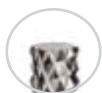
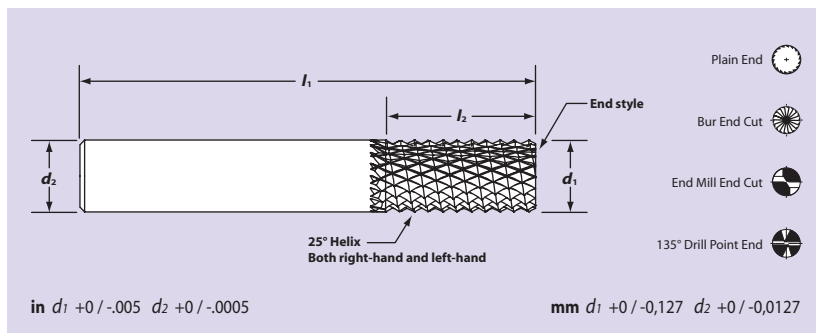
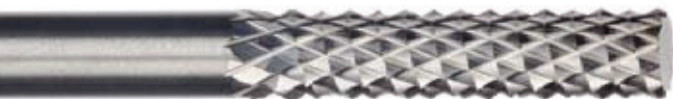


# FIBERGLASS ROUTERS

For routing fiberglass and graphite composite laminates

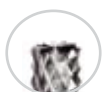
## FR10

Diamond pattern flutes



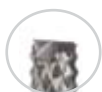
### No End Cut

Plain End – Used for edge routing or when the end of the router does not come in contact with the workpiece. Plain end routers are also referred to as ‘safe end’ tools.



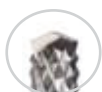
### Bur End Cut

Bur End – Used for bottom cutting. This design will leave a smooth and even bottom surface with a square corner.



### End Mill End Cut

End Mill End – Used for bottom cutting. This style produces a smooth bottom surface with a square corner.



### 135° Drill Point

Drill Point End – Used to plunge through the workpiece before beginning the routing operation. Care must be taken to ensure that the end of the router does not come into contact with the work holding after plunging through the workpiece.

The up cut geometry of the FR10 router pulls the workpiece tightly against the template resulting in clean, smooth cuts. Use the FR10 router in polyester glass-reinforced products such as printed circuit boards, phenolic-epoxy parts, graphite composite laminates, some grades of Kevlar® and other highly abrasive materials. Down cut routers available by quotation.

#### Inch

Tool Code	d <sub>1</sub> Cutter Dia	d <sub>2</sub> Shank Dia	l <sub>2</sub> Length of Cut	l <sub>1</sub> Overall Length	Plain End		Bur End		End Mill End		Drill Point End	
					EDP Number	List Price	EDP Number	List Price	EDP Number	List Price	EDP Number	List Price
FR-2	1/8	1/8	1/2	1-1/2	36621	7.56	36622	8.40	36623	9.14	36624	9.66
FR-3	3/16	3/16	5/8	2	36631	12.13	36632	13.39	36633	14.65	36634	15.23
FR-5	1/4	1/4	3/4	2	36641	13.23	36642	14.75	36643	15.70	36644	16.96
FR-6	1/4	1/4	1	2-1/2	36651	13.86	36652	15.70	36653	16.54	36654	17.17
FR-6-1	1/4	1/4	1	3	36661	17.64	36662	19.16	36663	20.06	36664	20.74
FR-7	5/16	5/16	1	2-1/2	36671	27.25	36672	29.09	36673	30.14	36674	31.08
FR-8	3/8	3/8	1	2-1/2	36681	33.92	36682	36.91	36683	38.33	36684	39.80
FR-9	1/2	1/2	1	3	36701	47.78	36702	52.50	36703	55.07	36704	57.59

#### Metric

Tool Code	d <sub>1</sub> Cutter Dia	d <sub>2</sub> Shank Dia	l <sub>2</sub> Length of Cut	l <sub>1</sub> Overall Length	Plain End		Bur End		End Mill End		Drill Point End	
					EDP Number	List Price	EDP Number	List Price	EDP Number	List Price	EDP Number	List Price
MFR-2	3	3	12	38	36615	7.56	36616	8.40	36617	9.14	36618	9.66
MFR-3	4	4	16	50	36625	12.13	36626	13.39	36627	14.65	36628	15.23
MFR-6	6	6	25	63	36655	13.86	36656	15.70	36657	16.54	36658	17.17
MFR-6-1	6	6	25	76	36675	17.64	36676	19.16	36677	20.06	36678	20.74
MFR-7	8	8	25	63	36685	27.25	36686	29.09	36687	30.14	36688	31.08
MFR-8	10	10	25	70	36695	33.92	36696	36.91	36697	38.33	36698	39.80
MFR-9	12	12	25	76	36705	47.78	36706	52.50	36707	55.07	36708	57.59

#### Application Guide • Speed & Feed

Tool Dia. Inch	Speed (SFM)		Feed Rate IPR	Tool Dia. mm	Speed (SFM)		Feed Rate IPR
	Min.	Max.			Min.	Max.	
1/16	600	900	0.002	2	183	274	0.051
1/8	600	900	0.002	3	183	274	0.051
3/16	600	900	0.002	4	183	274	0.051
1/4	600	900	0.002	6	183	274	0.051
5/16	600	900	0.002	8	183	274	0.051
3/8	600	900	0.002	10	183	274	0.051
1/2	600	900	0.002	12	183	274	0.051