

Totally Tubular™ Price List 9/9/99 Box 430, Hamburg, MI 48139-0430

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TUBES	(fits)	O.D.	I.D.	Wall thk.	Length, inches	WEIGHT gm each	Gm /in	Price 1-24	price 25-49	price 50-9
part #										
T-2		0.246	0.220	0.013	34	4.8		\$1.50	\$1.15	\$1
T-2+	QuestMicro-Mx	0.281	0.255	0.013	34	5.5		\$1.50	\$1.15	\$1
T-3		0.375	0.349	0.013	34	7		\$1.50	\$1.15	\$1
T-4	(Apogee micro)	0.448	0.432	0.013	34	9.6		\$1.50	\$1.15	\$1
T-4+	(slips-over T-4)	0.478	0.452	0.013	34	10		\$1.50	\$1.15	\$1
T-5	(Estes mini A)	0.544	0.518	0.013	34	11		\$1.50	\$1.15	\$1
T-5+	(Slips-over T-5)	0.585	0.559	0.013	34	12		\$1.50	\$1.15	\$1
T-20	(Estes 18mmB)	0.736	0.710	0.013	34	16		\$1.75	\$1.35	\$1
T-20+	(slips-overT-20)	0.770	0.744	0.013	34	17		\$1.75	\$1.35	\$1
T-.908"	(Centuri ST-8)	0.908	0.865	0.020	34	24		\$2.00	\$1.50	\$1
T-50	(Estes 24mmD)	0.976	0.950	0.013	34	21		\$2.00	\$1.50	\$1
T-1.04"	(Centuri ST-10)	1.040	1.000	0.020	34	28		\$2.00	\$1.50	\$1
T-52H	29mm motor mt	1.210	1.140	0.035	34	64		\$3.00	\$2.75	\$2
T-55		1.325	1.283	0.021	34	38		\$2.75	\$2.00	\$1
T-60		1.637	1.595	0.021	34	50		\$3.50	\$2.70	\$2
T-1.88"	(Aerotech ___)	1.880	1.800	0.040	34	110		\$5.00	\$3.75	\$3
T-2.04"	(Centuri ST-20)	2.042	2.000	0.021	34	64		\$4.00	\$3.00	\$2
T-70		2.217	2.180	0.021	34	69		\$4.00	\$3.00	\$2
T-80		2.600	2.558	0.021	34	78		\$6.00	\$5.50	\$5
T-101								nya		
T-4.476"	(100% Arcus)	4.546	4.476	0.035	34	230		\$8.00	\$6.00	\$5
MT-20	18mm motor mt	0.736	0.710	0.013	2.75"			\$0.25	\$0.25	\$0
CENTERING		(Engine	Blocks)	Wall thk	length	weight		1-99		
RINGS		OD	ID							
CR-2-3		0.348	0.250	0.049	0.125			\$0.15		
CR-2-4		0.420	0.250	0.085	0.125	0.16		\$0.15		
CR-2-5f	fiber	0.516	0.250		0.050			\$0.15		
CR-2-20f	Fiber	0.708	0.250		0.050			\$0.15		
CR-2+-3f	fiber	0.348	0.281		0.050			\$0.15		

CR-2+-4f	fiber	0.420	0.281		0.050			\$0.15
CR-3-4		0.420	0.376	0.022	0.125	0.06		\$0.15
CR-3-5		0.516	0.376	0.070	0.125			\$0.15
CR-3-20f	Fiber	0.708	0.376		0.050			\$0.15
CR-4-5		0.516	0.450	0.033	0.125	0.11		\$0.15
CR-4-20f	fiber	0.708	0.450		0.050			\$0.15
CR-5-20		0.708	0.546	0.081	0.125	0.28		\$0.15
CR-20-50		0.948	0.738	0.105	0.125	0.44		\$0.15
CR-50-52H		1.140	0.980	0.080	0.250			\$0.20
CR-50-55		1.283	0.978	0.1525	0.250			\$0.20
CR-50-60f	fiber	1.593	0.978		0.050			\$0.25
CR-50-70f	Fiber	2.178	0.978		0.050			\$0.30
CR-50-70p	Lite-ply	2.178	0.978		0.125			\$0.35
CR-50-80f	Fiber	2.556	0.978		0.050			\$0.40
CR-50-80p	Lite-ply	2.556	0.978		0.125			\$0.45
CR-52h-55	Wound kraft	1.283	1.215	0.034	0.250			\$0.30
CR-52h-60	Wound kraft	1.592	1.215	0.190	0.250			\$0.30
CR-52h-4.5"	Lite-ply	4.50	1.215		0.125			\$1.50
CR-U-f *	Fiber universal	2.556*	.948*		0.050			\$0.50
CR-U-p *	Lite-ply univ.	2.556*	.948		0.125			\$0.75

* Note: Universal rings have cuts for T-20, T-50, and t-53h inside tube to slip in, and for outside diameters to slip into T-60, T-70, T- 2.0", and T-80. Three small tabs hold each section together, so you can easily trim these rings easily to adapt just about any size to any other size. Similar to an electrical box knockout.

OD ID Wall Length Weight **1-99**

COUPLERS

CPL-3-1"		0.346	0.25	0.048	1	0.40	\$0.25
CPL-4-1"		0.420	0.376	0.022	1	0.38	\$0.25
CPL-4-1.25"		0.420	0.376	0.022	1.25		\$0.25
CPL-4-2"		0.420	0.376	0.022	2		\$0.25
CPL-5-2"		0.516	0.474	0.021	2	0.9	\$0.25
CPL-20-3"		0.708	0.666	0.021	3	1.8	\$0.25
CPL-.948"-3"	nya	0.906	0.838	0.034	2		nya
CPL-50-4"		0.948	0.880	0.034	4	5	\$0.50
CPL-50-1"		0.948	0.880	0.034	1	1.25	\$0.25
CPL-1.04"-3"	nya	0.998	0.930	0.034	2		nya
CPL-52H-4"	nya	1.140	0.980	0.080	4		\$0.50

CPL-55-4"	1.283	1.215	0.034	4	6.8	\$0.50
CPL-60-4"	1.593	1.525	0.034	4	8	\$0.65
CPL-2.0in-4"	1.998	1.930	0.031	4	10	\$0.70
CPL-70-4"	2.178	2.110	0.034	4	11	\$0.75
CPL-80-4"	2.554	2.486	0.034	4	14	\$1.00
CPL-4.5in-6"	4.470	4.310	0.080	6	74	\$4.00

COUPLER

1-24 25- 50
49 9

STOCK

CPL-4-34"	0.422	0.376	0.022	34	\$2.00	\$1.50	\$1.3
CPL-50-34"	0.948	0.880	0.034	34	\$4.00	\$3.00	\$2.6
CPL-52H-34"	1.140	0.980	0.080	34	\$5.00	\$3.75	\$3.2

LAUNCH

LUGS

LL-1/8-3"	0.178	0.152	0.013	3	\$0.25	\$0.25	\$0.2
LL-3/16-3"	0.240	0.214	0.013	3	\$0.25	\$0.25	\$0.2

NOMEX

	thickness	size	grams/ sq. in.	Price	Price	Price	Price
				1-9	10-24	25-49	50-99
NX-2	.002"	24" x 36"	for streamers, liners 0.03	\$2.50	\$2.25	\$2.00	\$1.70
NX-5	.005"	24" x 36"	for liners, small tubes 0.075	\$5.00	\$4.50	\$4.00	\$3.40
NX-10	.010"	24" x 36"	for tubes, liners 0.15	\$10.00	\$9.00	\$8.00	\$6.80
NX-15	.015"	24" x 36"	for larger tubes, liners 0.225	\$14.00	\$12.50	\$11.50	\$10.00
NX-30	.030"	24" x 36"	heavy tubes,liners 0.45	\$28.00	\$25.00	\$23.00	\$20.00

ASSORTMENTS

price Value

TUBE ASSORTMENTS

TA-1x5	1 each T-2, T-4, T-5, T-20, T-50 plus 4 each rings (5 tubes)	\$7.00
TA-5x5	5 each T-2, T-4, T-5, T-20, T-50 plus 20 each rings (25 tubes)	\$25.00
TA-25x5	25 each T-2, T-4, T-5, T-20, T-50 plus 100 each rings (125 tubes)	\$100.00

CENTERING RING ASSORTMENTS

CRA-20	20 each CR-2-4, 3-4, 4-5, 5-20, 20-50 (100 rings)	\$8.00
CRA-100	100 each CR-2-4, 3-4, 4-5, 5-20, 20-50 (500 rings)	\$40.00

COUPLER ASSORTMENTS

CPLA_5	5 each CPL-4, -5, -20, -50, -55	\$5.00
CPLA-20	20 each CPL-4, -5, -20, -50 -55	\$20.00
CPLA-100	100 each CPL-4, -5, -20, -50, -55	\$100.00

NOMEX PAPER ASSORTMENTS

NX-A	2 pc. NX2, 1 pc. NX5, 1/2 pc. NX10, 1/2 pc. NX15	\$20.00
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RECOVERY**MATERIALS**

	Applications	description	thickness	length	
SM-2X50'	streamers	MYLAR, 2" WIDE X 50 Ft	1.5 MIL	50'	\$2.30
-s, -g, -r, -p			(.0015)		
SM-4X50'	streamers	MYLAR, 4" WIDE X 50 Ft	1.5 MIL	50'	\$5.00
-s, -g, -r, -p					
SM-18	Wide streamers	Mylar, 18" wide	1.5 mil	Per foot	\$0.40/ft
	SM available in:	Met. silver, gold, red, purple			
SH-2x10'	streamers	Mylar, holographic silver	3 mil	50'	\$2.00
SC-4X50'	streamers	Streamer material, crepe,		50'	\$2.50
-R, -O		4 inch x 50 ft., red or org.			
MF-.5	Parachutes, thin streamers, flexies	mylar film, metalized silver, red, or gold	0.5 mil (.005")	54" x 96"	\$4.50
-S, -R, -G,					
NF-4x4-C	Chutes, streamers, flexies	nylon film, clear	1 mil (.001")	48" x 48"	\$4.00

NF-4x4	Chutes, streamers, nylon film, red, black flexies		1 mil (.001")	48" x 48"	\$6.00
-R,-O,-P,-B,-Y		, flo. Orange, yellow, pink			
KV-15	Shroud lines	Kevlar thread, 15# test		100'	\$2.00
KV-35	nya	Kevlar cord, 35# test		100'	nya
KV-70	nya	Kevlar cord, 70# test,		100'	nya
KV-120	Nya	Kevlar cord, 120# test		100'	nya
MISC. SUPPLIES					
PF-4X50"	Complex and fine masking	Parafilm masking film,		5pc 4"x10"	\$3.00
		5pc 4" x10" w/ instructions			
DP-cl		Decal Paper, clear film, blue back		8.5" x 11"	\$1.00
DP-wh		Decal Paper, white film		8.5" x 11"	\$1.25
IJF		Inkjettable clear label stock		8.5" x 11"	\$.75
CFR-030	Flexie spars	Carbon fiber reinf. rod	.030" dia	36"	\$2.25
CFR-050	Flexie spars	"	.050" dia	36"	\$2.25
CFR-070		"	.070" dia	36"	\$3.00
CFR-125	Launch rod	"	.125" dia	36"	\$5.00
DR-25PK		Dropper, grad., 7 inch,		25pc	\$2.50
GT-25PK		Glue tip, fine point, 25 pc.		25 pieces	\$1.50
ZG-1		Zap-a-Gap CA glue		1 oz	\$6.00
FZ-1		Flex-Zap CA glue, tough		1 oz	\$7.00
ZKP		Zap Kicker for plastics		2 oz	\$6.00
SCH		Scalpel handle, #3 plastic			\$1.00
SCB-11	Super sharp!	Scalpel blade- #11- sharp		12 pc.	\$5.00
SCD	Be safe	Scalpel disposal box			\$2.50

HELLO! Thanks for your interest in Totally Tubular™! What do you need but can't find? We'll find it!

NEW ITEMS 9/99:

Centuri size tubes in ST-8 and ST-10, T-2+ tubes for Quest Micro-Maxx motors, and 1.88" od tubes are in stock.

Centering rings in many new sizes, in black fiber and lite-ply including T-2+ (micro-maxx) to T-3 and T-4.

UniRING™ Universal knockout centering rings adapt from nearly anything to anything! One ring easily trims to fit over T-20, -50, or -52h and into in T-60, -70, -2.0" or -80.

Carbon fiber rods for flexie and BG spars, decal paper, very sharp scalpels, Zap, flex-zap high impact CA.

NEW ITEMS 11/98:

Nylon film 'chute material: clear, red, black, fl. Orange , fl. Yellow or fluorescent pink; tough and hi temp, softer hand than mylar, unfurls more easily, with less "set" and is a full 48" wide

2", 4", 18" wide Mylar streamer material, 1 mil metallized

Mylar chute material: ½ mil metallized, in silver, red, and gold (all silver one side), 54" wide!

T-3: 3/8" o.d. tube

T-4.5 and T-5.5: slip-over tubes for T-4 and T-5

T-60, T-70, and T-80 and couplers and rings for all.

T-2.0" (sim to Centuri **ST-20**) 2" ID, 2.042" od x 34" long, + couplers, rings

T-4.5" large light tube, perfect size for full scale Arcas! + couplers and rings

Parafilm masking film, with instructions- the choice for serious scale modelers...

CHANGES 7/99

Fixed listed T-4 dimension.

Changed designation of slip-over tube sizes to "+" (plus), i.e. T-5+ slips over T-5. (was called T-5.5.)

CHANGES 11/98

Checks should be written out to and mailed to Jim Fackert.

TOTALLY TUBULAR™ 5/99

Welcome to Totally Tubular™, the source for model rocket tubing and supplies for the scratch scale, competition and sport builder.

INTRODUCTION

Totally Tubular was created to give scratch and scale bulders, clubs, small manufacturers, teachers, and groups access to a wide range model rocket tubing and materials at reasonable prices.

Our prices are reasonable in small quantities, and are heavily discounted in larger quantities. We encourage group ordering! We figure it will pay clubs and groups to pool their orders and save on price and shipping, while helping us to be more efficient and spend more of our hobby time building rockets and less time packing orders!

TERMS

Because we are a part time business, we also need to keep the terms simple.

We accept money orders or personal check.. Sorry, no COD. Please write checks to Jim Fackert. In the past we have asked for money orders for quick shipment, but we know they are a pain to get, so we will accept personal checks and ship before they clear... but if you bounce one, it will cost you \$25 bank fee reimbursement and you'll be "money order only" from then on.

We can now accept Visa or Mastercard for orders over \$100. Card will be billed through CAE, Inc. We require a faxed signed order for charge cards... to Jim Fackert c/o CAE, Inc., Fax 810-231-1631.

We suggest you email, mail or fax us your order for price confirmation. We currently have lots of every item IN STOCK and ready to ship. We'll respond with confirmation of price including shipping.

TUBES

We have top quality tubing and couplers at great bulk prices. The tubing is kraft with a smooth white over- wrap to save you finishing time. The seams are very tight. The tubes are all 34" long, and are available in every size from 1/4" (T-2) through T-80. For familiarity, we have used numbering similar to Estes, extrapolated for new sizes.

COUPLERS and CENTERING RINGS

We have extra long, strong kraft couplers and centering/thrust rings for all of our tubes too.

Couplers are part numbered CPL- followed by the number of the tube into which they fit.

Centering/thrust rings are numbered CR- followed by the number of the tube they slip over, and then the tube they slip into. I.e. a CR-20-50 will center a T-20 within a T-50, and will also serve as a thrust ring for a T-50. Thinner rings are wound kraft paper. Wider are laser cut black fiber or lite-ply.

UNIRINGS™

Universal rings have inside cuts for T-20, T-50, and t-52h tube to slip inside, and outside cuts for T-60, T-70, T- 2.0", and T-80. Three small tabs hold each section together, so you can easily trim these rings to adapt just about any size to any other size. Similar to an electrical box knockout.

NOMEX

We carry NOMEX Aramid fiber paper in several gauges. This is a smooth, slick, hard to tear paper with a very high temperature rating. We have used it for streamers, 'chute protectors, anti-scorch liners, and hand wound vellum style competition bodies. This is an experimental material. We welcome your comments on applications and techniques. It must be spliced for longer length streamers.

(It is quite slick, and will require some preparation for bonding. A little roughing up before gluing will help. VHB double stick tape works well.)

SHIPPING

Shipping and handling is flat rate for expediency on small orders.

A 25 tube set, or whatever fits in the same space, ships in an express mail box for only \$6.00 shipping and handling. (\$8.00 us to Canada) A 125 tube set or equivalent ships for \$9.00.

Shipping and handling for larger quantities will be billed at cost. Include 10% of your order and we'll credit any overage.

INSURANCE and SHIPPING DAMAGE

It is really expensive to pack and ship model rocket tubing so it cannot be damaged by abuse in shipment. Instead, we have chosen to pack reasonably, and include an assortment of FREE TUBES as "crimp insurance." If your package arrives in good shape, as most do, you get a bonus. If a tube end or two is dinged, you get extras to make up for it. **If the box is crushed, you need to file a claim with the carrier IMMEDIATELY**, and contact us with a copy of the paperwork.

QUANTITY DISCOUNTS

Don't forget to pool those orders for the best prices!

You can combine your tube quantities for best pricing... i.e. buy 50 pc. T-5 and 50 pc. T-20 and get the 100 pc. price on both. Rings, couplers, and other stuff cannot be so grouped.

ORDERING

For fastest service, Email or fax your order to Jim for price and shipping cost confirmation and then mail a check or money order.

To use a credit card for a \$100 plus order, , fax or mail your order with credit card # and signature after confirming price and delivery as above.

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