Capstan Porous Materials

Material Properties

Bronze

FILTRATION GRADE (MICRONS)	FILTRATION RANGE (MICRONS)	TENSILE STRENGTH (PSI)	MIN. THICKNESS (INCHES)	MATERIAL DENSITY (GRAMS/CC)	OXIDIZING TEMP. (F)	MAX. OPER. TEMP. (F)	MIN. OPER. TEMP. (F)	CHEMICAL COMPOSITION
250	180-300	2,000	0.187	4.5-5.6	400	900	-452	
150	125-180	2,500	0.125	4.5-5.6	400	900	-452	
90	50-125	3,500	0.093	4.5-5.6	400	900	-452	89-96%
40	25-50	4,500	0.063	4.5-5.6	400	900	-452	Copper
30	20-40	5,500	0.063	4.5-5.6	400	900	-452	Balance
20	15-25	6,500	0.040	4.5-5.6	400	900	-452	Tin
10	7 to 13	7,000	0.035	4.5-5.6	400	900	-452	
5	1 to 7	8,000	0.030	4.5-5.6	400	900	-452	

1. Ideal filter medium for oxygen systems
2. Lower tooling costs allow smaller production runs
3. Can be nickel plated to improve corrosion resistance

Stainless Steel

FILTRATION GRADE (MICRONS)	FILTRATION RANGE (MICRONS)	TENSILE STRENGTH (PSI)	MIN. THICKNESS (INCHES)	MATERIAL DENSITY (GRAMS/CC)	OXIDIZING TEMP. (F)	MAX. OPER. TEMP. (F)	MIN. OPER. TEMP. (F)	CHEMICAL COMPOSITION
100	50-125	3,000	.090	5.2-5.8	1000	1500	-452	
40	25-50	3,500	.078	5.2-5.8	1000	1500	-452	Type
20	15-25	5,500	.062	5.2-5.8	1000	1500	-452	316L
10	5-20	7,500	.062	5.2-5.8	1000	1500	-452	(18Cr-
5	3-10	9,000	.062	5.2-5.8	1000	1500	-452	8Ni-
2	1-4	13,000	.062	5.2-5.8	1000	1500	-452	2Mo)
.5	.2-1	20,000	.045	5.2-5.8	1000	1500	-452	

1. Excellent corrosion resistance
2. High operating temperature
3. Industry standard for many applications

70/30 Copper Nickel

FILTRATION GRADE (MICRONS)	FILTRATION RANGE (MICRONS)	TENSILE STRENGTH (PSI)	MIN. THICKNESS (INCHES)	MATERIAL DENSITY (GRAMS/CC)	OXIDIZING TEMP. (F)	MAX. OPER. TEMP. (F)	MIN. OPER. TEMP. (F)	CHEMICAL COMPOSITION
60	40-90	5,000	.093	5.1-6.0	500	950	-452	
40	30-55	5,000	.063	5.1-6.0	500	950	-452	25-29Ni,
25	20-30	6,000	.063	5.1-6.0	500	950	-452	4-6Sn,
15	15-30	7,500	.040	5.1-6.0	500	950	-452	Bal. Cu
10	7-15	9,500	.030	5.1-6.0	500	950	-452	

1. Comparable alloys C96400, C71500
2. Highest corrosion resistance of all copper alloys
3. Excellent resistance to seawater corrosion

Data is provided for guideline purposes only. Actual results depend on application and part configuration.
The parts shown are representative components but may not be current Capstan products.

Standard Elements

Sheets — Bronze

	1	2	3	4	5	6	7	8
2	✔	✔	✔	✔	✔	✔	✔	✔
3	✔	✔	✔	✔	✔	✔	✔	✔
4	✔	✔	✔	✔	✔	✔	✔	✔
5	✔	✔	✔	✔	✔	✔	✔	✔
6	✔	✔	✔	✔	✔	✔	✔	✔

+.000 inches/-.010 inches per inch

Disks — Stainless Steel

THICKNESS (IN.) \ DIAMETER (IN.)	1/8	1/4	3/8	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2
1/16	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
1/8	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
1/4	✔	✔	✔	✔	✔	✔				

±.005 per inches for all dimensions

Disks — Bronze

THICKNESS (IN.) \ DIAMETER (IN.)	1/16	1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/4	1-1/2	1-3/4	2	2-1/2	3
1/16	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔		
1/8	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
1/4	✔	✔	✔	✔	✔	✔	✔	✔		✔		✔						
3/8		✔		✔		✔		✔										
1/2		✔		✔		✔		✔										

+.000 inches/-.010 inches per inch

Tubes — Bronze

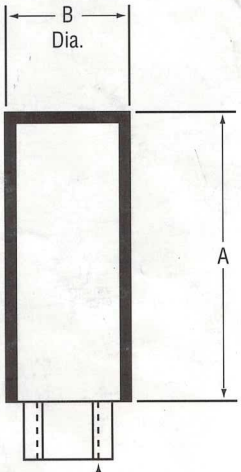
DIAMETERS	
1"	3"
1-1/2"	4"
2"	5"
2-1/2"	6"

Available open or closed end.
+.000 inches/-.010 inches per inch

Tubes Bronze Cast & Welded Fittings

PART NUMBER	PIPE THREAD ON FITTING	FILTER DIAMETER (B)	FILTER LENGTH (A)
FAP 100	1/8"	1"	2"
FAP 101	1/4"	1-5/16"	3"
FAP 102	1/2"	1-5/8"	4"
FAP 103	1"	2"	8"

Filter wall thickness is 3/32".
+.000 inches/-.010 inches per inch



FNPT Threaded Fitting