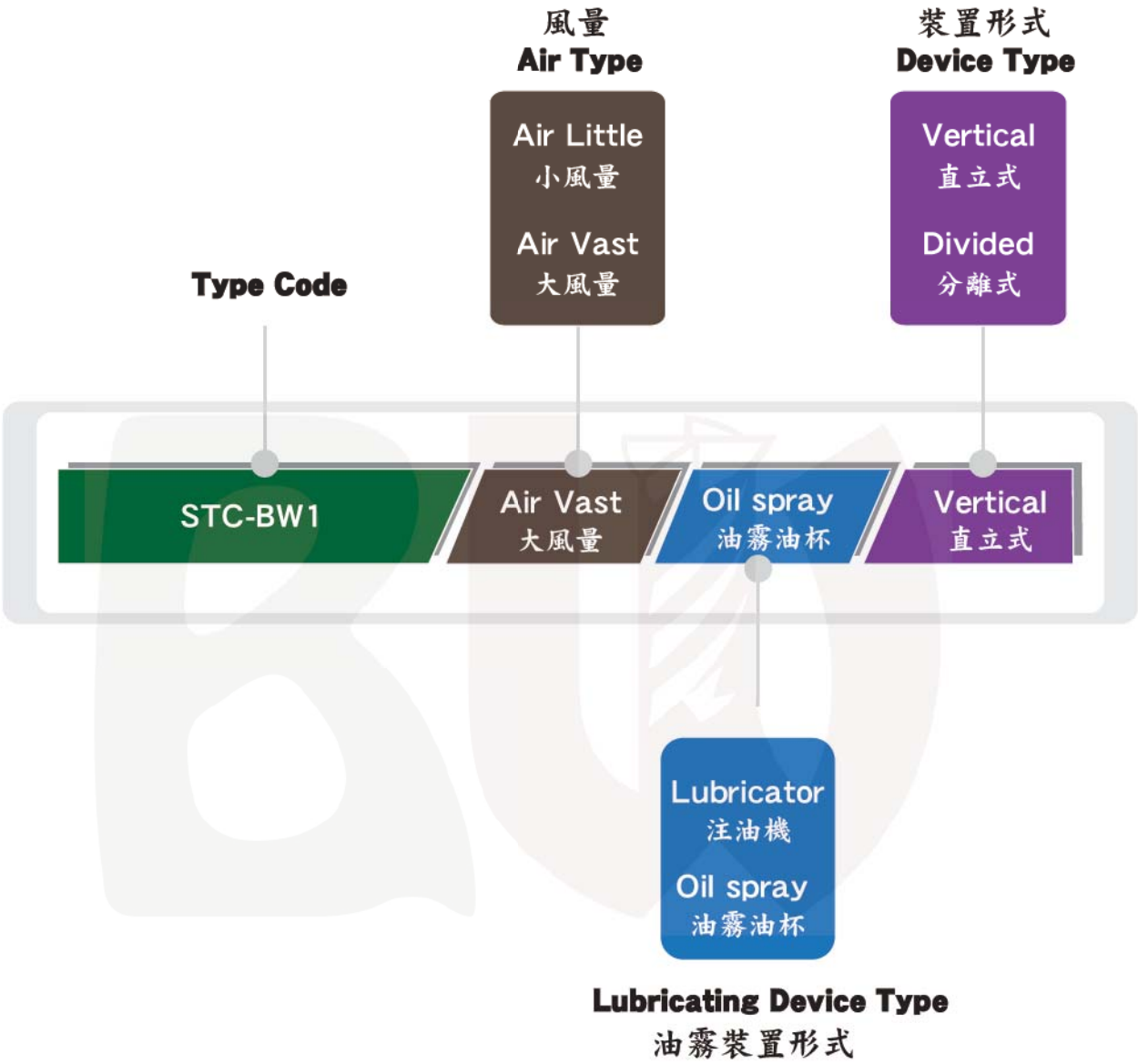


Description Of The Icon



SPIRAL TUBE COOLER SERIES



BW Spiral Tube Cooler serie

BW微型油霧冷風槍(渦流管槍)



P1 - STC-V1



直式油霧渦流管槍
Vertical Spiral Oil Mist Tube



P2 - STC-V2



直式渦流管槍
Vertical Spiral Tube Cooler



P3 - STC-V1L



直式油霧渦流管槍 (附註油機)
Vertical Spiral Oil Mist Tube
(Lubricator)



P4 - STC-V2D



分離式渦流管槍
Divided Spiral Tube Cooler



P5 - STC-BW1



大風量直式油霧冷風槍
Portable Vertical Spiral Oil
Mist Tube-Vast Air



BW Spiral Tube Cooler serie BW微型油霧冷風槍(渦流管槍)



P6 - STC-BW2



大風量直式渦流管槍
Vertical Spiral Tube Cooler
-Vast Air



P7 - STC-BW1L



大風量直式油霧渦流管槍 (附註油機)
Vertical Spiral Oil Mist Tube
-Vast Air (Lubricator)



P8 - STC-BW2D



分離式大風量渦流管槍
Divided Spiral Tube Cooler
-Vast Air



BW Spiral Tube Cooler serie

BW油霧冷風槍(渦流管槍)

產品特色：

Introduction of the product :

1. 藉由空氣壓縮機(建議5HP以上)驅動，即可產生超低溫冷風，無使用電源及冷煤，安全、乾淨、零污染。

Through the air compressor (prefer above 5HP) driving, the low temperature air will be produced. No need to use electricity and cold fuel. The product is safe, clean and produces no pollution.

2. 迅速產生超低溫冷風，無耗材，產品壽命長，設備成本低廉。

The benefit of the product is to produce super low temperature air in no need of consuming materials, being lasting and low cost.

3. 可依需求調整冷風溫度、風量及油量，達到最佳使用狀態。

The temperature, volume of the cold air and oil (STC-V1) can be adjusted according to the need to achieve the best effect.

4. 專利設計，可產生超低溫冷風+油霧，可於金屬切削加工時產生加乘之效果。

Patent design, STC-V1 can produce super low temperature cold air and oil spray which help to process metal cutting.

5. 入油口加裝止逆閥，可避免加工停止時油品垂滴，及不需於下次加工時重複設定油霧量。

STC-V1 oil inlet will be installed with an adverse proof valve to avoid the dripping of oil when the processing stops. Thus there is no need to reset the volume of oil spray for the next process.

6. 可選擇產生冷風，或冷風+油霧。

STC-V1 can produce either cold air, or cold air plus oil spray.

7. 配備具有多層保溫層之「冷風玻纖導管」，降低環境溫度對冷風溫度之影響。

Equipped with multi-layers of "glass fiber conduit" which can lower the environmental temperature affect towards the cold air temperature.

產品效能：

Product efficacy

1. 超低溫冷風可有效降低刀具溫度，避免刀具過熱，與切削形成燒結(假焊)，進而造成「刀具崩裂」及「加工面損傷」。

Super low temperature cold air can effectively reduce the temperature of cutting tools.

2. 超低溫冷風可中和切削部位之局部溫升，避免工件熱變形，影響加工精度。

Super low temperature cold air can lower the temperature of cutting parts to avoid the deforming and precision reducing of the product in process.

3. 經實測，相較於一般吹氣，超低溫冷風可降低切削時之「摩擦瞬間阻力」，使刀具壽命延長，加工面更光滑。

After actual testing, comparing with the ordinary blowing, the super low temperature air can lower the "momentary resistance of friction" in cutting and thus prolong the sharpness of the cutting tool and increase the smoothness of work.

4. 眾所皆知，油霧可於切削部位產生潤滑效果，亦具有保護刀具與使加工面更光滑之效果。故超低溫冷風+油霧具有加乘之效果。

As we all know that the oil spray can lubricate, protect the cutting tool and smooth the working surface. Thus the effect of super low temperature air with oil spray will be double.



Portable Vertical Spiral Oil Mist Tube

直式油霧渦流管槍

STC-V1

Air Little
小風量

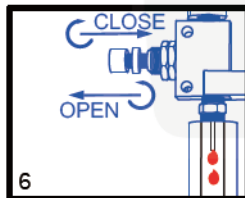
Oil spray
油霧油杯

Vertical
直立式

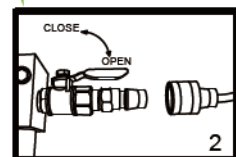
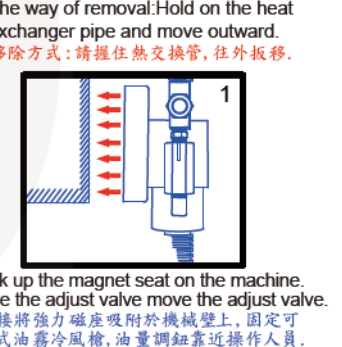
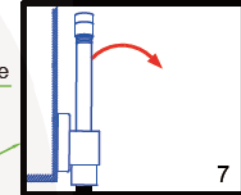
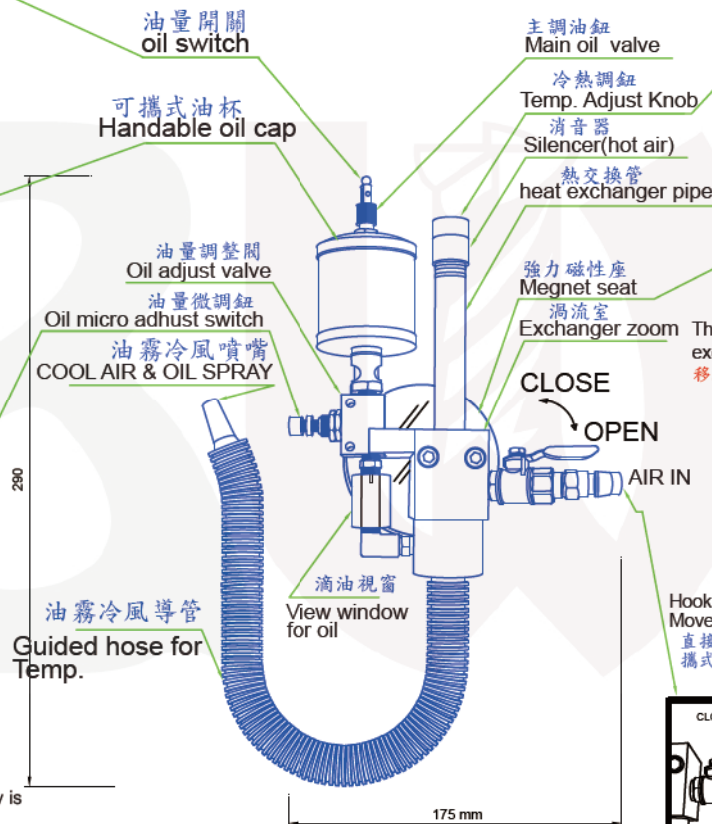
STEP:1-6



PS:停止使用時,請記得"供油閉鎖",以免油料繼續滴落。



STC-V1 直式油霧渦流管槍 Vertical Spiral Oil Mist Tube



STC-V1, STC-V2, STC-V1L Testing Statistics

Environment temperature 30 ° C / Air temperature 27.5 ° C

環境溫度 30 ° C / 入氣溫度 27.5 ° C

入氣壓力	總入氣量100%	冷風風量100%	冷風溫度 (風量 45%)	室溫 冷風溫度差	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 100%	Temperature Of Cold Air (Air Volume 45%)	(Room Temperature) cold air temperature difference	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C	°C
4	175	80~ 175	- 5.8	35.8	33.3
5	200	90~ 200	- 8.5	38.5	36
6	225	100~ 225	- 11.2	41.2	38.7
7	250	110~ 250	- 13.8	43.8	41.3
8	275	120~ 275	- 16.4	46.4	43.9



Vertical Spiral Tube Cooler

直式渦流管槍

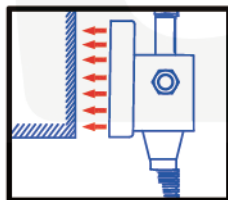
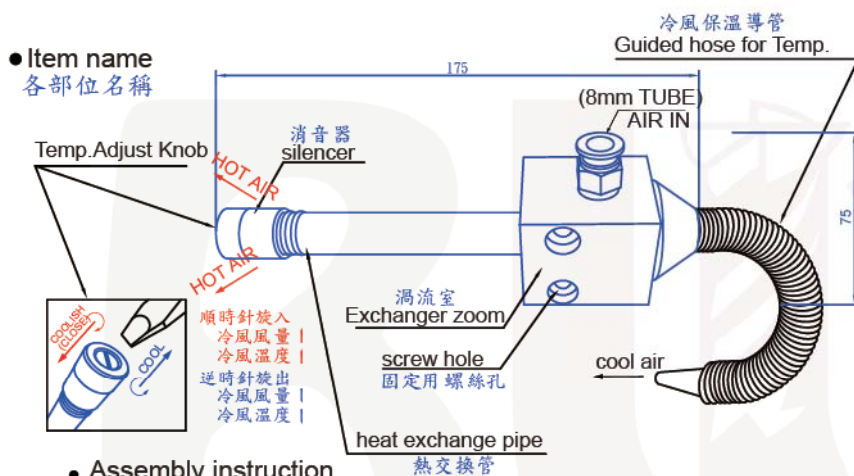
STC-V2

Air Little
小風量

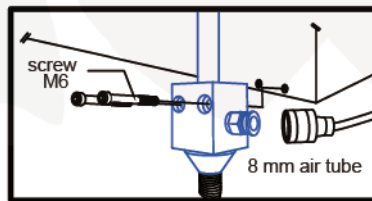
Vertical
直立式

STC-V2

直式渦流管槍 Vertical Spiral Tube Cooler



Hook up the magnet seat on the machine.
Move the adjust valve move the adjust valve.
直接將強力磁座吸附於機械壁上，固定可攜式油霧冷風槍。



Recommend the aircompressor 5HP above.
connect the air dryer to get the best results.
建議搭配空氣壓縮機5HP以上，若經過空氣乾燥機再入氣，效果更佳！

STC-V1, STC-V2, STC-V1L Testing Statistics

Environment temperature 30 ° C / Air temperature 27.5 ° C

環境溫度 30 ° C / 入氣溫度 27.5 ° C

入氣壓力	總入氣量100%	冷風風量100%	冷風溫度 (風量 45%)	室溫 冷風溫度差	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 100%	Temperature Of Cold Air (Air Volume45%)	(Room Temper Ature) cold air temperature difference	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C	°C
4	175	80~ 175	- 5.8	35.8	33.3
5	200	90~ 200	- 8.5	38.5	36
6	225	100~ 225	- 11.2	41.2	38.7
7	250	110~ 250	- 13.8	43.8	41.3
8	275	120~ 275	- 16.4	46.4	43.9



STC-V1

STC-V2

STC-V1L

STC-V2D

STC-BW1

STC-BW2

STC-BW1L

STC-BW2D

Vertical Spiral Oil Mist Tube-Lubricator 直式油霧渦流管槍-附注油機

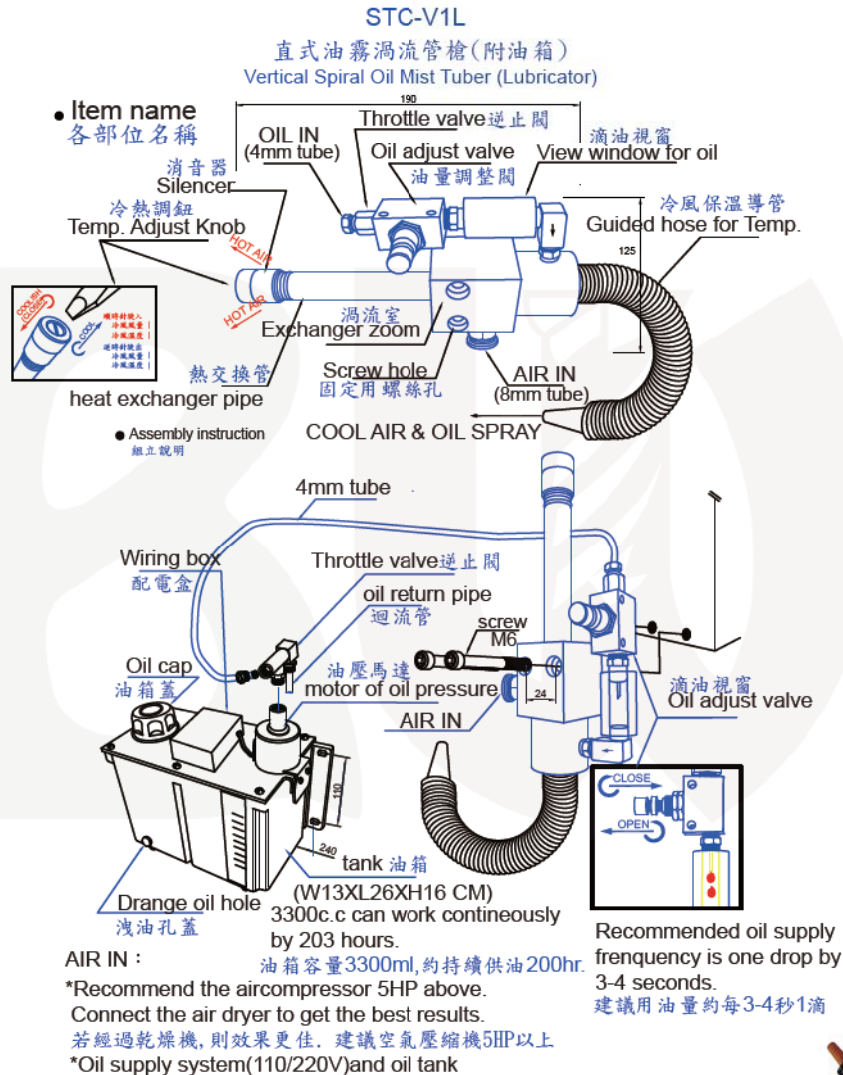
STC-V1L

Air Little
小風量

Lubricator
注油機

Vertical
直立式

STC-V1
STC-V2
STC-V1L
STC-V2D
STC-BW1
STC-BW2
STC-BW1L
STC-BW2D



STC-V1, STC-V2, STC-V1L Testing Statistics

Environment temperature 30 ° C / Air temperature 27.5 ° C 環境溫度 30 ° C / 入氣溫度 27.5 ° C					
入氣壓力	總入氣量100%	冷風風量100%	冷風溫度 (風量 45%)	室溫 冷風溫度差	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 100%	Temperature Of Cold Air (Air Volume 45%)	(Room Temper Ature) cold air temperature difference	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C	°C
4	175	80~ 175	- 5.8	35.8	33.3
5	200	90~ 200	- 8.5	38.5	36
6	225	100~ 225	- 11.2	41.2	38.7
7	250	110~ 250	- 13.8	43.8	41.3
8	275	120~ 275	- 16.4	46.4	43.9



Divided Spiral Tube Cooler

分離式渦流管槍

STC-V2D

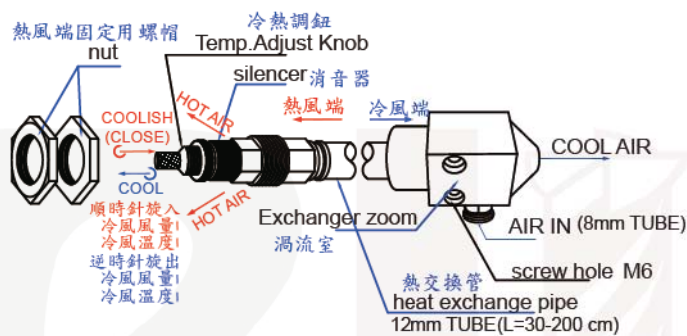
Air Little
小風量

Divided
分離式

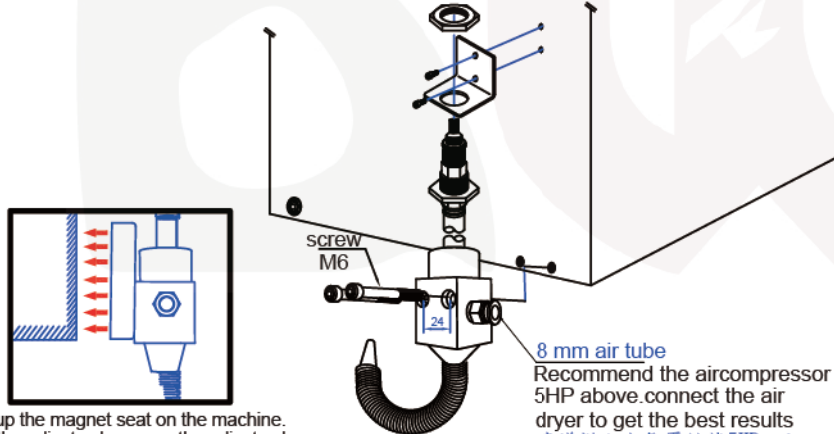
STC-V2D

分離式渦流管槍
Divided Spiral Tube Cooler

各部位名稱
• Item name



組立說明
• Assembly instruction



Hook up the magnet seat on the machine.
Move the adjust valve move the adjust valve.
直接將強力磁座吸附於機械壁上，固定可
攜式油霧冷風槍。

8 mm air tube
Recommend the aircompressor
5HP above, connect the air
dryer to get the best results
建議搭配空氣壓縮機5HP以上，
若經過空氣乾燥機再入氣，
效果更佳！

STC-V1LD Testing Statistics

Air temperature 15° C

入氣溫度 15° C

入氣壓力	總入氣量 100%	冷風風量 43~100%	冷風溫度 (風量 43%)	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 43~100%	Temperature Of Cold Air (Air Volume 43%)	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C
4	195	65~180	-25.4	40.4
5	225	75~210	-28.3	43.3
6	255	85~240	-31.5	46.5
7	285	95~270	-34.1	49.1
8	315	105~300	-37.4	52.4



STC-V1

STC-V2

STC-V1L

STC-V2D

STC-BW1

STC-BW2

STC-BW1L

STC-BW2D

Vertical Spiral Oil Mist Tube-Vast Air 大風量直式油霧渦流管槍

STC-BW1

Air Vast
大風量

Oil spray
油霧油杯

Vertical
直立式

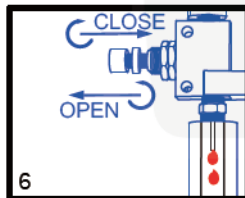
STEP:1-6



PS:停止使用時,請記得"供油開鎖",以免油料繼續滴落。

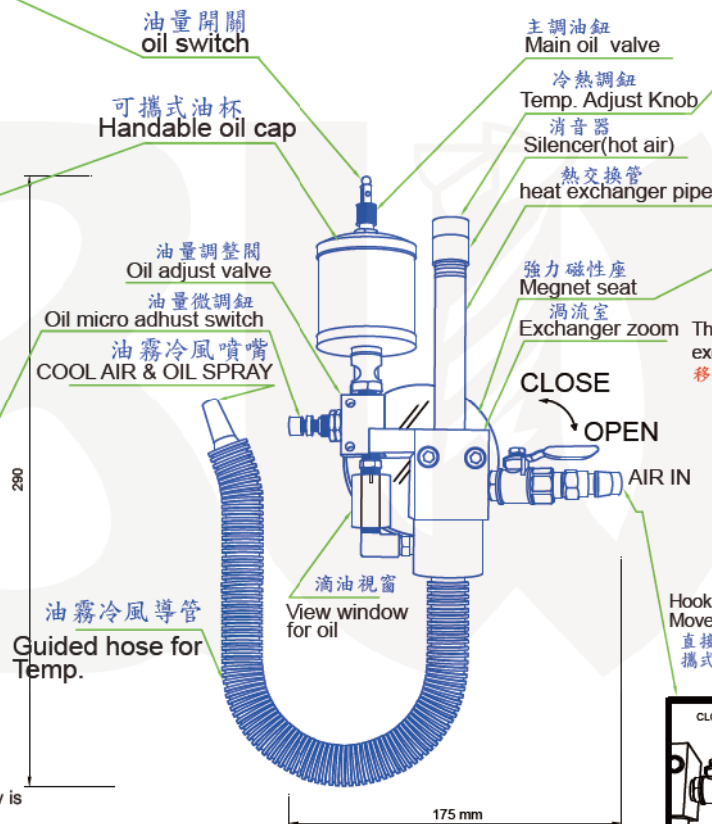


逆時針旋開油杯蓋,以小油壺補充潤滑油
Counter clockwise oil cap and fill the oil constantly.(80c.c)

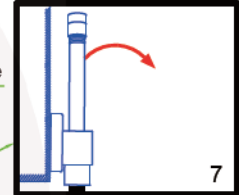
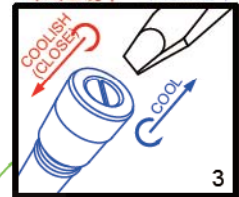


建議用油量 約每3-4秒1滴
油杯容量80ml, 可持續供油4-5hr.
Recommended oil supply frequency is one drop 3-4 seconds

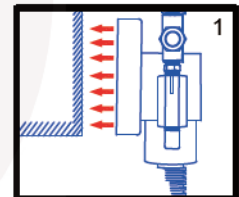
STC-BW1 大風量直式油霧渦流管槍 Vertical Spiral Oil Mist Tube



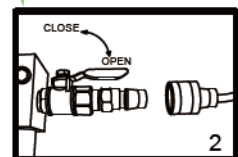
順時針旋入 逆時針旋出
冷風風量! 冷風風量!
冷風溫度! 冷風溫度!



The way of removal: Hold on the heat exchanger pipe and move outward.
移除方式: 請握住熱交換管, 往外扳移。



Hook up the magnet seat on the machine. Move the adjust valve move the adjust valve.
直接將強力磁座吸附於機械壁上, 固定可攜式油霧冷風槍, 油量調鈕靠近操作人員。



Recommend the aircompressor 10HP above. connect the air dryer to get the best results.
建議空氣壓縮機10HP以上若經過乾燥機, 則效果更佳。

STC-BW2、STC-BW1、STC-BW1L Testing Statistics

Air temperature 28° C 入氣溫度 28° C				
入氣壓力	總入氣量100%	冷風風量 65%-100%	冷風溫度 (風量 65%)	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 65-100%	Temperature Of Cold Air (Air Volume 65%)	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C
4	460	315-460	-3.7	31.7
5	510	330-510	-5.5	33.5
6	560	360-560	-7.3	35.3
7	610	395-610	-9.1	37.1
8	655	425-655	-10.9	38.9



Vertical Spiral Tube Cooler-Vast Air 大風量直式渦流管槍

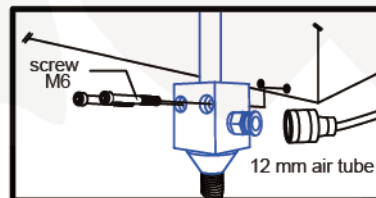
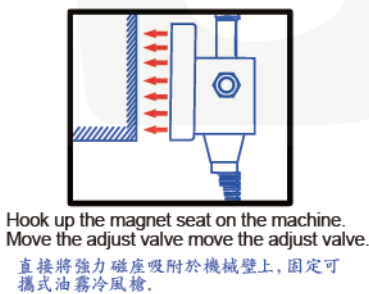
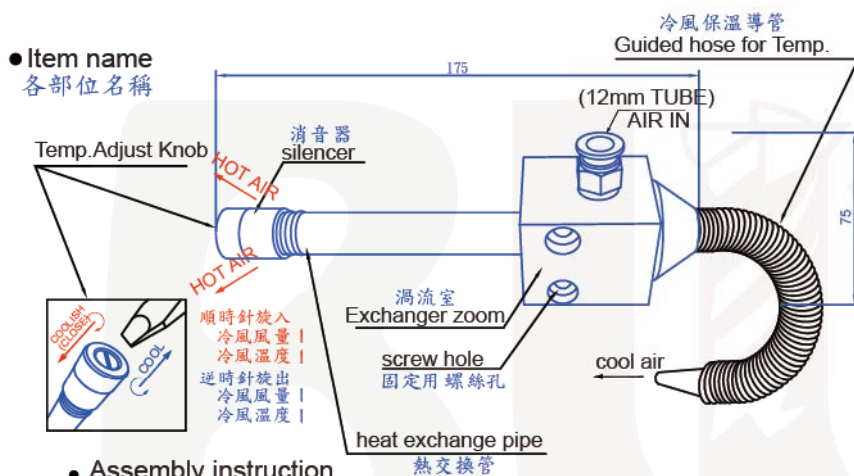
STC-BW2

Air Vast
大風量

Vertical
直立式

STC-BW2

大風量直式渦流管槍
Vertical Spiral Tube Cooler



Recommend the aircompressor 10HP above.
connect the air dryer to get the best results.
建議搭配空氣壓縮機10HP以上，若經過空氣乾燥機再入氣，效果更佳！

STC-BW2、STC-BW1、STC-BW1L Testing Statistics

Air temperature 28° C 入氣溫度 28° C				
入氣壓力	總入氣量 100%	冷風風量 65%~100%	冷風溫度 (風量 65%)	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 65~100%	Temperature Of Cold Air (Air Volume 65%)	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C
4	460	315~460	-3.7	31.7
5	510	330~510	-5.5	33.5
6	560	360~560	-7.3	35.3
7	610	395~610	-9.1	37.1
8	655	425~655	-10.9	38.9



STC-V1
STC-V2
STC-V1L
STC-V2D
STC-BW1
STC-BW2
STC-BW1L
STC-BW2D

Vertical Spiral Oil Mist Tube-Vast Air (Lubricator) 大風量直式油霧渦流管槍--附註油機

STC-BW1L

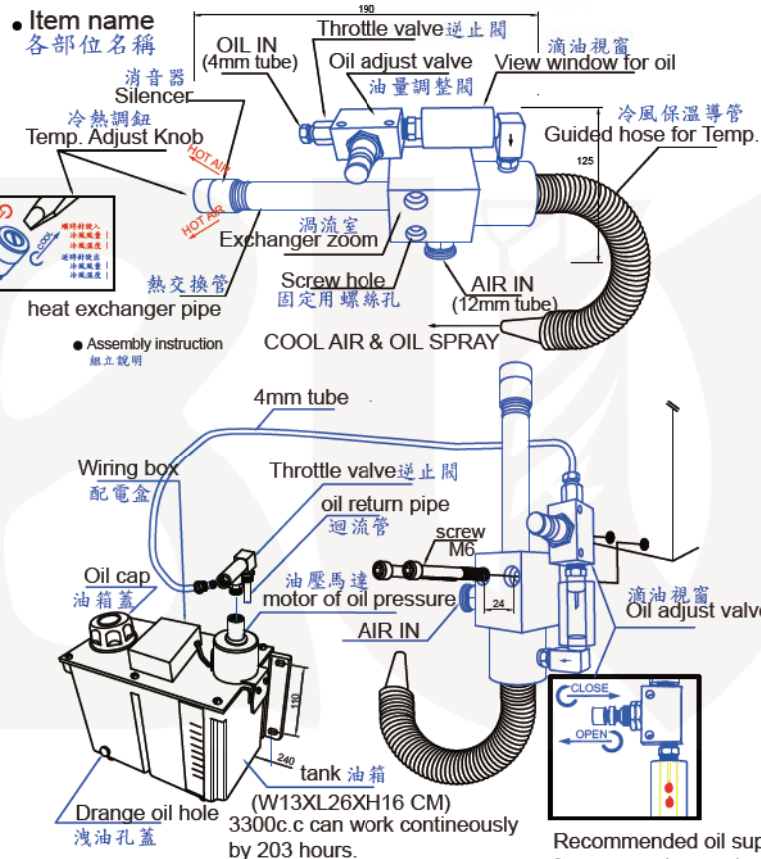
Air Vast
大風量

Lubricator
注油機

Vertical
直立式

STC-BW1L

大風量直式油霧渦流管槍(附油箱)
Vertical Spiral Oil Mist Tube-Vast Air (Lubricator)



AIR IN : 油箱容量3300ml,約持續供油200hr.
*Recommend the aircompressor 10HP above.
Connect the air dryer to get the best results.
若經過乾燥機,則效果更佳。建議空氣壓縮機10HP以上
*Oil supply system(110/220V)and oil tank
Recommended oil supply frequency is one drop by 3-4 seconds.
建議用油量約每3-4秒1滴

STC-BW2、STC-BW1、STC-BW1L Testing Statistics

Air temperature 28° C 入氣溫度 28° C				
入氣壓力	總入氣量100%	冷風風量 65%~100%	冷風溫度 (風量 65%)	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 65~100%	Temperature Of Cold Air (Air Volume 65%)	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C
4	460	315~460	-3.7	31.7
5	510	330~510	-5.5	33.5
6	560	360~560	-7.3	35.3
7	610	395~610	-9.1	37.1
8	655	425~655	-10.9	38.9



Divided Spiral Tube Cooler-Vast Air 分離式大風量渦流管槍

STC-BW2D

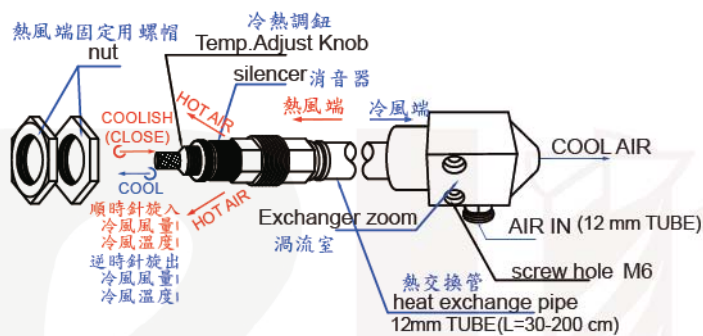
Air Vast
大風量

Divided
分離式

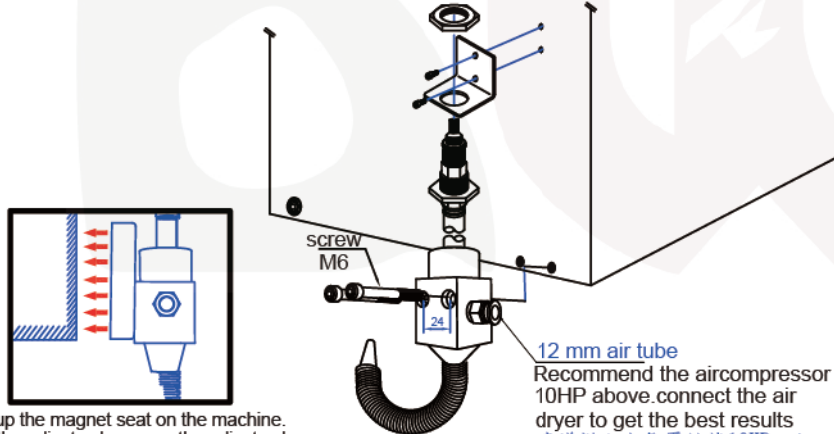
STC-BW2D

分離式大風量渦流管槍
Divided Spiral Tube Cooler-Vast Air

各部位名稱
• Item name



組立說明
• Assembly instruction



Hook up the magnet seat on the machine.
Move the adjust valve move the adjust valve.
直接將強力磁座吸附於機械壁上，固定可
攜式油霧冷風槍。

12 mm air tube
Recommend the aircompressor
10HP above, connect the air
dryer to get the best results
建議搭配空氣壓縮機10HP以上，
若經過空氣乾燥機再入氣，
效果更佳！

STC-V1LD Testing Statistics

Air temperature 28° C

入氣溫度 28° C

入氣壓力	總入氣量100%	冷風風量 43~100%	冷風溫度 (風量 43%)	入氣 冷風溫度差
Pressure	Air introduced in total 100%	Cold air in total 43~100%	Temperature Of Cold Air (Air Volume 43%)	cold air temperature difference
kg _f /cm ²	L/min	L/min	°C	°C
4	510	295~510	-4.2	32.2
5	540	310~540	-6.3	34.3
6	570	325~570	-8.4	36.4
7	595	345~595	-10.5	38.5
8	625	360~625	-12.6	40.6



STC-V1

STC-V2

STC-V1L

STC-V2D

STC-BW1

STC-BW2

STC-BW1L

STC-BW2D