

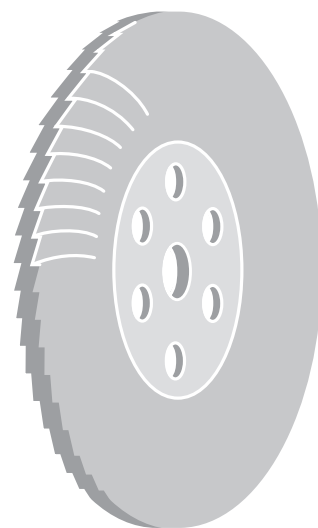
Filing Discs and Rings

Tailor-made solutions

84 Technical Information

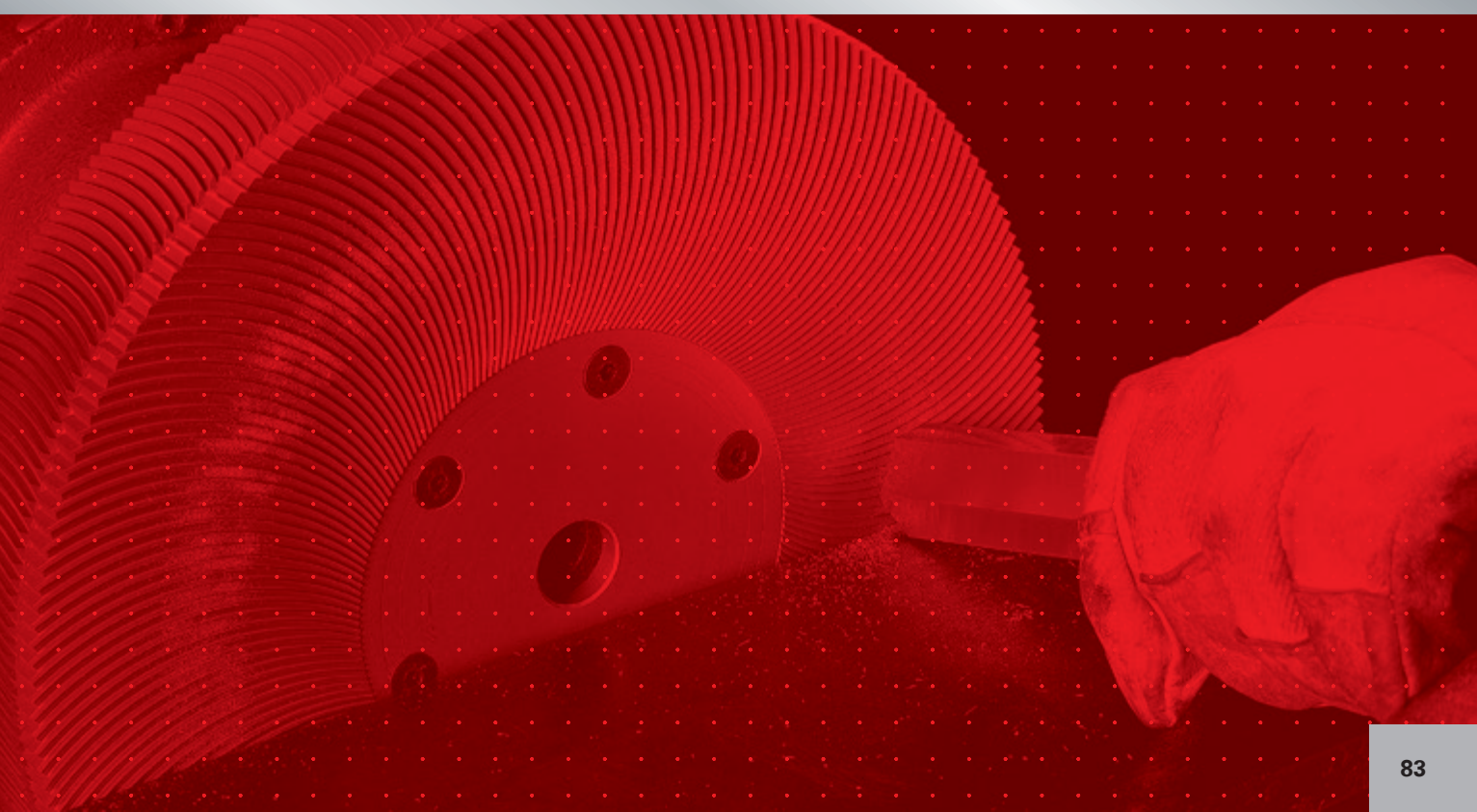
84 Filing discs in HSS

85 Filing rings in tool steel



Product line marking

The product lines are illustrated by star symbols at the top of the table; please refer to page **14** and **15**.

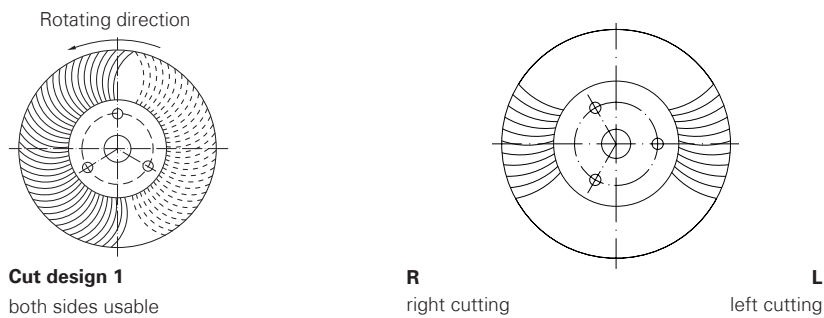


Filing discs in HSS



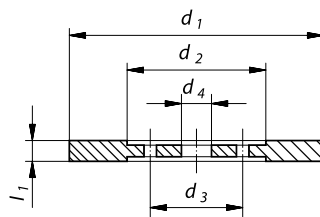
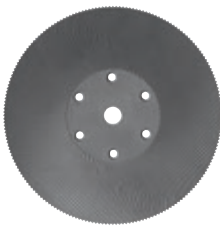
Filing discs in HSS are ideal for machining soft materials such as plastic or non-ferrous metal. Steel and cast iron can also be economically machined up to a strength of 450 N/mm². Filing discs are mounted on machines and used in stationary applications, in particular for deburring or bevelling workpieces.

In the standard right cutting version, tooth type 1, the tools have teeth on the front and back of the disc (order example: F16-R-1-Z2). Alternatively, customers can choose a left-cutting version (order example: F16-L-1-Z2).



Types of cut and their application

Z1	Z2	Z3
Aluminium alloys plastics $v = 38-150$ m/min Wood $v = 150-300$ m/min	Aluminium alloys plastics $v = 38-150$ m/min Bronze, brass $v = 150-300$ m/min	Steel up to 450 N/mm ² $v = 38-75$ m/min Cast and malleable iron $v = 38-150$ m/min



Ordering example: FR16-R-Z1

= 1 piece



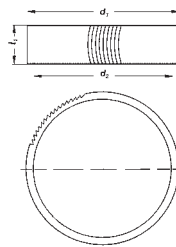
Description	Dimensions						Cut		
	d1 mm	d2 mm	d3 mm	d4 mm	l1 mm	Number of bores	Z1 coarse	Z2 medium	Z3 fine
F 16	160	80	60	15	7	3	F16-R-1-Z1	F16-R-1-Z2	F16-R-1-Z3
F 21	210	80	60	15	8	3	F21-R-1-Z1	F21-R-1-Z2	F21-R-1-Z3
F 26	260	110	90	20	9	6	F26-R-1-Z1	F26-R-1-Z2	F26-R-1-Z3
F31	310	125	90	20	10	6	F31-R-1-Z1	F31-R-1-Z2	F31-R-1-Z3

Filing rings in tool steel



Filing rings in tool steel, like filing discs, are the perfect tool for machining soft materials such as plastic, non-ferrous metal, steel and cast iron (up to a strength of 450 N/mm²). Filing rings, too, are mounted on machines and used in stationary applications, in particular for deburring or bevelling workpieces.

Filing Rings



Ordering example: FR 16 Z1

= 1 piece



Description	Dimensions			Cut		
	d1 mm	d2 mm	l1 mm	Z1 coarse	Z2 medium	Z3 fine
FR 16	160	145	40	FR 16 Z1	FR 16 Z2	FR 16 Z3
FR 21	210	195	40	FR 21 Z1	FR 21 Z2	FR 21 Z3
FR 26	260	245	40	FR 26 Z1	FR 26 Z2	FR 26 Z3
FR 31	310	295	40	FR 31 Z1	FR 31 Z2	FR 31 Z3

Benefit:

Filing rings are seamless forged. This makes them especially durable.