

Airside Infrastructure

Jointline

Precision, Innovation and Reliability in Airfield Infrastructure

Discover how Jointline's Airfields Division is enhancing airfield safety and efficiency across the UK and beyond. From precision grooving at Heathrow's Southern Runway to specialist military markings for the Red Arrows, this feature explores key projects and the company's £1m investment in future-ready runway infrastructure.

In the highly regulated world of aviation, where every detail impacts safety and operational efficiency, the integrity of airfield infrastructure is paramount. From the precise line markings that guide pilots on the tarmac to the grooved runways that improve braking performance in all weather conditions, airports depend on trusted specialists to keep airfields operational, safe and compliant. With more than 30 years of experience, Jointline's Airfield Division provides airfield line marking, runway grooving, joint sealing and maintenance services across the UK and internationally, delivering solutions relied upon by both commercial and defence airfields.

Raising the Standards of Airfield Safety and Efficiency

Airfield infrastructure plays a critical role in ensuring safe and efficient aircraft movements. Line markings must meet stringent regulatory standards for visibility and accuracy, while runway grooving enhances water drainage and improves aircraft braking, reducing the risk of hydroplaning. Similarly, joint sealing prevents

fuel/water ingress and structural damage, helping extend the operational life of concrete and asphalt pavements.

Jointline's Airfields Division works in line with international best practice, including standards set by the Civil Aviation Authority, the International Civil Aviation Organization, and the UK Ministry of Defence for military sites. The team collaborates closely with airport operators and schedulers to ensure projects are delivered with minimal disruption. Overnight work is often carried out when airfield access is limited, but Jointline is also experienced in working in live environments, safely coordinating operations around active aircraft movements.

Major Projects that Define Jointline's Expertise

At one of the world's busiest aviation hubs, Heathrow Airport, Jointline played a key role in the recent Southern Runway Resurfacing Programme. Over a 29-week schedule of intensive night shifts, contractors completed the resurfacing of 3,658 metres of runway, ensuring the airfield remained fully operational during daytime hours. As part of this major infrastructure renewal, Jointline carried out precision grooving, totalling 208,000 linear metres, to improve surface drainage and braking performance for aircraft.

Jointline's long-standing relationship with Heathrow spans more than three decades, during which the company has delivered line marking operations to support the airport's evolving infrastructure. This



Precision marking for the Red Arrows: freshly lined aircraft standing platform at their home base, ensuring accuracy and operational efficiency for the world-renowned aerobatic team

continuity of service highlights the trust placed in Jointline to meet the highest safety and operational standards on one of the most complex airfields in the world.

At RAF Waddington, Jointline delivered specialist airside marking works for VIVO Defence Services, creating new aircraft stand designations for the Royal Air Force Aerobatic Team, the Red Arrows. Twelve Hawk T2 aircraft stands were marked, labelled R1 to R12 to reflect the iconic display team's formation numbering. The project required exacting attention to specification and alignment to ensure consistency with military airfield standards while meeting the unique operational requirements of the Red Arrows' new base.

Investing in the Future of Airfield Infrastructure

To meet growing demand from both domestic and international aviation markets, Jointline has made its largest investment since the business was established more than three decades ago. Over £1.5 million has been allocated to expand the company's grooving division, introducing new specialist plant and machinery designed to improve operational efficiency, precision and sustainability.

The investment includes multiple ride-on pavement groovers, joint sealing machines, floor saws, new articulated transport units and the remanufacture

of high-capacity water tankers with advanced safety systems. This modern fleet allows Jointline to deliver grooving projects with faster turnaround times and greater accuracy, while reducing environmental impact through improved spoil management and more efficient water usage.

This capability supports runway resurfacing and safety upgrades for both commercial and defence airfields. By deploying the latest grooving machines, Jointline can optimise water drainage, reducing the risk of aquaplaning and improving braking performance. These technological advancements help airports extend the operational life of their infrastructure while enhancing safety for all aircraft movements.



Specialist Grooving at Heathrow: Jointline's grooving equipment in action on the southern runway, enhancing surface performance and safety for one of the world's busiest airports

A Trusted Partner for Airports Nationwide

Jointline's expertise is visible across the UK and International aviation network. In the commercial sector, the company has delivered line marking, grooving, and joint sealing works at major airports including Heathrow, Manchester, Biggin Hill, Newcastle, Teesside, Cardiff, Belfast International, Donegal, Cork and Southampton. Beyond large passenger hubs, Jointline also supports vital regional infrastructure, completing projects for hospital and coastguard helipads where airside safety is equally critical.

In the defence sector, Jointline has contributed to the operational readiness of key Royal Air Force and United States Air Force bases. These projects require strict compliance with military specifications and the ability to coordinate seamlessly within highly secure environments. Working in such settings demands precision, flexibility and a clear understanding of the unique operational requirements of defence aviation. This broad project portfolio demonstrates Jointline's capacity to adapt to a diverse range of operational requirements, from international hubs to specialist military and emergency service airfields.

Looking Ahead: Meeting Tomorrow's Aviation Challenges

As the aviation sector continues to evolve, airports are under increasing pressure to balance safety, efficiency, and sustainability. Future-ready infrastructure will need to accommodate heavier aircraft, increased passenger volumes, and the integration of emerging technologies such as electric and hybrid aviation.

Jointline is positioning itself to meet these challenges head-on. By investing in state-of-the-art machinery, training a skilled workforce and continuously refining its methods, the company is ensuring its services remain aligned with the needs of modern airfields. The focus on sustainability, from efficient resource use to reducing the environmental impact of construction activities, is becoming central to every project delivered.

From commercial airports handling millions of passengers each year to military bases supporting critical defence operations, Jointline remains committed to delivering precise, durable and compliant solutions that keep airfields operational and future-ready.

Meet the team at inter airport Europe in Munich, **Stand B5-1257**, learn more about their latest innovations in airfield infrastructure.

About Jointline Airfields Division

Jointline is a leading provider of airfield line marking, runway grooving, joint sealing and maintenance services, with more than 30 years of experience delivering projects across commercial airports, military bases and regional airfields. Operating throughout the UK and internationally, the company combines specialist expertise with modern equipment to enhance aviation safety and efficiency.

For more information visit our website **jointline.co.uk**



Safely Marking The Way Ahead