

**NEW**  
BENZ  
**i.com +**  
internal coolant

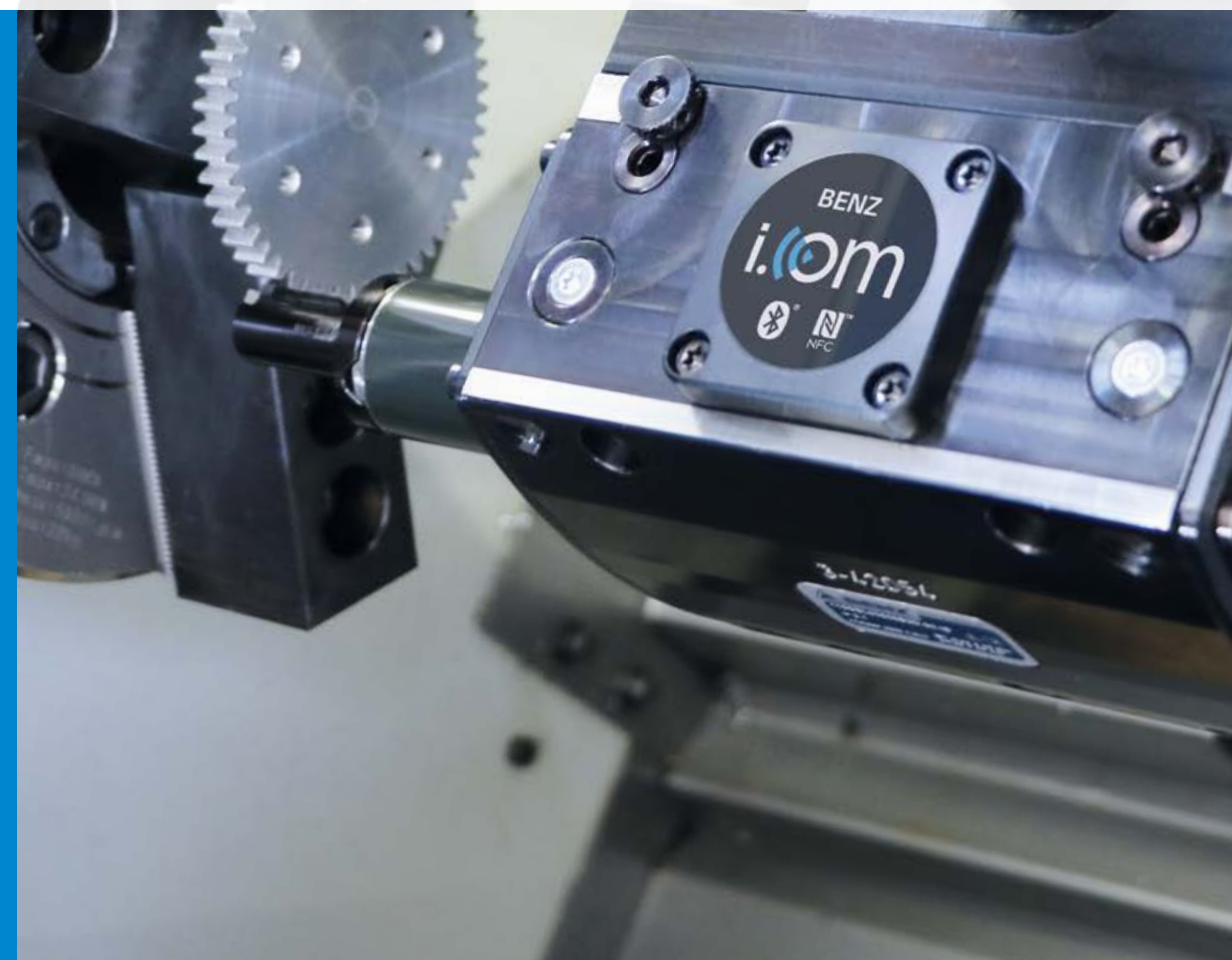
F-341796-EN-0919

# BENZ LINTEC BROACHING UNITS


Tooling technology  
for CNC turning centers and machining centers

Metal machining


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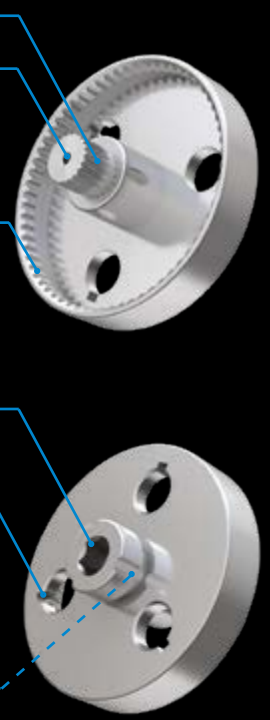
## INTERNAL AND EXTERNAL MACHINING





**Internal machining**  
of a workpiece  
with a broaching unit





**External machining**  
of a workpiece  
with a broaching unit





 Splines

 Torx

 Involute tooting  
(gears/shafts)

 Hexagon socket

 Groove

 Other  
special profiles

## CLAMPING HOLDER

For internal and external machining



You can find the right solution at your preferred cutting insert manufacturer. We would be happy to pass on corresponding contact information.

## OVERVIEW OF TYPES

**Design competitive processes to be more cost-effective**  
Specialized production workflows can be optimized by integrating driven units into machines. The integration of broaching units into a production process is an ideal example of how you can avoid complicated and expensive changeover and retooling processes all the way to complete machining.

As the leading company in shaping technology, BENZ provides units for all common CNC lathes and machining

centers. Receive the benefits of our years of experience for your specific application.

The new generation of BENZ units is equipped with internal cooling as standard, which has a positive effect on the tool life of the cutting inserts and thus on the efficiency of the overall process!

### CNC-TURNING CENTERS

BENZ LinA 4.0 - DRIVEN



**axial**  
- standard



**radial**  
- standard  
- long stroke



**radial ≠ 90°**  
- standard  
- long stroke

### TURRET INTERFACES



VDI



BMT



CDI



more on  
request

### MACHINING CENTERS

BENZ LinA 4.0 - DRIVEN



**axial**  
- standard



**radial**  
- standard  
- long stroke

BENZ LinS - STATIC

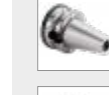


**axial**

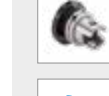
### DRIVE CONE



SK



CAT



KM™



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request



MAS BT



HSK



Coromant  
Capto®

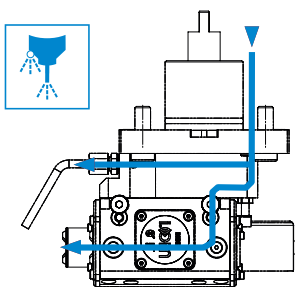
## NEW STANDARD EQUIPMENT

**Operating hours counter**  
BENZ i.com processes your tool data and gives you important information about the condition of your aggregate.

BENZ  
**i.com**



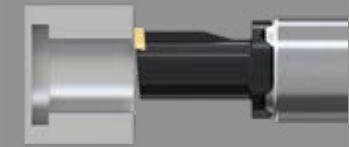
**Internal coolant**  
**Market innovation:**  
BENZ broaching units with internal coolant



## TECHNICAL DATA

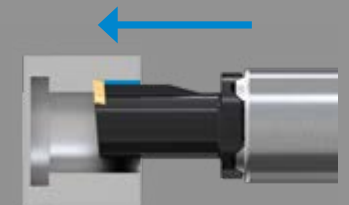
Variant	S	SL
Usable working stroke	32 mm	51 mm
Total stroke	34 mm	53 mm
No. of double strokes	1.500 min <sup>-1</sup>	1.000 min <sup>-1</sup>
Material strength <sub>max</sub>		1000 N/mm <sup>2</sup>
Material hardness		31,5 HRC
Groove width <sub>max</sub>		12 mm
Gear ratio variants		2:1 / 1:1
Feed per stroke <sub>max</sub>		0,02 mm - 0,1 mm

## PROCESSING CYCLE



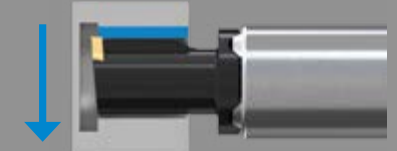
### Moving to the start position

Move with the cutter in the x-axis and z-axis at the desired starting dimension.



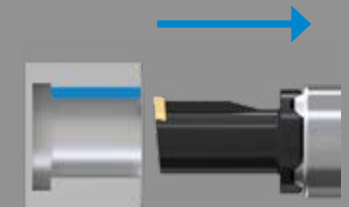
### Cutting movement

The cutter pushes forward into the workpiece and begins cutting.



### Integrated lift-off function

The broaching unit lifts up after the shaping process. It features an integrated lift-off mechanism.



### Return stroke as idle stroke

The non-contact return motion during the idle stroke prevents wear and prevents the cutter from breaking during the return motion.

With the x-axis providing continuous feed, the cycle repeats until the desired groove depth has been reached.