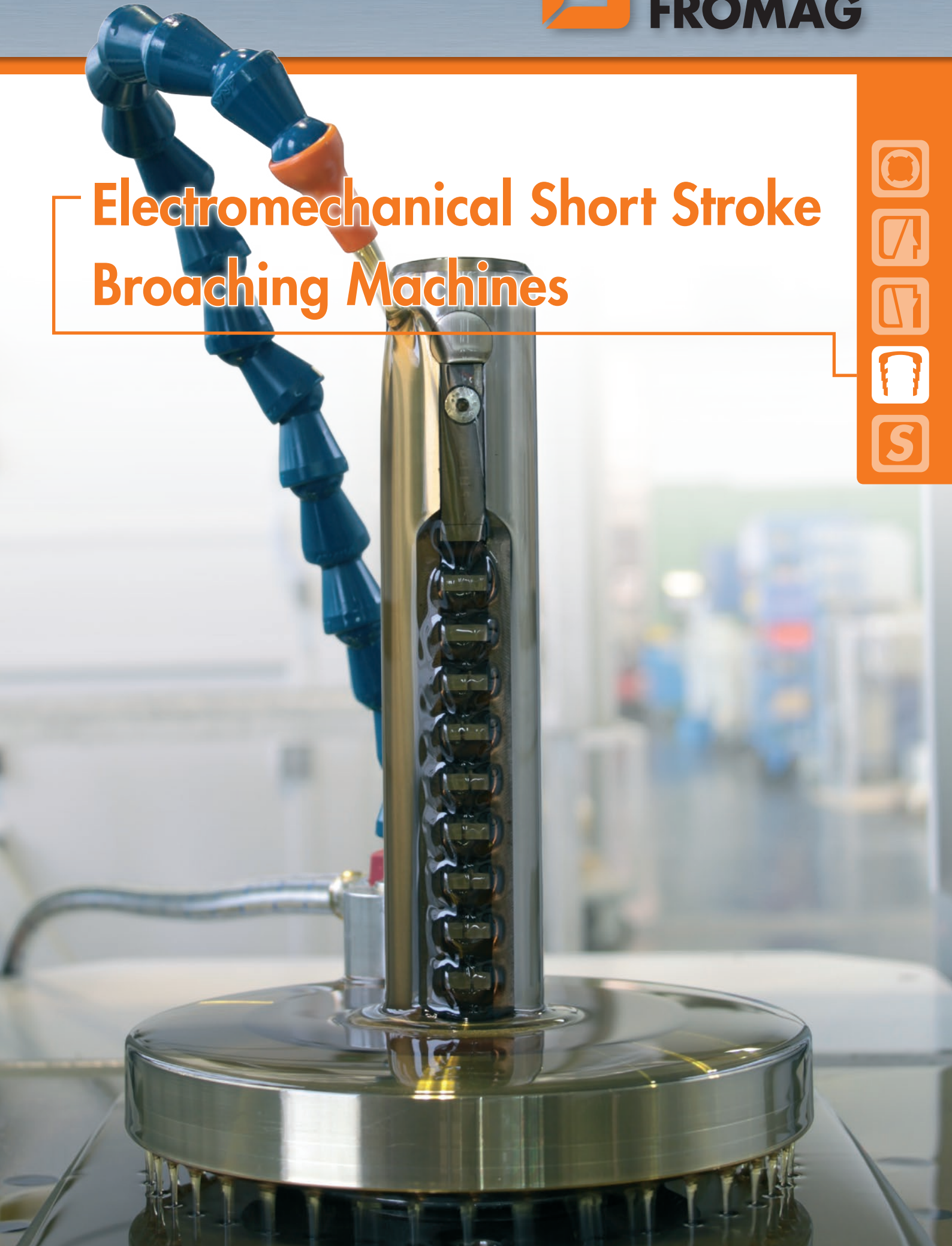


Electromechanical Short Stroke Broaching Machines





Keyway Broaching

Broaching is a chip removal machining procedure with a short cycle time. Keyway broaching at present is done with vertical or horizontal broaching machines. At present broaching machines needed a long stroke and strong pulling force had to be used on all machining task. On the majority of machining tasks more than one pass was needed.

Operating these machines manually, shims of different thicknesses were used on each separate pass to achieve the required depth. An expensive alternative was to use an automatic shim control or wedge control system for semi or fully automatic keyway broaching. Moveable tables can also be used to finish keyways in multiple passes.

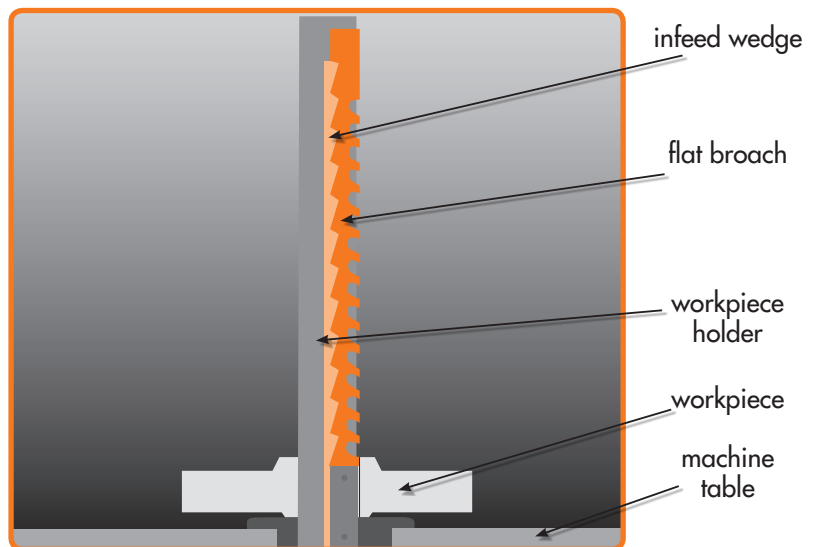
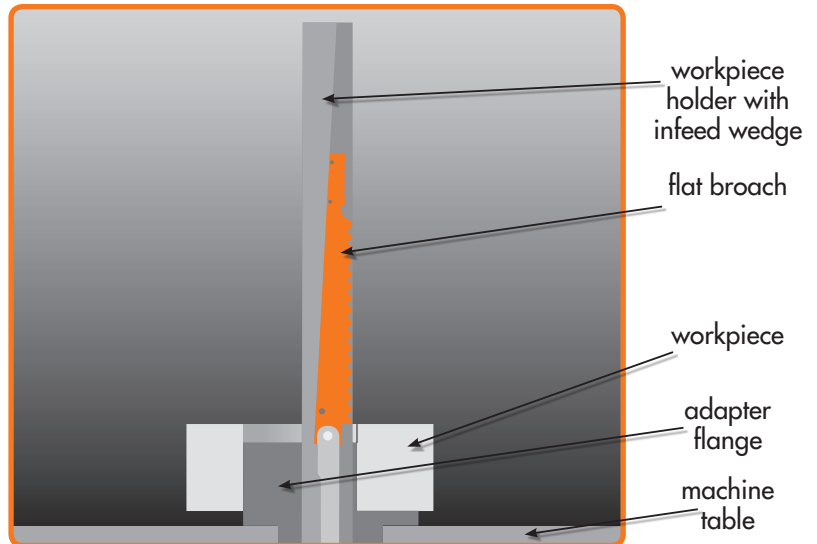
FRÖMAG Short Stroke Broaching Machines

FRÖMAG's latest development is an economical broaching procedure that is executed with short broaches in multiple passes using FRÖMAG's short broaching machine. This procedure is without shims and manipulation by the operator during machining sequences.

ADVANTAGES:

- The broaching operation is fully AUTOMATIC
- Elimination of complex set-ups and set-up times
- Fast broaching and return speeds result in higher productivity and lower costs
- Improvement of the machined keyway surfaces due to the stiffness of the electromechanical drive used in the FRÖMAG Short Stroke Broaching Machine
- The cutting inserts will have an extended tool life due to being made exclusively with a high quality PM-material
- Significant reduction of floor space is needed when compared to a standard broaching machine. Height of the FRÖMAG machine is significantly shorter
- Operation of the machine is conducted interactively using common language not computer programming language. No special computer or programming skills are necessary as the operator is guided through the programming by easily followed menus

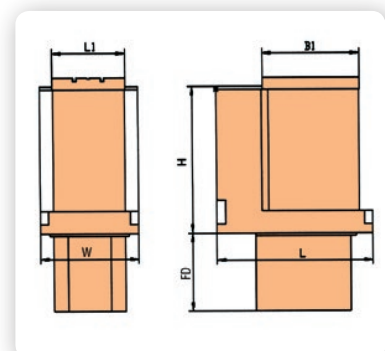
The technical principle



Features and dimensions

- subject to change without notice -

		4-600-APC	7-600-APC	7-750-APC
Keyway width (mm)		32	50	70
Stroke length / Keyway length (mm)		425/200	600/200	750/200
Bore sizes		35-130	35-230	35-350
Broaching- and Return Speed (m/min)		0-10/20	0-10/20	0-10/20
Connected load of the Main drive (kW)		15	22	22
Infeed rates / stroke (mm)		depending on the geometry of the broach		
Machine loading capacity (kN)		300	350	350
Machine dimensions (mm)	H	1290	1290	1290
	L	1285	1285	1285
	W	810	810	810
	FD*	-	595	745
Machine table (mm) L1 x B1		800 x 600	800 x 600	800 x 600

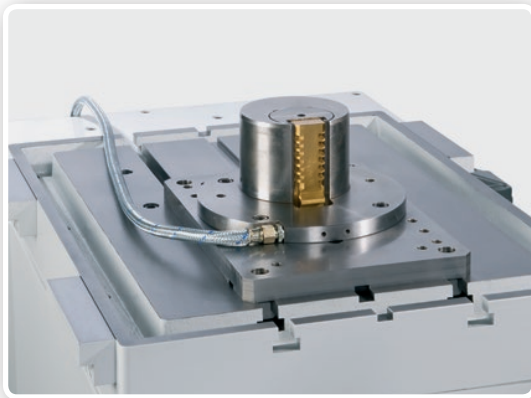


*FD only for stroke lengths larger than 425 mm

The Machines

HIGHLIGHTS:

- fully automatic working sequence
- short set up- and machining times
- space savings
- high productivity



Workpiece sample





Maschinenfabrik
FRÖMAG

The Machines



Messrs. FRÖMAG is your reliable partner for:

- Subcontracting
- Electromechanical Keyseating and Profiling Machines
- Electromechanical Slotting Machines
- Electromechanical Broaching Machines
- Special Purpose Machines

Precision, Product reliability, Efficiency

There are more than 5.000 FRÖMAG machines worldwide much valued due to their precision and reliability.

They offer cost saving solutions for the jobs defined by our customers especially in the fields of:

drive systems (motors, gears and gear boxes, couplings)

pumps-, fittings-, actuators manufacturing systems

materials handling and wind energy

automotive and components

special purpose machines...

Messrs. FRÖMAG is certified according to DIN EN ISO 9001

Please contact us,
we will find a perfect solution for your requirements.



Maschinenfabrik FRÖMAG GmbH & Co.KG

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