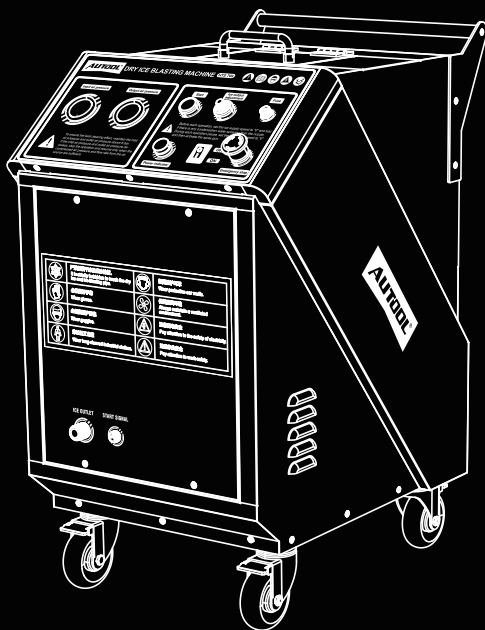


AUTOOL HTS709

汽车干冰清洗机

用户手册





深圳市偶然科技有限公司

广东省深圳市宝安区航城锦驰产业园

📍 Hangcheng Jinchí Industrial Park, Bao'an, Shenzhen, China

🌐 www.autooltech.com

✉ aftersale@autooltech.com

☎ +86-755-2330 4822 / +86-400 032 0988



RoHS
Made in China



COPYRIGHT INFORMATION

Copyright

- All rights reserved by AUTOOL TECH. CO., LTD. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of AUTOOL. The information contained herein is designed only for the use of this unit. AUTOOL is not responsible for any use of this information as applied to other units.
 - Neither AUTOOL nor its affiliates shall be liable to the purchaser of this unit or third parties for damages, losses, costs, or expenses incurred by the purchaser or third parties as a result of: accident, misuse, or abuse of this unit, or unauthorized modifications, repairs, or alterations to this unit, or failure to strictly comply with AUTOOL operating and maintenance instructions.
 - AUTOOL shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as original AUTOOL products or AUTOOL approved products by AUTOOL.
 - Other product names used herein are for identification purposes only and may be trademarks of their respective owners. AUTOOL disclaims any and all rights in those marks.
-

Trademark

Manual are either trademarks, registered trademarks, service marks, domain names, logos, company names or are otherwise the property of AUTOOL or its affiliates. In countries where any of the AUTOOL trademarks, service marks, domain names, logos and company names are not registered, AUTOOL claims other rights associated with unregistered trademarks, service marks, domain names, logos, and company names. Other products or company names referred to in this manual may be trademarks of their respective owners. You may not use any trademark, service mark, domain name, logo, or company name of AUTOOL or any third party without permission from the owner of the applicable trademark, service mark, domain name, logo, or company name. You may contact AUTOOL by visiting AUTOOL at <https://www.autooltech.com>, or writing to aftersale@autooltech.com, to request written permission to use materials on this manual for purposes or for all other questions relating to this manual.

CAUTIONS

Warning



Before using the instrument, please read this manual carefully for proper operation.

- ▶ If cleaning moving objects, firstly be sure to turn off the drive power of the objects to be cleaned.
- ▶ The temperature of dry ice is -78.5 degrees, and gloves must be worn for long-term contact with dry ice to prevent burns.
- ▶ The object to be cleaned and sprayed contains a lot of dust, so be sure to wear a protective mask.
- ▶ The spray head shall not against people, and the dry ice particles sprayed will hurt people.
- ▶ Cleaning with dry ice will produce certain noise, and it is necessary to wear noise-proof earmuffs during operation.
- ▶ It is forbidden to touch dry ice and the barrel of ice spraying gun.
- ▶ When adding dry ice, it must be kept clean and no other foreign objects fall into the equipment.
- ▶ This equipment uses solid CO₂ particles, and ventilation must be ensured when operating dry ice cleaning.
- ▶ Before working, it is necessary to check whether goggles, earmuffs, work clothes and gloves are worn.
- ▶ Before each operation, first set the ice feeding speed to "0" and test whether there is condensed water sprayed from the nozzle.
- ▶ When the operation is not finished and suspended, please adjust the ice feeding speed to "0", and then start the spray gun to spray for 30-50s to ensure that the residual ice in the feeding pipe is discharged and prevent ice blocking.
- ▶ To ensure that the compressed air pressure flow of the air source is sufficient, please choose the air source supply pipe with an outer diameter greater than DN20 and an air source pressure greater than 6bar, so as to achieve better cleaning effect.
- ▶ To prevent electric shock, please do not touch the working equipment in the wet place or operate the equipment in the rain.
- ▶ In case of equipment failure during operation, the power supply shall be disconnected immediately.

TABLE OF CONTENTS

Product Introduction	2
Overview	2
Applicable industry field	2
Function features	2
Technical parameters	3
Product Structure	4
Machine structure.....	4
Control panel introduction	5
Operations Instruction	6
Equipment debugging	6
Adjusting the volume of dry ice blasting	6
Final work.....	6
Common Problems And Troubleshooting	7
Common faults.....	7
Analysis and treatment method.....	7
Maintenance Service	9
Maintenance.....	9
Warranty	10
Warranty access.....	10
Disclaimer	10
Return & Exchange Service	11
Return & Exchange	11

PRODUCT INTRODUCTION

Overview

Dry ice cleaning uses compressed air as power to spray dry ice particles to the surface of the cleaned object at supersonic speed. However, it does not rely solely on the kinetic energy of dry ice particles, but uses the ultra-low temperature performance of dry ice to achieve the purpose of decontamination.

Dry ice spraying medium - dry ice particles accelerate in the high-pressure air flow and impact the surface to be cleaned. The unique feature of dry ice cleaning is that the dry ice particles are vaporized at the moment during cleaning, and the momentum of dry ice disappears at the moment of impact. The heat exchange between dry ice particles and the cleaning surface occurs rapidly, resulting in the rapid sublimation of solid CO₂ into gas, and the volume expansion of dry ice particles is nearly 800 times within a few thousandths of a second, thus causing "micro explosion" at the impact point. Due to the volatilization of CO₂, no secondary waste is generated during the dry ice cleaning process, and only the dirt that needs to be cleaned.

Applicable industry field

- Dry ice blasters are suitable for removing stuck and flaking formulations, silicone and rubber residues, oils, greases, turpentine, asphalt, dirt, inks, resins, adhesives, waxes and paints, chewing gum, and graffiti. It has been widely used in rubber, casting, automobile, marine, electric power, chemical, printing, plastic, food, pharmaceutical and aviation fields.
-

Function features

- **Effective cleaning equipment for improving productivity.**
The main function of the dry ice blasters is to clean different equipment. On the one hand, dry ice cleaning can avoid the impact of shutdown on production, and at the same time, it can reduce the disassembly and damage of equipment, fundamentally protect the equipment and improve productivity.
- **Avoid personal injury caused by hazardous substances.**
Cleaning with dry ice instead of toxic chemical to avoid long-term adhesion of undesirable substances to the equipment, affecting the overall operation and causing injury to

personnel.

- **Quickly remove all kinds of intractable dirt.**

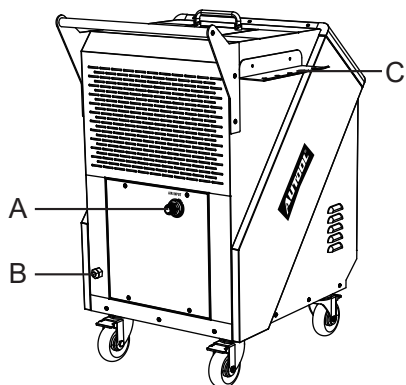
The use of dry ice blaster can thoroughly remove the attached dirt and protect the equipment to avoid affecting the operation and use of the equipment during cleaning.

Technical parameters

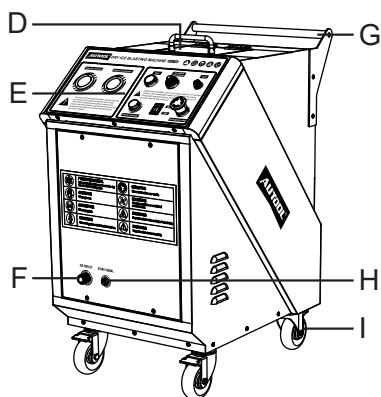
Power Supply	110V / 220V
Dry Ice Volume	7.5kg
Compressed Air Flow	>1~2m³/min
Dry Ice Particle State	3mm
Air Supply Pressure	0.3~1.0Mpa
Dry Ice Blasting Volume (Adjustable)	0~3.2Kg/min
Product Size	635×517×815mm
Package Size	600×750×1060mm

PRODUCT STRUCTURE

Machine structure

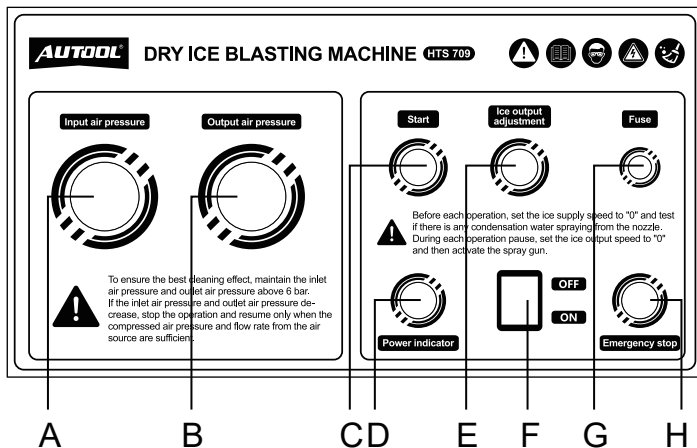


A	Air source interface	B	Power cord
C	Hanger of spray gun pipe		



D	Dry ice tank	E	Control panel
F	Ice outlet	G	Handle
H	Signal Line interface	I	Caster

Control panel introduction



A	Input air pressure	B	Output air pressure
C	Start	D	Power indicator
E	Ice output adjustment	F	Power switch
G	Fuse	H	Emergency stop

OPERATIONS INSTRUCTION

Equipment debugging

- Connect the host to the external air source and external power supply. Check whether the data of the air pressure indicator is normal and whether the power connection is normal (make sure the power supply is grounded normally).
 - Make preparations for testing machine, including connecting the machine and accessories properly, checking whether the parts are loose, and cleaning the unnecessary items placed on the machine body or the work area.
 - Turn on the power switch, then turn it to start mode first. And then press the start switch on the handle to run, adjust the dry ice volume from 0 to its maximum, check whether there is any abnormality, and then put dry ice materials into the machine for trial operation.
-

Adjusting the volume of dry ice blasting

- Add an appropriate volume of dry ice and cover the lid.
 - According to the required cleaning degree, turn the dry ice volume adjusting controller to achieve the best effect as needed (it is recommended to set it to "5" first and adjust it according to the cleaning effect).
 - If the barrel with smaller inner diameter is adopted, it is recommended to set it to "3" and then increase it as appropriate.
 - After confirmation, align the spray gun with the parts to be cleaned, and press the start switch on the handle to enter the cleaning procedure.
-

Final work

- Turn the dry ice volume adjusting controller to "0" and start the spray gun to spray for 30-50s until no water is sprayed.
- The dry ice residue can be removed by extending the product's spraying time, and manual cleaning is required if necessary.
- Turn off the power switch, disconnect the air source, and store the spray gun and accessories.

COMMON PROBLEMS AND TROUBLESHOOTING

Common faults

► The ice is blocked in the ice hopper in the dry ice box.

Analysis and treatment method:

- Stop the operation and open the cover plate to see if there is too much dry ice. If there is too much, take out part of the dry ice and then continue.
 - Check whether the vibration pump works. If not, contact the manufacturer for replacement.
 - When dry ice is filled into the funnel, it will instantly take away the air inside the funnel to form condensed caking. It is necessary to take the steel bar at the center of the funnel to move up and down manually.
-

Common faults

► The dry ice pipe is vented but does not discharge ice (internal ice blockage).

Analysis and treatment method:

- The ice blockage of the dry ice pipe is due to intermittent use and intermittent shutdown, and then immediately shut down. The residual dry ice in the ice outlet pipe is mixed with compressed air to cause freezing. If this is the case, first adjust the ice discharge volume to 0, then turn on the spray gun switch and continue to start the machine for 3 minutes, then adjust the ice discharge volume to 20% - 30%, and then see the effect of ice discharge.
-

Common faults

► The dry ice pipe leaks ice and air.

Analysis and treatment method:

- Check the air source to ensure that the compressed air supplied to the dry ice blaster is free of oil and water.
 - The dry ice pipe has been used for a long time, and the dry ice has been rubbing against the pipe wall for a long time, resulting in the internal thinning. Contact the manufacturer for replacement.
-

Common faults

Analysis and treatment method:

► **The cleaning effect is not perfect, carbon deposits and other intractable stains are not cleaned thoroughly.**

- If the cleaning is not complete, first check whether the air pressure and flow of the external air source are insufficient. The working pressure of the dry ice machine is not less than 6bar and the flow rate is not less than 1m³/min. If the air supply pipe is too thin, too long, or directly connected to the quick interface, it will cause the pressure of the pipeline to drop too much. In this case, it is considered to directly connect the blaster to the main air supply pipe before operation.

MAINTENANCE SERVICE

Our products are made of long-lasting and durable materials, and we insist on perfect production process. Each product leaves the factory after 35 procedures and 12 times of testing and inspection work, which ensures that each product has excellent quality and performance.

Maintenance To maintain the performance and appearance of the product, it is recommended that the following product care guidelines be read carefully:

- Be careful not to rub the product against rough surfaces or wear the product, especially the sheet metal housing.
- Please regularly check the product parts that need to be tightened and connected. If found loose, please tighten it in time to ensure the safe operation of the equipment. The external and internal parts of the equipment in contact with various chemical media should be frequently treated with anti-corrosion treatment such as rust removal and painting to improve the corrosion resistance of the equipment and extend its service life.
- Comply with the safe operating procedures and do not overload the equipment. The safety guards of the products are complete and reliable.
- Unsafe factors are to be eliminated in time. The circuit part should be checked thoroughly and the aging wires should be replaced in time.
- Adjust the clearance of various parts and replace worn (broken) parts. Avoid contact with corrosive liquids.
- When not in use, please store the product in a dry place. Do not store the product in hot, humid, or non-ventilated places.

WARRANTY

From the date of receipt, we provide a three-year warranty for the main unit and all the accessories included are covered by a one-year warranty.

Warranty access

- The repair or replacement of products is determined by the actual breakdown situation of product.
- It is guaranteed that AUTOOL will use brand new component, accessory or device in terms of repair or replacement.
- If the product fails within 90 days after the customer receives it, the buyer should provide both video and picture, and we will bear the shipping cost and provide the accessories for the customer to replace it free of charge. While the product is received for more than 90 days, the customer will bear the appropriate cost and we will provide the parts to the customer for replacement free of charge.

These conditions below shall not be in warranty range

- The product is not purchased through official or authorized channels.
- The product breakdown because the user does not follow product instructions to use or maintain the product.

We AUTOOL pride ourselves on superb design and excellent service. It would be our pleasure to provide you with any further support or services.

Disclaimer

All information, illustrations, and specifications contained in this manual, AUTOOL reserves the right of modify this manual and the machine itself with no prior notice. The physical appearance and color may differ from what is shown in the manual, please refer to the actual product. Every effort has been made to make all descriptions in the book accurate, but inevitably there are still inaccuracies, if in doubt, please contact your dealer or AUTOOL after-service centre, we are not responsible for any consequences arising from misunderstandings.

RETURN & EXCHANGE SERVICE

Return & Exchange

- If you are an AUTOOL user and are not satisfied with the AUTOOL products purchased from the online authorized shopping platform and offline authorized dealers, you can return the products within seven days from the date of receipt; or you may exchange it for another product of the same value within 30 days from the date of delivery.
- Returned and exchanged products must be in fully saleable condition with documentation of the relevant bill of sale, all relevant accessories and original packaging.
- AUTOOL will inspect the returned items to ensure that they are in good condition and eligible. Any item that does not pass inspection will be returned to you and you will not receive a refund for the item.
- You can exchange the product through the customer service center or AUTOOL authorized distributors; the policy of return and exchange is to return the product from where it was purchased. If there are difficulties or problems with your return or exchange, please contact AUTOOL Customer Service.

China	400-032-0988
Oversea Zone	+86 0755 23304822
E-mail	aftersale@autooltech.com
Facebook	https://www.facebook.com/autool.vip
YouTube	https://www.youtube.com/c/autooltech

目 录

版权信息.....	13
版权.....	13
注册商标.....	13
注意事项.....	14
警告.....	14
产品简介.....	15
原理简介.....	15
适用行业领域.....	15
功能特点.....	15
技术参数.....	16
产品结构.....	17
结构图.....	17
控制面板说明.....	18
操作说明.....	19
设备调试.....	19
调节干冰喷射量.....	19
结束作业.....	19
常见问题及分析处理方法.....	20
常见故障及分析处理方法.....	20
维修保养服务.....	21
维修保养.....	21
保修服务.....	22
保修方式.....	22
声明.....	22
退换货服务.....	23
退换货.....	23

版权信息

版权

- 版权所有! 未征得深圳市偶然科技有限公司的书面同意, 任何公司或个人不得以任何形式 (电子、机械、影印、录制或其他形式) 对本说明书进行复制和备份。本手册专为偶然公司产品的使用而计, 对于将之用于指导其他设备操作而导致的各种后果, 本公司不承担任何责任。
- 因使用者个人或第三方的意外事故, 滥用、误用该设备, 擅自更改, 或修理该设备, 或未按偶然公司的操作与保养要求而导致设备损坏、遗失所产生的费用及开支等, 偶然公司及其分支机构不承担任何责任。
- **正式声明:** 本说明书所提及之其他产品名称, 目的在于说明该设备如何使用, 其注册商标所有权仍属原公司。
- 本设备供专业技术人员或维修人员使用。

注册商标

偶然公司已在中国及海外若干国家进行了商标注册, 其标志为 **AUTOOL**。本手册所提及之偶然公司其它商标、服务标志、域名、图标、公司名称均属偶然及其下属公司之产权。在偶然公司之商标、服务标志、域名、图标、公司名称还未注册之国家, 偶然公司声明其对未注册商标、服务标志、域名、图标、公司名称之所有权。本手册所提及之其它产品及公司名称的商标仍属于原注册公司所有。在未得到拥有人的书面同意之前, 任何人不得使用偶然公司或所提及的其它公司之商标、服务标志、域名、图标、公司名称。

您可以访问偶然网址: www.autooltech.com, 或发送邮件至: aftersale@autooltech.com, 与偶然公司进行联系, 征得其手册使用权之书面同意。

注意事项

警告

⚠ 在使用仪器之前，请仔细阅读本说明书，以便正确操作！

- ▶ 如清洁移动物体一定要先关掉被清洁物体的驱动电源。
- ▶ 干冰的温度为-78.5度，手长期接触干冰一定要戴手套，以防灼伤。
- ▶ 清洗喷洒出的物质含有大量灰尘，一定要戴防护面具。
- ▶ 喷射口不能指向人，喷射的干冰粒会对人造成伤害。
- ▶ 干冰清洗会产生一定的噪音，操作时需要戴防噪音的护耳罩。
- ▶ 严禁触摸干冰及喷冰枪管。
- ▶ 倒入干冰时必须要保持干净，无其他异物掉进干冰槽内。
- ▶ 本产品所选用的是固态CO₂颗粒，操作干冰清洗时必须保证通风。
- ▶ 在进行作业前，需要检查是否穿戴好护目镜、耳罩，工作服、手套。
- ▶ 每次作业前，先将供冰速度设定为“0”，测试看喷嘴中是否有冷凝水喷出。
- ▶ 每次作业未结束，中途暂停时，请先将出冰速度调为“0”，然后开启喷枪喷射30-50s，确保出冰管内残冰喷出，防止堵冰。
- ▶ 为保证气源压缩空气压力流量充沛，请选用气源供应管道大于DN20外径，气源压力大于6bar，这样清洗效果更佳。
- ▶ 为了防止受电击，不要在潮湿的部位接触工作中的设备或在雨中操作设备。
- ▶ 在进行作业中，遇到设备故障，应立即断开电源。

产品简介

原理简介

干冰清洗利用压缩空气作为动力，把干冰颗粒以超音速喷射至被清洗对象表面，但并非单依赖干冰颗粒的动能，而是利用干冰的超低温性能达到除污目的。

干冰喷射介质干冰颗粒在高压气流中加速，冲击待清洗表面。干冰清洗的独特之处在于干冰颗粒在冲击瞬间气化，干冰的动量在冲击瞬间消失，干冰颗粒与清洗表面间迅速发生热交换，致使固体CO₂迅速升华变为气体，干冰颗粒在千分之几秒内体积膨胀近800倍，这样在冲击点造成“微型爆炸”。由于CO₂挥发掉了，干冰清洗过程中没有产生任何二次废物，留下需要清理的只是清除下来的污垢。

适用行业领域

- 干冰清洗机适合清除粘连和脱落的制剂、硅树脂和橡胶残留、油、润滑脂、松脂、沥青、污垢、油墨、树脂、粘合剂、蜡和油漆、口香糖和涂鸦等。已经被广泛地应用在橡胶、铸造、汽车、船舶、电力、化工、印刷、塑料、食品、制药和航空等领域。
-

功能特点

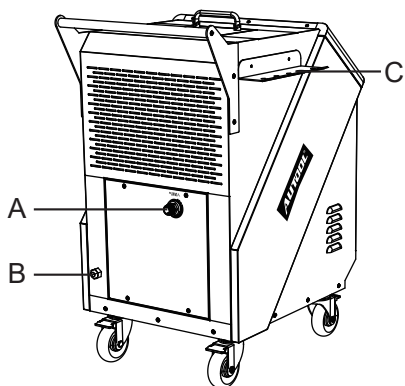
- 有效清洗设备，提高生产率
干冰清洗机的主要功能就是对不同的设备进行清洁，使用这种方式清洁，一方面可以避免停工影响生产，同时还能够减少对设备的拆卸和损坏，在根本上对设备进行了保护并提高了生产率。
- 避免危险物对人员造成伤害
CO₂是一种无毒的物质，用干冰清洗替代有毒化学物质清洗，避免不良物质长期附着在设备上影响整体的运行以及对人员造成伤害。
- 快速清除各种顽固性污垢
干冰清洗机的使用能够很好的将附着的污垢彻底地清除，同时还能够对设备进行很好的保护，避免在清洗中影响到设备的运转和使用。

技术参数

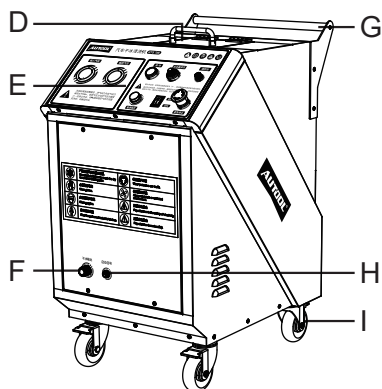
电源	110V / 220V
干冰容量	7.5kg
压缩空气流量	>1~2m ³ /min
干冰颗粒状态	3mm
供气压力	0.3~1.0Mpa
干冰喷射量 (可调)	0~3.2Kg/min
产品尺寸	635×517×815mm
包装尺寸	600×750×1060mm

产品结构

结构图

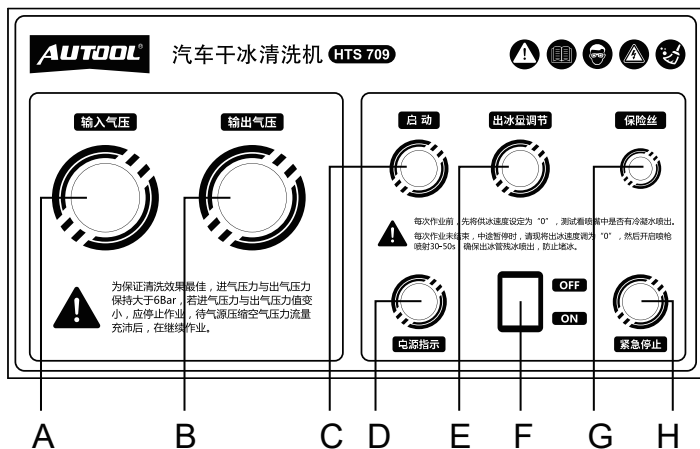


A	气源输入口	B	电源
C	喷枪管挂架		



D	干冰槽	E	操作面板
F	干冰输出口	G	推手
H	信号接口	I	脚轮

控制面板说明



A	输入气压表	B	输出气压表
C	启动	D	电源指示灯
E	出冰量调节	F	电源开关
G	保险丝	H	紧急停止

操作说明

设备调试

- 将主机连接好外接气源和外接电源。检查气压指示表各数据是否显示正常，电源接入是否正常（一定要确认电源的接地正常）。
 - 做好试机准备工作，包括将机器各部位完整连接好，检查零件是否有松动，清理放在机身上或工作区的杂物。
 - 打开电源开关，先旋扭到启动模式，再按下手柄上的启动开关试运行，按从0到最大调整干冰量调节控制器，确定无异常的情况，再放入干冰物料试机。
-

调节干冰喷射量

- 加入适量的干冰，盖好盖板。
 - 根据清洗程度，旋扭干冰量调节控制器，达到最佳效果为宜（建议先设定为“5”，视清洗效果调整）。
 - 如选用的是较小内径的枪管，建议先设定为“3”，再视情况增加。
 - 确认完成后，将喷枪对准需要清洁部位，按下手柄上的启动开关进入清洗程序。
-

结束作业

- 将干冰量调节控制器旋扭至“0”，开启喷枪喷射30-50s，直到没有水分喷出。
- 产品通过延长喷射时间自行清理干冰残留物，必要时需手动清洁。
- 关闭电源开关，断开气源，收纳好喷枪及配件。

常见问题及分析处理方法

常见故障

► 干冰箱内盛冰漏斗不下冰

分析及处理方法

- 停止作业，打开盖板，看是否是干冰装填过多，如果过多就将干冰取出一部分，而后作业。
- 查看震动泵是否工作，如不工作，联系厂商更换。
- 干冰在漏斗填入时，瞬间带走漏斗内部的空气形成冷凝结块，需要主动地在漏斗正中心拿钢条手动辅助上下活动一下。

常见故障

► 干冰管出气不出冰（内部堵冰）

分析及处理方法

- 干冰管堵冰是由于间歇性使用间歇性停机，而后立即停机，出冰管内残留的干冰与压缩空气混合导致结冰。如确实是这种作业工况：先将出冰量调节为0，然后开启喷枪开关持续开机保持3分钟，然后将出冰量调节为20%-30%，然后再看出冰效果。

常见故障

► 干冰管漏冰、漏气

分析及处理方法

- 排查气源，确保供入干冰清洗机的压缩空气无油、无水。
- 干冰管使用时间过长，干冰长时间与管壁摩擦，内部变薄导致，联系厂商进行更换。

常见故障

► 清洗效果不佳，积碳等较顽固污渍清洗不彻底

分析及处理方法

- 清洗不彻底，先排查外接气源空气压力、流量是否不足，干冰机工作压力不低于6bar，流量不低于1m³/min。供气管太细、太长，或者直接接入快捷接口，都会导致管道压降太大，这种情况就考虑清洗机直接对接主气源管道，进行作业。

维修保养服务

您所拥有的AUTOOL产品选用持久耐用的材料，AUTOOL坚持精益求精的生产工艺，每一件产品出厂都经过35道工序及12次质检工作，从而确保每一件产品都拥有卓越的品质及性能。所以您的AUTOOL产品值得您定期维护保养，使其产品将能够长期稳定地工作。

维修保养

维护保养是为了保持产品性能和外观，我们建议您仔细阅读以下产品保养指南：

- 注意不要将产品与粗糙表面摩擦或揉搓产品，特别是钣金外壳。
- 对产品中需要紧固和连接的部位经常进行检查，如发现松动应及时紧固，以保证产品的安全运行。对与各种化学介质接触的产品外部和内部零件要经常进行除锈、喷漆等防腐处理，以提高产品的抗腐蚀能力，延长产品的使用寿命。
- 遵守安全操作规程，不超负荷使用产品。产品的安全防护装置齐全可靠，及时消除不安全因素。电路部分彻底检查，老化电线要及时更换。
- 定期清洗和更换易耗部件；调整各部位配合间隙和更换磨损（已坏）部件清洁时，避免产品接触带腐蚀性的液态物品。
- 不使用时，请将产品存放于干燥的位置。不要将产品存放在高温、潮湿或不通风的地方。

保修服务

AUTOOL主机自客户签收日起享有3年保修期。其所含附件自客户签收日起享有1年保修期。

保修方式

- 根据具体的故障情况对产品进行免费修理或更换；
- 我方保证所有更换的部件、附件或产品都是全新；
- 在客户收到产品90天内出现故障同时提供视频和图片，我方承担运费并免费提供相应配件给客户更换。收到产品超过90天，客户承担相应的费用，我方免费提供配件给客户更换；

以下情况不在免费保修范围：

- 非正规渠道购买AUTOOL的产品；
- 未按产品说明书要求使用和维护造成的损坏；

在AUTOOL，我们为精湛的设计和卓越的服务感到自豪。我们很乐意为您提供更多的支持或服务。

声明

偶然公司保留更改产品设计与规格的权利，届时恕不另行通知。实物外观与颜色可能与说明书中显示的有差别，请以实物为准。我们已尽最大努力力求使书中所有描述准确，但仍难免有不妥之处。如有疑问，请联系经销商或偶然售后服务中心。本公司对产品拥有最终解释权，不承担任何因误解而产生的后果。

退换货服务

退换货

- 如果您对从线上授权购物平台和线下授权经销商所购买的 AUTOOL 产品不满意, 根据《AUTOOL 全球销售条款》, 您可以自收到产品之日起七日内退货; 或者在产品交付之日起的 30 日内调换等值的其他产品。
- 退回及调换的产品必须处于完全可销售状态, 并附上相关销售单单据, 所有相关配件、纸质发票 (如有)。
- AUTOOL 将会对寄回退货的商品进行检查, 以确保其处于完好无损的状态并且符合条件, 相关条件详情请参阅《AUTOOL 全球销售条款》。任何未通过检查的商品将退还给您, 您将不会获得商品退款。
- 您可以通过客户服务中心或 AUTOOL 授权经销商调换产品; 退换货原则为从哪里购买, 就从哪里退换货。如果您退换货遇见困难或者阻碍, 请联系 AUTOOL 客户服务中心。通过客户服务中心退换货时, 我们建议您通过下面的方式进行:

中国区域致电	400-032-0988 / 18929303778
售后微信号	18929303778
海外区域致电	+86 0755 23304822
E-mail	aftersale@autooltech.com
Facebook	https://www.facebook.com/autool.vip
YouTube	https://www.youtube.com/c/autooltech

- 如您的退换货得到确认, 您将收到确认信息和邮件。