



Setting the industry benchmark, Alwaysse **800 Series Ball Transfer Units** are the go-to option for specifiers of ball decks – having undergone successful testing with numerous air cargo handlers, express couriers and military clients. Units are available for the most arduous uses, with slotted bases to allow for escape of debris and the ability to handle the heaviest air cargo containers. **The 805 Unit** is the best choice for air cargo, and listed in the IATA specification.



The Alwaysse **Flanged Unit** (often known as the Flying Saucer) is the mainstay of our ball deck and table offering. Available in a large range of sizes, it is able to carry a heavy load and provides a robust platform for reliable performance over many years. Its ease of replacement enables fast changeover times to keep high impact areas running smoothly with the minimum of downtime.



The Alwaysse **Euro Unit** is the go-to product for a huge range of industry applications. From ball tables to conveyor applications, the Euro unit covers a multitude of applications. Built to the same level of precision as its larger siblings, it offers long life and precision movement in a great value package.

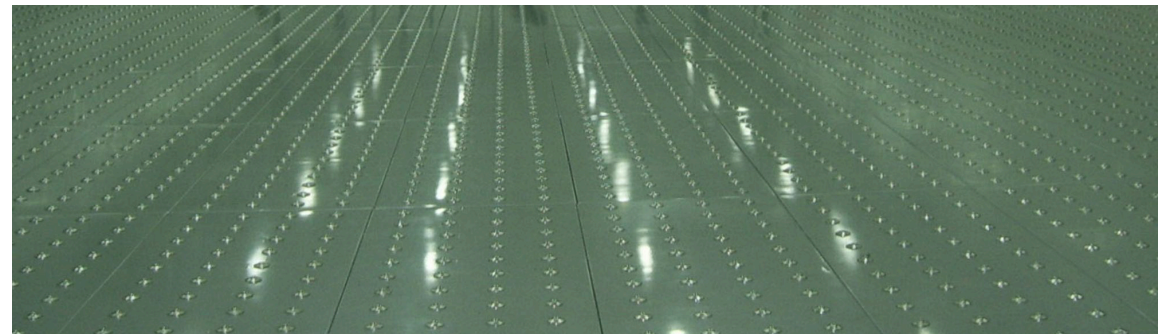
A SMOOTH OPERATION WITH ALWAYSE BALL TRANSFER UNITS



AIR CARGO HANDLING



TECHNICAL INFORMATION





Air cargo handling systems that put you in control

ALWAYSSE Engineering designs and manufactures omni-directional movement solutions, enabling smooth and efficient manual movement of ULDs, pallets and heavy cargo, often in very demanding environments. Our 805 units are named in the IATA specification.



Maintenance

Ball transfer units are classed as a semi precision bearing and providing they receive regular maintenance service and is not operated beyond its capacity, the unit should give several years satisfactory service. For more information on maintenance and suitable cleaning fluids, please contact our technical sales staff.

IATA Airport Handling Ground Support Equipment Specifications

Below are IATA recommendations for maximum spacing of ball transfers covering an area that a cargo container is to be moved over. The spacing of the units should be measured in a square (90°) arrangement and are as follows:

When using balls of less than 30mm (1.2") diameter - 127mm (5")

When using balls of 30mm (1.2") diameter and larger - 180mm (7")

When using balls of 60mm (2.4") diameter and larger - 305mm (12')

Minimum ball diameter - 25mm (1")

Maximum height difference for unloaded ball transfers in any 1524mm x 1524mm (5'x5') area - 6mm (0,25")

Maximum height difference between any two adjacent ball transfers - 3mm (0.12")

Materials

Our ball units are available in various materials. The material required for should be quoted when ordering:

Material Option	Water / Moisture	Temperature Range	Non-Marking	Ball Hardness
Type 13 - Carbon Chrome	Internal Moisture Only	-30°C to +100°C	No	60-66RC
Type 14 - Nylon	Internal Moisture Only	-30°C to +80°C	Yes	Nylon 66
Type 15 - Stainless Steel (All)	Maximum Exposure / Outdoor Use	-30°C to +200°C*	No	52-58 HRC
Type 16 - Stainless Steel (Ball Only)	Internal Moisture and Minimal External Use	-30°C to +100°C	No	52-58 HRC

Ball Decks

The three main types of ball decks are:

Modular Systems - comprising of ball channels welded together to form a single rigid area, giving the strength of individual ball channels and removing the need to individually fix each channel.

Ball Channel - a very rapid and flexible means. This system allows you to accommodate difficult areas and irregular contours such as building support stanchions and internal office areas.

Ball Plates - manufactured from a heavier gauge material which produces a stronger deck, eliminating the need for support braces and leading to an overall lower profile. The surface of the deck is unbroken, reducing the chance of an uneven surface.

All ball decks can be manufactured with non-slip, non-corrosive material, dependent on application.