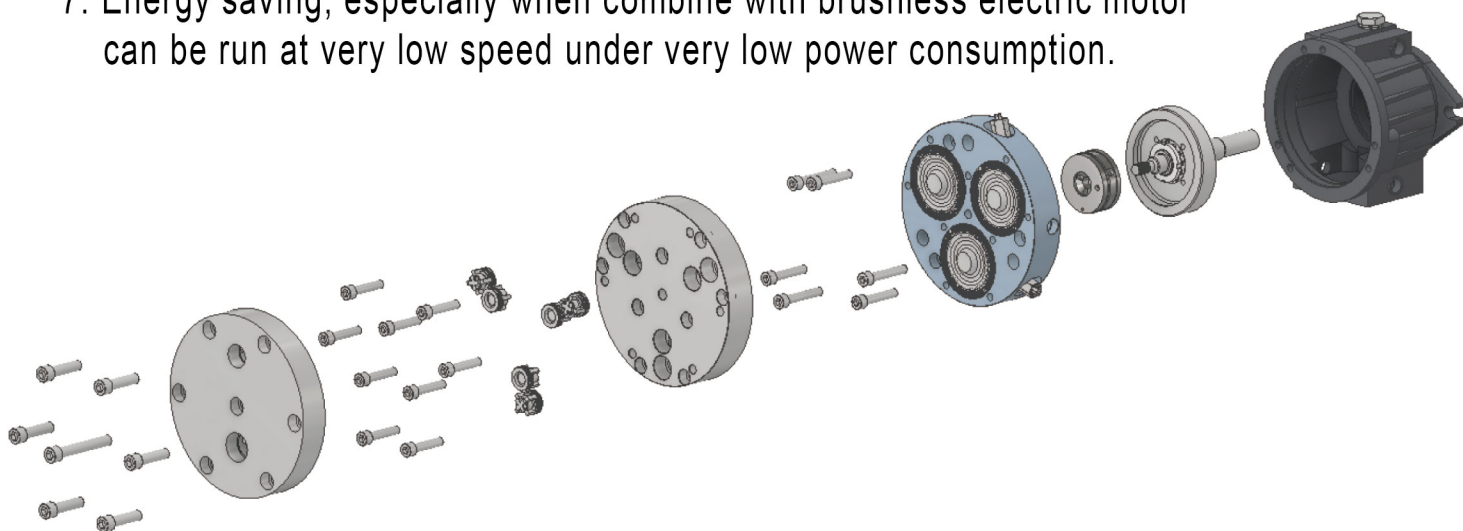


MPD Series Diaphragm Pump

- ▲ The structure of Piston diaphragm pump basically separated into two section: Oil hydraulic pumping section and Water pumping section. Thus, it will be very important to understand the function of each section.
- ▲ Hydraulic pumping section:
Oil hydraulic pumping section transfer the power from electric motor to hydraulic force. There are pistons deliver hydraulic oil to pushing diaphragm in water pumping section continuously. Therefore, the oil hydraulic pumping section will need hydraulic oil for lubrication, and pressing. In this section, there is build-in a circulating pump, it will transfer hot oil out and cooling them through radiator and then return to pump housing. This design will extending the pump service life and keeping pump works in a very low temperature.
- ▲ Water pumping section:
This section deliver coolant with high pressure to your system. This section combines diaphragm and check valves, they are controlling coolant in and out at high speed. Because of diaphragm design, there is not friction during operation. Thus, there will be very less heat will be generated, and it keeps coolant in about room temperature. In some cases, it saves the cost in the investment of "water chiller".
- ▲ MPD pump combines three different types of pump structures and becomes a very high performance pump. It saves energy, creates higher pressure, high volume characteristics. It is the best solution of high pressure coolant system of metalworking machines.

Features:

1. High pressure diaphragm pump with high efficiency.
It pumps wide range viscosity fluid (Max. 160 cst.).
2. Build-in circulating pump(U.S. Patent No.: 11542934), prevent overheat and service life time.
3. Simple and compact design, can be run in dry condition without damage to the pump in case of accident or operator error.
4. Low pulsation, prevent vibration of cutting tools.
5. Low rpm working is available, Minimum rpm: 300rpm.
6. High working pressure: 70 bar.
7. Energy saving, especially when combine with brushless electric motor can be run at very low speed under very low power consumption.



HOW TO ORDER

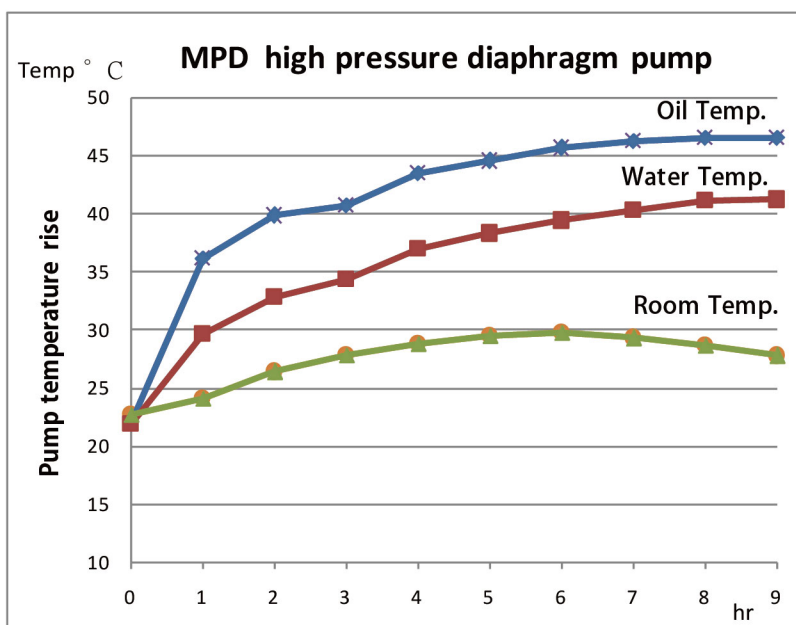
MPD - 5M - 28 - F - A - 10 Series Code

1 2 3 4 5

1 MPD high pressure diaphragm pump	4 Mounting: F: SAE Flange L: Foot mounting **Foot mounting available.	5 Material: S: Stainless B: Brass A: Aluminum
2 Model : S · M · L		
3 Displacement : c.c./rev. 5S: 17 5M: 28 , 31.6 , 38		

Model	Volume c.c /rev	Volume L/min		
		1200 rpm	1500 rpm	1800 rpm
MPD-5S-17-F-A	17.0	20.4	25.5	30
MPD-5M-38-F-A	28.0	33.6	/	/
	31.6	38.0	/	/
	38.0	46.0	/	/

Oil & Water temperature chart



Room temperature : 20°C

Working pressure : 70 bar

Fluid: water

Test hours :8hr

Tank capacity :280L

Amount of water : 196L

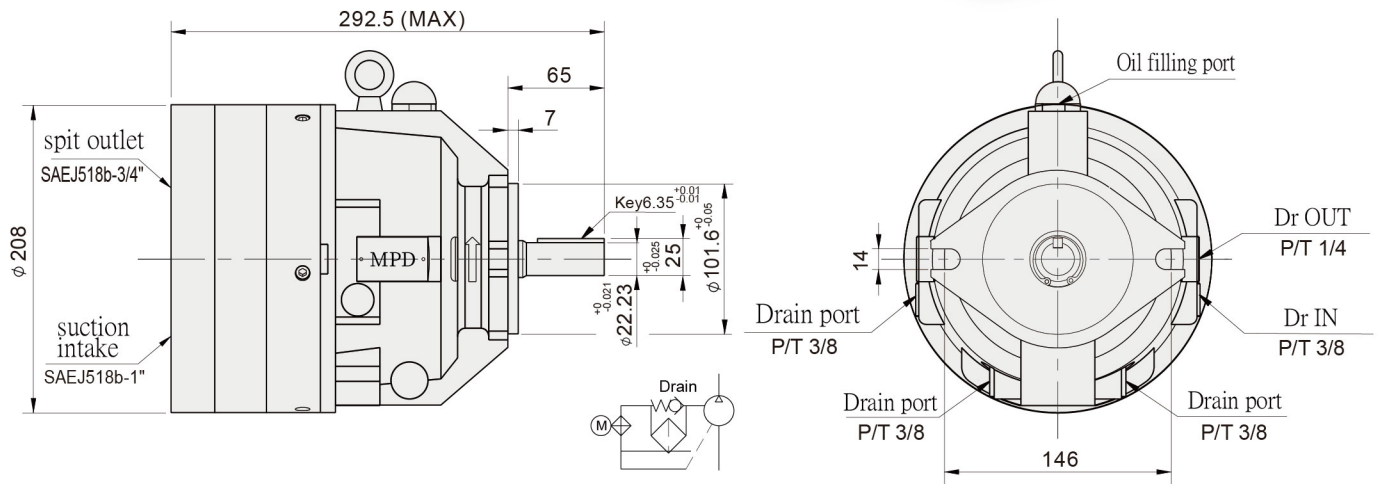
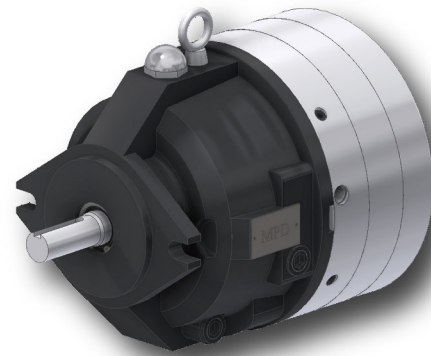
Operating frequency : run 120sec./
stop 20 sec.

Pump model: MPD-5M-28-F-A

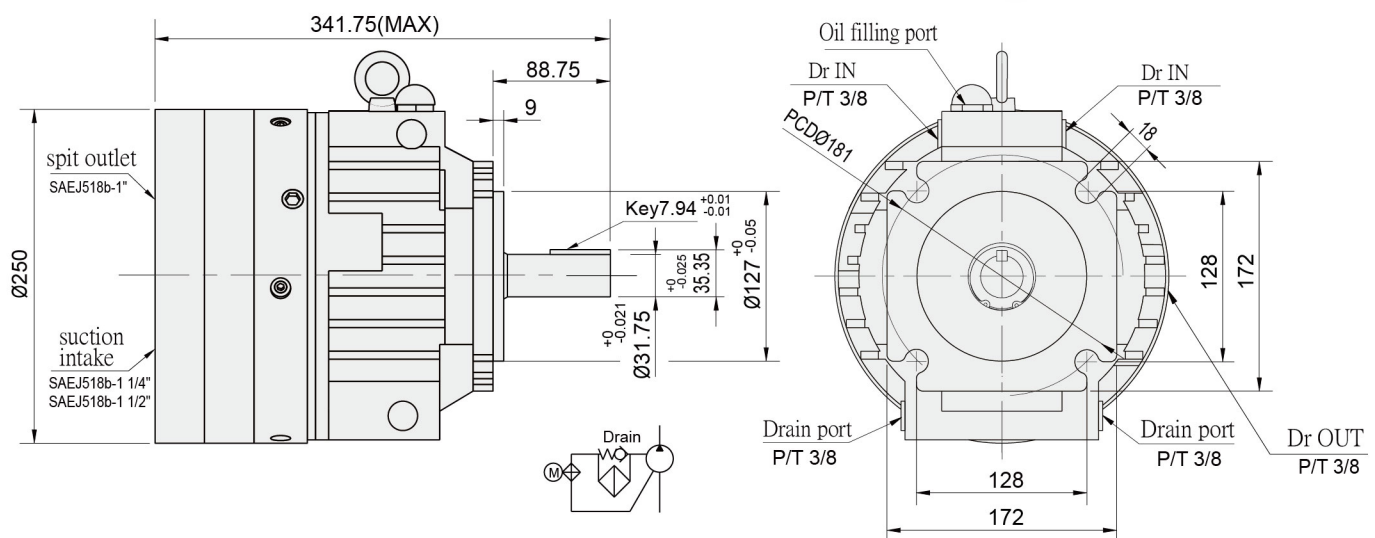
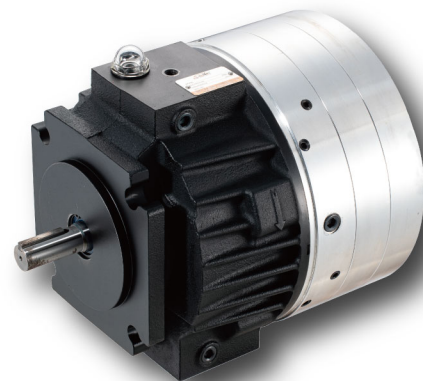
Radiator : AL-608-CA2

(70barX1 , 100barX2)

MPD - 5S



MPD - 5M

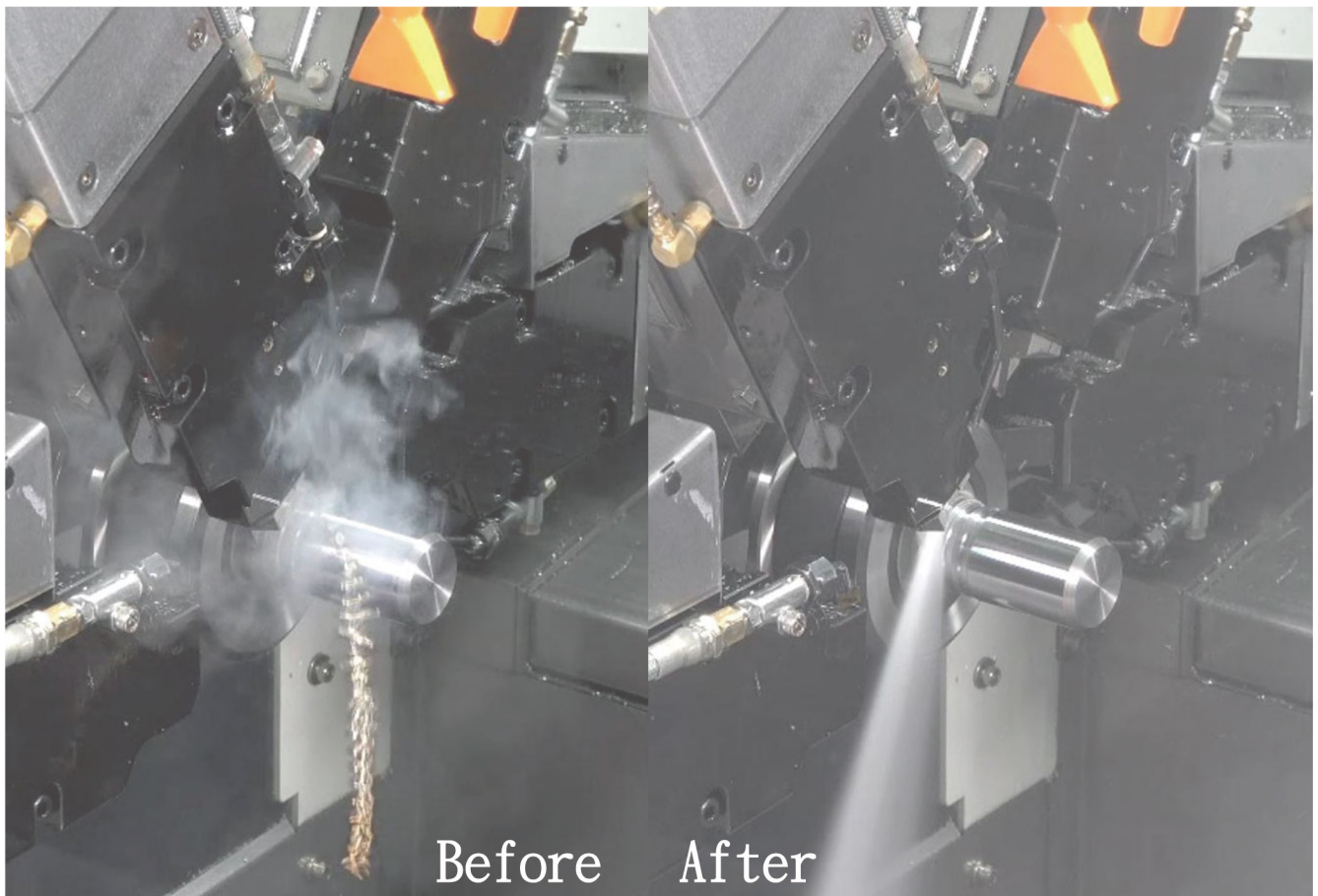


高壓中心出水系統具有快速清除纏屑，增強切削效率。減少毛邊，延長刀具壽命，降低加工成本的優點。這幾年已經逐漸取代傳統切削液的供給方式，並且進一步成為數位加工設備的標準化配備。然而高壓中心出水設備的心臟 - 幫浦，才是影響效能與決定壽命的主要關鍵。

經過二年多的研發與測試，推出了專為中心出水設備所設計的 MPD 幫浦。一個能提供高壓，大流量。高汙染耐受性，節能且價格合理的幫浦。MPD 幫浦 100% 在台灣設計與生產，特有的內置式循環幫浦的設計讓幫浦的工作溫度能貼近於常溫，大幅延長了使用壽命，並且在售價及售後服務上更是比進口幫浦更有競爭力。

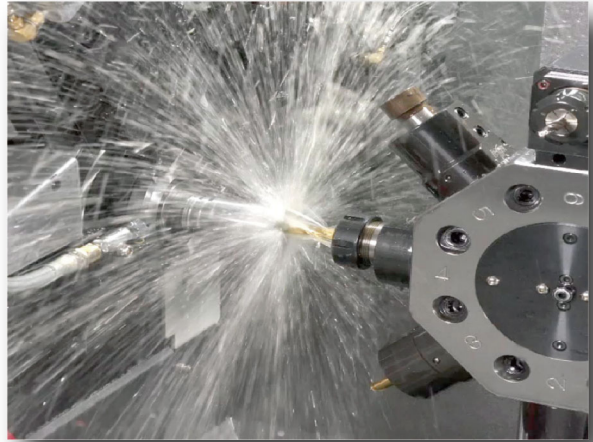
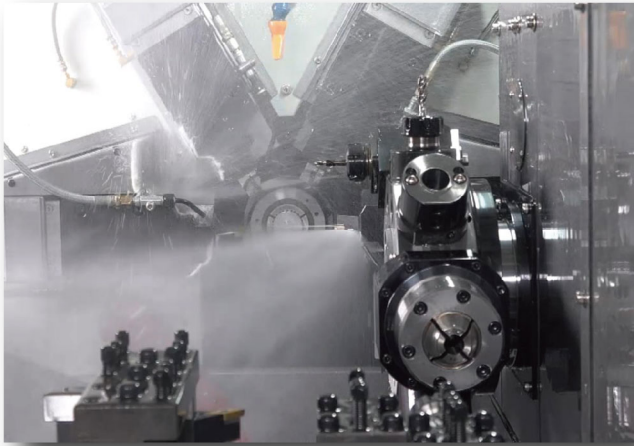
MPD 幫浦成就了 HCC 高壓切削冷卻系統的優異性能。這顆超強心臟，是影響效能與決定壽命的主要關鍵。在長時間連續加壓運轉之下仍能維持幫浦保持在常溫下運轉！這讓高壓中心切削冷卻系統除了帶走加工所產生的溫度外，切削液在經過系統的過程中不會 "增溫" - 大幅提升中心出水系統的卻效能。

選用高壓冷卻中心出水系統前請先確認，您買的是冷卻系統還是加熱系統？



降低鐵削纏繞，提升加工品質

Apply other industries



Mighty Spraying Technology Co., Ltd

Tel: +886-4-2252-8036 Fax: +886-4-2251-8863

No. 15-2, Ln.1266, Wuquan W. Rd., Taichung, 40869, Taiwan

