

Everywhere.
Every day.

We go further



Resurfacing The Busiest Single Commercial Runway In The World

Gatwick Airport

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Date - 21/03

Airport Background

Project Overview

Intrame UM280 Mobile Asphalt Plant

Marshall Asphalt

Surfacing Operations

HSEQ

Key Figures

Personal Involvement

Conclusion

Gatwick Airport Ltd (GAL)

Worlds busiest single commercial runway

The second largest airport in the UK and the tenth busiest international airport globally

Main runway (3.3km long) – **primary asset**

Operational 24/7

Runway reaching the end of its 12 year serviceable life

YOUR LONDON AIRPORT
Gatwick



Principal contractor: VFL

Contract award: August 2011

Value £42 million

Value of surfacing operations £xx million

Mobile Asphalt Plant (MAP) used to manufacture materials on site

Construction from August – November 2012

Main runway construction : plane off 10mm put back 50mm

Shoulder construction: plane off 10mm put back 50mm

Taxiway construction: plane off 50mm, regulate where needed, put back 100mm





Brand new £2 million MAP

Maximum output of 300 tonnes per hour

RAP capability

Logistics

Installation/commissioning

Environmental permits to operate (Mid-Sussex District Council)

Aggregates and bitumen



Asphaltic Concrete

Traditional material used on runways in the UK

Grooved to improve friction properties and drainage

Extremely hard and long wearing, resistant to rutting, deformation and fuel resistant

Designed to withstand heavy point loads and shear forces from landing aircraft

All in accordance with MA spec



Main runway/shoulders resurfaced first under night time closures

Limited working window

Military precision

Vehicle movements/logistics

Never plan off what you can't put back

3 pavers used in echelon

Other contractors working on runway

Adverse weather

Late hand back penalty

Bigger picture – affect airport, airlines businesses



2100
Mobilise
plant and
labour

2240
Access
runway

2300 Start
planing/
prep work

0000 Start
surfacing

0300
Complete
paving

0330
Complete
compacti
on

0400
Reinstate
lines on
runway



Main runway and taxiways grooved

4x4mm grooves at 25mm centres

UKAS accredited on site lab

MA testing

All testing compliant with specification



Excellent HS record throughout project
with 0 LTI

High risk operations – plant
movements

All planings recycled/re-used on site

Planings sent to Colas quarry for use
as RAP for low carbon asphalt

No environmental incidents

No defects upon completion



43710 tonnes of asphalt mixed
9240 tonnes of planings recycled
301,500m² total area surfaced
68 number of shifts worked
New Vogele 1803-2 paver
commissioned

New Intrame UM280 Mobile
Asphalt used to batch materials

3 pavers used in echelon

0 LTIs

No defects on completion



Quality Engineer

QA/ITP/QMP/NCRs

Precondition survey

Supervise MAP installation

Supervise surfacing operations

Audits

Industry event (ICE GS South Branch)



Working safely - High intensity operations

Understanding clients needs

Surfacing operations completed on time and defect free

No late hand backs

MAP at Birmingham Airport

Sustainability

