

DESIGN | ENGINEERING | MANUFACTURING





Cast Waveguide Bends

Aerospace | Defence | Space







Investment Casting of Precision Thin-Wall, Lightweight Cast Bends

Sylatech's lost wax investment process is ideally suited to produce brass and aluminium alloy castings for high frequency waveguide applications. Typical uses for Sylatech's standard and custom lightweight miter bends and includes a wide range of waveguide assemblies and microwave components. This includes monopulse comparators, slotted antennas, and power combiners which are often used in the aerospace and defence markets.

The lost wax investment casting process provides a fast and cost-effective method for both small batches and large quantities. Sylatech can provide waveguide sizes from stock, with immediate delivery ranging from WR650 (WG6) up to WR22 (WG23). We can also provide custom waveguide bends.

Benefits of Sylatech's cast waveguide bend process:

- Thin-wall, small or micro castings with a wall thickness as fine as 0.2mm
- 90, 60, 45, and 30 degree bends available
- High quality surface details and finish
- Rapid prototyping of cast bends
- In-house CNC machining and low cost tooling also available.

Space and Aerospace

Sylatech's lightweight cast waveguide bends are typically used in space and aerospace applications where weight reduction is critical.



Flanges

Plain, choke, and double-ridged flanges are readily available in aluminium or brass. Flange sizes are available from WG10 to WG22 (WR284 to WR28).











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Waveguide Size	Plane	90° (Part #)	60° (Part #)	45° (Part #)	30° (Part #)
WR28	Н	22301			
WR28	E	22302			
WR34	Н	21301		21303	
WR34	E	21302		21304	
WR51	Н	19301	19305	19303	19307
WR51	E	19302	19306	19304	19308
WR62	Н	18301	18303	18305	18307
WR62	E	18302	18304	18306	18308
WR75	Н	17301	17303	17305	17307
WR75	E	17302	17304	17306	17308
WR90	Н	16311		16303	
WR90	E	16312		16304	
WR112	Н	15301			
WR112	E	15302			
WR137	Н	14301			
WR137	E	14302			
WR229	Н	11301			
WR229	E	11302			

Available from stock. Contact our experienced engineering team today.







