

SiMag 42.1

Single-channel loading magazine

with quick-change channels for bar stock diameters from 5 - 42 mm and lengths of 3, 4 and 6 m.
Flexible loading technology for medium and large lot production

Loading of the bar stock in approx. 12 seconds

The upper channel segments are opened pneumatically for bar loading. When the end piece is ejected to the front, the next bar can be

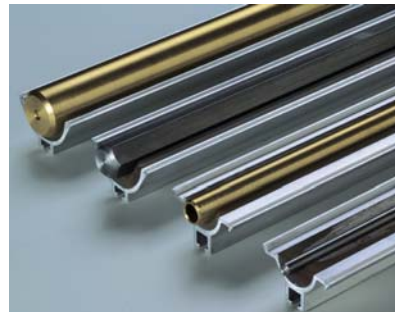
loaded while the last workpiece is still being machined. When the end piece is ejected to the back, approx. 25 seconds are needed.

Easily accessible steady rest for safe feeding of bar stock and pusher (Photo montage)



End piece ejection. The clamp releases the end piece from the clamping sleeve of the pusher

Open segment of the feed channel. View of the quick-change clip fastener, pusher, material in closed feed channel, material table



Feed channel segments (quick-change channels) for round and profiled bar stock. Lined with vibration-damping, highly wear-resistant synthetic material.



SiMag 42.1 – Raises machine performance

and improves turning quality thanks to hydrodynamic bar guiding

Oil flows through the feed channels continuously, thereby keeping movement noise to an absolute minimum and relieving stress on the machine spindle. For precision turning tasks, BREUNING recommends use of the closest-fitting feed channel possible.

A pneumatic stopper allows quick threading of a bar profile into a turn-inhibited collet chuck. Bar profiles can therefore be processed precisely, trouble-free and highly productively.

Technical data:

Main drive:
Frequency-controlled servomotor with torque and speed control

Controller:
PLC with plain text display in the portable manual control box

Change channels:
Available in fine increments with matching pusher

Other types:

- SiMag 70.1
- SiMag 100.1
- SiMag 130.1

Type	End piece ejection		Positioning		Loading area			External dimensions			Axial slide		
	to the front	to the back	with limit stop	without limit stop	Length 3 m	4m	6m	Width	Length 3 m	4 m		6 m	Width
42.1	•		•		3250	4250	6250	365	4200	5200	7200	670	•
42.1 R		•		•	3250	4250	6250	365	4200	5200	7200	670	•
42.1 PR		•		•	3250	4250	6250	365	4200	5200	7200	670	•

All dimensions specified in approximate millimetres. Subject to change without notice.

Note:

The positioning accuracy specified is attained without problem in lathes and loading systems if suitable materials and components are used.

Controller functions

- Automatic end piece detection
The magazine automatically detects the end of the bar. No adjustments by the operator are necessary.
- Monitoring of the feed paths
- Freely selectable feed speed up to 30 m/min.
Return up to 70 m/min
- Display of the respective current bar length and number of work-pieces still possible
- Diagnostic system
- End piece optimisation only in PR

Manufacturer's advice

BREUNING has specialised exclusively in the manufacturing of high-quality material feed systems for decades.

The comprehensive standard product range offers everything needed for cost-effective turning – from simple pusher right through to the latest fully automated systems.

If you would like further information on individual products, please call or fax us.

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Linear movement for good accessibility when changing the spindle

SiMag Single-channel loading magazine

for bar stock diameter from 5 – 130 mm . Universal for medium and large lot production
Sizes to 42, 70, 130 mm diameter

High flexibility thanks to modern single-channel switching technology

Thanks to the quick-lock clip fasteners, the feed channel of the SiMag loading magazine can be quickly and easily changed over for optimum adaptation to the bar stock to be handled. The feed channel segments are made of aluminium shells with precision cast inserts of a special plastic. When assembled, the upper and lower section form a closed, wear-resistant and vibration-damped feed channel. The standard increment of the inside diameter is 5 mm.

High-speed changing of the bar stock in approx. 12 seconds

For bar loading, the upper channel segments are opened pneumatically. On the standard version, end piece ejection is to the front. With this function, the next bar can be automatically placed into the feed channel even while the last work-piece is still being machined.



SiMag – High machine performance

and optimum turning quality thanks to hydrodynamic bar guiding

The plastic lining of the feed channels and the continuous oil flow through the channel segments offers optimum smooth running and relief for the machine spindle. For precision turning, Breuning always recommends the use of the closest possible fitting feed channel. In addition to the change channels, a centering steady rest with exact fitting centering jaws can be employed for seldom used intermediate sizes.

The ideal loading magazine for trouble-free processing of profile material

A pneumatic stopper allows quick 'threading' of a bar profile into a turn-inhibited collet chuck. Together with the appropriate feed channel, bar profiles can also be processed precisely, trouble-free and highly productively.

Types

Standard

Positioning against lathe limit stop.
End piece ejection to the front.

R

Positioning against lathe limit stop.
End piece ejection to the rear.

PR

Positioning without limit stop,
End piece ejection to the rear.

Note:

The positioning accuracy specified is attained without problem in lathes and loading systems if suitable materials and components are used.

Technical data:

Main drive:
Variable-frequency servomotor with torque and speed control

Controller:
PLC with plain text display in the portable manual control box

Change channels:
Diameter increment 5 mm, intermediate dimensions in mm increments (can be manufactured at no additional charge).
Every change channel comes with a matching pusher.

Manufacturer's advice

As a manufacturer of high quality material feed systems, Breuning has been specialising exclusively in this field for decades. The comprehensive standard product range offers everything needed for cost-effective turning - from the simple pusher right through to the latest fully automated systems. If you would like further information on individual products, please call us or fax us.

Type	End piece ejection		Positioning		Loading area		Outside dimensions		Axial slide	Swing-out
	to the front	to the rear	with limit stop	without limit stop	Length	Width	Length	Width		
42.1	•		•		3250	365	4200	670		•
42.1 R		•	•		3250	365	4200	670		•
42.1 PR		•		•	3250	365	4200	670		•
70.1	•		•		3250	500	3900	900	•	
70.1 R		•	•		3250	500	4410	1000	•	
70.1 PR		•		•	3250	500	4410	1000	•	
100.1	•		•		3250	650	4200	1300	•	
130.1	•		•		3250	650	4200	1300	•	

All dimensions specified in approximate millimetres. Subject to change without notice

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