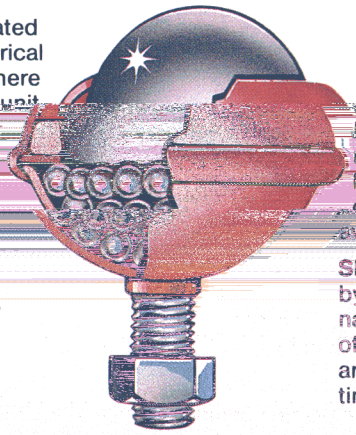
TECHNICAL INFORMATION

The following applies to all Ball Units unless mentioned in the appropriate section.

ALWAYSE Ball Units consist of a large ball seated on a quantity of small bearings in a hemispherical cup. NOT JUST A SINGLE RING OF BALLS. There are from 80 to 150 bearings according to ball unit size. This design enables the large ball to rotate freely and instantaneously in ANY direction. Extremely heavy loads can be moved with the minimum of effort.

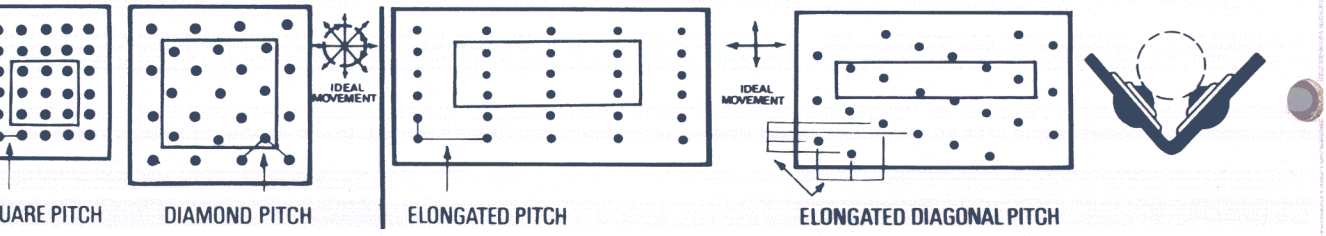


It should be noted that the load is supported through the centre line of the unit. It may also be applied offset, upwards, downwards or sideways, although this may affect stated loading (see appropriate table). Tubes and bars of varying diameters can also be conveyed.

TO DETERMINE BALL UNITS CAPACITY the weight of the article to be conveyed should be divided by 3. The result gives the maximum load which can safely be applied when Ball Units are levelled accurately, then a larger number than 3 may be applied. The surface hardness and condition of the article to be conveyed should be taken into consideration to avoid undue ball penetration.

SPACING OF BALL UNITS. The pitch is obtained by dividing the narrowest dimension by 3.5 i.e. narrowest dimension 14" divided by 3.5 = pitch of 4" between ball centres, this ensures 3 units are beneath the narrowest dimension at any one time.

SOME BALL UNIT ARRANGEMENTS



UARE PITCH | DIAMOND PITCH | ELONGATED PITCH | ELONGATED DIAGONAL PITCH | SQ

TYPE	MATERIALS	TYPE	MATERIALS
	Carbon steel bearings. 60-66 Hrc		Stainless bearings.
			AISI 304 (EN58E).
14	Nylon single ball, ferrous bearings and shell.	16	Stainless bearings. 55-58 Hrc Ferrous steel pressings.

UBRICATION. Each Ball Unit is PRE-LUBRICATED during manufacture and normally does not require further attention. n certain applications we will advise on lubrication. Greasing or oiling points can be incorporated in some units.

LEANING. A suitable cleaning or release fluid should be used if dirty conditions prevail. Paraffin or suitable detergent

SHOCK LOADS. When calculating loads bear in mind the possibility of impact from dropping, incorrect levels etc. Spring loading will considerably reduce wear and tear to the Ball Units where they are subject to continuous harsh

RETRACTABLE BALL UNITS. Ball Units can be made retractable by means other than spring loading. Pneumatic or

LF LEVELLING can be effected by fitting rubber pads under each unit. This allows any unit standing proud to be mpressed to the mean level eliminating the possibility of excessive loading on a few units. Details on request.

LF LOCKING. Spring loaded Ball Units permit an empty container to move freely into position, then stand firmly when

F CLEANING. Most designs of ALWAYSE Ball Units have holes in the base of the bearing cup

AL. A seal is incorporated to help resist ingress of dirt and swarf etc. Either Polyurethane foam or felt. Although it can

PERATURE. (Minimum – 30°C to maximum 70°C continuous or 100°C intermittent), do not affect the running ities but special seals may have to be fitted to suit prevailing conditions ean conditions without seal 150°C-200°C is possible.

15 Nm MAX TORQUE ALL UNITS

L CASTORS. Many Castor applications can be solved with Ball Transfers.

trated below are various methods of fixing the standard range of 'Alwayse' Ball Units. de range of fittings enable them to be used with metals, wood, plastics and slotted angle, etc.

ult our Technical Department for further details

pecifications subject to change without prior notice providing the product capabilities are not reduced.

We cannot accept liability for any verbal recommendations