# TB-189 Refractory Metal Sheet and Foil

### Pure Rhenium Ribbon

Thickness (in.)	Widths (in.)			
0.0010	0.015			
0.0012	0.020			
0.0016	0.025			
0.0020	0.028			
0.0030	0.030			
	0.040			

Standard tolerances (in.): Width ±.002, Thickness ±10%

We offer two highly pure grades of rhenium ribbon: commercial and zone refined. Their uses extend from mass spectrometers to other diverse electronic applications. Our commercial grade rhenium ribbon is 99.97% pure and zone refined rhenium ribbon meets a 99.995% purity grade. Both are measured on metallic content. You may chose from a variety of widths from .015" and thickness from .001" to .003" in rhenium ribbon. Each grade may also be ordered in either random lengths or pre-cut pieces to best meet your applications. Both are available in either metric or english units.

Intermediate, special and metric sizes as well as specific pre-cut lengths can be ordered on request. Random lengths range from 5" to 20". All widths listed can be produced in all thicknesses listed.

## Pure Rhenium And Moly/Rhenium Sheet

#### Pure Rhenium Sheet

Thickness (in.)	Width (in.)			
.001 to .0019	Up to 2			
.002 to .0049	Up to 3			
.005 to .019	Up to 4			
.020 to .070	Up to 6			
.071 to .300	Upon request			

Molybdenum/Rhenium Sheet

Thickness (in.)	Width (in.)			
.0005 to .0009	Up to 1			
.001 to .0019	Up to 2 1/4			
.002 to .0049	Up to 3			
.005 to .019	Up to 4			
.020 to .080	Up to 6			
.081 to .300	Upon request			

Intermediate, special and metric sizes are available on request. Lengths are made to order in a full range of sizes.

Produced using powder metallurgy techniques, pure rhenium sheet is extremely ductile after welding and can be formed in a variety of shapes including pure rhenium tubing used in high tech applications. HeatWave Labs supplies our growing markets with sizes down to a .001" thickness in a variety of widths and lengths.

Molybdenum/Rhenium sheet is available in two standard alloys with 47.5% and 41% rhenium. HeatWave can provide a variety of Molybdenum/Rhenium combinations by customer request to meet your needs. Mo47.5%/Re sheet is produced as thin as .0005" for heat shield and electronics applications. Other customers use the Mo41%/Re alloy which does not develop sigma phase, making the material even more ductile after exposure to high temperatures. All are available in metric or english units.



#101945 MoRe Sleeves for dispenser cathode applications

## Tungsten, Molybdenum and Tantalum Foil

	Tungsten		Molybdenum			Tantalum			
Thickness	Kg / Cu In	Width	Length	Kg / Cu In	Width	Length	Kg / Cu In	Width	Length
0.0005	-	-		0.000837	12"		-	Inquire	
0.0006	-	-		0.000100	12"		-		
0.0007	-	-		0.000117	12"		-		
0.0008	-	-		0.000134	12"		-		
0.0009	-	-		0.000151	12"		-		
0.0010	0.000316	5"		0.000167	12"		0.0006		
0.0012	-	-		0.000200	12"		-		
0.0014	-	-	Inquire for Length	0.000234	12"		-		
0.0015	0.000475	5"		0.000257	12"		-		Inquire
0.0016	-	-		0.000267	12"	.≅	- - 0.0012		
0.0018	-	-		0.000301	12"	Stocked In Coils			
0.0020	0.000633	6"		0.000335	12"				
0.0022	-	-		0.000367	12"	_ _	-		
0.0024	-	-		0.000401	12"	<u>\$</u>	-		
0.0026	-	-		0.000434	12"	8	-		
0.0028	-	-		0.000468	12"	Š	-		
0.0030	0.000969	6" & 12"		0.000502	12"		0.0018		
0.0035	-	-		0.000585	12"		-		
0.0040	0.001265	6" & 12"		0.000670	12"		0.0024		
0.0045	-	-		0.000753	12"		-		
0.0050	0.001579	6" & 12"		0.000836	12"		0.0030		
0.0060	-	-		0.001006	12"		-		
0.0070	-	-		0.001180	12"		0.0042		
0.0080	0.002534			0.001319	12"		-		
0.0100	0.003133	12"		0.001657	12"		0.0060		
0.0150	0.004687	12"		0.002534	12"		0.0090		
0.0200	0.006215	12"		0.003368	12"		0.0120		

#### Sheet and Foil Stock

- · Many more sizes available than listed, call for specifics
- Most sizes available from stock
- · Some sizes offered in roll or sheet form
- · Special sizes available on request

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