

# Leading Welding Technology

焊接 / Welding

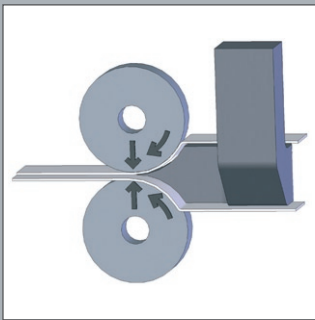




# 焊接方式

## Welding methods

热焊头  
Heating wedge



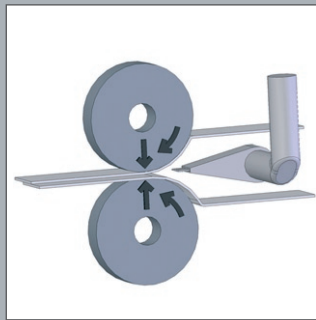
焊接参数

- 滚轮压力
- 焊接速度
- 温度

Welding parameters:

- Roller pressure
- Speed
- Temperature

热吹风  
Hot air



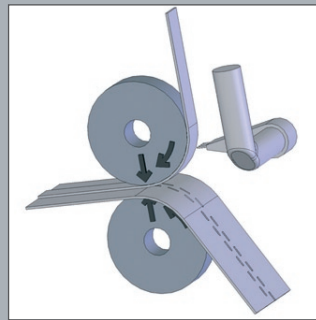
焊接参数

- 滚轮压力
- 焊接速度
- 温度
- 吹风量

Welding parameters:

- Roller pressure
- Speed
- Temperature
- Hot air flow

热风压胶  
Hot air tape welding



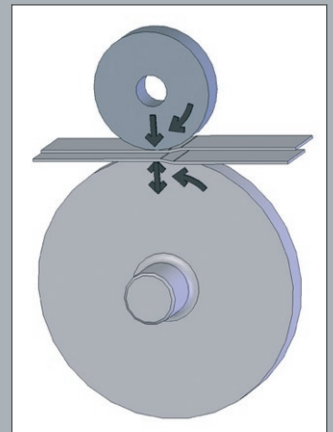
焊接参数

- 滚轮压力
- 焊接速度
- 温度
- 吹风量

Welding parameters:

- Roller pressure
- Speed
- Temperature
- Hot air flow

超声波  
Ultrasonic



焊接参数

- 滚轮压力
- 焊接速度
- 振幅/能量

Welding parameters:

- Roller pressure
- Speed
- Amplitude/Energy

Together for you



# 现代工业纺织品的熔合

## *Modern joining of technical textiles*

在创新纺织品不断发展的市场中，熔合方法一直都在被检验着。在此领域中，针与线不再拥有独享权有一段时间了。在缝纫过程中，针刺穿纺织面料并把线拉至面料下方。在“通常”的面料里并不会产生大的伤害。在工业纺织品中则可能存在，织物表面会被毁坏，织物特性会被损伤。而焊接机自身通过使用热吹风，热焊头，超声波或者高频焊接可以熔合热塑性材料而不会损害织物特性。此外，焊接可以提供额外的优势，例如：好的密封性（防透水，气密性），不会有扰人或者面积大的线迹，不会使用如针，线，粘合胶等消耗品。毫无疑问，百福PFAFF INDUSTRIAL公司在焊接工艺如热焊头，热吹风，超声波方面的革新与技术研发上，几十年来都是领导者。在其他的生产商中，百福PFAFF INDUSTRIAL公司开创了新的里程碑，制造出第一台滚动超声波振动轮的超声波焊接机，也是市场上第一台可进行程控亦或是第一台可进行裁边的焊接机。产品所涉及的范围从标准机器直至全自动订制系统，其中的一些由百福PFAFF麾下位于德国洛尔施的KSL公司制造生产。从2013年起，杜克普Dürkopp Adler公司和百福PFAFF INDUSTRIAL公司（联合KSL）合并成为一个集团，并拥有了在世界范围内互不平行冲突的销售网络。在这本手册中总结了目前集团内所有的焊接方案。当然我们也非常乐意与您一起共同计划并实现专属于您的方案。我们在此期待您的意见反馈。

*On the continuously growing market of innovative textiles joining methods are constantly being scrutinized. For quite some time needle and thread have been losing their claim to exclusivity in this field. During the sewing process the needle penetrates the textile fabric and pulls a thread behind it. In "regular" textiles this does not leave behind any major damage. In technical textiles it could, however, destroy the surface and thus compromise the textile properties. Welding machines on the other hand join thermoplastic materials using hot air, contact heat (hot wedge), ultrasound or high frequency without affecting material properties. Moreover, welding offers additional advantages e. g. high impermeability (watertight, gastight, airtight), no disruptive resp. bulky seam, no use of consumables such as needle, thread or glue. Without a doubt, PFAFF INDUSTRIAL has for decades been the leader in innovation and technology for the welding techniques hot wedge, hot air and ultrasound. Among others, PFAFF INDUSTRIAL launched milestones like the first ultrasound machine featuring a rolling sonotrode, the first programmable welding machine or the first welding machine featuring edge trimming. The spectrum ranges from standard machines to fully automatic customized systems, some of which are manufactured at PFAFF INDUSTRIAL's KSL-site in Lorsch. Since 2013 Dürkopp Adler and PFAFF INDUSTRIAL (featuring the KSL-brand) have been united under one roof and can rely on a sales network that is unparalleled in the world. This segment brochure outlines all current welding solutions within the group. Of course, we would be happy to plan and realize your very own solution together with you. We are looking forward to your feedback.*

# Together for you





# 集团介绍-品牌与公司

## *The group – brands and companies*

杜克普公司，于1860年在德国比勒菲尔德市成立，目前是在工业缝纫技术行业中最大的欧洲制造商，同时也是全球范围内的领导者之一。公司的产品组合包含了高技术价值的工业缝纫机和自动机，可用于多个行业，如：汽车制造，服装，软式家具，工业纺织品，制鞋以及皮具，此外，可靠的备件服务也令人充满信心。

*Dürkopp Adler AG, founded in Bielefeld in 1860, is the largest European manufacturer and one of the worldwide leaders in industrial sewing technology. The product portfolio of the enterprise includes industrial sewing machines and automats of high technological quality for a multitude of applications like automotive, garments, upholstered furniture, technical textiles, shoes as well as leather goods and convinces by a reliable spare parts service.*

在50多年成功的企业发展过程中，KSL拥有了全面的专有技术和国际认可的能力。我们专业于针对客户进行的发展，生产特殊的设备用于在以下的行业里对工业纺织品进行自动化作业：提供汽车内饰，安全气囊产品，空间飞行，过滤品，家装品以及独立的自动化方案。

*During more than 50 years of successful development KSL acquired comprehensive know-how and internationally recognized competence. We are specialists for the customized development and production of special machines for the automated processing of technical textiles in the following branches: automotive interiors, airbag production, aerospace, filters, home textiles as well as individual automation solutions.*

杰出的产品专有技术和持续性的革新—在此有建立于1862年位于德国凯泽斯劳滕市的百福PFAFF INDUSTRIAL公司。作为技术领导者之一百福公司提供了对于工业用与非工业用的纺织材料以及皮革进行加工处理的最现代化的解决方案。百福是全球范围内唯一可以同时提供缝纫和焊接方案，并配有多种不同焊接方法的企业。

*Excellent product know-how and continuous innovation – this is what the traditional trademark PFAFF from Kaiserslautern has been known for since 1862. As one of the technology leaders PFAFF INDUSTRIAL produces state-of-the-art solutions for the processing of textile materials (technical and non-technical) and leather. PFAFF INDUSTRIAL is the only provider of sewing- and welding solutions with different welding methods worldwide. This unique competence is also underlined by the company slogan "Excellence in seaming".*

# Together for you







# 工业化焊接技术

*Industrial welding solutions*

焊接方案：超声波  
*Welding solutions: Ultrasonic*

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焊接方案：压合胶带n  
*Welding solutions: Taping*

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焊接方案：热吹风，焊接头+焊接综合工作站  
*Welding solutions: Hot-air, hot-wedge + welding units*

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您全球范围内的伙伴  
*Your partner worldwide*

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Together for you

 DÜRKOPP  
ADLER

 KSL

 PFAFF®  
Industrial

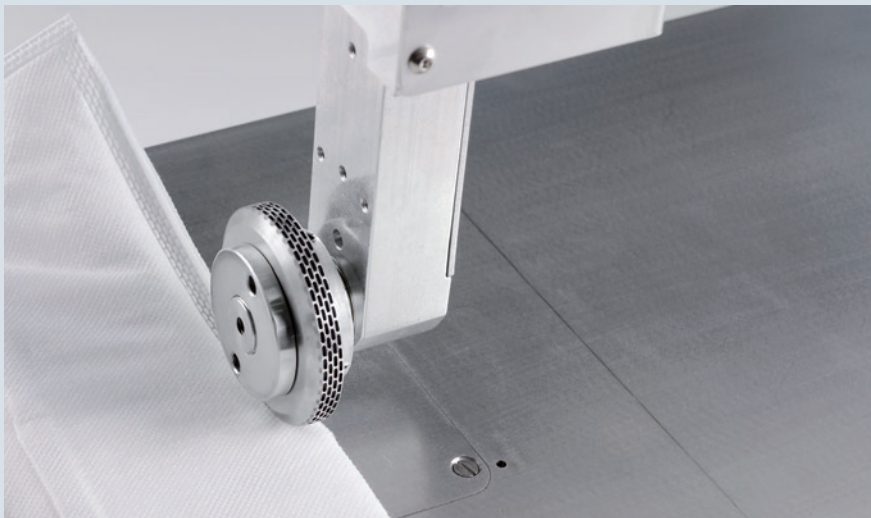




# 焊接方案：超声波

*Welding solutions: Ultrasonic*

焊接—单轮标准焊接  
*Welding - Standard wheel*



防护服进行闭合焊接

*Closing- and assembly seams on protective closing*

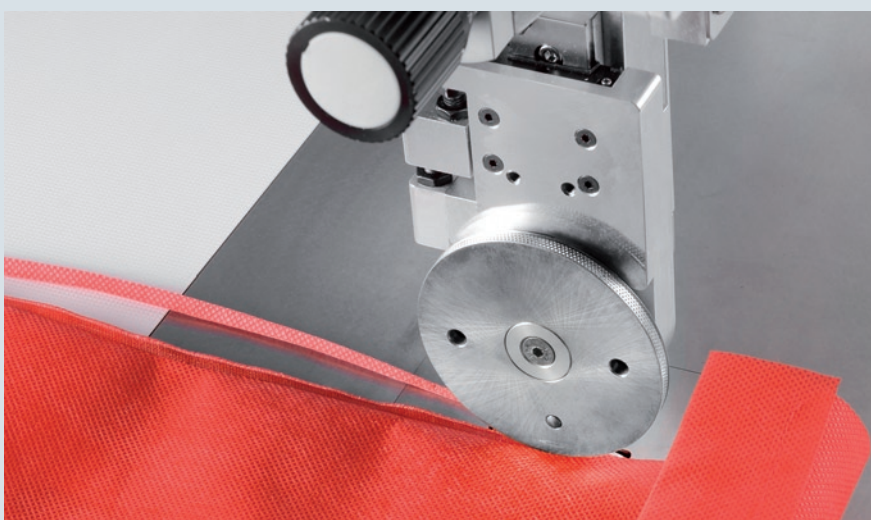
焊接—单轮裁剪&密合  
*Welding - Cut & Seal*



对边进行裁剪与密合

*Cutting + edge sealing in one operation*

焊接—裁剪&密合焊接 双轮复合式  
*Welding - Cut & Seal Dual*



对边进行剪裁，同时在一道工序中进行平行焊接

*Cutting, edge sealing and welding a second seam in one operation*

超声波—单轮标准焊接  
Ultrasonic - Standard wheel



百福8301 - 平台式超声波焊接机: 最经济的焊接方案

PFAFF 8301 - Fladbed ultrasonic welding machine: The economical solution



百福8310 - 可编程控制的平台式超声波焊接机 (可选装拖轮)

PFAFF 8310 - Programmable fladbed ultrasonic welding machine (optional with puller)



百福8310 - 可编程控制的超声波焊接机, 超声波振动轮位于上部 (不同版本: 斜置立柱和垂直立柱)

PFAFF 8310 - Programmable ultrasonic welding machine with sonotrode from above (Versions: feed-off-the arm and standing post-bed)

超声波—单轮剪裁并密合  
Ultrasonic - Cut & Seal



百福8301 - 平台式超声波焊接机: 最经济的焊接方案

PFAFF 8301 - Fladbed ultrasonic welding machine: The economical solution



百福8310 - 可编程控制的平台式超声波焊接机 (可选装拖轮)

PFAFF 8310 - Programmable fladbed ultrasonic welding machine (optional with puller)



百福8312 - 可进行电子程控的平台式超声波焊接机

PFAFF 8312 - Programmable electronic fladbed ultrasonic welding machine

超声波—裁边并焊接 双轮复合式  
Ultrasonic - Cut & Seal Dual



百福8301—平台式超声波焊接机: 最经济的焊接方案

PFAFF 8301 - Fladbed ultrasonic welding machine: The economical solution



百福8312—可电子程控的平台式超声波焊接机

PFAFF 8312 - Programmable electronic fladbed ultrasonic welding machine

超声波—长臂式  
Ultrasonic - Long arm



百福8312—可电子程控的平台式超声波焊接机 (既可进行裁剪密合 亦可裁边加焊接复合同时进行)

PFAFF 8312 - Programmable electronic fladbed ultrasonic welding machine as long-arm version (also as Cut & Seal and Cut & Seal Dual)





# 焊接方案：压胶焊接

*Welding solutions: Taping + welding units*

压胶焊接 (服装面料)  
*Taping (Clothing)*



焊接贴合反光条  
*Welding of reflective strips*



在户外夹克的缝纫线迹上压合胶条

*Seam sealing (taping) of an outdoor jacket*

在安全服上贴合反光教条

*Welding reflective strips onto safety jackets*

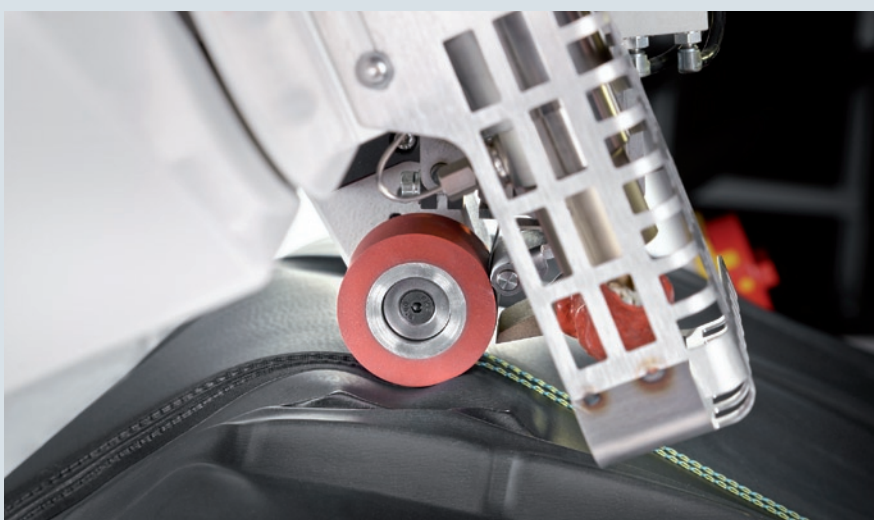
压胶焊接 (制鞋)  
*Taping (Shoes)*



在鞋制品的缝纫线迹上压合胶条

*Seam sealing (taping) on a shoe*

压胶焊接 (汽车行业)  
*Taping (Automotive)*



在汽车仪表盘的缝纫线迹上压合胶条

*Seam sealing of a dashboard*



压胶焊接 (用于服装面料)  
Taping (Clothing)



百福8303i - 新款可编程控制的热风压胶焊接机

PFAFF 8303i - New programmable hot-air taping machine for classical sealing



百福8330 - 满足高要求需要的可编程控制的热分压胶焊接机

PFAFF 8330 - Programmable hot-air taping machine for classical sealing for highest demands

焊接反光条  
Welding of reflective strips



百福8323 反光条 - 特殊款式热风压胶焊接机, 用于压合反光条

PFAFF 8323 Reflective - Special hot-air taping machine for welding of reflective strips

压胶焊接机 (制鞋)  
Taping (Shoes)



百福8303i - 新款程控热风压胶焊接机

PFAFF 8303i - New programmable hot-air taping machine for classical sealing



百福8330 - 程控热风压胶焊接机, 可满足高要求需要

PFAFF 8330 - Programmable hot-air taping machine for classical sealing for highest demands

压胶焊接机 (汽车行业)  
Taping (Automotive)



百福8323 - 可编程的臂式热风压胶焊接机, 用于加工圆管状制品

PFAFF 8323 - Programmable hot-air taping machine with cylinder arm for sealing tubular parts



百福8323 (长臂式) - 可编程的臂式热风压胶焊接机, 用于加工圆管状制品

PFAFF 8323 (Long arm) - Programmable hot-air taping machine with cylinder arm for sealing tubular parts



百福8323 (特殊款) - 可编程的热风压胶焊接机, 配合特殊的硅胶压轮, 用于焊接密封敞篷车软顶

PFAFF 8323 (Special) - Programmable hot-air taping machine with special silicone rollers for sealing convertible tops

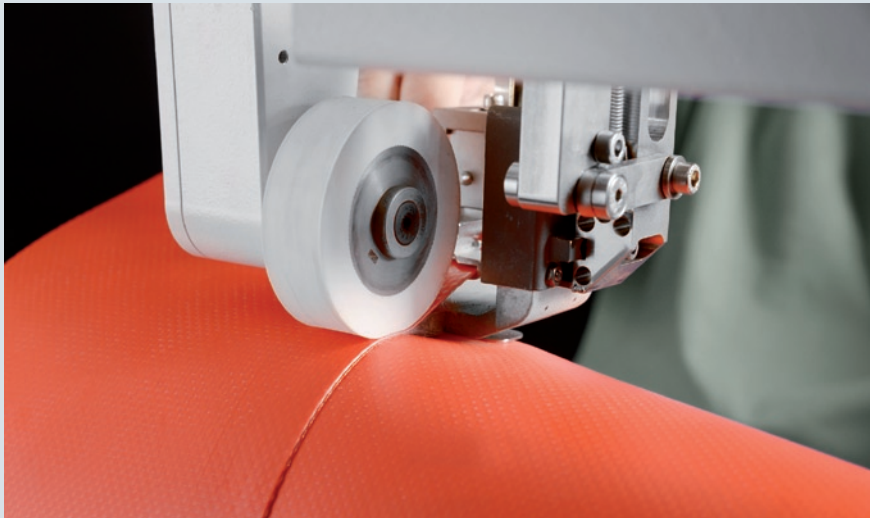




# 焊接方案：热焊头，热吹风+焊接工作站

*Welding solutions: Hot-wedge, hot-air + welding units*

热焊头  
*Hot-wedge*



帐篷双层材料间进行焊接

*Welding of two tent layers*

热吹风  
*Hot-air*



过滤袋的闭合

*Closing of a filter bag*

焊接工作站  
*Welding units*



对于管状制品进行长行程焊接，例如：过滤管，支撑壳体

*Welding (length seams) of tubes, eg. filters and supporting shells*

焊接头式  
Hot-wedge



百福8390 - 可编程, 可移动式的热焊头式焊接机, 配有可延长的轨道

*PFAFF 8390 - Programmable mobile hot-wedge welding machine on tracks (extensible length)*



百福8362i - 便携式热焊头式焊接机, 用于在户外对于材料进行重叠式焊接

*PFAFF 8362i - Portable hot-wedge welding machine for lap seams in the outdoor area*



百福8320-010 - 可编程的热焊头式焊接机, 用于PVC材料间的焊接

*PFAFF 8320-010 - Programmable hot-wedge welding machine for seaming PVC fabrics*

热风式  
Hot-air



百福8320-020 - 可编程热吹风焊接机

*PFAFF 8320-020 - Programmable hot-air welding machine*



百福8320-020/061 - 可编程式热吹风焊接机, 配有可调的管道导轨

*PFAFF 8320-020/061 - Programmable hot-air welding machine with adjustable tube guide*



百福8321 - 可编程的热吹风焊接机 (重负载版本, 适合于香蕉材质的小艇, 容器以及可充气膨胀的物件)

*PFAFF 8321 - Programmable hot-air welding machine (Heavy-duty version for rubber boats, containers and inflatable objects)*

焊接工作站  
Weldng units



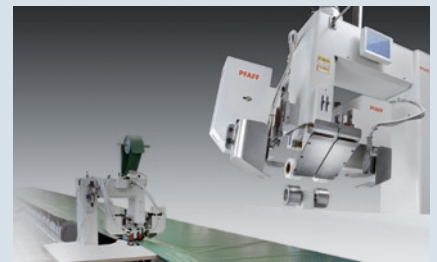
百福8317 - 单焊接头超声波焊接工作站, 配有送料台

*PFAFF 8317 - Single-head ultrasonic unit with transportation belt system table*



百福4504/4507 - 超声波或者热吹风工作站, 用于闭合长焊迹的工业制品

*PFAFF 4504/4507 - Ultrasonic or hot-air welding unit for closing technical articles with length seams*



百福8390 (双焊接头) - 热焊头式焊接工作站, 配有双焊接头, 用于大面积的材料进行焊接

*PFAFF 8390 (Double-head) - Hot-wedge unit with two machine heads for welding large-area materials*

我们关注于给客户提提供解决方案：在百福的测试中心会进行测试，用来决定出适合的焊接方案。

*The focus is on the customer solution: Tests to determine the most suitable welding method are carried out at the PFAFF Testcenter.*





在超声波焊接机上,通过使用不同的压轮  
可以对焊迹进行个性化设计!

*Individualize the design of your seam using the  
anvil wheel of the ultrasonic welding machine.!*







您的全球伙伴

Your partner worldwide



Germany, Bielefeld / Kaiserslautern  
France

America, Atlanta ■

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- Produktionsstandort / Production site
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- Vertretung / Representative

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 ■ Czech Republic, Boskovice  
 ■ Romania, Sângeorgiu de Mures  
 ■ Italy, Cinisello Balsamo

■ China, Zhangjiagang  
 ■ China, Shanghai

■ Bangladesh  
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■ India (in planning)  
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