



"The Source For High Power Microwave" Solutions & Engineering

Thermo Wave Technologies

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All Products and Services are Designed and Manufactured In House. This is accomplished by the Expertise of our Staff of over 70 Employees.



POLARIZED FEEDS

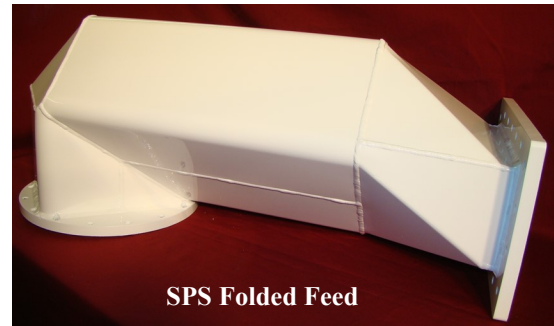
Synthesized Polar Feed System

Patent Pending

Thermo Wave enhanced the Polarized Feed concept to develop the "Circular Polarized Synthesizer Feeds". TWT's "Synthesized Polar Feed System" (SPS) provides a very uniform circular Microwave output, for improved uniformity. Polarized Feeds have no moving parts, providing the user with little to no maintenance. TWT has developed two options to allow maximum flexibility in applying this technology to our customers current or future requirements.



SPS Straight Feed



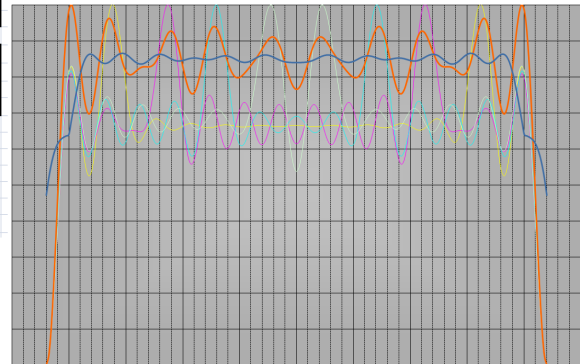
SPS Folded Feed

SPS Process Application Method

ThermoWave Technologies Engineering has developed a Method that takes a systemic approach to applying Polarized Technology. This Method includes a "Custom Engineering Calculator" to predict as close as possible the transient conditions in a customers System to ensure actions are taken to optimize performance.

	A	B	C	D	E	F
1	Customer	Thermowave				
2	Timestamp	41205.617				
3	Engineer	Bruce Secovich				
4	Print Date	2:51 PM, October 23, 2012				
5	Description	Microwave Drying				
6	Process	3000 Lbs/Hr				
7						
8	Product Calculations				Specific Heat Calculator	
9	Input pounds total	3,000	Hour		0.65	Partial Specific Heat (water)
10	Initial water percentage	65%			0.18	Partial Specific Heat (dry)
11	Final percentage of water	30%			0.83	Est Sp Heat
12	Yield	50%				
13	Water removed per input pound	0.50	lb			
14	Total Water removed	1,500	lb/hr			
15	Total Steam Produced	675	CFM			
16	Specific Heat of Product (dry)	0.50				
17	Initial Temperature	40	deg F			
18	Process Temperature	212				
19	Sensible Heat @ 0.825 Sp Heat	425,700	BTU/hr			
20		125	kW			
21						
22	Microwave					
23	Water Removed	3.55	lb/KWH			
24	Heat of vaporization	422.54	kW			
25	Sensible Heat	124.77	kW			
26	Kilowatts required (no hot air)	547	1867.937442			
27	Number of lines	1				
28	Kilowatts per line	600	rounded up			
29	Power Supply Size	75	kW			
30	Power per line	8	minimum			

By combining the improved designs of SPS Feeds and the systemic approach of the SPS Process Application Method, Thermo Wave has been able to provide our customers with significant improvements in quality of product, yield and reduced maintenance.



Uniform Results Are Realized

For More Details Call
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 Or Contact Us At:
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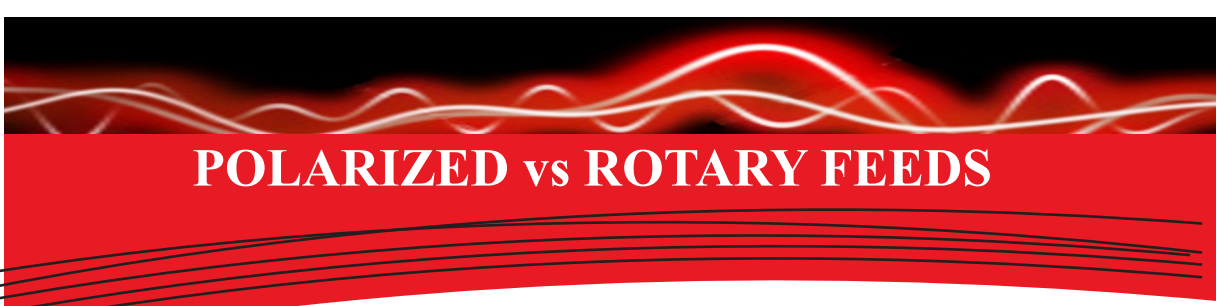


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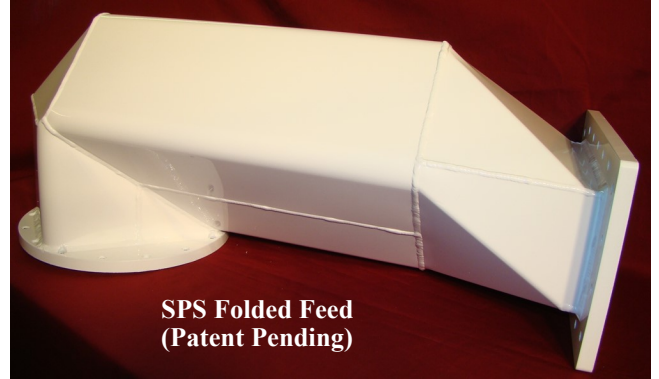


POLARIZED vs ROTARY FEEDS

The SPS Folded Feed Directly Replaces Rotary Feeds

TWT's Patent Pending SPS Folded Feed can Directly Replace Rotary Feeds with the Following Benefits:

- No Parts To Replace
- Reduced Maintenance
- Reduced Down Time
- Spare Parts Cost Savings
- Increased Productivity
- No Change To Wave Guide Required



SPS Folded Feed (Patent Pending)

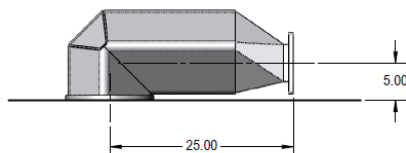
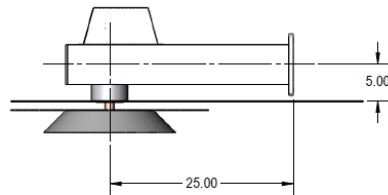


BEFORE



AFTER

TWT's SPS Folded Feed was Designed to be a Direct Replacement for Rotary Feeds. Previously, to Obtain the Benefits of Polarized Technology, a Major Change to the Wave Guide Configuration was Required. This is no Longer Necessary. Now there is a Cost Effective way to Upgrade to Polarized Feed Technology.



Critical Dimensions are Identical



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