



A Maxcess  
International  
Company

# Equalizer - Model D3 Differential Air Shaft



**Fast automatic or manual setups and high quality roll structure.**

**Q**uick and easy pneumatic core stop placement and multiple roll tension-equalization for slit rolls winding on the same shaft is offered by the D3 Differential Shaft. Automatic core-stops and core loading require minimal operator intervention and three-point tension control ensures superior quality rolls. The D3 provides guaranteed core positioning at low air pressure without spacers or core stops and is ideal for duplex winders. The result is improved finished roll quality, reduced scrap and fast, easy set-ups. The D3 is designed for multiple roll tension equalization in 3" (76 mm) to 16" (406 mm) ID cores.

## SPECS

### Specifications

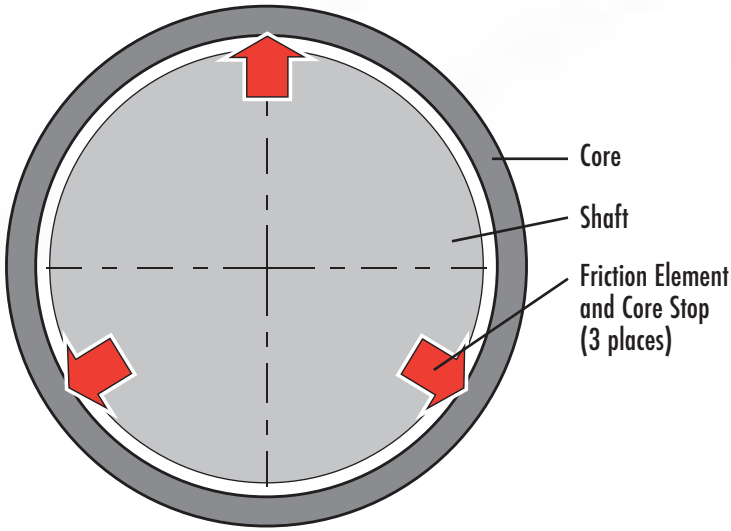
	Units	Core Diameter			
		3.00		6.00	
	inches	3.00		6.00	
	mm	76.2		152.4	
	Type	Drop-In	Cantilevered	Drop-In	Cantilevered
Minimum Slit Width	inches	0.88	0.88	1.00	1.00
	mm	22.4	22.4	25.4	25.4
Maximum Recommended Operating Speed	fpm	2300	1500	2300	1500
	mpm	701	457	701	457
	rpm	2196	1432	1255	819
Allowable Acceleration Rate (per sec.)	fpm	150	150	150	150
	mpm	46	46	46	46
	rpm	143	143	82	82
Tension Range Capability	pli	0.10 to 3.0		0.50 to 5.0	
	N/mm	0.02 to 0.53		0.09 to 0.90	
Operating Air	psi	5 - 60			
Pressure Range	kPa	35 to 414			
Shaft Balance Tolerance	N/A	Below upper limit of the VDI quality zone G16			
Body Material Options	N/A	Mild Steel - Alloy - Aluminum			

## KEY FEATURES

### Key Features:

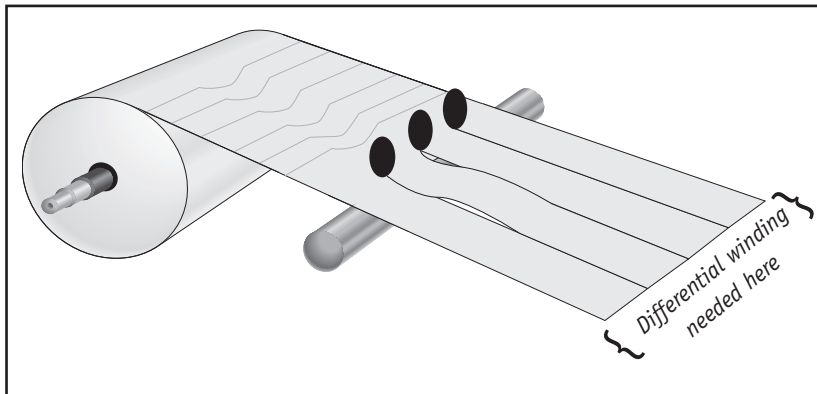
- Polymer tension segments reduce setup time and simplify core positioning, no tools or core stops required
- 3/32" (2.3 mm) wide, staggered tension segments ensure tight tolerance to the core edge regardless of core position
- Removable tension segment cartridges can be changed out easily to reduce down time for routine maintenance
- Symmetrical, balanced design ensures smooth operation
- Pressure control valve provides optimal regulation of machine air pressure
- Replaceable polymer wear bars and tension segments enable tolerance fit and reduced friction against core ID
- Automatic inflation/deflation and core stop activation allow remote operation

## Equalizer – Model D3 Core-Slip System

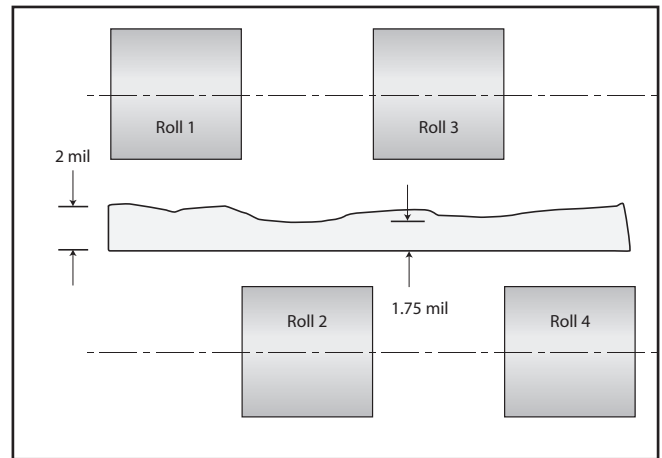


Tension Segments also act as core stops to eliminate lateral roll movement

## Differential Winding Applications



Length Compensation (caused by baggy webs)



Cross-Web Caliber Variation (typical of coated, printed or laminated materials)



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