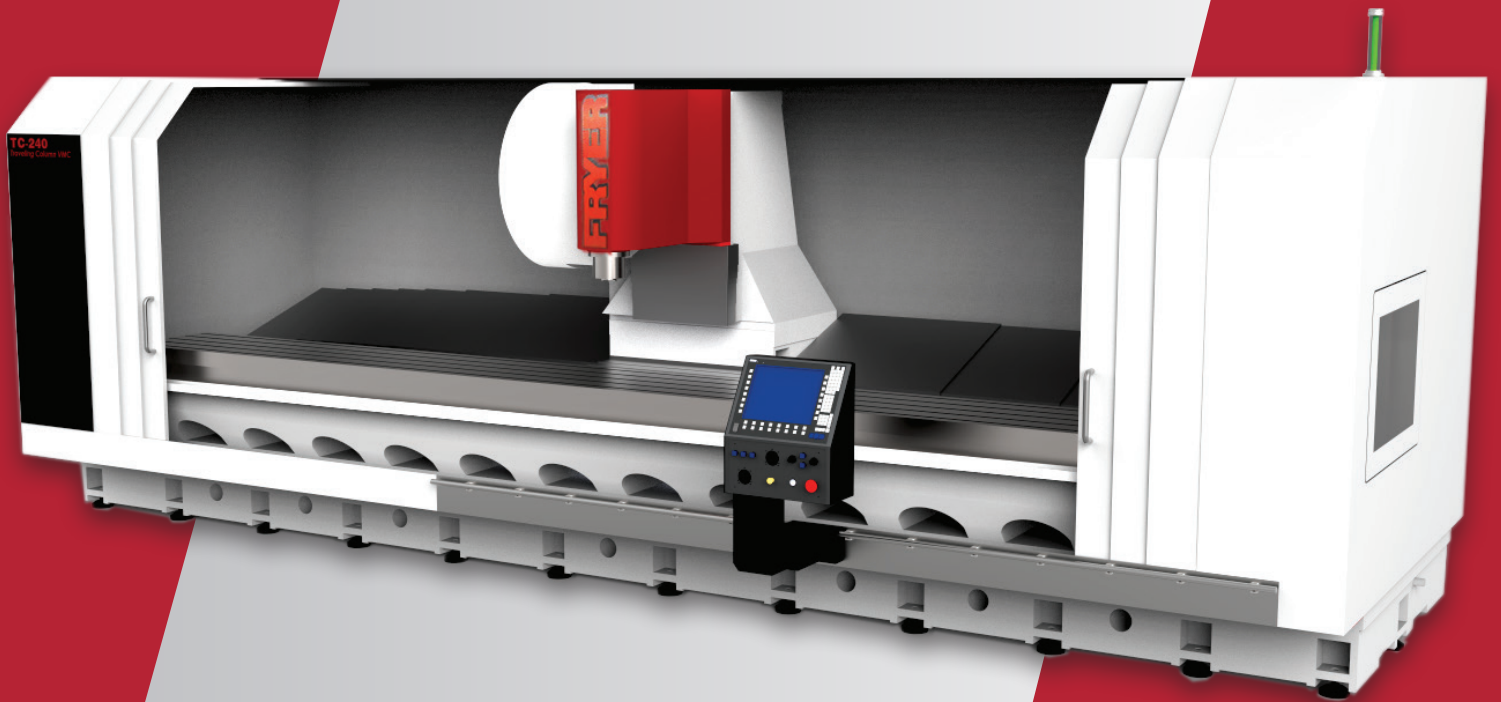


# TC-V Series

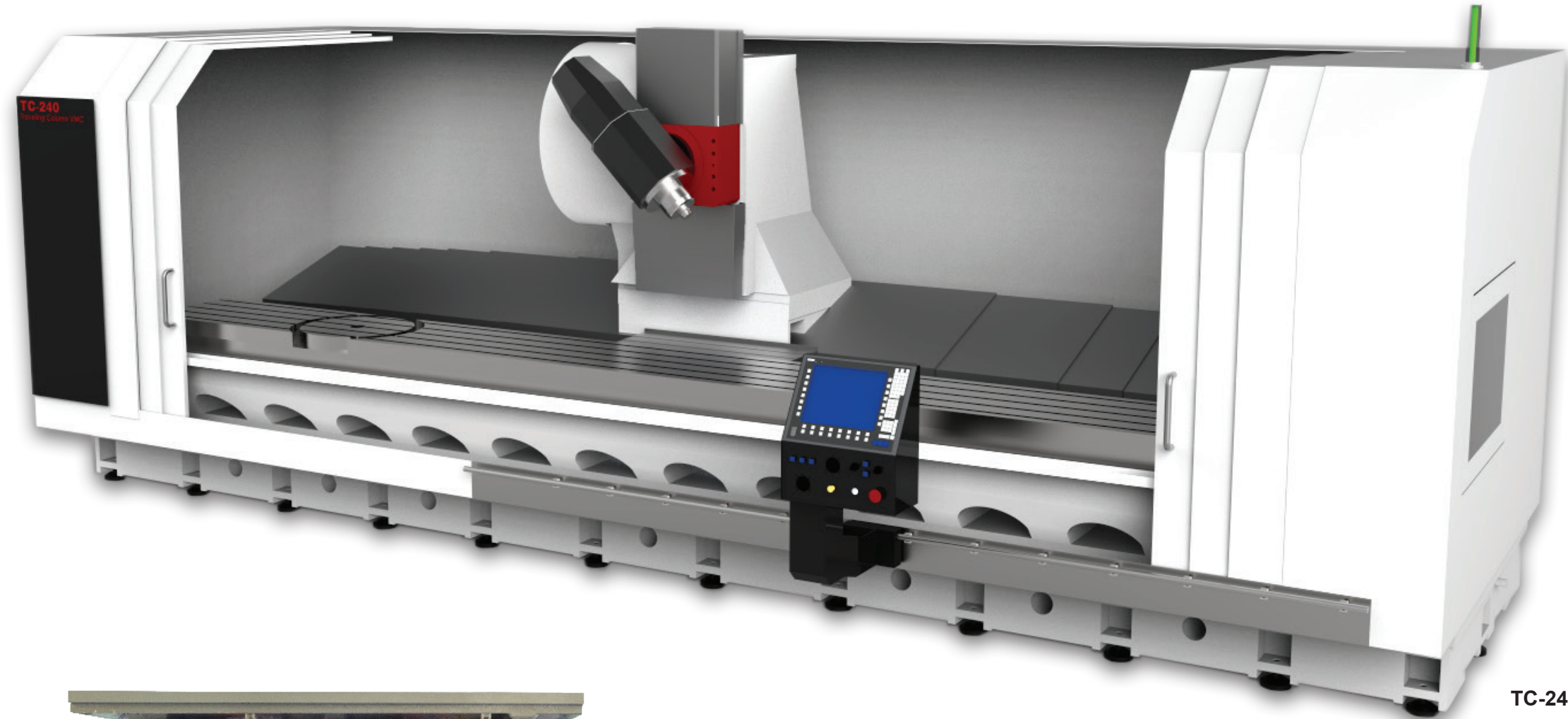
Vertical Traveling Column



**FRYER**  
MACHINE SYSTEMS<sup>®</sup>

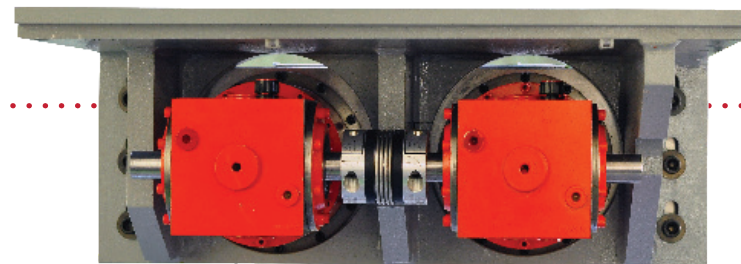
Precision Built Solutions™

The Fryer TC-V Series features a fixed table and traveling column for flexibility with large parts and fixturing. You can use the machine as a multi-pallet design by using the table dividers to create work zones. The fixed table allows table loads of more than 10,000 lbs. and is available with a built in rotary table. The high torque 40 and 50 taper spindles feature available CTS and gearbox. Available Y axis travel of 24" or 32" and in sizes ranging from 40" X travel all the way to a huge 320" travel machine.



TC-240V

## High Precision

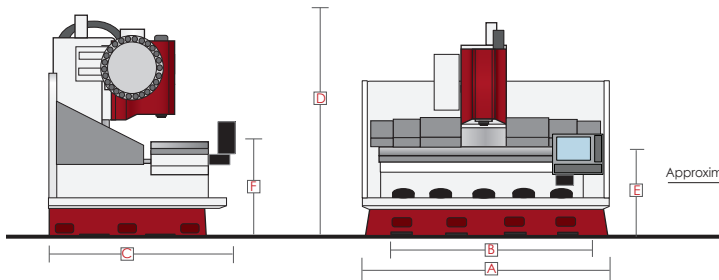


Redex DualDRIVE system features a backlash free feature by torsionally winding one pinion against the other through the rack. The benefit of this system is the need for only one servo motor greatly simplifying motor control and reliability. (used on TC-160,240 and 320 only)

- Flexible traveling column design
- Fixed table with 10,000 lbs. plus capacity
- Standard or tilting head spindle
- Y travel of 24" or 32"
- 40" to 320" X travel
- Built-in rotary table
- 1,000 IPM rapid feedrate
- 24 or 30 tool ATC
- Open style semi-guarding or fully enclosed
- Siemens or Fanuc CNC

TC-V SERIES SPECIFICATIONS	TC-40V	TC-80V	TC-120V	TC-160V	TC-240V	TC-320V
X Travel	40"	80"	120"	160"	240"	320"
Y Travel	26"			24" (32")		
Z Travel	28"			24"		
Table Load (Evenly Distributed)	8,000 lbs.	8,000 lbs.	10,000 lbs.	10,000 lbs.	14,000 lbs.	18,000 lbs.
Table Size	60" X 24"	80" x 24"	120" x 24"	160" x 24"	240" x 24"	320" x 24"
T-Slots (No./Width)			5 / .787"			
Table Top to Floor			38"			
Motor (Peak)			30.0 HP (40.0 HP Optional)			
Spindle Speed (RPM)			60 - 8,500 RPM (6K, 10K, 12K, 15K Optional)			
Spindle Torque			155 ft/lbs. @ 350 RPM (204 ft/lbs. w/opt 40 HP motor; 800 ft/lbs. w/opt 40 HP motor & gearbox)			
Tool Type/Taper			CAT-40 (CAT-50 Optional) (BT)			
Spindle Nose to Table (Max-Min)	30" - 2"			28" - 4"		
Spindle Center to Column	28"			24" (32")		
Tool Storage Capacity			24 Station Arm Type (30 and 40 tool Option)			
Tool Change Time			3.0 seconds	(4 sec 50 taper)		
Tool Change Time Chip to Chip			4.0 seconds	(6 sec 50 taper)		
Max. Tool Diameter (Full)			3.20"	(5.90" 50 taper)		
Max. Tool Diameter (Adjacent Empty)			6.25"	(9.5" 50 taper)		
Max. Tool Length			13"	(16" 50 taper)		
Max. Tool Weight			15.4 lbs	(30 lbs 50 taper)		
Positioning Accuracy			+ / - 0.0002"		+ / - 0.0003"	
Position Repeatability			+ / - 0.0001"		+ / - 0.00015"	
X Axis Drive Type			Ballscrew		Rack and Pinion	
Rapid Traverse			1,000 X, Y, Z			
Cutting Feed Rate			AC Digital Brushless			
Servo Type			AC Digital Brushless			
Axis Thrust (Peak)			4,955 lbs. X, Y, Z			
Air Pressure Requirements			90 PSI - 5 CFM			
Coolant Capacity			100 Gallons			
Coolant Flow			5 GPM			
Power Requirements			40 AMP 400 - 500 VAC 3 Phase (80 AMP)			
Operating Dimensions (WxDxH)	160"x138"x118"	200"x138"x118"	245"x138"x118"	310"x138"x118"	375"x138"x118"	440"x138"x118"
Machine Weight	30,000 lbs.	32,000 lbs.	34,000 lbs.	40,000 lbs.	46,000 lbs.	50,000 lbs.

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	TC-40V	TC-120V	TC-160V	TC-240V	TC-320V
Overall Width (A)	172"	250"	290"	372"	450"
Table Width (B)	50"	120"	160"	240"	320"
Overall Depth (C)	164"	116"	116"	128"	128"
Overall Height (D)	130"	108"	108"	108"	108"
Table Height (E)	38"	38"	38"	38"	38"
Console Height (F)	62"	62"	62"	62"	62"
Approximate Machine Weight	18,000 lbs.	34,000 lbs.	40,000 lbs.	46,000 lbs.	50,000 lbs.



Precision Built Solutions™