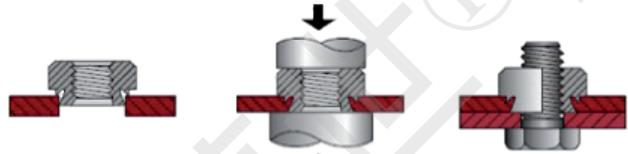


质量, 效率, 提升表面质量, 优化人力

Quality, efficiency, damage reductions, labour saving



压铆工艺是一种在压铆机的特殊冲压力作用下将专用压铆紧固件铆接或涨铆方式“冷焊”在金属板件上的表面安装技术，可提供薄金属钣金件牢固的、可重复使用的永久螺纹和安装的一种新工艺，并且适用于PCB板材料等其它可延展的或非塑形薄的材料。

压铆机的使用可以节约大量的人工成本。压铆这种先进的自铆工艺仅需一次即可完成替代传统的焊接、翻孔、攻丝等多道加工工序的生产工艺。因此对生产线的质量和效率进行大幅提升。其特点是能够优化劳动力，提高质量，提升生产效率。另外压铆机能大量节省加工准备工作时间并不损伤工件表面镀层。我们除了提供标准压铆设备外，也可以定制特殊设备以适用于更广泛更专业的领域。

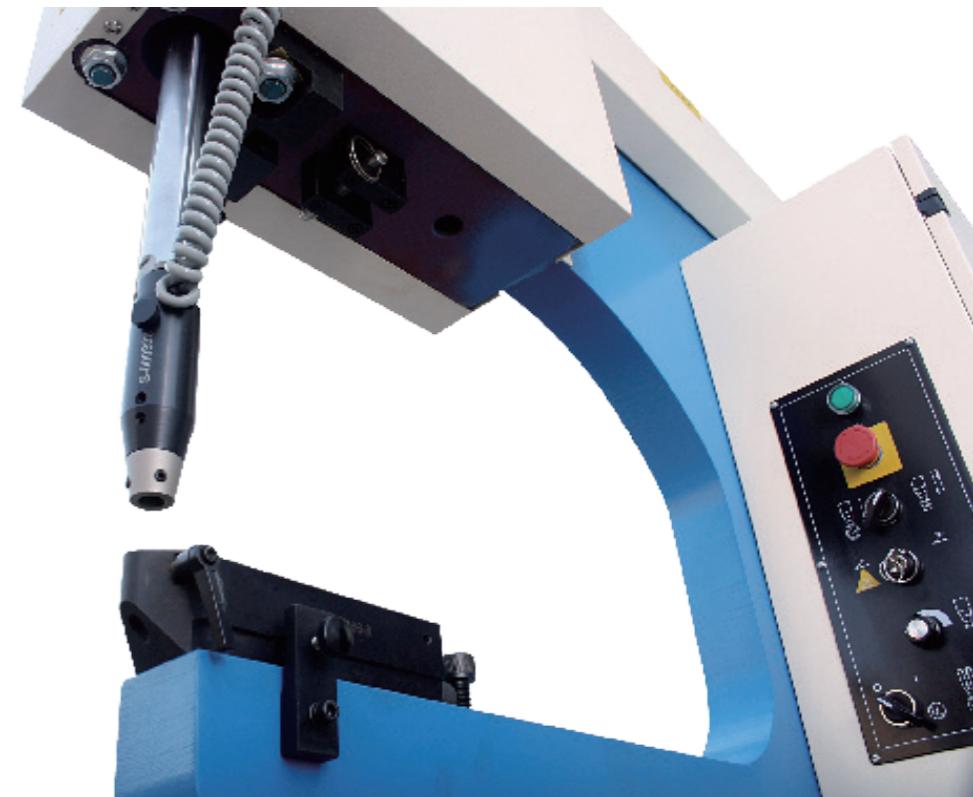
Fasteners utilize self-clinching, broaching, flaring, surface mount, technology to provide strong, reusable, and permanent threads and mounting points in thin sheet metal, P.C. board materials, and other ductile or non-ductile thin material.

Insertion machine is not a part of the manufacturing process where manufacturers want to invest a great deal of human resources. It is often monotonous work and can dramatically impact on production line **quality** and **efficiency**. The machine **optimize labor**, improve quality and increase productivity. The insertion machine also **reduce part handling and part damage**, and can be also customized to suit highly specialized applications.



效率提升30%
质量100%
CE标准

Efficiency +30%
Quality 100%
CE standard



机器的基本特点：

- 全新升级的整体式高刚性加厚机架结构, 有效提升了喉口的抗形变能力
- 操作简便, 多模式选择的人性化设计
- 100%防压手安全系统
- 采用全部CE标准的电器、液压、气动元器件
- LAG特殊设计及专业生产的油缸确保即使在恶劣的工作环境下仍然长期稳定的工作
- 液压系统采用台湾Winner阀组保证设备24小时高可靠性工作, 可输出压力重复精度±1%, 并可按需要自由选择保压时间, 确保压铆工件100%合格
- 可以选配自动送料系统, 无铆连接工具等

Fastener Insertion Machines



技术特点 TECHNICAL FEATURES

全行程施加压力 - 工作中的任何行程点施加工作压力，安全系统都可以发挥作用，并且该系统无需操作者进行任何调整，故不会增加设备初始化设置时间和模具更换时间

节能环保 - 全液压驱动相对气动和液气混动降低能耗约40%，大大降低了设备的能耗成本，机器只有在压接瞬间施加全负荷，待机时只有15%的能量消耗

J型钩支架 (MSTP33件套手动工具) - J型钩实现了折弯之后再压铆，让您的折弯变得更简单

操作简单 - 仅需踩下脚踏开关后，选择压力测试模式及调整旋钮，能够让您在10秒之内设定到正确的铆接压力，即使没有操作经验的工人也很容易

正向限位 - 正向限位是专门为软基材设计的，如：PC板，塑料，玻璃和铝，它使得在压铆紧固件时板材不会被压变形或压碎

客户化设计和研发 - LAG拥有一支专业的技术团队，能够针对客户在生产中的特殊工件研发生产出切合生产实际的客户化工具，为客户解决生产中的所有压铆问题

PRESSURE DURING THE WHOLE TRIP - Pressure on the any point of processing, security system can use, and the system does not need to make any adjustment, it does not increase the time of device initialization and tool change setting.

ENERGY SAVING AND ENVIRONMENT PROTECTION - Hydraulic drive can reduce Energy consumption by about 40% relatively pneumatic and hydraulic drive, greatly reducing the Energy costs of equipment, the machine only press instantly applied in the full-load, standby power consumption is only 15%.

J TYPE HOOK BRACKET (MSTP 33 PIECES OF HAND TOOLS)
- J-hook realized insertion after bending, allowing you to bending easier.

EASY OPERATION - Proprietary stress test adjustment button, allowing you to find the right riveting pressure within 10 seconds the novice can easily operate.

FORWARD LIMITED - Forward limited is specifically designed for the soft material, such as: PC board, plastic, glass and aluminium, which make fasteners plates will not be deformed or crushed.

CUSTOMIZED DESIGN AND DEVELOPMENT - LAG has professional technical team, to produce special pieces suitable for production customized tools for customer to solve production problems all insertion.



防压手安全系统 SAFETY SYSTEM

安全可靠---压铆机的防压手安全系统确保操作者在设备选择导电或非导电工作模式下的全方位安全保护，极大地提升了操作人员的安全信心从而提高工作效率，杜绝安全隐患！

- 无需其它防护装置，操作者也可以快速安全地工作
- 防压手安全系统无需任何调整，因此无需耗费调整时间
- 安全系统与机床的工作是独立的
- 在工作过程中即使要调整压力大小都无需另外对防压手安全系统做任何调整，只要踩脚踏开关就可以开始工作
- 防压手安全系统能轻松确保操作人员长时间持续的精确压铆工作
- 油缸行程的任意位置都能调节压力

SAFE AND RELIABLE - Security system of Fastener Insertion Machine make the operator to full protection on the conductive non-conductive work mode, which greatly enhanced the confidence and plug efficiency for the operator. No security risks.

- Allow the operator to work fast and safety without use of protections;
- No lost of time due to the adjust of the safety system;
- The safety function is independent from the machine work;
- It is possible to adjust the power during the work without interfere with the safety system; The start of the working cycle is by pedal;
- Safety on the apply a constant and correct fastener power;
- Adjustable power in every point of the cylinder stroke.



* 本图片演示的机床防压手功能是指在加工过程中的特殊安全模式，仅作参考，严禁模仿

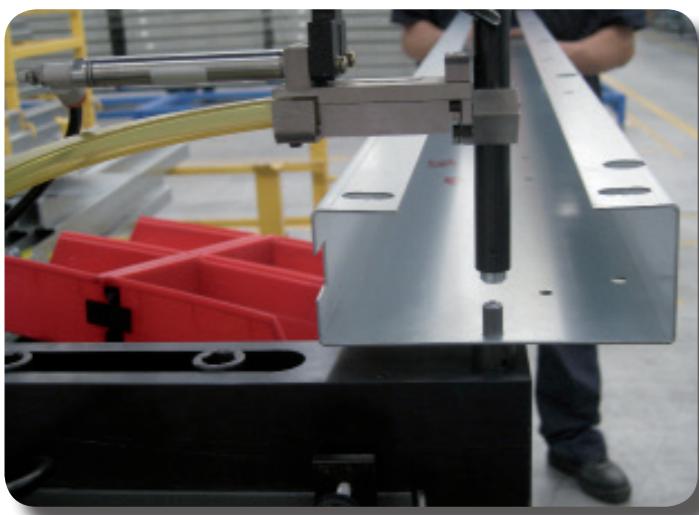
* This picture demonstrates the anti-pressure hand function of the machine refers to the special security mode of processing , only for reference, prohibited imitation

技术参数

TECHNICAL SPECIFICATION

416 Plus

	416 PLUS	618 PLUS	824PLUS
最大压力载荷 Force	44KN	54KN	72 KN
喉深 Throat Depth	406mm	450mm	610mm
喉高 Throat Height	340mm	381mm	421mm
行程长度可否调整 Stroke Length Adjustable	Yes	Yes	Yes
每小时压铆数量 Numbers Of Inserts Per Hour (Manually)	1200	1200	1200
压力重复精度 Ram Force Repeat Accuracy	±1%	±1%	±1%
液压手安全系统 Safety Device	Yes	Yes	Yes
手动转塔(选配) Manual Turret Insertion System(Optional)	Yes	Yes	Yes
自动送料切换(选配) Automatic Feeding System(Optional)	No	Yes	Yes
无铆连接工具(选配) Clinching Joint System(Optional)	Yes	Yes	Yes
保压时间 Dwell time	No	标准配置 Standard	标准配置 Standard
正向限位 Forward Limited	No	选配 Option	选配 Standard
批量计数(选配) Batch Counter(optional)	No	Yes	Yes
功率 Main power	1.5kw	2.2kw	3.75KW
油箱容量 Tank Capacity	38L	38L	76L
标准电压 Power Supply	220V 单相 single phase 50HZ	380V 三相 3phase 50HZ	380V 三相 3phase 50HZ
外形尺寸(宽度*深度*高度) Dimension(W*D*H)mm	740*840*1650	800*810*2100	1025*960*2500
机床净重 Net Weight (Kg)	335	610	950



主要特点:

- 高刚性整体式加工的机身结构，压铆工作过程中无变形，确保压铆精度
- 按人体工程学设计的机身结构及完美的模具组合，简便灵活的操作模式，一个人就可以方便的完成大部分复杂的压铆工作
- 快速设置最佳的目标压铆力并保证压力重复精度达到±1%
- 冲压载荷： 最大44KN
- 喉深： 406mm
- 100%防压手安全系统
- 最新设计的高可靠性、高稳定的节能液压系统
- 使噪音降低到35分贝
- 最大可以压接M8碳钢螺母于碳钢基材
- 随机配置标准工具/模具架
- 标准颜色： 蓝白
- 标准电压： 单相220V/50Hz

Main Feature:

- High stiffness, structure, high stability, less deformation, less vibration, high accuracy
- Ergonomic design frame and different size tooling package with easy operation panel to meet most of the complex insertion process by single operator
- Quick press force setting and repeatability ±1%
- Force range MAX 44KN
- Throat depth 406 mm
- 100% safety system
- Energy saving re-design reliability and energy efficiency of a full hydraulic system
- Noise reduced to 35db
- Possibility to insert M8 nut with the mild steel
- Equipped with standard tooling storage
- Blue & white color
- Standard power supply 1 phase 220v/50hz



订货号

Machine Order Number

Item	Part Num.	Description 货物名称
1	S-000300-BW	416 plus 压铆机
2	S-000364	MSTP 33 pieces Metric Standard Tooling Package/33 33件套工具组合



618 Plus

主要特点：

- 高刚性整体式加工的机身结构, 压铆工作过程中无变形, 确保压铆精度
- 按人体工程学设计的机身结构及完美的模具组合, 简便灵活的操作模式, 一个人就可以方便的完成大部分复杂的压铆工作
- 快速设置最佳的目标压铆力并保证压力重复精度达到±1%
- 冲压载荷: 最大54KN
- 喉深: 458mm
- 最新设计的高可靠性、高稳定的节能液压系统
- 100%防压手安全系统;
- 最大可以压接M10碳钢螺母于碳钢基材
- 标准颜色: 蓝白
- 标准电压: 3相380V/50HZ

Main Feature

- High stiffness, structure, high stability, less vibration, high accuracy
- Ergonomic design frame and different size tooling package with easy operation panel to meet most of the complex insertion process by single operator
- Quick press force setting and repeatability ±1%
- Ram force range MAX 54KN
- Throat depth 458 mm
- 100% safety system
- Energy saving Re-design reliability and energy efficiency of a full hydraulic system
- Optional auto feeding system and clinching joint system
- Possibility to insert M10 nut with the mild steel
- Blue & white color
- Standard power supply 3 phase 380v/50hz



订货号

Machine Order Number

Item	Part Num.	Description 货物名称
1	S-000300 BW Or S-000306 BW	618 plus 压铆机 或 618 plus with positive stop cylinder 带止挡位的 618 plus
2	S-000364	MSTP 33 pieces Metric Standard Tooling Package/33 33 件套工具组合
3	S-X-X S-000440	Automatic tooling set 自动工具组件 Autofeed modular 自动送料系统

824 Plus

机器的主要特点：

- 高刚性整体式加工的机身结构, 压铆工作过程中无变形, 确保压铆精度
- 按人体工程学设计的机身结构及完美的模具组合, 简便灵活的操作模式, 一个人就可以方便的完成大部分复杂的压铆工作
- 快速设置最佳的目标压铆力并保证压力重复精度达到±1%;
- 冲压载荷: 最大72KN
- 喉深: 610mm
- 最新设计的高可靠性、高稳定的节能液压系统
- 100%防压手安全系统
- 标配模具保护限位装置
- 最大可以压接M12碳钢螺母于碳钢基材
- 通过调整保压时间可以最大压铆M8的不锈钢螺母在不锈钢板材等较硬的材料
- 标准颜色: 蓝白
- 标准电压: 3相380V/50HZ

Main Feature

- High stiffness, structure, high stability, less vibration, high accuracy
- Ergonomic design frame and different size tooling package with easy operation panel to meet most of the complex insertion process by single operator
- Quick press force setting and repeatability ±1%
- Ram force range MAX 72KN
- Throat depth 610 mm
- Energy saving Re-design reliability and energy efficiency of a full hydraulic system
- 100% safety system
- Standard Tooling Protection System
- Optional auto feeding system and self-clinch tooling
- Possibility to insert M12 nut with the mild steel
- Variable dwell time for use stainless steel M8 nut and materials and the others hard materials
- Blue & white color
- Standard power supply 3 phase 380v/50hz



订货号

Machine Order Number

Item	Part Num.	Description 货物名称
1	S-000309 BW	824 plus 标准型压铆机
2	S-000364	MSTP 33 pieces Metric Standard Tooling Package/33 33 件套工具组合
3	S-X-X S-000440	Automatic tooling set 自动工具组件 Autofeed modular 自动送料系统

可选配件 Options

MSTP - 手动工具包

MSTP - Manual Tooling Package

33件套手动工具组合，满足不同尺寸，从M2-M8, 长度最长35mm的压铆螺母，螺钉及螺母柱的上、下模具及专为小法兰避位压铆的象鼻底座，J型钩工具

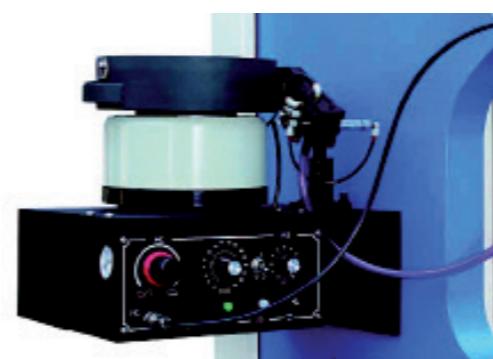
33 pieces of manual work with nuts, studs & standoff different size of punch and dies M2-M8, length up to 35mm, special insertion application for small parts flange die holder and Manual J frame.



自动送料系统

Modular autofeed system

- MAS系统包括：高质量的四个震源的振动盘，数字变压及变频压电式控制器
- 连续及单次，速度调整，频率调整等多种工作模式
- 内置真空发生器
- 适合M2-M12，最长30mm的各种压铆螺母，螺钉及螺母柱
- Including high quality vibration bowl and intelligent digital variable voltage and variable frequency Piezoelectric vibration feeder controller.
- Single and constant working mode
- Integrate Vacuum generator
- work with nuts, studs & standoff size M2-M12, length up to 30mm



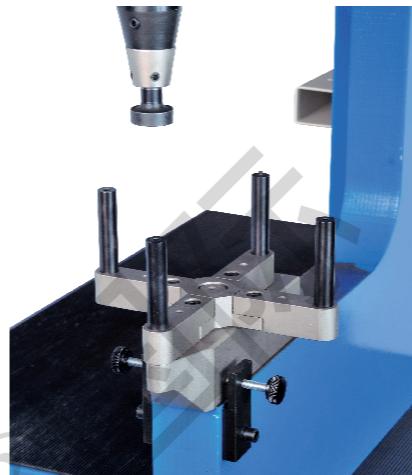
可选配件 Options

TIS - 手动转塔

TIS - Turret Insertion System

多工位转塔，含四个压铆标准件储存盒、料盒

Multiple manual insertion system turret complete with 4 boxes that match with different anvil



批量计数器

Batch Counter



包括三个独立的计数器和一个提示蜂鸣器，通过设定组合，可以显示批次及每次需压铆的单个工件还需几次压铆行程，避免漏铆

Consists of independent 3 counters and a electronic beepers for audible signals , Set and display the number remaining to be insert in the Workpiece

正向限位功能

Forward Limited



通过油缸限位装置对模具特别是易变形或损坏的工件进行保护

Forward Limited function is designed to protect both the tooling and the workpiece from damage by positive stop cylinder

激光定位装置

Lazer locating light

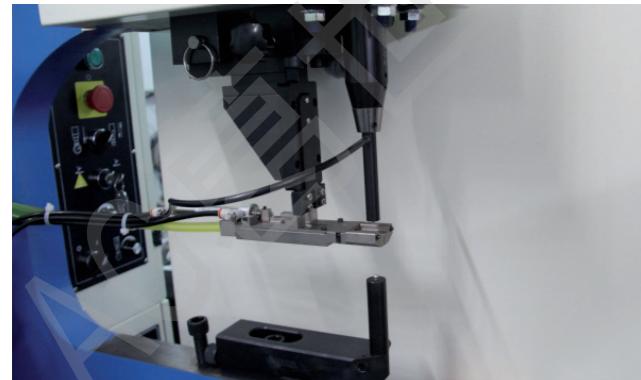


便于操作者在压铆较大的工件时移动和寻找被挡住的下模具的位置

Assist to handling the big workpiece to cover flower tool by laser locating light reference

上送压铆螺母工具系统 Shuttle nut tooling system

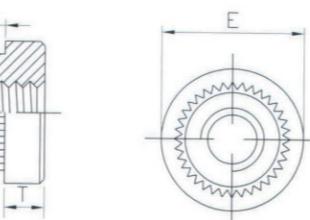
Captive: C, CS
PEM: S, SS, CLS, CLSS
TR: TR-S, TR-CLS
PSM: P-S, P-CLS



上送压铆螺母自动工具系统选型及订货号

Nut Automatic Tooling System Part Num.

FASTENER SIZES(mm) 尺寸及规格	SHUTTLE TOOLING SET 上送压铆螺母自动工具组件	AUTOFEED MODULAR 自动送料系统
NUTS 压铆螺母		
S-M3-0,1,2	S-000354-3	S-000440
S-M4-0,1,2	S-000354-4	S-000440
S-M5-0,1,2	S-000354-5	S-000440
S-M6-0,1,2	S-000354-6	S-000440
MX-0,-1,-2 (Special request) 其他非标	S-000354-X	S-000440

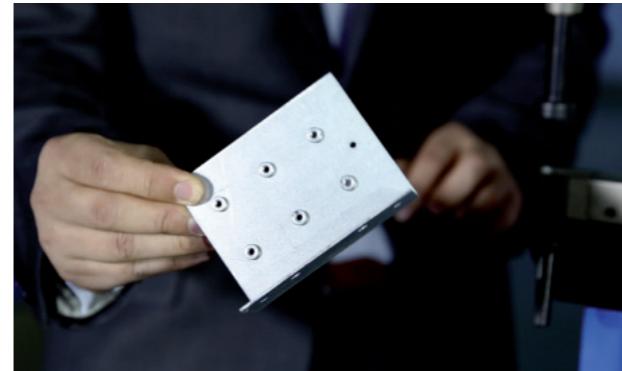
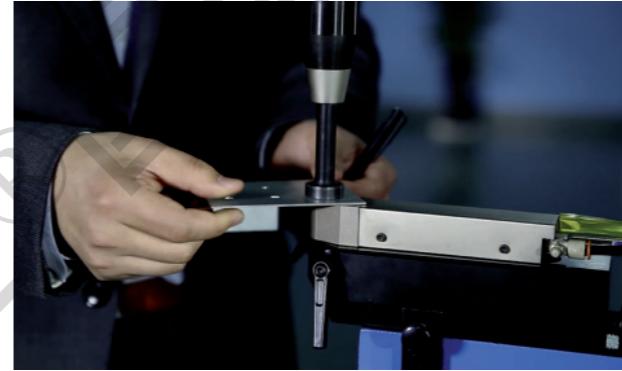


618Plus & 824Plus

螺母下送工具系统

Bottom feed nut tooling system

Captive: C, CS
PEM: S, SS, CLS, CLSS
TR: TR-S, TR-CLS
PSM: P-S, P-CLS



螺母下送工具系统选型及订货号

Bottom Feed Nut Automatic Tooling System Part Num.

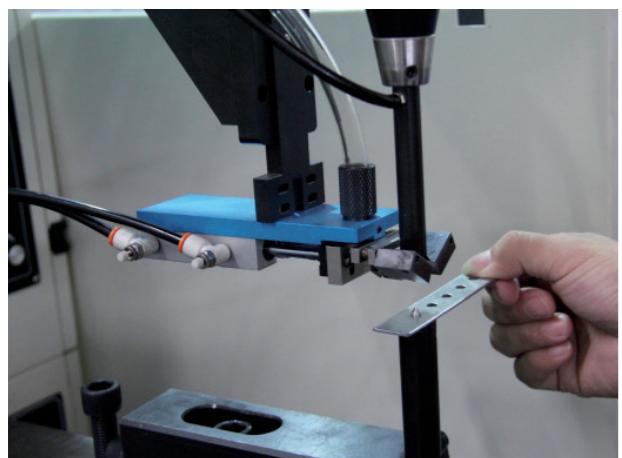
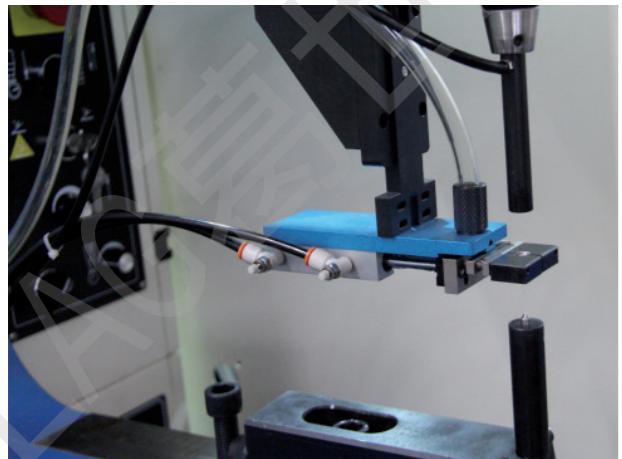
FASTENER SIZES(mm) 尺寸及规格	BOTTOM FEED NUT TOOLING SET 下送压铆螺母自动工具组件	AUTOFEED MODULAR 自动送料系统
NUTS 压铆螺母		
S-M3-0,1,2	S-000350-3	S-000440
S-M4-0,1,2	S-000350-4	S-000440
S-M5-0,1,2	S-000350-5	S-000440
S-M6-0,1,2	S-000350-6	S-000440
MX-0,-1,-2 (Special request) 其他非标	S-000350-X	S-000440

618Plus & 824Plus



螺钉/螺母柱上送工具系统 Shuttle standoff/stud tooling system

Captive: C, CS
PEM: S, SS, CLS, CLSS
TR: TR-S, TR-CLS
PSM: P-S, P-CLS



618Plus & 824Plus



1. 请标注您的压铆标准件的具体规格和尺寸，鉴于不同生产厂家的压铆标准件公差不一样，请提供最少300 件样件给我们以便我们按照贵司的压铆标准件测试和设计自动化工具系统
2. 一次性购买我们的螺母柱自动工具组合包括：T型支架，和真空发生器
3. 如您需升级改造或增加压铆螺母柱/ 螺钉工具组合时请注明您之前的机器的型号及序列号
4. CLA, CA 铝螺母柱需特殊定制的自动化工具（铝螺母柱尺寸比钢螺母柱大），并根据铝的压铆工艺在标准自动工具基础上进行修改

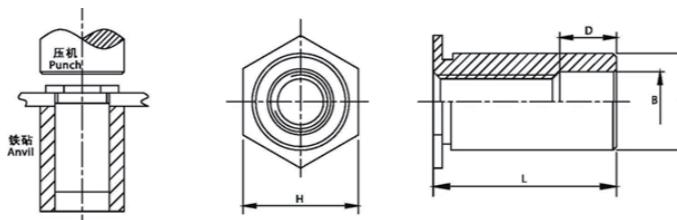
螺钉/螺母柱上送工具系统 Shuttle standoff/stud tooling system

上送螺钉工具系统选型及订货号
Stud Automatic Tooling System Part Num.

FASTENER SIZES(mm) 尺寸及规格	SHUTTLE TOOLING SET 上送压铆螺母自动工具组件	AUTOFEED MODULAR 自动送料系统
FLUSH-HEAD STUDS 平头压铆螺钉		
RH-M3-8-25	S-000098-12	S-000440
RH-M4-8-25	S-000098-13	S-000440
RH-M5-15-25	S-000098-14	S-000440
MX-0,-1,-2 (Special request) 其他坐标	S-000098-X	S-000440



1. Please specify your fastener size and supply min 300 PCS sample to LAG for testing and design the automatic tooling.
2. A one time purchase of T-Bracket, and Vacuum Generator is include for Shuttle standoff Tooling set.
3. Please specify machine model and serial number when ordering a vacuum generator as a retrofit item.
4. CLA, CA Aluminum nuts are MADE TO ORDER TOOLING (Aluminum standoffs are larger than steel standoffs). Standard tooling will need to be modified for aluminum fasteners.



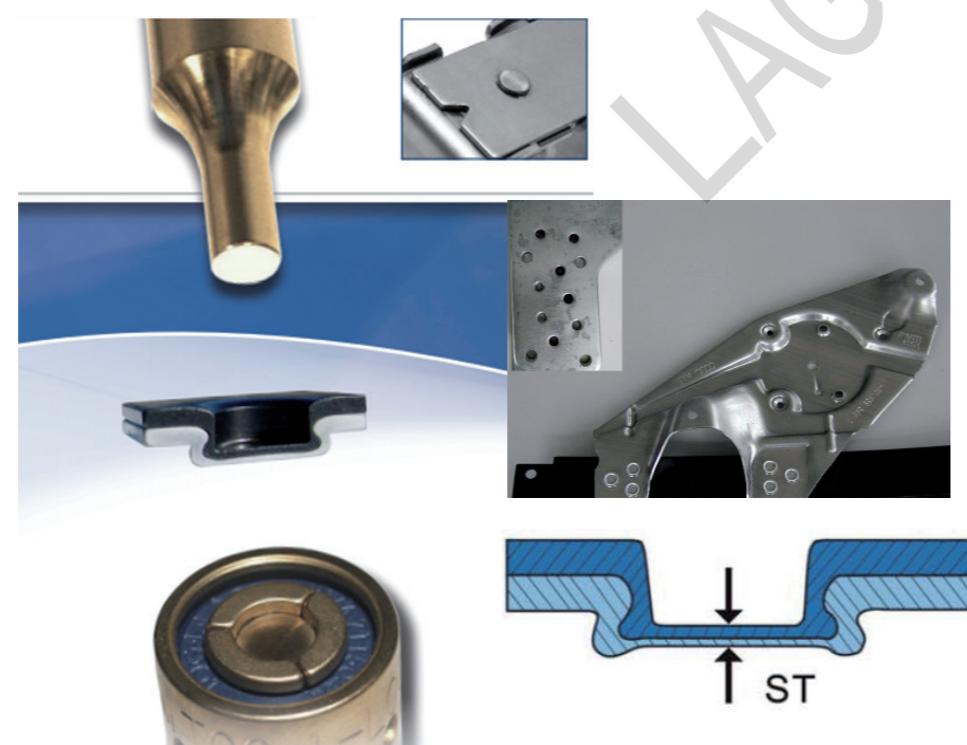
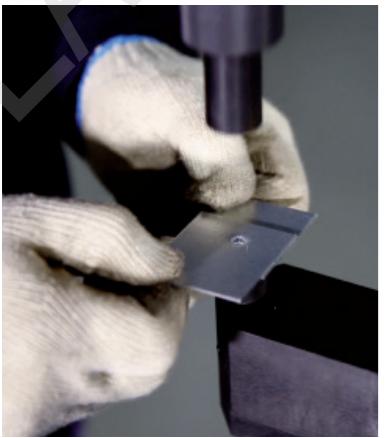
FASTENER SIZES(mm) 尺寸及规格	SHUTTLE TOOLING SET 上送压铆螺母自动工具组件	AUTOFEED MODULAR 自动送料系统
THRU-HOLE THREAD STANDOFFS 通孔螺母柱		
SO-M3-8-25	S-000098-3	S-000440
SO-3.5M3-8-25	S-000098-5	S-000440
SO-M4-8-25	S-000098-7	S-000440
SO-M5-8-25	S-000098-9	S-000440
MX-0,-1,-2 (Special request) 其他坐标	S-000098-X	S-000440

上送螺母柱工具系统选型及订货号
Standoff Automatic Tooling System Part Num.

FASTENER SIZES(mm) 尺寸及规格	SHUTTLE TOOLING SET 上送压铆螺母自动工具组件	AUTOFEED MODULAR 自动送料系统
BLIND THREAD STANDOFFS 盲孔螺母柱		
BSD-M3-8-25	S-000098-3	S-000440
BSD-3.5M3-8-25	S-000098-5	S-000440
BSD-M4-8-25	S-000098-7	S-000440
BSD-M5-8-25	S-000098-9	S-000440
MX-0,-1,-2 (Special request) 其他坐标	S-000098-X	S-000440

LAG 无铆连接系统

LAG Clinch Joint System



您还在做焊接或铆接吗？

省钱 - 仅需1套冲头和下模就可以完成零件的连接！
LAG的BTM无铆连接系统通过简单的冲压过程就能让二块板材“冷焊”在一起，并且无需任何焊材或购买紧固件。通过这种特殊的冲铆工艺使二块板料拉伸和成型后形成倒钩并紧密的“粘联”在一起，加工成本大大降低。无铆连接工艺对于镀锌、彩涂板等带表面涂层的板材相比传统焊接工艺具有无火花及烟雾污染，板无表面损伤的明显优势！

BTM 的压铆解决方案的一些好处：

- LAG 无铆连接系统具有极稳定的抗拉强度
- LAG 无铆连接可做无损伤检测
- LAG 无铆连接效率高（一个工件通常可以在一秒中完成）

Are you still Welding or Riveting?

SAVE MONEY - Join your parts with a Punch and Die!

LAG and BTM related clinching tools join sheet metal without the expense of welding or purchased fasteners by simply joining the part's own material! Assembly cost is significantly reduced by drawing and forming the part material into an interlock. Join galvanized, pre-painted, or even dissimilar metal combinations using an environmentally friendly process that does not produce sparks, harmful fumes or damaging heat!

Some Benefits of BTM's Clinching Solutions:

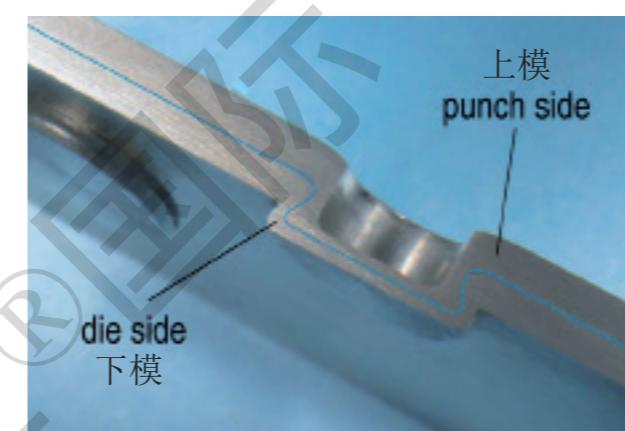
- LAG Clinch Joints system are consistently strong
- LAG Clinch Joints are Non-destructively checked
- LAG Clinching is fast (a joint can typically be created in under one second).

LAG 无铆连接 BTM 工具订购及要求

LAG Joint BTM Tooling Set order specification Request

1. 请提供需连接的板材的种类、厚度，典型工件图，鉴于不同工厂的板料有一定差异，请提供最少10件样件给我们以便我们按照贵司的材料选择最佳的BTM工具型号
一次性购买我们LAG无铆连接BTM工具组合，包括：BTM冲模、凹模和冲模座及凹模座

1. Please specify your joint parts material, drawing and supply min 10 PCS sample to LAG for define BTM joint tooling.
A one time purchase of BTM Punch,die and punch/die holder is included for LAG Joint BTM Tooling Set



BTM无铆连接工具适用于厚度0.6mm-2.5mm碳钢及不锈钢

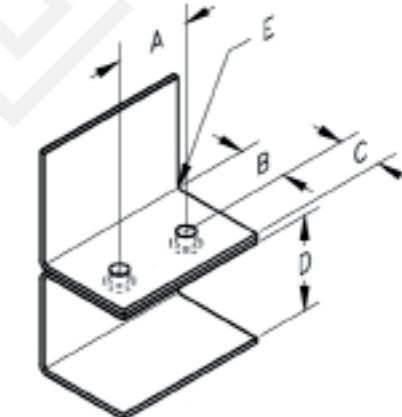
Self clinch mechanical joint tooling set for mild steel sheet thickness from 0,6 mm to 2,5 mm, for Stainless steel sheet thickness on request

JOINT TOOLING	PART NUMBER	SHEET MATERIAL	STRENGTHEN	THICKNESS
PUNCH 冲模	S-BTM122	MS □ SS □ AL□		
DIE 凹模	S-BTM123	MS □ SS □ AL□		
PUNCH/DIE HOLDER SET 冲凹模座组件	S-BTM121			

2. 最小边距要求

Please specify LAG Joint Minium Distance Request

A	B	C	D	E



Fastener Insertion Machines

Worldwide distribution



416 Plus



618 Plus



618 Plus-L



824 Plus



中国-上海总部

Headquarters - Shanghai - China

嘉意机床（上海）有限公司
中国上海市嘉定区外冈镇外冈第三
工业园区恒翔路55号
电话. +86 021-39003785
传真. +86 021-39108985
网址: la-g.cn
邮箱: szeng@la-g.cn



中国-山东剪板、折弯、机加
工生产基地

Productive site - Shandong - China

山东嘉意机械装备有限公司
山东省泰安市宁阳县磁窑镇幸福路
北首魁星南路
电话. +0538-6089098
网址: la-g.cn
邮箱: szeng@la-g.cn



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Productive site and show room - Italy

LAG-RAINER SRL
Via Stalingrado, 3
40016 San Giorgio di Piano (BO) - IT
tel. +39 051 897351 -
fax. +39 051 6632903
www.la-g.it
szeng@la-g.cn

SHOW ROOM
Via Staizza, 41/A
31033 Castelfranco V.to (TV) - Italy
tel. +39 0423 492144
www.la-g.it
szeng@la-g.cn



嘉意机床(上海)有限公司
上海市嘉定区外冈镇外冈
第三工业区恒翔路55号
电话: +86 - 021-3900-3785
传真: +86 - 021-3910-8985
网址: www.la-g.cn
邮箱: szeng@la-g.cn

压铆机
折弯机
RBC 机器人折弯单元
RSPC 机器人智能分拣数控冲切单元
RSLC 机器人智能分拣激光切割单元
RWC 机器人焊接单元
FMS 自动生产线
Smart Factory 数字化智慧工厂解决方案

LAG Machinery Tool (Shanghai) Co., Ltd
No. 55 Hengxiang Road,
Waigang Industrial Park 3,
201806 Waigang Town, Jiading District
Shanghai, China
Tel. +86 021-39003785
Fax. +86 021-39108985
szeng@la-g.cn



Fastener Insertion Machines
Press Brakes
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RSPC Robot Auto Sorting CNC Punching
Press Cell
RSLC Robot Auto Sorting Laser Cutting
Cell
RWC Robot Welding Cell
Flexible Mobile Smart Producing Line
Customized Smart Solution For Sheet
Metal Manufactory

压铆机 FASTENERS

FASTENER INSERTION MACHINES