



THORNE &  
DERRICK  
INTERNATIONAL

Thorne & Derrick  
+44 (0) 191 410 4292  
www.heatingandprocess.com

WORLD'S LEADING MANUFACTURER  
OF HAZARDOUS AREA PORTABLE  
& TEMPORARY LIGHTING

# ATEX Turbolite

Zones: 1, 2, 21 and 22



## Product Overview

**The ATEX Turbolite is a high power compressed air driven lamp for use in potentially explosive atmospheres and meets EN 1127 'Explosion Prevention and Protection' in Europe and FM Class 3600 'Electrical Equipment for use in Hazardous (Classified) Locations' in the USA.**

Wolf air lamps provide illumination for shotblasting, cleaning and coating of storage tanks and vessels and pipeline and structural engineering activities, offering a safer alternative to mains and low voltage lighting where explosive atmospheres present a serious risk to the workforce. Light models include: Bay provides a high level of all-round general illumination and Flood has a matt reflector giving a wide-angle diffused beam. Available in aluminium (A) or brass (B), usable in gassy mines and all lamps are nickel plated to protect against corrosion and are supplied with a bridle and safety hook fitted.

The ATEX Turbolite is powered, purged, pressurised and cooled by compressed air controlled by an integral regulator, which passes through the lamp head and drives the turbine wheel by means of three nozzle plates. The turbine drives a magnet rotor within windings, generating the 24 Volt ac electrical supply which powers the 250 Watt halogen bulb. Major improvements over other models, include sealed bearings, refined regulator, greater use of stainless steel components, bulb-life enhancing device and silencer with a particle trap.

**Special certification conditions:** clean, dry compressed air and anti-static air hose are used to operate the lamp to minimise contamination inside the lamp and dangerous accumulation of static electricity and in potentially explosive dust atmospheres a 'remote exhaust' must be used, exhausting air to the safe area. Accessories available include anti-static hoses, filters and stands, tripods, setting and testing devices.

## Features & Benefits

- CE marked to ATEX Directive, for use in zones 1 and 2 Hazardous Areas
- Aluminium super-lightweight construction
- 250 watt Halogen light output
- Safe compressed air power source
- Re-designed for greater reliability
- Fitted with stainless steel exhaust silencer
- Dust ignition protected for zones 21 and 22 using remote exhaust
- Group I Mining approval with alternative brass construction
- US Factory Mutual dual marking approval

## Certifications

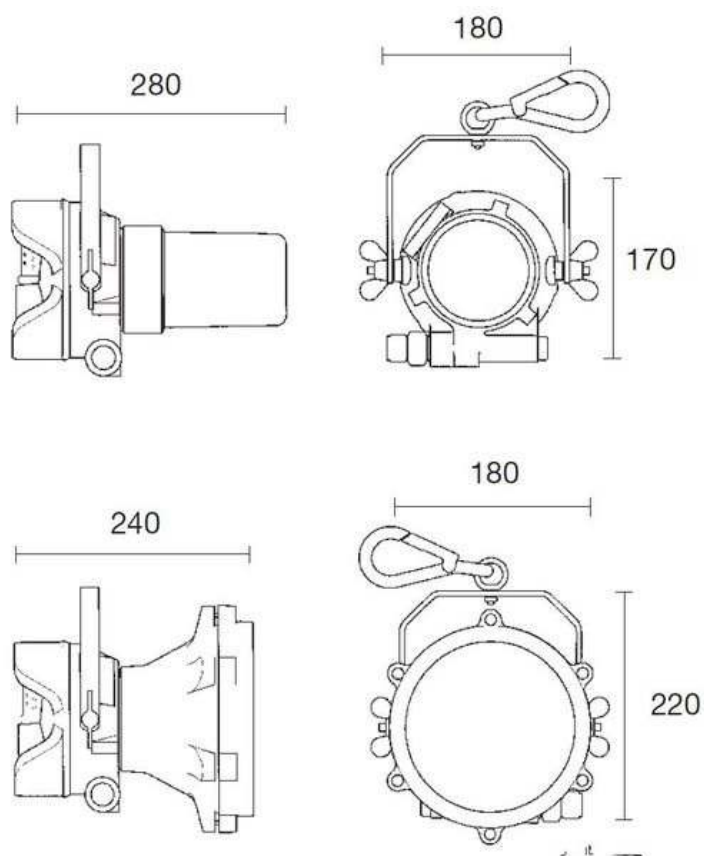


Technical Specification

Product Reference		A-TL44A	A-TL44B	A-TL45A	A-TL45B
Product Description		Safety Bay Light, Compressed Air Powered		Safety Flood Light, Compressed Air Powered	
Code	ATEX	II 2 GD II T4 (Tamb = 55°C) T135°C			
	Mining	-	I M2	-	I M2
	FM	Class 1 Div 1 Groups A, B, C, D. T4 Ta = 55°C			
Apparatus Standards		EN1127:1998			
Type of Protection		Technical File			
Area of Class (Gas)		Zones 1 and 2, Gas Groups IIA, IIB, IIC			
Temp. Class (Gas)		T4			
Area of Class (Dust)		Zones 21 and 22			
Max Surface Temp. (Dust)		T135°C			
Ambient Temperature		-20°C to +40°C			
Certificate		SIRA02ATEX5099X			
Enclosure		Aluminium	Brass	Aluminium	Brass
Lens		Lens Ball Glass/Plastic Dome		Toughened Glass (15mm)	
Beam Type		All-around 360°C Illumination		Flood (as standard) or Spot (to order)	
Light Source:	Part Number	A-129 (as standard) / A-159 (alternative)			
	Type	Halogen Filled Filament Bulb			
	Volts	24v			
	Watts	250w			
	Output	6000 lm/9000 lm			
	Life	2000 hrs/200 hrs			
Power Source:	Type	Compressed Air Driven Turbo-alternator			
	Air Pressure	5.0-8.0 bar			
	Consumption	0.75m3/min			
Ingress Protection		Once pressurised may be used underwater			
Weight		5.5kg	9.4kg	7.1kg	13.5kg

- All information has been gathered under laboratory conditions, the user must regard the values given as approximate.
- Changes may be made to the above specification without notification, details are available on request.

## Product Dimensions



## Light Output

### A-TL44A/B - Ball Glass

Peak luminous intensity at 2.5m **70lux**

### A-TL45A/B - Polished Reflector

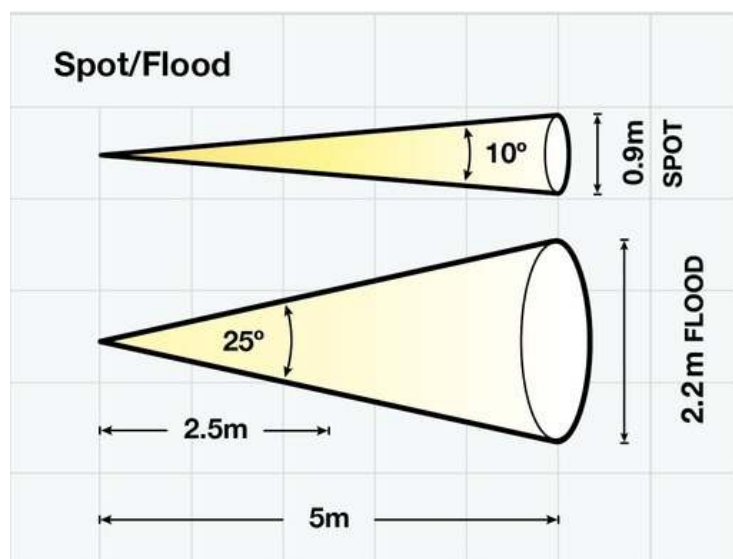
Spot Beam (approx 10°)

Peak luminous intensity at 5m **2000lux**

### A-TL45A/B - Matt Reflector

Flood Beam (approx 25°)

Peak luminous intensity at 5m **950lux**



Version: SL001 Issue 2



**THORNE &  
DERRICK**  
INTERNATIONAL

**Thorne & Derrick**  
+44 (0) 191 410 4292  
[www.heatingandprocess.com](http://www.heatingandprocess.com)

ISO 9001  
BUREAU VERITAS  
Certification

