



Reading Station – in need of a rethink

Reading Station is one of the busiest parts of the UK's rail network but the complicated track layout constricted the number of trains needed to meet the demands of a modern rail service. Network Rail is addressing this need by 'rebuilding the railway to provide for more trains, fewer delays and a better station'. Works comprise changing the track layout and building new platforms and entrances to promote the free-flow of trains and their passengers.

Stannah – helping the rethink happen

With a portfolio of substantial Network Rail lift refurbishments to its credit, Stannah was first in line for the people-movement revamp, delivering fourteen bespoke lift systems on time and budget. With five new platforms and a passenger footbridge to service, the new lifts will help provide the extra people and goods movement needed for step-free access throughout the station.

Scope of work - responding to pressure

Stannah responded to challenging deadlines to complete the fourteen bespoke lift installations in an emerging new station adjacent to a fully functioning existing hub. In particular, the Stannah team worked 24-7 over a three-month period when ten of the lifts were installed simultaneously.

In September 2012 a huge bridge (constructed alongside the fully operational station) was installed overnight. The main station concourse is sited on this bridge and is the hub of the station, providing access to every area.

£895m

Network Rail redevelopment

15.3m

passenger footfall - and rising

8th

busiest station in the UK

14

bespoke passenger and goods lifts

Clients – a hat-trick of heavyweights

Network Rail: The Authority responsible for the United Kingdom's

railway network.

Costain/Hochtieff: Joint principal contractors – an international

engineering and construction partnership.

Redevelopment Timeline: 2010-2015

Winter 2010: First Phase of work completed over Christmas

Spring 2011: Modernisation work starts

Winter 2012: Platforms renumbered and the new southern platform

opens; Cow Lane bridge (south) opened

Spring 2013: The improved station opens with new platforms

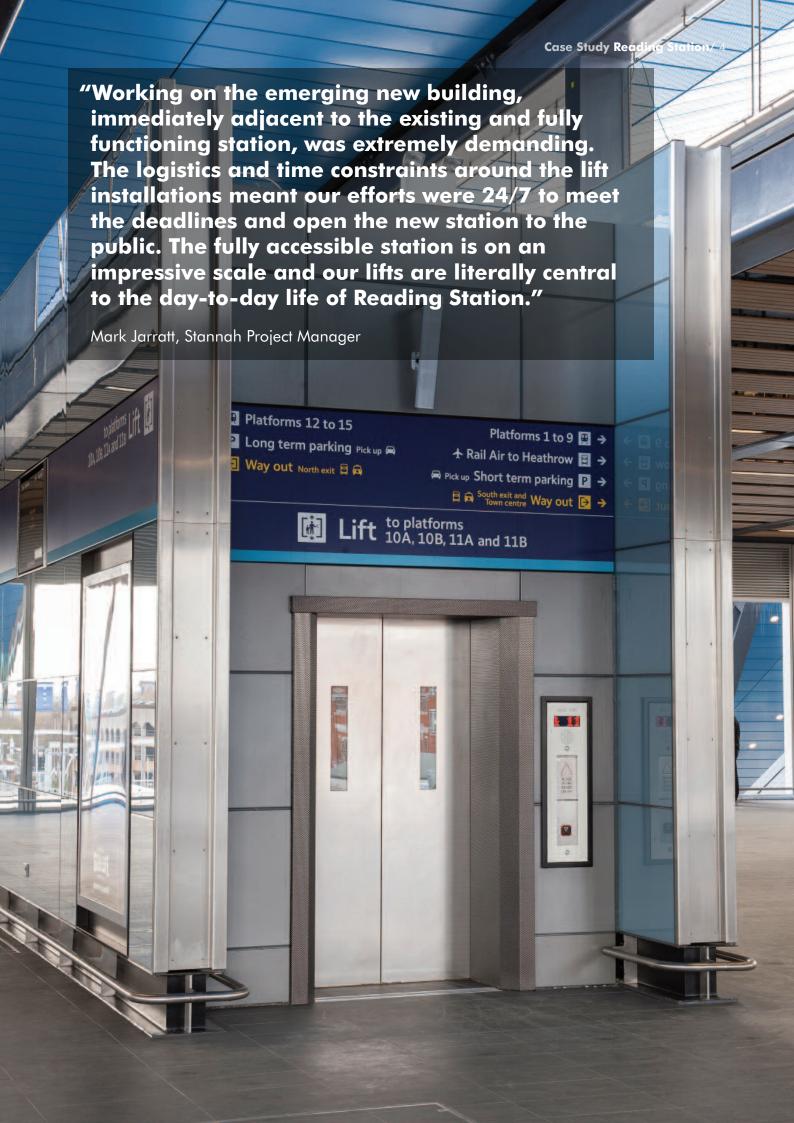
and entrances - and 14 Stannah bespoke

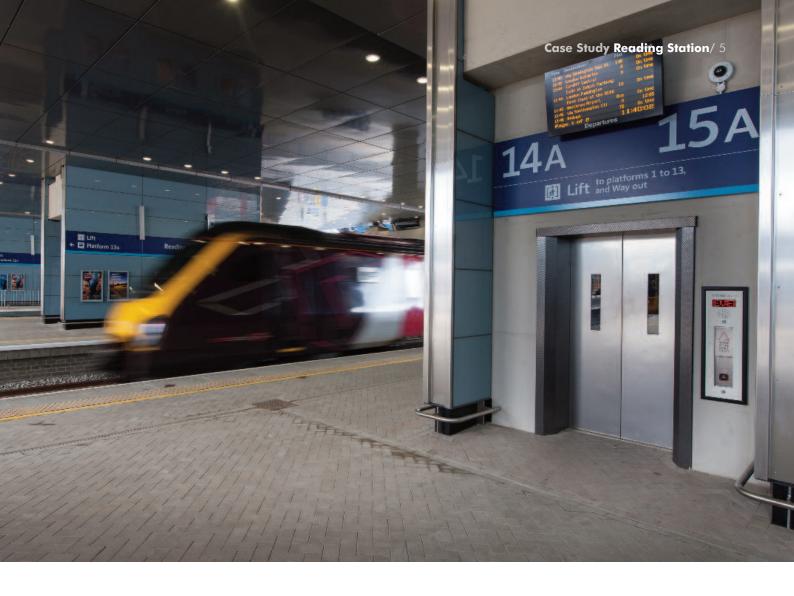
passenger and goods lifts

Autumn 2013: New train depot opens
Spring 2015: Viaduct to cut delays
Summer 2015: Project complete









The 14 Stannah lifts – tailored to suit

One of Stannah's specialties is tailoring lifts to exacting criteria. All fourteen hydraulic lifts in Reading Station were built to Network Rail specifications; and, with an eye to eco-issues, Stannah used energy-saving gas counterbalance accumulators.

On entering the station from the north side two 16-person (1200kg) passenger/goods lifts provide travel to the elevated bridge area. A third matching lift travelling three stops, with a capacity of 20 persons (1500kg), is for staff use only and is operated by a swipe card system. At bridge level these lifts appear as a triplex, adjacent to the escalators.

The bridge features a series of five central lift shafts running right across the concourse, each plinth housing two lifts; one for passenger use and a second that can be used by staff with goods too. The five 2-stop 16 person (1200kg) passenger lifts travel 7 metres to the platforms below. The five 2-stop 20-person (1500kg) staff/goods lifts travel 7 metres to and from service areas.

An additional four 4-stop 16-person lift for staff use only sits in the corner of the bridge back of house for office staff.





Lifts specification – the nitty-gritty

General features

All the lifts benefit from a tough finish for optimum performance in a demanding environment:

Lift car:

Side walls: 16 gauge, 316 grade linen-pattern stainless steel
Entrance returns: 16 gauge, 316 grade Raltex 6WL pattern matt black

stainless steel

Panel interface: Black Darvic strip

Skirting: 14 gauge 316 grade satin stainless steel

Ceiling: 16 gauge white powder coated

Station: 3mm 316 grade satin stainless steel. New Gardenia

BS10815

Doors: 16 gauge 316 grade linen-pattern stainless steel

Flooring: Altro Atlas 40. Anvil

Handrails: Stainless steel New Gardenia B\$10815

Landing Entrance:

Doors: 16 gauge 316 grade linen-pattern stainless steel
Surrounds: 16 gauge 316 grade Raltex 6WL pattern matt black

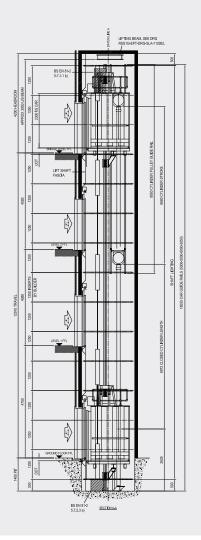
stainless steel

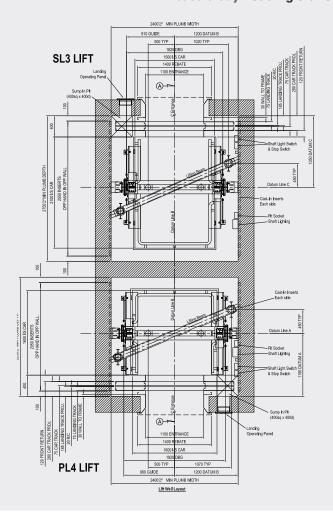
Landing sills: Bronze











A range of operational features:

Speed: 0.63m/s Hydraulics: tandem direct

and indirect

Buffer supports: Bucher or

Stannah

Ram: Bucher Up over travel: 350mm or

210mm

Down over travel: 150mm or

120mm

The motor rooms

All the lifts are hydraulically driven with their motor rooms housed beneath the escalator voids on the entry level of the station on both the north and south sides of the complex.

Lift specific details:

Western Gateline

Platform 7 to bridge level
2 lifts: 1 public, 1 staff
Capacity: 16 person / 20 person

Load: 1200kg / 1500kg

Travel: 7190mm

Platforms 8/9 to bridge level:

2 lifts: 1 public, 1 staff
Capacity: 16 person / 20 person
Load: 1200kg and 1500kg

Travel: 7122mm

Platforms 10/11, 12/13, 14/15 to

bridge level:

6 lifts: 3 public, 3 staff
Capacity: 16 person / 20 person
Load: 1200kg / 1500kg

Travel: 6760mm

Northern Entrance to bridge level:

4 lifts: 3 public, 1 staff Capacity: 3 x 16 person,

1 x 20 person

Load: 1200kg and 1500kg

Travel: 12910mm





Compliance – for total reassurance

All fourteen Stannah lifts meet all regulations, standards and directives, and help Network Rail meet the requirements of the Equality Act 2010.

Maintenance – for total support

All the Stannah lifting equipment at Reading is supplied with guarantees and is maintained by the Brackley branch of Stannah Lift Services, covering South Midlands and Home Counties as part of the nationwide service and maintenance contract with Network Rail.

The Stannah promise

Stannah is committed to delivering: The best quality products Superior service Good value for money Complete reliability

All backed by a 150-year lift manufacturing pedigree.





All Stannah lift products meet required standards, including: The Equality Act 2010, EN81-70, EN81-3, BSEN115, Health & Safety at Work Act, CE Mark and Certificate of Conformity.

To find out more about Stannah's comprehensive ranges of Passenger Lifts, Platform Lifts, Escalators & Moving Walkways and Goods & Service Lifts, go to www.stannahlifts.co.uk



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