TIKOAIR®



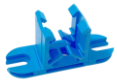
TP modular piping system
TP模块管路说明书

Tikoair 琛拓科技

INSTRUCTION MANUAL说明手册 TP PIPING SYSTEM TP管路系统

1 The components included in TP piping system enable you to create a piping system for compressed air and other non-corrosive fluids, which can be used in workshops or equipments, capable of withstanding pressures up to 20 bar (290 psi).
TP管道系统包括的组件可以帮助您创建用于压缩空气和其他非腐蚀性流体的管道系统，适用于车间或设备，能够承受高达20巴（290psi）的压力。

2 Part of components and tools 部分元件和工具

Modular aluminium pipe	模块化铝合金管	
Straight joint	直通接头	
Elbow	90度弯通接头	
Closed terminal	端头堵头	
Female outlet plate 3/8''	内螺纹平接接头	
Female threaded terminal 3/8''	内螺纹端头接头	
Snap clamp	管夹	
M2, M4 Allen key	M2\M4内六角扳手	
Drill	钻头	
Drill position tool	开孔定位卡板	
Deburring tool	毛刺刮刀	
Caulking tape	生料带	
Grease	凡士林	

3 The TP modular piping system products designed and manufactured by TIIKOAIR have undergone rigorous industrial inspections. Please strictly follow TIIKOAIR's installation process requirements for installation operations.

TP模块化管道系统产品是由琛拓公司设计和制造的，经过了严格的工业检验。请严格按照琛拓公司的安装工艺要求进行安装操作。

⚠Warning: TIIKOAIR will not be held responsible for any issues resulting from failure to follow the operating instructions in this manual. Please strictly comply with local laws and regulations when performing installation operations.

警告：如果未按照本说明书的操作指南执行操作，琛拓公司将不对由此导致的任何问题承担责任。在执行安装操作时，请严格遵守当地的法律法规。

⚠Warning: Proper personal protective equipment such as safety glasses and gloves should be worn during cutting and drilling processes. Flying debris can cause injury to the eyes and hands.

警告：在切割和钻孔过程中应佩戴适当的个人防护装备，例如安全眼镜和手套。飞溅的碎片可能会导致眼部和手部受伤。

4 Other optional accessories 更多其它配件

!!! For more information，please contact: support@tikoair.com

如需获取更多信息，请联系**: support@tikoair.com**

Mounting 安装 TP PIPING SYSTEM TP管路系统

① PIPES CUT TO SIZE 切管至需要的长度

Where necessary, the pipe can be cut to size with a hacksaw. In this case, after having made a clean cut, you need to deburr the new end of the pipe with the tool provided. The deburring will allow an easy insertion of the joints.

使用金属锯将管道按尺寸切割。在这种情况下，切割后需要用提供的工具去除管道端头的毛刺。去毛刺将使接头更容易插入。



Cut pipe
切 管



Deburring
刮除毛刺



Clean
清理铝屑

② STRAIGHT JOINT ASSEMBLY 直通安装

Grease both the inside of the pipe and the straight joint, press on the latter to insert it without any effort into the deburred pipe opening. A correct lubrication, not only facilitates the insertion of the joint but lubricates and prevents damage to the o-ring.

在管道的内部和直接接头上都涂抹油脂，将直接接头按压，无需费力地插入去毛刺的管道开口中。正确的润滑不仅有助于接头的插入，还可以润滑并防止O型密封圈受损。









③ CONNECT TWO PIPES WITH A STRAIGHT JOINT使用直接接头连接两根管道：

Insert the lubricated straight joint into two pipes; insert the clamping brackets in the dovetail grooves where the two pipes connect and tighten the screws.

1、将润滑过的直通接头插入两根管中间；2、在两根管道连接处的燕尾槽中装入卡板；3、用螺丝将卡板拧紧。






The screws should be tightened with the allen key. The recommended tightening torque for M5 screws is 8Nm. (Once the screw has come to a stop, make one more ¼ turn.)

螺丝应使用内六角扳手拧紧。M5螺丝的推荐拧紧扭矩为8Nm。当螺丝停止后，再多转动1/4圈。

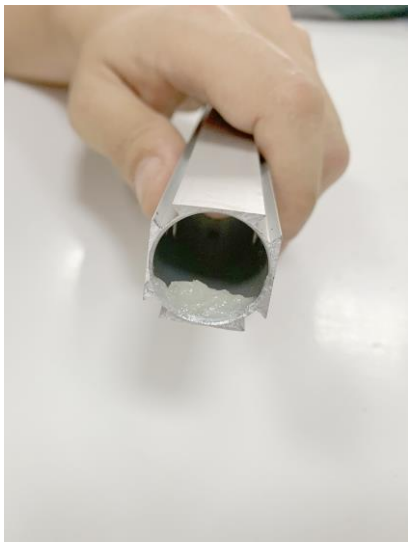
⚠ WARNING: After each joint is complete, check you have locked all the screws and you have not damaged the threads by over tightening.

警告：在每个接头完成后，请检查是否已锁紧所有螺丝，并确保未因过度拧紧而损坏螺纹。

④ PIPES COUPLING WITH "L" JOINT "L"型弯头的连接

Grease both the inside of the pipe and the "L" joint, press on the latter to insert it without any effort into the deburred pipe opening. A correct lubrication, not only facilitates the insertion of the joint but lubricates and prevents damage to the o-ring.

在管道的内部和 "L" 型接头上都涂抹油脂，将 "L" 型接头按压，无需费力地插入去毛刺的管道开口中。正确的润滑不仅有助于接头的插入，还可以润滑并防止 O 型密封圈受损。





After the two sections of pipe have been connected with the “L” joint, insert the provided “L” clamping bracket in the dovetail grooves and tighten the screws. The recommended tightening torque for M5 screws is between 8Nm. (Once the screw has come to a stop, make one more ¼ turn.)

在使用 ″L″ 型接头连接两段管道后，将配套的 ″L″ 型卡板支架插入燕尾槽，并拧紧螺丝。对于 M5 螺丝，推荐的拧紧扭矩为8Nm。（当螺丝停止后，再多转动1/4圈。）




⚠Warning: After each joint is complete, check you have locked all the screws and you have not damaged the threads by over tightening. The recommended tightening torque for the screws is 8Nm. (In practice, once the screw has come to a stop, make one more ¼ turn.)

警告：在每个接头完成后，请检查是否已锁紧所有螺丝，并确保未因过度拧紧而损坏螺纹。螺丝的推荐拧紧扭矩为8Nm。（在实际操作中，当螺丝停止后，再多转动1/4圈。）

⑤ INSTALLING A CLOSED TERMINAL 安装堵头

Grease both the inside of the pipe and the closed terminal, press on the latter to insert it without any effort into the deburred pipe opening. A correct lubrication not only facilitates the insertion of the joint but lubricates and prevents damage to the o-ring. Once inserted, secure the closed terminal with it’s clamp.

在管道的内部和堵头上都涂抹油脂，将堵头按压，无需费力地插入去毛刺的管道开口中。正确的润滑不仅有助于接头的插入，还可以润滑并防止 O 型密封圈受损。插入后，使用配套的堵头卡板锁定并紧固堵头。



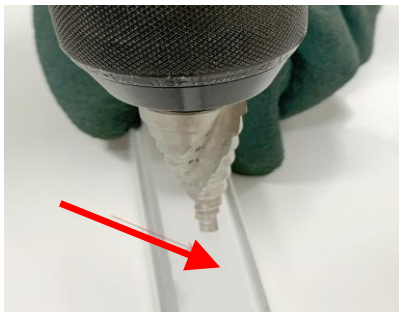



⑥ INSTALLING AN OUTLET PLATE 安装平接取气接头

Before installing the outlet plate, it is necessary to drill a hole at a suitable position on the pipe, and it is important to align the center of the hole with the center of the flat surface of the pipe. Use the positioning tool to mark the center of the hole and the installation position of the joint (as shown in Figures 2 and 3), drill the hole, and then remove any burrs. The diameter of the hole should not exceed 11 mm.

在安装平接取气接头之前，需要在管道上适当位置钻一个孔，并且重要的是将孔的中心与管道平面的中心对齐。使用定位工具标记孔的中心和接头的安装位置（如图2和图3所示），钻孔，然后去除任何毛刺。孔的直径不应超过11毫米。

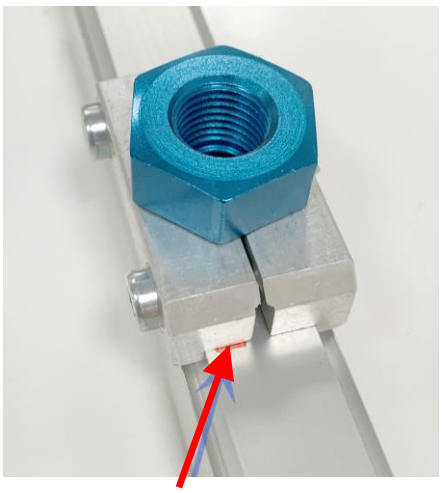






Once done, clean the hole. Attach the outlet plate inserting the clamp in the dovetail grooves and tighten the screws. The recommended tightening torque for the M5 screws is 8Nm. (Once the screw has come to a stop, make one more ¼ turn.)

完成后，清洁孔口。将平接接头安装在孔口上，将卡板插入燕尾槽中，并拧紧螺丝。对于M5螺丝，推荐的拧紧扭矩为8Nm。（当螺丝停止后，再多转动1/4圈。）

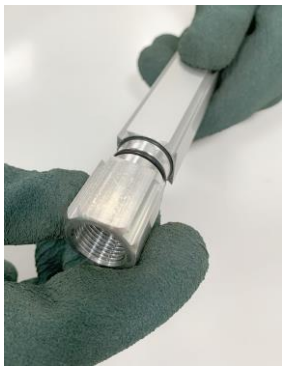



⚠Warning: After each joint is complete, check you have locked all the screws and you have not damaged the threads by over tightening.

警告：在每个接头完成后，请检查是否已锁紧所有螺丝，并确保未因过度拧紧而损坏螺纹。

⑦ INSTALLING A THREADED TERMINAL 安装螺纹接头

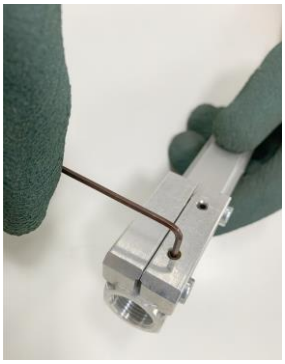
Grease the inside of the pipe and the threaded terminal, press on the latter to insert it without any effort into the pipe opening. Secure the threaded terminal with it's clamp.
在管道的内部和端头螺纹接头上都涂抹润滑油脂，将螺纹端头按压，无需费力地插入管道开口中。使用配套的卡板固定螺纹接头。



Inserting the threaded terminal
插入螺纹接头



Securing 1
锁紧螺丝1



Securing 2
锁紧螺丝2



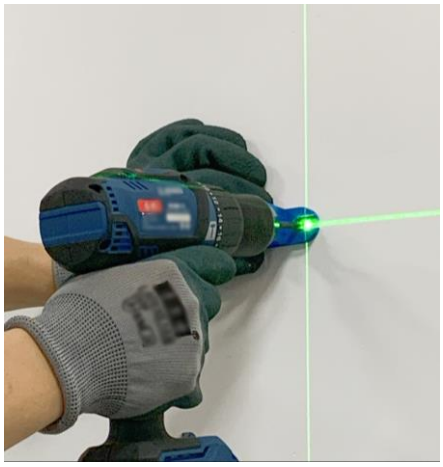
Inserting the push fitting
连接快插接头

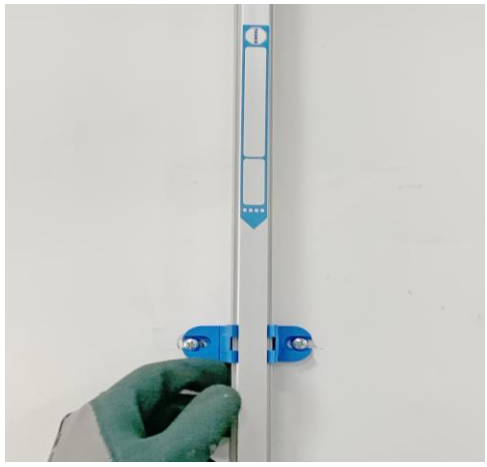
⚠ Warning: After each joint is complete, check you have locked all the screws and you have not damaged the threads by over tightening. The recommended tightening torque for the screws is 8Nm. (In practice, once the screw has come to a stop, make one more ¼ turn.)
警告：在每个接头完成后，请检查是否已锁紧所有螺丝，并确保未因过度拧紧而损坏螺纹。螺丝的推荐拧紧扭矩为8Nm。（在实际操作中，当螺丝停止后，再多转动1/4圈。）

⑧ PIPE FIXATION 管路固定

Draw the installation line on the wall or equipment: drill on the line just drawn and x the clamps securely to the wall. A snap clamp should be set every 2 or 2.5 metres. Once the clamps are installed simply press the pipe section against the clamp and with a slight twist insert it so that the retaining hooks enter perfectly the dovetails.
在墙壁或设备上画安装线：在刚刚画出的线上钻孔，并将管夹牢固地固定在墙上。每隔2米或2.5米设置一个快速管夹。安装好管夹后，只需将管道部分按压到管夹上，并稍微扭转，使其完美地卡入燕尾槽中，以确保管夹锁定住管道。







⑨ PRESSURE TESTING 压力测试

Inspect each part of the system to check that no screw is loose and the joints and ttings have been positioned correctly. Close the outlet valve of the compressor. Start the compressor. Slowly open the valve to allow the pipework system to pressurize. When the system pressure has reached 1 bar (15 psi) close the valve and inspect the entire system searching for air leaks. If a leak is found, depressurize the system safely before attempting to correct the leak. Only proceed if you are sure there are no leaks. Increase the system pressure incrementally until you have reached 1.5 times the operating pressure. Stop to check for leaks at regular intervals. Hold this pressure for about 1 hour. Inspect the entire system again to verify that there are no leaks or abnormal deformation of the joints. Drain the system slowly and with care.

检查系统的每个部件，确保没有松动的螺丝，接头和配件已正确安装。关闭压缩机的出口阀门。启动压缩机。缓慢打开阀门，让管道系统增压。当系统压力达到1巴（15psi）时，关闭阀门，并检查整个系统是否有气体泄漏。如果发现泄漏，请在尝试修复之前安全地释放系统压力。只有确定没有泄漏后才能继续操作。逐步增加系统压力，直到达到操作压力的1.5倍。定期停下来检查是否有泄漏。保持该压力约1小时。再次检查整个系统，确保没有泄漏或接头异常变形。慢慢而谨慎地卸掉系统中的压力。

⚠Warning: All testing and inspection must be carried only when no one else is present in the area. Wear appropriate personal protective equipment. Please follow all safety precautions.

警告：所有测试和检查必须在无其他人员在场时进行。请佩戴适当的个人防护装备。请遵守所有安全预防措施。

⑩ SYSTEM REPAIR OR MODIFICATIONS 系统维修或改造

⚠Warning: Before performing any repair, maintenance or modification, it is essential to depressurize the system.

警告：在进行任何维修、保养或修改之前，必须先释放系统压力。

⑪ CONTACT 联系

!!! For more information，please contact: support@tikoair.com

如需获取更多信息，请联系：support@tikoair.com

NOTE: