



An example of Tungum tubing used in a Hytech diving system.

Average physical properties

Mean Ultimate Tensile Strength	:31 tons / in ² (478N / mm ²)
Mean 2% Proof Stress	:15.5 tons / in ² (240N/mm ²)
Design Stress at 4:1	
Safety Factor	:6.78 tons / in ² (105N/mm ²)
Hardness	:90/140 VPN
Elongation (Average)	:40/50%
Magnetic Permeability	:1.05 Max
Thermal Conductivity at 300 K	:1.0 W / cm.K
Average Surface Finish	:20 Micro in (0.5µm)
Weight	:.308lb / in ³ (.853 x 10 ⁴ Kg/M ³)

ORDERING INFORMATION:

Tubes are delivered in lengths varying between 15-17 feet (5-6 meters). Longer lengths are available on order. State size of the tube, and length desired. For ordering state the following:

Pipe diameter (E.G. 1/4")

Working pressure:	1	=	50 bars
	2	=	200 bars
	3	=	300 bars

In the manufacture of its high-quality diving systems and for instance its diving-panels Hytech makes extensive use of Tungum Alloy tubing.

Tungum is an alpha brass, an alloy of mainly copper, aluminium, nickel and silicon. It combines high strength, ductility, good fatigue properties, exceptional corrosion resistance, good thermal properties and cost-effectiveness. It is widely used in high-pressure fluidics where strength and ease of manipulation are required.

The inherent cleanliness of the tube bore greatly reduces the possibility of contamination damage to expensive components within the system, and also greatly simplifies the flushing process.

Due to its corrosion resistance, it has outstanding serviceability at intermittent duty and requires no external treatment.

Being an aluminium-nickel-silicon-brass alloy, tungum has a high resistance to sea-water corrosion and this together with its non-magnetic, non sparking characteristics, makes it ideal for marine offshore and diving gas applications. Tungum is ideally suited to use in high-pressure gas installations, notably oxygen, where the thermal characteristics counters the potential threat of heating due to adiabatic compression.

Hytech stocks sizes from 1/8" to 1" any other size available to order.

Also millimeter sizes in stock.

TYPICAL TUBE SIZES FOR VARIOUS PRESSURES

IMPERIAL				METRIC			
Tube O/Dia (in)	Wall Sections in SWG			Tube O/Dia (mm)	Wall Sections in mm		
	3000PSI working	3500PSI working	4000PSI working		200 Bar working	240 Bar working	280 Bar working
1/4"	22	20	20	6	.8	.8	.8
5/16"	20	20	18	8	.8	1.0	1.25
3/8"	18	18	16	10	1.0	1.5	1.5
1/2"	16	16	14	12	1.2	1.5	2.0
3/4"	14	12	12	16	1.6	2.0	2.5
1"	12	10	8	20	2.0	2.5	3.0
1 1/4"	10	8	6	25	2.5	3.0	3.5
1 1/2"	8	6	-	30	3.0	3.5	4.0
1 3/4"	6	-	-	38	4.0	4.5	5.0
2"	6	-	-	50	5.0	-	-



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