TABLE 7

FRACTIONAL SIZES.

PREFERRED DIAMETERS.		PREFERRED PITCHES (T.P.I.)								
1ST. CHOICE	2ND CHOICE	U.N.C. SERIES	U.N.F SERIES	6.	8.	12.	16.	20.	28.	36.
1/4	-	20	28	-	-	-	-	-	-	36
5/16	-	18	24	-	-	-	-	-	-	36
3/8	-	16	24	-	-	-	-	-	-	36
7/16	-	14	20	-	-	-	-	-	28	-
1/2	-	13	20	-	-	-	-	-	28	-
9/16	-	12	18	-	-	-	-	-	28	-
5/8	-	11	18	-	-	-	-	-	28	-
-	11/16	-	-	-	-	-	16	20	28	-
3/4	-	10	16	-	-	-	-	20	28	-
-	13/16	-	-	-	-	-	16	20	28	-
7/8	-	9	14	-	-	-	(16)	20	(28)	-
-	15/16	-	-	-	-	12	(16)	20	(28)	-
1	-	8	12	-	-	-	(16)	20	(28)	-
-	1 1/16	-	-	-	-	12	(16)	20	(28)	-
1 1/8	-	7	12	-	(8)	-	(16)	20	(28)	-
-	1 3/16	-	-	-	(8)	12	(16)	20	(28)	-
1 1/4	-	7	12	-	(8)	-	(16)	20	(28)	-
-	1 5/16	-	-	(6)	(8)	12	(16)	20	(28)	-
1 3/8	-	6	12	-	(8)	-	(16)	20	(28)	-
-	1 7/16	-	-	(6)	(8)	12	(16)	20	(28)	-
1 1/2	-	6	12	-	(8)	-	(16)	20	(28)	-
-	1 5/8	-	-	(6)	(8)	12	16	20	(28)	-
1 3/4	-	5	-	(6)	(8)	12	16	20	(28)	-
-	1 7/8	-	-	(6)	(8)	12	16	20	(28)	-
2	-	4 1/2	-	(6)	(8)	12	16	20	(28)	-
-	2 1/8	-	-	(6)	8	12	16	(20)	-	-
2 1/4	-	4 1/2	-	(6)	8	12	16	(20)	-	-
-	2 3/8	-	-	(6)	8	12	16	(20)	-	-
2 1/2	-	4	-	(6)	8	12	16	(20)	-	-
-	2 5/8	-	-	(6)	8	12	16	(20)	-	-
2 3/4	-	4	-	(6)	8	12	16	(20)	-	-
-	2 7/8	-	-	(6)	8	12	16	(20)	-	-
3	-	4	-	(6)	8	12	16	(20)	-	-
-	3 1/8	-	-	(6)	8	(12)	16	-	-	-
3 1/4	-	4	-	(6)	8	(12)	16	-	-	-
-	3 3/8	-	-	(6)	8	(12)	16	-	-	-
3 1/2	-	4	-	(6)	8	(12)	16	-	-	-

TABLE 8

DECIMAL SIZES.

PREFERRED DIAMETERS		PREFERRED PITCHES.							
1ST. CHOICE	2ND. CHOICE	U.N.C. SERIES	U.N.F. SERIES	6	8	12	16	20	28
–	1·4	–	–	(6)	(8)	12	(16)	20	(28)
1·5	–	6	12	–	(8)	–	(16)	20	(28)
–	1·6	–	–	(6)	(8)	12	16	20	(28)
1·75	–	5	–	(6)	(8)	12	16	20	(28)
–	1·9	–	–	(6)	(8)	12	16	20	(28)
2·0	–	4 1/2	–	(6)	(8)	12	16	20	(28)
–	2·1	–	–	(6)	8	12	16	20	–
2·25	–	4 1/2	–	(6)	8	12	16	20	–
–	2·4	–	–	(6)	8	12	16	20	–
2·5	–	4	–	(6)	8	12	16	20	–
–	2·6	–	–	(6)	8	12	16	20	–
2·75	–	4	–	(6)	8	12	16	20	–
–	2·9	–	–	(6)	8	12	16	20	–
3·0	–	4	–	(6)	8	12	16	20	–
–	3·1	–	–	(6)	8	(12)	16	–	–
3·25	–	4	–	(6)	8	(12)	16	–	–
–	3·4	–	–	(6)	8	(12)	16	–	–
3·5	–	4	–	(6)	8	(12)	16	–	–
–	3·6	–	–	(6)	8	(12)	16	–	–
3·75	–	4	–	(6)	8	(12)	16	–	–
–	3·9	–	–	(6)	8	(12)	16	–	–
4·0	–	4	–	(6)	8	(12)	16	–	–

SCHEDULE OF PHYSICAL PROPERTIES OF FINISHED STEEL BOLTS & SCREWS.

(EXTRACT FROM B.S. 1083 - WHIT. THREADS & B.S. 1768 - UNIFIED THREADS TABLE 5.)

TABLE 14.

CODE SYMBOL	CLASSIFICATION OF BOLT OR SCREW TONS	MINIMUM U.T.S TONS / SQ. IN. (SEE NOTE 1)	MINIMUM YIELD TONS / SQ. INS. (SEE NOTES 1 & 2)	MINIMUM ELONGATION %	MINIMUM IZOD IMPACT (SEE NOTE 3) DIAMETER OR WIDTH A/F.			BRINELL HARDNESS NUMBERS (SEE NOTE 4)
					UP TO 3/4" FOOT LBS.	OVER 3/4" TO 1 1/8" FOOT LBS.	OVER 1 1/8" FOOT LBS.	
A	—	28	—	10 - 14	—	—	—	—
B	28 / 35	28	—	17	—	—	—	—
P	35 / 45	35		15	20	15	10	152 / 224
S	50 MIN.	50	40	20	40	35	25	201 / 271
T	55 / 65	55	41	18	40	35	25	248 / 316
V	65 / 75	65	52	16	35	30	20	293 / 364
X	75 / 85	75	60	14	15	15	15	341 / 408

NOTES.

1. WHEN THE ULTIMATE TENSILE AND YIELD STRESS TESTS ARE MADE ON A BOLT OR SCREW (ON TO WHICH A NUT HAS BEEN SCREWED AS FAR AS POSSIBLE BY HAND AND THEN SCREWED BACK TWO FULL THREADS) THE CALCULATION SHOULD BE BASED ON THE FORMULA :- AREA = $\pi \left(\frac{\text{EFFECTIVE DIA.} + \text{MINOR DIA.}}{4} \right)^2$
2. THE YIELD STRESS VALUES GIVEN SHALL NOT BE USED AS ACCEPTANCE VALUES EXCEPT BY SPECIAL ARRANGEMENT BETWEEN THE PURCHASER AND THE MANUFACTURER.
3. FOR BOLTS AND SCREWS BELOW 1/2" DIA. A NICKED FRACTURE TEST MAY BE SUBSTITUED FOR THE IZOD IMPACT TEST — SEE B.S. 970 — "WROUGHT STEELS" CLAUSE 5 (d)
4. BRINELL HARDNESS NUMBERS ARE RECORDED FOR GUIDANCE ONLY AND ARE NOT PART OF THE CONTRACTUAL OBLIGATIONS OF THE SPECIFICATION, SEE B.S. 970 — "WROUGHT STEELS" CLAUSE 5 (f)

SCHEDULE OF PHYSICAL PROPERTIES OF FINISHED NUTS.

(EXTRACT FROM BS 1083 - WHIT. THREADS B.S. 1768 - UNIFIED THREADS TABLE 6.)

TABLE 15.

FIED EADS ADE.	WHIT FORM THREADS CODE SYMBOL	CLASSIFICATION OF NUT.	U.T.S TONS/SQ. IN.	MINIMUM ELONGATION %	BRINELL HARDNESS NUMBERS (SEE NOTE 1)
1	A	NUTS FOR BOLTS. SYMBOLS A, B, P, R, & S	28 MINIMUM	10 - 14	120 235
3	P	NUTS FOR BOLTS SYMBOL T.	35, 48	15	152 235
5	R	NUTS FOR BOLTS SYMBOL V.	45 MINIMUM	20	201 271
5	T	NUTS FOR BOLTS. SYMBOL X.	55 MINIMUM	18	248 316

NOTE.

1. BRINELL HARDNESS NUMBERS ARE RECORDED FOR GUIDANCE ONLY FOR NUTS WHICH ARE MANUFACTURED FROM THE BAR AND ARE NOT PART OF THE CONTRACTUAL OBLIGATIONS OF THIS SPECIFICATION.
   WHERE NUTS ARE MANUFACTURED BY COLD FORMING FROM ROUND WIRE, WITH OR WITHOUT SUBSEQUENT HEAT TREATMENT, THE BRINELL HARDNESS NUMBERS APPLY AS PART OF THE CONTRACTUAL OBLIGATIONS OF THIS SPECIFICATION.