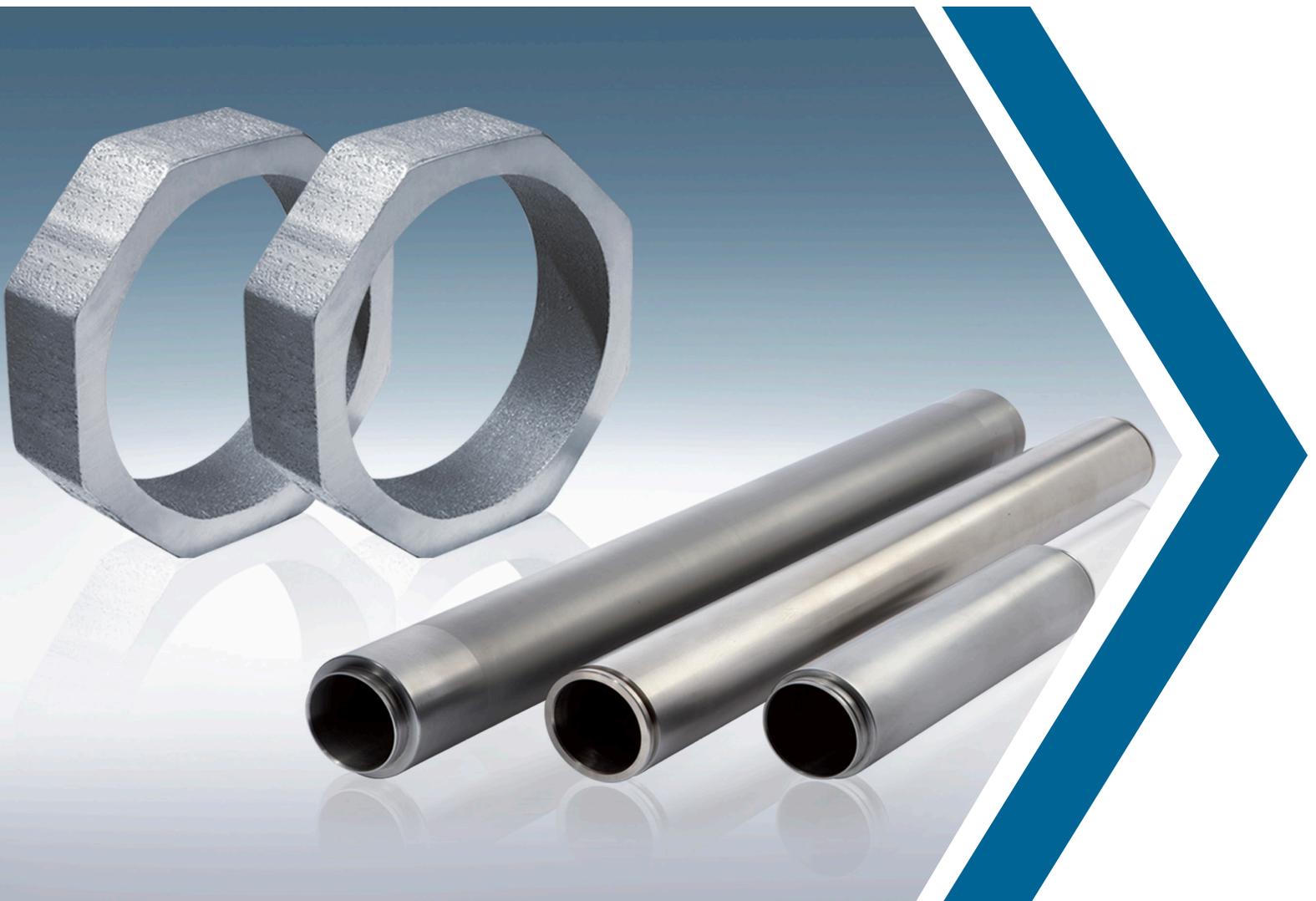


# HIGH PERFORMANCE SOLUTIONS FOR LARGE EXTRUSION APPLICATIONS



## MAXIMIZE MATERIAL YIELDS THROUGH EXTRUSION TECHNOLOGY

Elmet Technologies is one of the largest producers of refractory materials with world class extrusion capabilities and services. We help customers solve material processing and fabrication challenges with extrusion technology and an extensive knowledge in the processing and metallurgy of a wide spectrum of metals and alloys.

Our extrusion services offer the ability to convert material to meet the size and shape requirements of customers. With a highly qualified staff of Engineers and Production Developers, we can assist with specifications for your material process and design needs. Elmet Technologies focuses on extrusion process development to optimize extrusion quality and material yields. By producing near-net-shapes and pipes, extrusion reduces machining costs and improves material yields.

Elmet Technologies can also provide extruded products, such as pipe and shapes, in many ferrous and nonferrous metals. We have one of the only extrusion operations in the world that can produce extruded pipe with a flange. As a fully-integrated supplier, we can manage the entire process from material procurement, extraction billet preparation to a wide range of finishing processes, including heat treatment, cleaning, straightening, and cutting.

Our extrusion expertise comprises specialty metals and alloy based systems including titanium, molybdenum, tantalum, niobium and other metals for large extrusion applications.

## EXTRUSION SERVICES AND PRODUCT OFFERINGS FOR A WIDE VARIETY OF MARKETS



Aerospace & Defense



Chemical Processing



Electronics



Energy



Automotive



Medical

# ELMET TECHNOLOGIES IS A WORLD CLASS LEADER IN EXTRUSION TECHNOLOGY

## Technology & Capabilities

### Premiere High Temperature Extrusion Source

Forward extruded shapes and pipe  
Back extruded heavy wall pipe

### Force

5,000 metric tons (5,500 tons)

### Extrusion Ram Speed

1.27 – 203 mm/sec (0.05 – 8.0 inch/sec)

### Billet Temperature

260 – 1315 °C (500 – 2400 °F) gas fired controlled atmosphere  
815 – 1925 °C (1500 – 3500 °F) induction inert atmosphere

### Input Billet Diameter

152 – 432 mm (6 inch – 17 inch) diameters

Elmet Technologies is unique in its ability to extrude almost any metal in any size range. From concept to production, from small 6 inch diameter to large scale 17 inch diameter billet, we provide extrusion services to deliver specified material, size and shape to your specific needs. Elmet Technologies' extensive extrusion capabilities allow us to provide extrusion services with as little as two weeks lead-time.

At Elmet Technologies we utilize our 5,000 metric ton (5,500 ton) extrusion press to extrude rods, tubes and shapes from difficult to extrude materials, including:

### Copper and Copper Alloys

C10100 | C15000 | C16200 | C17200 | C17500 | C18200  
C63000 | C70600 | C71500 | Copper and Niobium

### Stainless Steels

300 series | 400 series | 15-5 PH | 17-4 PH | Duplex

### Nickel Base Alloys

C276 | 400 | 625 | 718 | 800H | 925

### Titanium and Titanium Alloys

CP2 | 6Al | 4V

### Refractory Metals

Molybdenum and Molybdenum Alloys  
Tantalum and Tantalum Alloys  
Niobium | Chrome

### Aluminum Metal Matrix Composites

#### Composite Billets

Superconductor Materials  
Clad Materials

### PIPE MATRIX

		WALL THICKNESS												
		inches	0.3750	.500	0.6250	.750	0.8750	.000	1.1250	.250	1.3750	.500	1.625	
OD	3.0													76.2
	3.5													88.9
	4.0													101.6
	4.5													114.3
	5.0													127.0
	5.5													139.7
	6.0													152.4
	6.5													165.1
	7.0													177.8
	7.5													190.5
	8.0													203.2
	8.5													215.9
	9.0													228.6
	9.5													241.3
	10.0													254.0
	10.5													266.7
11.0													279.4	
			9.5	12.7	15.9	19.1	22.2	25.4	28.6	31.8	34.9	38.1	41.3	mm



Pipe capability at 20 feet (6 m) minimum extruded lengths.  
Please inquire for other sizes and metals.



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