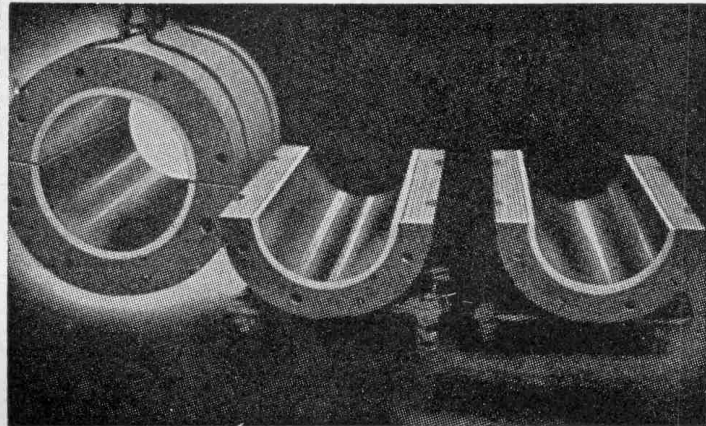


HOYT BEARING METALS

Available in twelve different grades to cope with every bearing metal problem.

Hoyt Metals are made from selected metals of the highest commercial purity. All metal mixing and casting is under scientific control.



Y401—

"NUMBER ELEVEN" ALLOY—the toughest and most durable lining metal on the market.

80



TOUGHNESS.

"No. 11" will stand the strain under pounding or conditions of extreme loading. Its exceptional toughness is of special value with cast-iron or steel bearing shells.

In large bearings, too, where the tinning is often weak with resultant looseness of the linings, "No. 11" will resist any tendency to break up, and will give long service in adverse conditions.

ANTI-FRICTIONAL QUALITIES.

In bearings that have a high working temperature, anti-friction alloys have their strength (resistance to pressure) reduced, which assists any tendency to crack, with subsequent troubles.

"No. 11" shows a very low temperature rise under applied load and so the danger of overheating is minimised—an important advantage, for every degree of heat lower means additional strength to the liner and helps to maintain the proper viscosity of the oil. Cool running means power saved.

DURABILITY.

On a wide variety of jobs, Hoyt's "No. 11" has proved to be the most durable and satisfactory bearing metal.

The Hoyt Book on the lined Bearing is available on request.

"NUMBER ELEVEN" made in TWO GRADES — "D" and "R"

Hoyts World Famous "NUMBER ELEVEN" "D" is the most dependable Anti-Friction Metal known for High Speed Work such as Aeroplanes, Automobiles, Marine Engine Air Compressors, Electric Generators, etc.

Hoyts "NUMBER ELEVEN" "R" is the right metal for Diesel Engines. It stands apart from all other Anti-Friction Metal. It is a metal that is sufficiently hard so as not to yield to the High Working Loads encountered in Diesel Engines, yet one that is, at the same time, of exceptional toughness to minimise the possibility of cracking.

In 7½ lb. ingots Price 7/8¼ lb.



BEARING METALS

(Continued)

Y402— HOYT "STAR" BRAND METAL

HOYT "STAR" METAL'S composition and quality are always uniform, and users are assured a full measure of satisfaction from every ingot.

Hoyt "Star" Metal contains more than double the percentage of tin found in metals ordinarily sold for these services.

STAR METAL gives lasting wear in

Agricultural Machinery.
Axleboxes (all types).
Brick Making Machinery.
Bakery Machinery.
Boot and Shoe Machinery.
Colliery Plant.

Cement Making Machinery.
Concrete Mixers.
Flour and Rice Mills.
Fans.
Lifts.
Laundry Machinery.

Mining Machinery.
Mill Shafting, etc.
Paper Machinery.
Plummer Blocks.
Railway Axleboxes.

Stone Crushers (Jaw).
Textile Machinery.
Threshing Machines.
Tramcar Bearings.
Tube Mills.
Winches, etc., etc.

In 7 1/2 lb. ingots Price 2/7 lb.

GENERAL PURPOSE METALS

Y403—"I.C.E." METAL ("Internal Combustion Engine")

A Hoyt brand of great merit, for severe high-speed duties.

"I.C.E." BRAND is a high-grade, tin-base composition of proved high efficiency, and one to be relied upon always for a full measure of long and carefree service.

An improved formula superseding the old "copper-hardened" metal.

Price 6/- lb.

Y404—"ARROW"

A high quality anti-friction alloy for heavy pressure and high-speed.

ARROW is a dense-grained, tough composition, suitably hardened with Copper and Antimony.

Price 4/2 1/2 lb.

Y405—"No. 1"

A very good anti-friction metal for heavy pressure and medium speed, or medium pressure and high speed.

A tenacious, tough metal, carrying a large percentage of tin.

Price 3/- lb.

Y406—"No. 3M" (Magnolia Type)

Equal to or better than the numerous metals claimed to be of the "Magnolia Type."

Can be used for most of the purposes for which "STAR" is especially recommended.

Price 2/2 1/2 lb.

Y407—"Nos. 4a AND 4"

Close-grained metals, for light pressure and medium speed, or medium pressure and slow speed.

The best of all low-priced Babbitts.

No. 4A, 1/7 1/4 lb. No. 4, 1/1 lb.

Y408—HOYTS PLASTIC METAL

A high grade self tinning Plastic Metal extensively used in Marine Engine and Locomotive work.

In sticks weighing approximately 1 lb.

Price 5/9 1/2 lb.

ANY TINNING FLUX SUITS HOYT METALS, but we recommend "Hoyt Powder Flux": it is especially good as it helps to clean the surface of the bearing.

See Index under "Fluxes".

Y409—No. 175

For Gyrotory and Heavy Duty Crushers, Rolling Mills, etc.
— Highly recommended for eccentric bearings of gyrotory crushers, locomotive bearings, pumps, tube mills, and in those cases where additional hardness in the babbitt is desired.

Physical Characteristics:

Brinell No. 38-40
Compression yield—lbs. per sq. inch to produce 2 per cent. reduction in height of sample 17,500 lbs. (approx.)
First melting point 238° C. (460° F.)
Liquid point 399° C. (750° F.)
Average pouring temperature 430° C.-480° C. (800-900° F.)
6/10 lb.

Y410—No. 400

Corrosion-Resisting Metal for Under-Water Bearings — This material represents the latest development in connection with bearing metals designed for operating in salt water. It is almost equi-potential with steel in aerated sea-water, and offers a high intrinsic resistance to corrosion. It is also shown to possess superior anti-frictional properties, especially when running in sea-water without oil lubrication.

Tensile Strength 7.4 tons per sq. in.
Brinell Hardness No. 35.7
Pouring Temperature 310° C. (590° F.)

8/1 1/4 lb.

Y411—No. 7 METAL

A copper-free metal for bearings of anhydrous ammonia machinery, and enclosed type of compressors.

6/6 1/4 lb.

Specific Gravity and Weight per cu. in.

	S.G.	Wt. c. in.
NUMBER ELEVEN	7.312	.264 lbs.
No. 175 Metal	7.51	.2711 lbs.
I.C.E. Metal	7.96	.2875 lbs.
ARROW	8.93	.3225 lbs.
No. 1	9.55	.345 lbs.
STAR	10.0	.3625 lbs.
No. 3M	10.11	.365 lbs.
Nos. 4A and 4	10.42	.376 lbs.

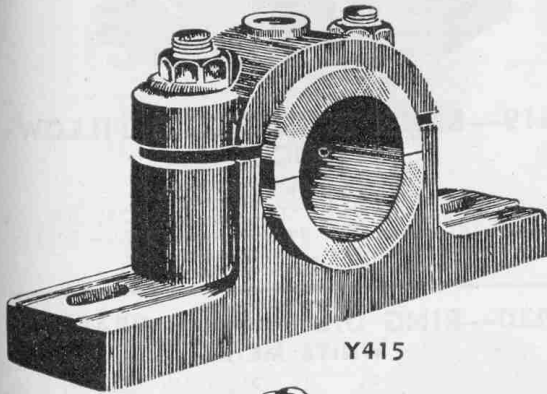
"HOYT" BEARING METALS — (Contd.)

The following is a table of machinery types, together with the Hoyt grade recommended. If your particular class of work is not mentioned, we shall be pleased to quote a suitable grade.

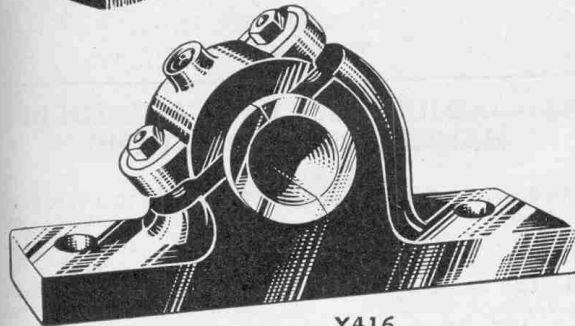
NATURE OF DUTY:	Hoyt Grade Recommended	NATURE OF DUTY:	Hoyt Grade Recommended
Agricultural Machinery (All types in general, except prime movers)	STAR	Lorries:— Petrol Diesel Pit	Number Eleven "D" Number Eleven "R" No. 4
Air Compressors	Number Eleven "D" or No. 175	Locomotives:— Connecting-rods Axleboxes	No. 175 or I.C.E. according to size and duty. No. 175, I.C.E., Arrow, according to size I.C.E.
Air Pumps	I.C.E.	Machine Tools	Number Eleven "R"
Aircraft Engines	Number Eleven "D"	Marine Oil Engines	
Ammonia Compressors (Enclosed type)	No. 7 (Copper-free)	Marine Steam Engines Large Small	I.C.E. I.C.E. or Arrow
Automobiles	Number Eleven "D" or I.C.E.	Mill Shafting, etc	STAR or No. 3M (See "Collieries")
Axleboxes:— Railway Coaches " Locomotives " Waggons Road Rollers Tramcars	No. 1 No. 175 or I.C.E. STAR Arrow STAR	Mining Machinery	
Bakery Machinery	STAR	Motor Cars	Number Eleven "D" or I.C.E.
Bobbin Making Machinery	Number Eleven "D"	Motor Boat Engines	Number Eleven "D" or I.C.E.
Boot and Shoe Machinery	STAR	Motor Boat Stern Tubes and "A" Brackets	No. 400
Brick Making Machinery: Rollers General Plant	I.C.E. STAR	Oilwell Boring Machinery	No. 4
Cement Making Machinery	STAR	Paper Machinery	STAR
Centrifugal Pumps	I.C.E. or No. 175	Paraffin Engines	Number Eleven "D" or I.C.E.
Chocolate and Confectionery Machinery	STAR	Plummer Blocks	STAR or No. 3M
Circular Saws	I.C.E.	Pulverisers	No. 175
Colliery Plant:— Rope Capping Tubs Pumps Fans	No. 3M or No. 4 No. 4 I.C.E. STAR or No. 175	Pumps	I.C.E.
Concrete Mixers	STAR	Quarry Machinery:— Crushers (Jaw Type) (Gyratory) Jaw-backing Tube Mills	STAR No. 175 No. 4 No. 175 or STAR
Converters (Rotary)	I.C.E.	Rope Conveyors	STAR
Cranes	No. 1	Rolls and Rolling Mills Sugar Rolls	No. 175 or I.C.E. No. 175
Diesel Engines	Number Eleven "R"	Road Roller Axles	Arrow
Electrical Machinery:— Dynamos Motors and Converters Small ditto	I.C.E. I.C.E. Arrow or No. 1	Rope Capping	No. 3M or No. 4
Engines:— Diesel Engines Gas, Petrol and Small Oil Engines Steam Engines	Number Eleven "R" Number Eleven "D" or I.C.E. I.C.E.	Saw Mills	I.C.E.
Fans:— Large or where exhausting hot gases Small and medium size	No. 175 STAR	Semi-Diesel Engines	Number Eleven "R"
Flour and Rice Mills	STAR	Steam Engines:— High-speed Medium and slow-running, etc.	I.C.E. Arrow or No. 1
Gas Engines	I.C.E.	Stern Tubes — and all under-water bearings	No. 400
Lathes	I.C.E.	Sugar Rolls	No. 175
Laundry Machinery:— Hydro-Extractors Other types	I.C.E. STAR	Tar Macadam Machinery	STAR
Lifts	STAR or No. 3M	Textile Machinery	No. 1
		Threshing Machines	STAR
		Tramcar Bearings:— Armature, Suspension and Axle Bearings	Arrow, No. 1 or STAR
		Tube Mills	No. 175 or STAR (according to severity of duty)
		Turbines	Number Eleven "D"
		Winches	STAR
		Winding Engines	See Engines.
		Woodworking Machinery Highest Speed Medium Speed Circular Saws	Number Eleven "D" I.C.E. I.C.E.

IF IN DOUBT ASK FOR TECHNICAL ADVICE

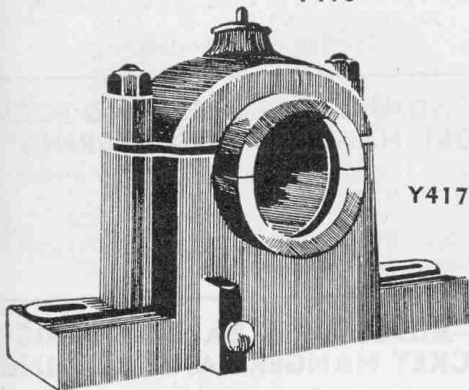
PLUMMER BLOCKS



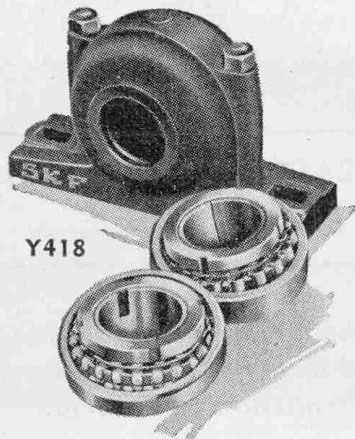
Y415



Y416



Y417



Y418

Y415—STANDARD PLUMMER BLOCKS

With brass bearings, top and bottom, length $1\frac{1}{2}$ times the diameter of bore.

	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$ in. bore
Light Type	10/3	10/3	10/3	10/3	10/3	11/- each
Heavy Type	—	—	—	—	15/9	17/- each
	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$ in. bore
Light Type	11/-	17/6	15/9	18/-	22/9	30/9 each
Heavy Type	17/-	23/6	23/6	29/6	33/-	42/- each
	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$	4	in. bore
Light Type	39/3	56/3	60/9	—	—	each
Heavy Type	48/9	65/9	71/9	101/3	137/6	each

Discount on application.

Y416—ANGLE PLUMMER BLOCKS

Bore	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$ in.
Price	20/9	23/3	31/6	41/- ea.
Bore	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3 in.
Price	46/3	55/9	65/1	96/9 ea.

Discount on application.

Y417—SELF-OILING PLUMMER BLOCKS

Length of brasses, $1\frac{1}{2}$ times bore diameter, plus $\frac{5}{8}$ in.

	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2 in.
Light Type	18/9	20/6	20/6	26/6	35/3	45/9
Heavy Type	—	—	33/-	34/6	45/6	54/9
	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{2}$	4 in.
Light Type	55/9	72/9	102/9	114/9	187/6	259/3
Heavy Type	70/-	90/9	120/3	132/9	227/-	304/6

Discount on application.

Y418—BALL-BEARING PLUMMER BLOCKS

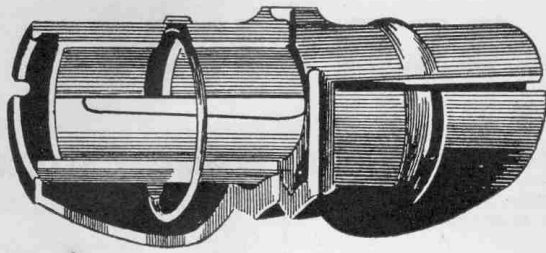
Self-aligning.

Size	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$ in.	
List Price	41/-	39/-	51/-	54/- ea.	
Size	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3 in.
List Price	59/-	69/-	87/-	104/-	146/- ea.

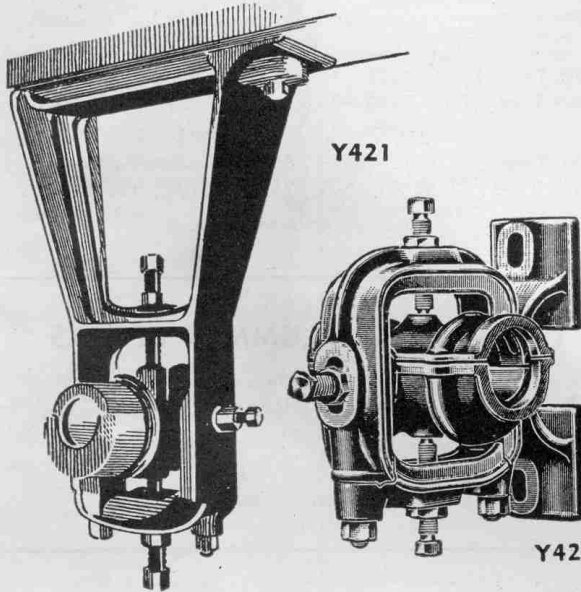
DISCOUNT ON APPLICATION.

MACHINE TOOL INFORMATION

Comprehensive illustrated leaflets on Machine Tools may be obtained on request.

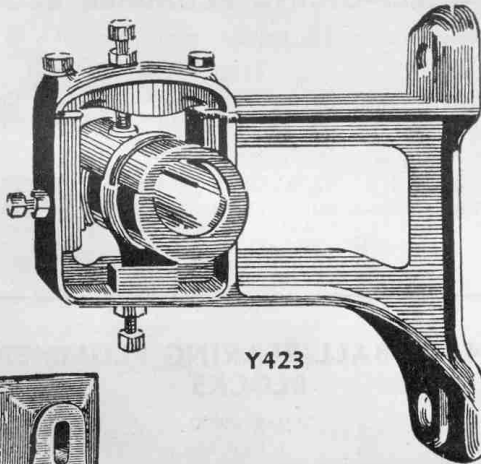


Y420

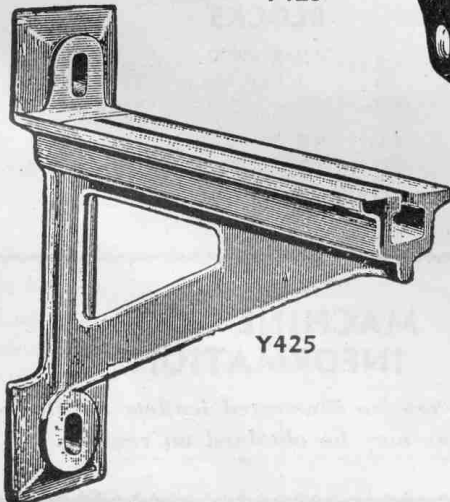


Y421

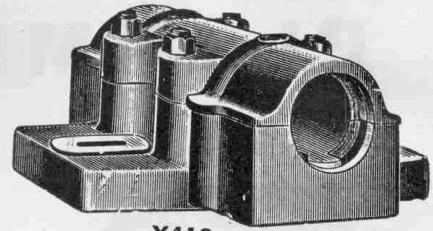
Y422



Y423



Y425



Y419

Y419—RIGID RING-OILING PILLOW BLOCKS

With white-metal bearings.

Size 1 1¼ 1½ 1¾ 2 2¼ 2½ 2¾ 3 in. bore
Price 16/3 18/- 21/- 26/6 34/3 41/- 42/9 52/- 54/3 ea.

Discount on application.

Y420—RING OIL HANGER BEARING WHITE METAL

1 1¼ 1½ 1¾ 2 2¼ 2½ 2¾ 3 in.
11/- 11/9 12/9 16/3 21/6 24/3 28/- 38/- 41/3 ea.

Discount on application.

Y421—ADJUSTABLE BALL AND SOCKET HANGER OR FLOOR STAND

Cast Iron.

7 x 9 x 1 32/6	7 x 9 x 1¼ 33/3	7 x 9 x 1½ 34/3	10 x 12 x 1 in. 34/- ea.
10 x 12 x 1¼ 34/9	10 x 12 x 1½ 35/9	10 x 12 x 1¾ 41/6	10 x 12 x 2 in. 46/9 ea.
13 x 15 x 1 37/9	13 x 15 x 1¼ 38/6	13 x 15 x 1½ 39/6	13 x 15 x 1¾ in. 45/6 ea.
13 x 15 x 2 50/9	14 x 16 x 2¼ 64/9	14 x 16 x 2½ in. 68/6 ea.	

Discount on application.

Y422—ADJUSTABLE BALL AND SOCKET POST HANGERS AND BEARING

Cast iron. Ring oiling, or with bearings for grease. Side adjustment ½ in.; vertical 1 in.

Dia. 1 1¼ 1½ 1¾ 2 2¼ 2½ in.
Price 30/6 31/6 33/6 36/9 42/3 48/- 51/3 ea.

Discount on application.

Y423—ADJUSTABLE BALL AND SOCKET BRACKET HANGERS AND BEARINGS

Suitable for Ring Oil Bearings.

10 x 1 33/9	10 x 1¼ 34/6	10 x 1½ 35/9	10 x 1¾ 39/3	12 x 1½ in. 40/9 ea.
12 x 1¾ 44/3	12 x 2 54/9	14 x 1½ 43/3	14 x 1¾ 46/9	14 x 2 in. 59/9 ea.

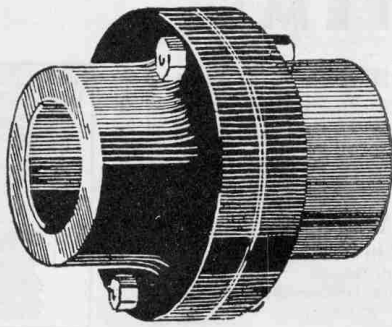
Discount on application.

Y425—CAST IRON WALL BRACKETS

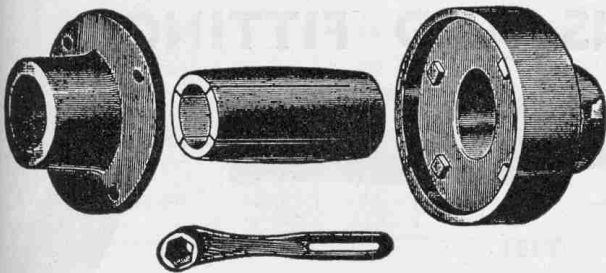
Suitable for any type of bearing.

Sizes and prices on application.

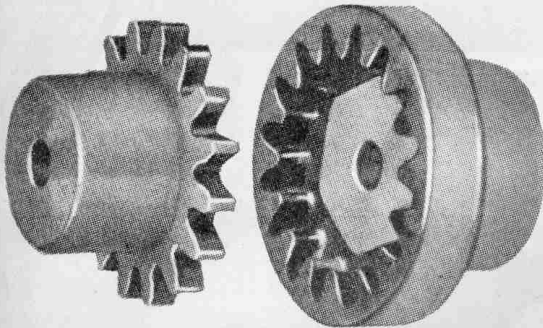
We should be glad to quote for special installations of power transmission equipment.



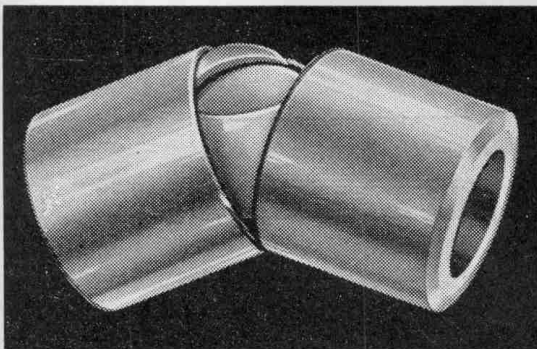
Y427S



Y428S



Y429S



Y430

Y426—SHAFTING COLLARS

Shaft Dia. ...	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4 in.
Price	3/-	3/-	3/-	3/-	3/-	3/-	3/- ea.
Shaft Dia. ...	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/4 in.
Price	3/3	3/6	4/9	4/-	6/6	5/6	6/3 ea.
Shaft Dia. ...	2 1/2	2 3/4	3	3 1/4	3 1/2	4	in.
Price	7/9	9/-	11/3	12/3	14/3	17/6	ea.

Y427S—STANDARD FLANGED COUPLINGS

Shaft Dia. ...	3/4	7/8	1	1 1/8	1 1/4	1 3/8 in.
Price	28/-	29/3	30/-	32/9	32/9	38/9 ea.
Shaft Dia. ...	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4 in.
Price	38/9	45/-	55/6	67/9	83/-	100/- ea.
Shaft Dia. ...	3	3 1/4	3 1/2	4		in.
Price	117/-	159/9	159/9	213/-		ea.

Discount on application.

Y428S—COMPRESSION COUPLINGS

1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3 in.
37/3	40/6	45/9	57/-	64/6	77/3	88/6	101/3	114/6 ea.

Discount on application.

Y429S—"GEARTEX" FLEXIBLE COUPLINGS

A Flexible Coupling that offers many advantages for Light Powers.

Gearflex is a laminated moulded fabric Bakelite material widely used for the construction of silent gears. It is not affected by extremes of temperature, oil, water, petrol and many acids. Its natural resilience is combined with high breaking strength and permanence of form.

Owing to the number of teeth in contact and the accuracy of generation—they are cut on gear generating machines—the load is uniformly distributed. This leads to light weight, low cost and a minimum size for a coupling of great strength.

It is also a "safe" coupling, with only two parts. The teeth on the steel gear half are completely enclosed within the moulded portion and the exterior is perfectly smooth. The fabric half is reinforced in the bore with a metal bush to take a standard keyway.

The Coupling isolates the drive from the driven unit electrically and thermally, and offers a safe flexible mechanical connection.

Nos.	GT1	GT2	GT3	GT4
Minimum Bore ..	3/8	1/2	7/8	1 in.
Maximum Bore ...	3/4	1 1/8	1 1/2	2 in.
	28/6	41/3	64/6	123/6 ea.

Couplings are supplied with minimum bore as listed, but can be bored and keywayed up to the maximum sizes shown for an extra charge of 9/6 each.

HORSE POWER RATINGS — MAXIMUM FOR NORMAL DUTY

	Revolutions per Minute						
Size	100	250	500	750	1000	1500	3000
GT15	.7	1	1.2	1.5	1.8	2.5
GT2	2	3	5	6	7	8	9
GT3	3	5	7	9	10	12	15
GT4	6	10	14	16	18	21	27

Y430—"MOLLART" UNIVERSAL BALL JOINTS

For power transmission through an angle. Has a wide range of application for the transmission of power in machine tools and all types of machinery. Designed to provide compactness with high load-carrying capacity and reliability for long periods.

The components of the joint comprise a ball grooved in two planes at right angles to each other, and two forked members ground to a sliding fit in the grooves and surrounding them by more than 180°. The sliding and fitting surfaces are ground to a tolerance of .0005 in.; the highest grade material is used throughout, with special machining and heat treatment processes.

Standard joints are made for angular drives up to 38°. Supplied with grease-retaining covers.