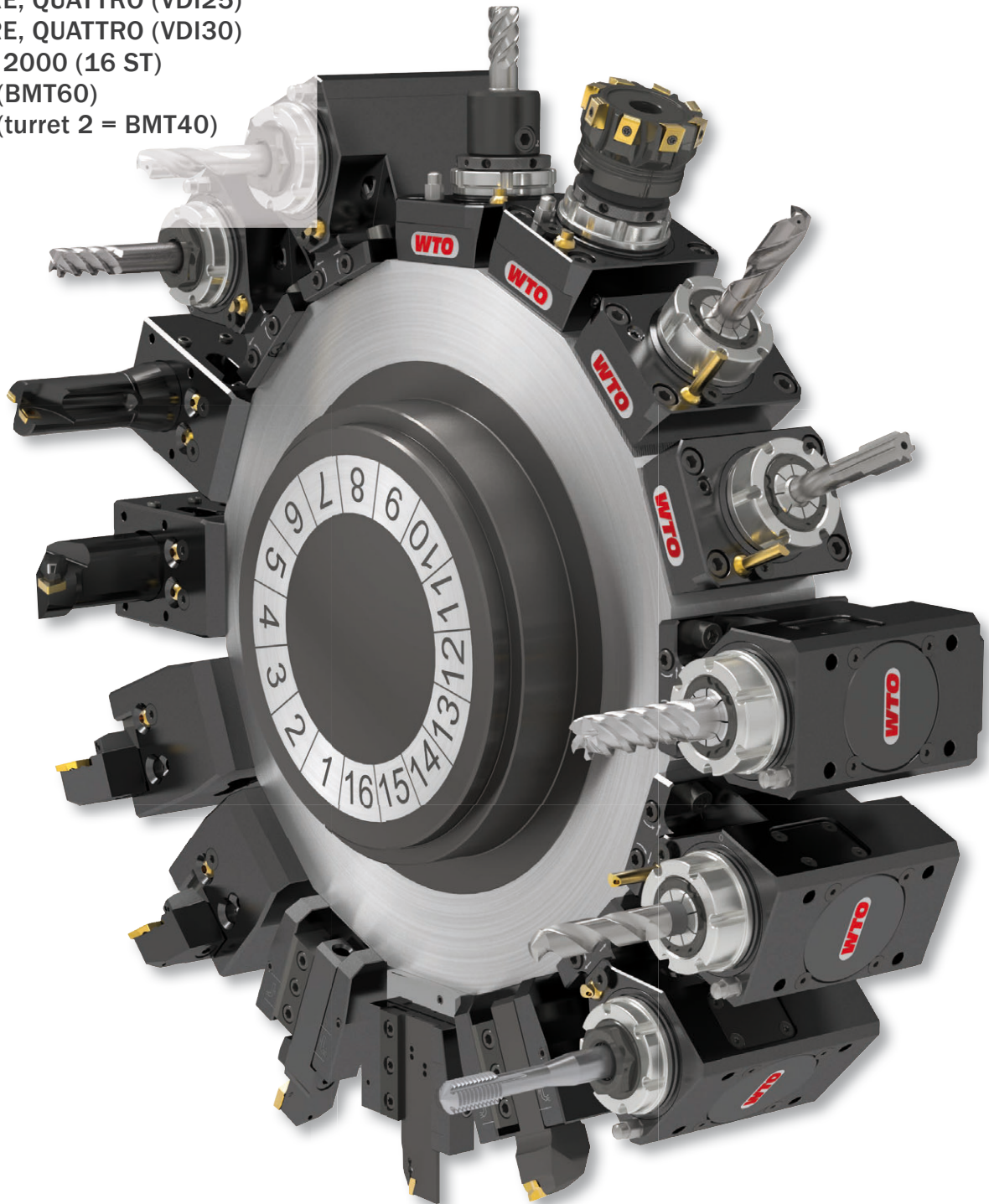


# DMG MORI

# WTO

## Tool Holder Program

NZ DUE, TRE, QUATTRO (BMT40)  
NZ DUE, TRE, QUATTRO (BMT42/64)  
NZ DUE, TRE, QUATTRO (VDI25)  
NZ DUE, TRE, QUATTRO (VDI30)  
NZX 1500, 2000 (16 ST)  
NZX 2500 (BMT60)  
NZX 2500 (turret 2 = BMT40)  
NZX 4000  
NZX 6000



# DMG MORI



## QuickFlex®

The new quick change system for high performance and precision.

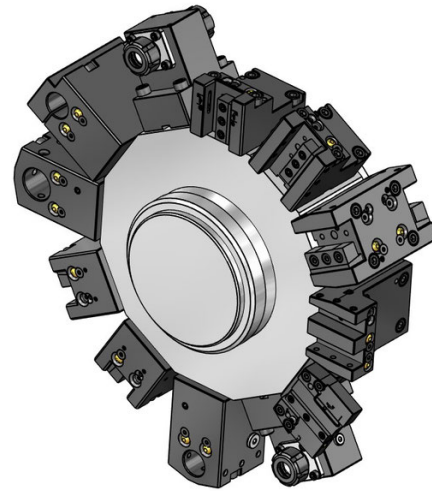
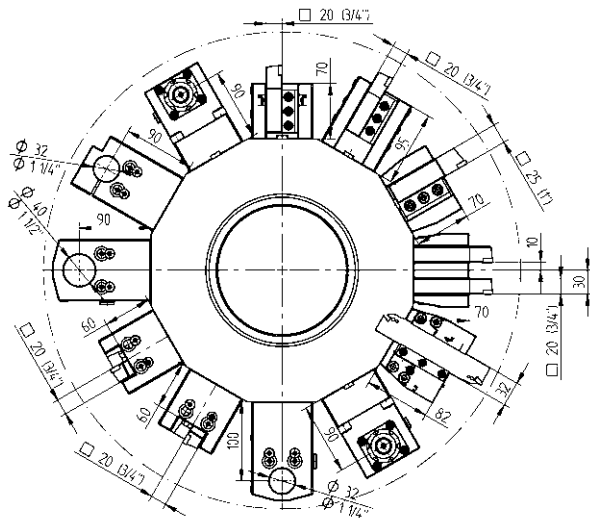
Minimal investment, maximal expandability.

Designed  
for



NZ DUE, TRE, QUATTRO (BMT40)	Page	4 - 10
NZ DUE, TRE, QUATTRO (BMT42/64)	Page	11 - 12
NZ DUE, TRE, QUATTRO (VDI25)	Page	13 - 18
NZ DUE, TRE, QUATTRO (VDI30)	Page	19 - 26
NZX 1500, 2000 (16 ST)	Page	27 - 33
NZX 2500 (BMT60)	Page	34 - 39
NZX 2500 (turret 2 = BMT40)	Page	40 - 44
NZX 4000	Page	45 - 47
NZX 6000	Page	48 - 49
Reduction sleeves	Page	50 - 53
Collets	Page	54 - 57

**EC = External coolant supply**  
**HP-IC = High pressure internal coolant supply through cutting tool**  
**IC 80 bar = Internal and external coolant supply**  
 Max. coolant pressure = 80 bar  
**IC 30 bar = Internal and external coolant supply**  
 Max. coolant pressure = 30 bar  
 Only use filtered coolant fluid (max. particle size = 50 µm)  
 Do not run without coolant  
 Do not use for machining abrasive materials such as cast iron, etc.



Static Toolholders - Standard Program

Static Toolholders - Standard Program



- OD cutting holder, short**
- 20 48-T00224  
T00224
  - 25 48-T00267  
T00267
  - 3/4" 48-T00234  
T00234
  - 1" 48-T00272  
T00272



- OD cutting holder, short, HP-IC**
- 20 48-T00224-HP IC 80 bar  
T00224
  - 25 48-T00267-HP IC 80 bar  
T00267
  - 3/4" 48-T00234-HP IC 80 bar  
T00234
  - 1" 48-T00272-HP IC 80 bar  
T00272



- OD cutting holder, long**
- 20 48-T00225  
T00225
  - 3/4" 48-T00235  
T00235



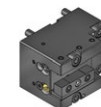
- OD cutting holder, both sides, short**
- 20 48-T00228  
T00228
  - 25 48-86523
  - 3/4" 48-T00250  
T00250
  - 1" 48-86524



- OD cutting holder, both sides, short, HP-IC**
- 20 48-T00228-HP IC 80 bar  
T00228
  - 25 48-86523-HP IC 80 bar
  - 3/4" 48-T00250-HP IC 80 bar  
T00250
  - 1" 48-86524-HP IC 80 bar



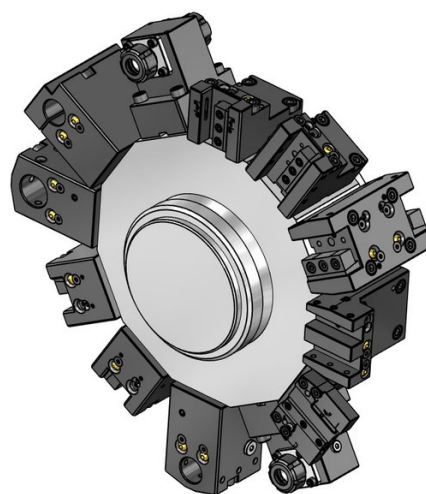
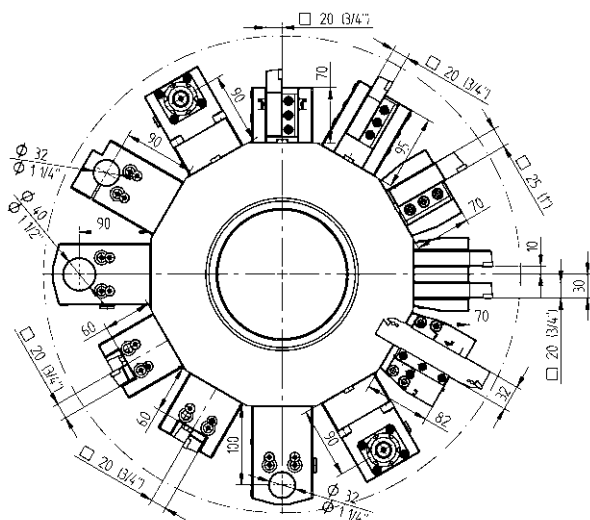
- OD cutting holder, both sides, long**
- 20 48-T00226  
T00226
  - 3/4" 48-T00249  
T00249



- Face cutting holder**
- 25 48-T03024  
T03024
  - 3/4" 48-T03018  
T03018
  - 1" 48-T03025  
T03025



- Face cutting holder, HP-IC**
- 20 48-T03017-HP IC 80 bar  
T03017
  - 3/4" 48-T03018-HP IC 80 bar  
T03018



Static Toolholders - Standard Program



- Cut-off holder, right hand**
- 20 48-T00251  
T00251
  - 25 48-T00268  
T00268, T00356
  - 3/4" 48-T00252  
T00252
  - 1" 48-T00359  
T00359, T00357



- Boring bar holder**
- Ø 32 48-T10115  
T10115
  - Ø 1 1/4" 48-T10119  
T10119



- Combination toolholder**
- Ø 32 48-T13132 IC 80 bar  
T13132
  - Ø 40 48-77999 IC 80 bar
  - Ø 1 1/4" 48-T13135 IC 80 bar  
T13135
  - Ø 1 1/2" 48-80016 IC 80 bar

Static Toolholders - Enhanced Program



- OD cutting holder, double, Y axis**
- 20 (3/4") 48-77726



- OD cutting holder, both sides, double, Y axis**
- 20 (3/4") 48-77727



- Face cutting holder, both sides**
- 20 48-79608
  - 3/4" 48-79609



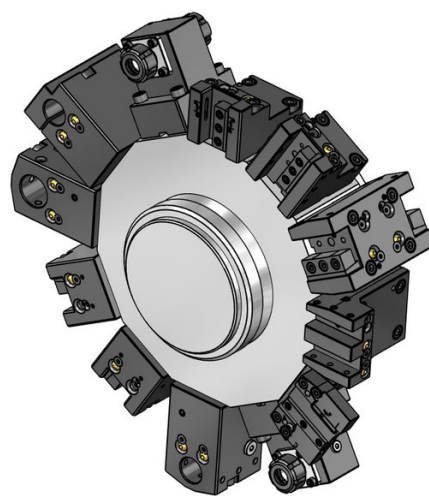
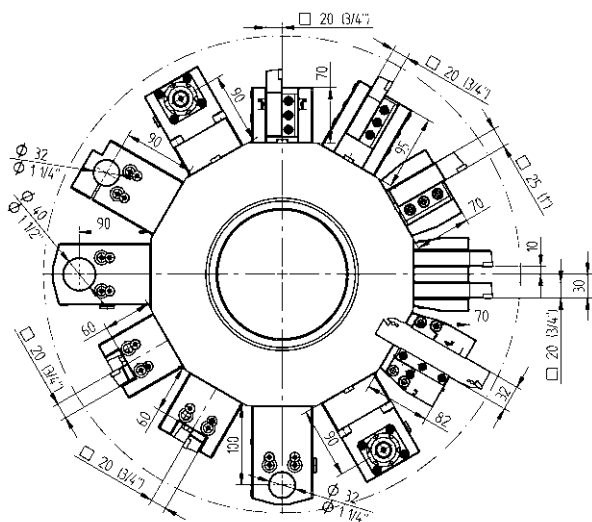
- Cut-off holder, adjustable**
- SH 32 48-98891



- Cut-off holder, adjustable, HP-IC**
- SH 32 48-102261R IC 80 bar
  - SH 32 48-102261L IC 80 bar



- Boring bar holder, with slot**
- Ø 32 48-82057
  - Ø 40 48-82058
  - Ø 1 1/4" 48-82059
  - Ø 1 1/2" 48-82060



Static Toolholders - Enhanced Program



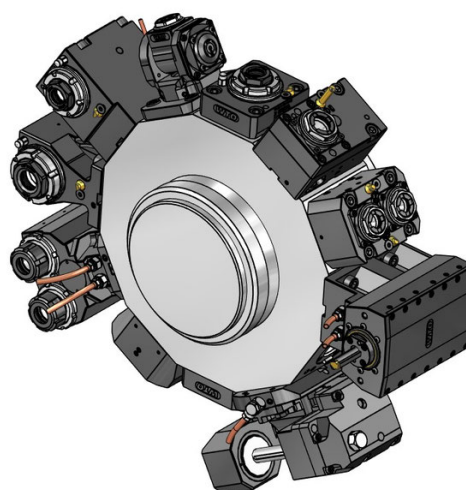
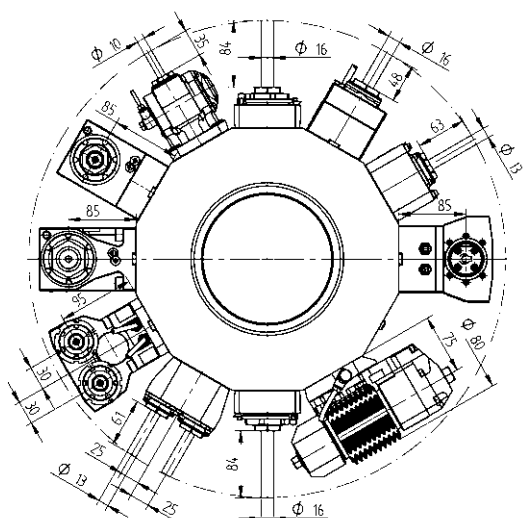
- Collet face drill holder**
- ER 25    48-107230                      IC 80 bar  
           107525000
  - ER 32    48-81031                         IC 80 bar  
           107532000



- Collet face drill holder, both sides**
- ER 25    48-107227                      IC 80 bar  
           107525000
  - ER 32    48-80509                        IC 80 bar  
           107532000



- Boring bar holder, blank**
- 48-80506



Driven Toolholders - QuickFlex®

Driven Toolholders - QuickFlex®



- OD drill/milling unit (12000 RPM)**
- |                 |                           |     |            |
|-----------------|---------------------------|-----|------------|
| <b>ER-25 QF</b> | 420125012-40<br>T32433    | 1:1 | EC         |
|                 | 0067725000                |     |            |
| <b>ER-25 QF</b> | 420125013-40              | 1:1 | IC 80 bar  |
|                 | 0067725000                |     |            |
| <b>ER-32 QF</b> | QF32-DNE-MS40A-050-E-HS-A | 1:1 | EC         |
|                 | 0067732000                |     |            |
| <b>ER-32 QF</b> | QF32-DNE-MS40A-067-I-HS-A | 1:1 | IC 100 bar |
|                 | 0067732000                |     |            |



- Face drill/milling unit (12000 RPM)**
- |                 |                           |     |            |
|-----------------|---------------------------|-----|------------|
| <b>ER-25 QF</b> | 420525013-40<br>T32434    | 1:1 | EC         |
|                 | 0067725000                |     |            |
| <b>ER-25 QF</b> | 420525014-40<br>T32436    | 1:1 | IC 80 bar  |
|                 | 0067725000                |     |            |
| <b>ER-32 QF</b> | QF32-DNI-MS40A-085-E-HS-A | 1:1 | EC         |
|                 | 0067732000                |     |            |
| <b>ER-32 QF</b> | QF32-DNI-MS40A-085-I-HS-A | 1:1 | IC 100 bar |
|                 | 0067732000                |     |            |



- OD drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**
- |                 |                              |     |            |
|-----------------|------------------------------|-----|------------|
| <b>ER-32 QF</b> | QF32-DNE-MS40A-067-I-HS-SB-A | 1:1 | IC 100 bar |
|                 | 0067732000                   |     |            |
|                 | LI-F12-01                    |     |            |



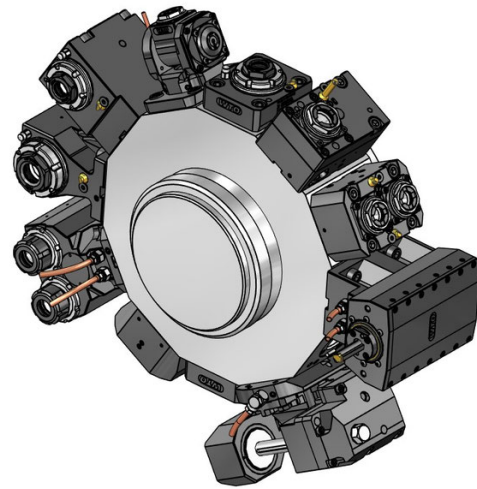
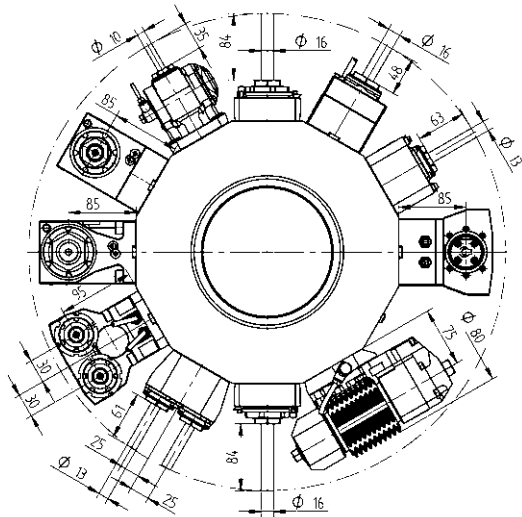
- Face drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**
- |                 |                              |     |            |
|-----------------|------------------------------|-----|------------|
| <b>ER-32 QF</b> | QF32-DNI-MS40A-085-I-HS-SB-A | 1:1 | IC 100 bar |
|                 | 0067732000                   |     |            |
|                 | LI-F12-01                    |     |            |



- OD drill/milling unit (6000 RPM, Heavy Duty)**
- |                 |                                |     |           |
|-----------------|--------------------------------|-----|-----------|
| <b>ER-25 QF</b> | 420125010-40<br>T32274, T32450 | 1:1 | EC        |
|                 | 0067725000                     |     |           |
| <b>ER-25 QF</b> | 420125011-40<br>T32287         | 1:1 | IC 80 bar |
|                 | 0067725000                     |     |           |
| <b>ER-32 QF</b> | 420132010-40<br>T32475, T32484 | 1:1 | EC        |
|                 | 0067732000                     |     |           |
| <b>ER-32 QF</b> | 420132011-40                   | 1:1 | IC 80 bar |
|                 | 0067732000                     |     |           |



- Face drill/milling unit (6000 RPM, Heavy Duty)**
- |                 |                                |     |           |
|-----------------|--------------------------------|-----|-----------|
| <b>ER-25 QF</b> | 420525010-40<br>T32275, T32297 | 1:1 | EC        |
|                 | 0067725000                     |     |           |
| <b>ER-25 QF</b> | 420525011-40<br>T32288, T32435 | 1:1 | IC 80 bar |
|                 | 0067725000                     |     |           |
| <b>ER-32 QF</b> | 420532010-40<br>T32476, T32485 | 1:1 | EC        |
|                 | 0067732000                     |     |           |



Driven Toolholders - QuickFlex®



**Face drill/milling unit, both sides (12000 RPM)**

- ER-25 QF** 420525049-40 1:1 EC  
0067725000
- ER-32 QF** 420532148-40 1:1 EC  
0067732000



**Face drill/milling unit, both sides (6000 RPM, Heavy Duty)**

- ER-25 QF** 420525012-40 1:1 EC  
T32276, T32437  
0067725000
- ER-32 QF** 420532012-40 1:1 EC  
0067732000

Driven Toolholders - Enhanced Program



**OD milling unit with combination mill arbor DIN 6358**

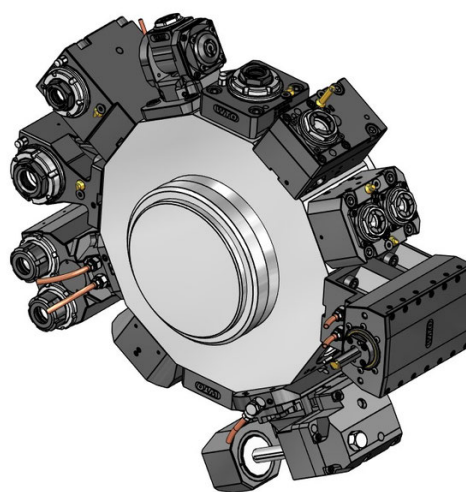
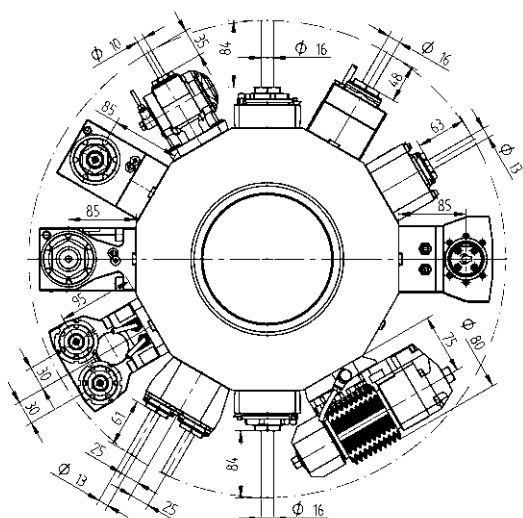
- Ø 16** 410216010-40 1:1 EC  
00675000854
- Ø 22** 410222016-40 1:1 EC  
T32280, T32486  
00675000483
- Ø 3/4"** 410219003-40 1:1 EC  
00675000483



**OD drill/milling unit, offset**

- ER 25** 410116050-40 1:1 EC  
T32488  
00675000932
- ER 25** 410116057-40 1:1 IC 80 bar  
00675000932
- ER 20** 410113060-40 1:2 EC  
00675000939
- ER 20** 410113068-40 1:2 IC 80 bar  
00675000939
- ER 16** 410410003-40 1:3 EC  
00675000937
- ER 16** 410410004-40 1:3 IC 80 bar  
00675000937
- ER 25** 410116051-40 2:1 EC  
00675000932
- ER 25** 410116058-40 2:1 IC 80 bar  
00675000932





Driven Toolholders - Enhanced Program



**OD drill/milling unit, offset (12000 RPM)**

- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 410116060-40 | 1:1 | EC        |
|              | 00675000932  |     |           |
| <b>ER 25</b> | 410116059-40 | 1:1 | IC 80 bar |
|              | 00675000932  |     |           |



**Face drill/milling unit**

- |                 |                          |     |            |
|-----------------|--------------------------|-----|------------|
| <b>ER-20 QF</b> | 420520010-40             | 1:2 | EC         |
|                 | 0067720001               |     |            |
| <b>ER-20 QF</b> | 420520011-40             | 1:2 | IC 80 bar  |
|                 | 0067720001               |     |            |
| <b>ER 16</b>    | 410810012-40             | 1:3 | EC         |
|                 | 0067825001               |     |            |
| <b>ER 16</b>    | 410810013-40             | 1:3 | IC 80 bar  |
|                 | 0067825001               |     |            |
| <b>ER-32 QF</b> | 420532013-40             | 2:1 | EC         |
|                 | 0067732000               |     |            |
| <b>ER-32 QF</b> | QF32-DNI-MS40A-085-I-T-A | 2:1 | IC 100 bar |
|                 | 0067732000               |     |            |



**Face milling unit with combination mill arbor  
DIN 6358**

- |               |              |     |    |
|---------------|--------------|-----|----|
| <b>Ø 16</b>   | 410616013-40 | 1:1 | EC |
|               | 00675000854  |     |    |
| <b>Ø 22</b>   | 410622030-40 | 1:1 | EC |
|               | 00675000483  |     |    |
| <b>Ø 3/4"</b> | 410619003-40 | 1:1 | EC |
|               | 00675000483  |     |    |

Driven Toolholders - Enhanced Program



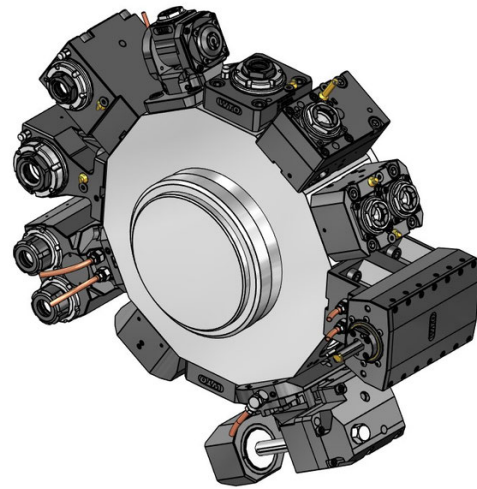
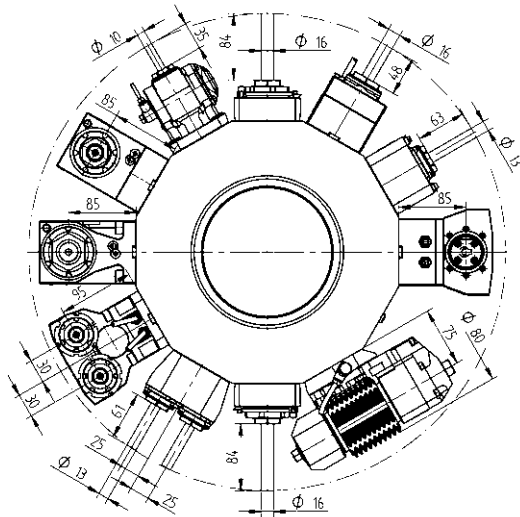
**Face back set drill/milling unit**

- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 410516153-40 | 1:1 | EC        |
|              | 00675000801  |     |           |
| <b>ER 25</b> | 410516154-40 | 1:1 | IC 80 bar |
|              | 00675000801  |     |           |



**Adjustable angle drill/milling unit**

- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 16</b> | 411010008-40 | 1:1 | EC        |
|              | 00675000913  |     |           |
| <b>ER 16</b> | 411010009-40 | 1:1 | IC 80 bar |
|              | 00675000913  |     |           |
| <b>ER 11</b> | 411007001-40 | 1:2 | EC        |
|              | 00675000914  |     |           |
| <b>ER 11</b> | 411007002-40 | 1:2 | IC 80 bar |
|              | 00675000914  |     |           |



Driven Toolholders - Enhanced Program

Driven Toolholders - Enhanced Program



<b>Gear hobbing unit</b>			
Type 16-1	411500017-40	1:1	EC
Type 16-1	411500018-40	2:1	EC
	00675000954		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	160031161 Ø 1 1/4"		
	110587		



<b>2-spindle - Face drill/milling unit, Y axis</b>			
ER 25	413502008-40	1:1	EC
	00675000915		
ER 25	413502009-40	1:1	IC 80 bar
	00675000915		



<b>2-spindle - Face drill/milling unit, both sides, Y axis</b>			
ER 25	413502007-40	1:1	EC
	00675000915		



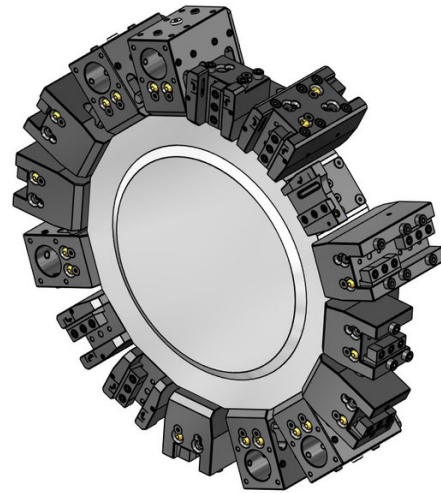
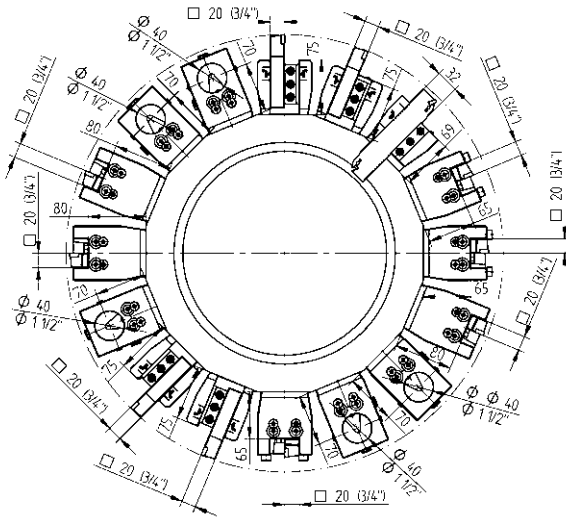
<b>OD drill/milling unit, both sides</b>			
ER 20	413002015-40	1:1	EC
	00675000947		
ER 20	413002018-40	1:1	IC 80 bar
	00675000947		



<b>Broaching unit for ID and OD</b>			
Type 32	414532000-40	1:1	EC



<b>OD drill/milling unit, double, Y axis</b>			
ER 20	413002014-40	1:1	EC
	00675000947		
ER 20	413002017-40	1:1	IC 80 bar
	00675000947		



Static Toolholders - Standard Program

Static Toolholders - Enhanced Program



20  
3/4"

**OD cutting holder, HP-IC**

S020-TNE-MS42A-075-I-A IC 80 bar  
S075-TNE-MS42A-075-I-A IC 80 bar



20  
3/4"

**OD cutting holder, both sides, HP-IC**

S020-TNE-MS42A-075-I-DT-A IC 80 bar  
S075-TNE-MS42A-075-I-DT-A IC 80 bar



20  
3/4"

**Face cutting holder**

S020-TNI-MS42A-087-E-A  
S075-TNI-MS42A-087-E-A



20  
3/4"

**Face cutting holder**

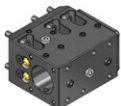
S020-TNI-MS42A-100-E-A  
S075-TNI-MS42A-100-E-A



20  
3/4"

**Face cutting holder, both sides**

S020-TNI-MS42A-087-E-DT-A  
S075-TNI-MS42A-087-E-DT-A



Ø 40

**Combination toolholder, universal**

D040-TNI-MS42A-070-I-DT-A IC 80 bar  
241140020 ER32  
241140026 ER40

Ø 1 1/2"

D150-TNI-MS42A-070-I-DT-A IC 80 bar



SH 32

**Cut-off holder, adjustable**

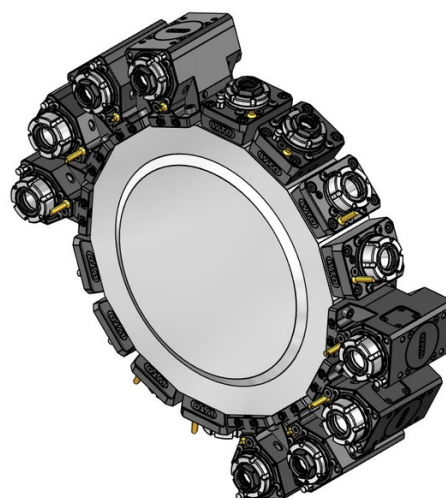
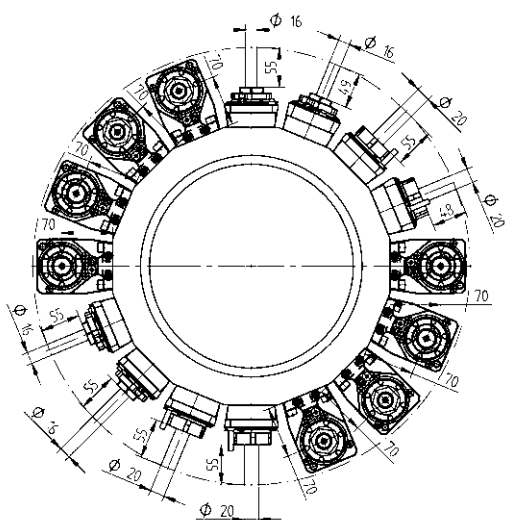
SH32-TNE-MS42A-077-E-A



SH 32  
SH 32

**Cut-off holder, adjustable, HP-IC**

SH32-TRE-MS42A-077-I-A IC 80 bar  
SH32-TLE-MS42A-077-I-A IC 80 bar



Driven Toolholders - QuickFlex®



**OD drill/milling unit (12000 RPM)**

**ER-25 QF** QF25-DNE-MS42A-047-E-A 1:1 EC  
 0067725000

**ER-25 QF** QF25-DNE-MS42A-053-I-A 1:1 IC 100 bar  
 0067725000



**Face drill/milling unit (12000 RPM)**

**ER-25 QF** QF25-DNI-MS42A-070-E-A 1:1 EC  
 0067725000

**ER-25 QF** QF25-DNI-MS42A-070-I-A 1:1 IC 100 bar  
 0067725000

Driven Toolholders - Enhanced Program



**OD drill/milling unit (12000 RPM)**

**ER 32** ER32-DNE-MS42A-055-E-A 1:1 EC  
 0067725030

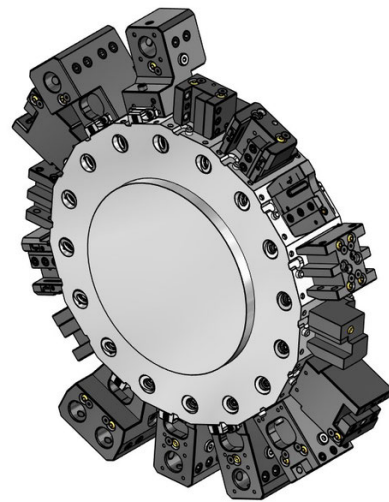
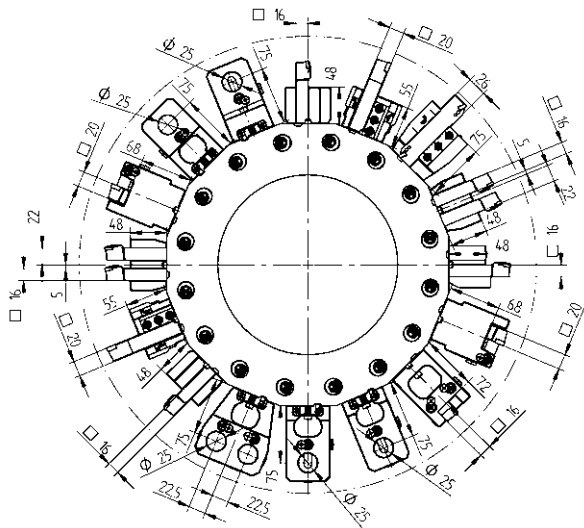
**ER 32** ER32-DNE-MS42A-062-I-A 1:1 IC 100 bar  
 0067725030



**Face drill/milling unit (12000 RPM)**

**ER 32** ER32-DNI-MS42A-070-E-A 1:1 EC  
 0067725030

**ER 32** ER32-DNI-MS42A-070-I-A 1:1 IC 100 bar  
 0067725030



Static Toolholders - Standard Program

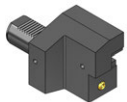
Static Toolholders - Standard Program



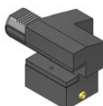
**Axial square toolholder, right hand, Form C1**  
16(12) 48-C1-25x16



**Axial square toolholder, left hand, Form C2**  
16(12) 48-C2-25x16



**Axial square toolholder, right hand inverted, Form C3**  
16(12) 48-C3-25x16



**Axial square toolholder, left hand inverted, Form C4**  
16(12) 48-C4-25x16



**OD cutting holder - double VDI serration**  
16 48-88237  
R2Z415W



**OD cutting holder, both sides**  
16 48-71572  
R2Z810W



**Face cutting holder**  
16 48-74693



**Combination toolholder, universal**  
Ø 25 48-74687  
241125016 ER25



**Combination toolholder, universal, Trifix®**  
Ø 25 48-98234  
241125016 ER25



**Combination toolholder, back set, left hand**  
Ø 25 48-74689  
241125016 ER25



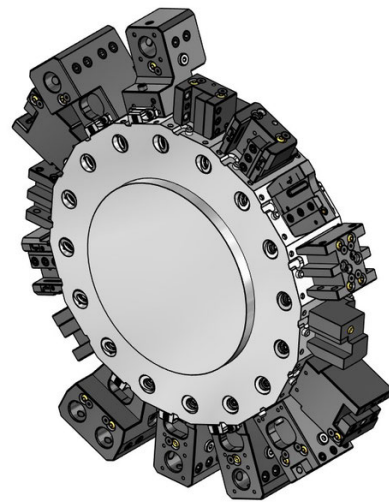
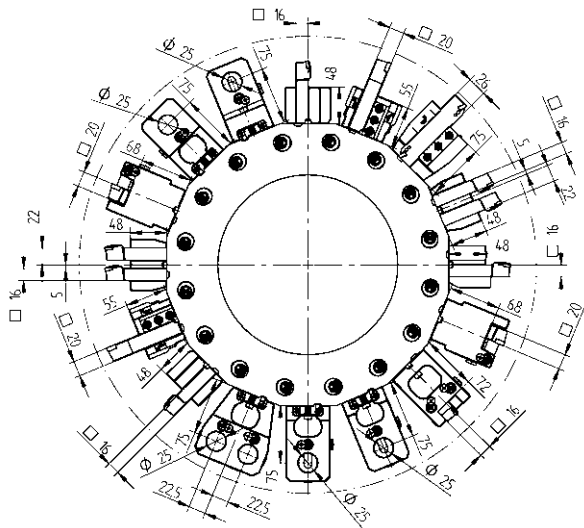
**Combination toolholder, back set, left hand, Trifix®**  
Ø 25 48-98235  
241125016 ER25



**Combination toolholder, back set, right hand**  
Ø 25 48-74688  
241125016 ER25



**Combination toolholder, back set, right hand, Trifix®**  
Ø 25 48-98236  
241125016 ER25



Static Toolholders - Standard Program



Ø 25

**Combination toolholder, both sides**  
48-74690



Ø 25

**Combination toolholder, both sides, Trifix®**  
48-98238

Static Toolholders - Enhanced Program



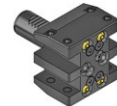
20

**OD cutting holder, HP-IC - double VDI serration**  
48-106423-HP IC 80 bar



20

**OD cutting holder, both sides, HP-IC**  
48-111171-HP IC 80 bar



16(5/8")

**OD cutting holder, both sides, double, Y axis**  
48-77394  
442770W



20

**Face cutting holder, HP-IC - double VDI serration**  
48-107434-HP IC 80 bar



SH 26

**Cut-off holder, adjustable - double VDI serration**  
48-98981  
R2Z452W



SH 26

**Cut-off holder, adjustable, HP-IC - double VDI serration**

SH 26

48-102647R IC 80 bar

SH 26

48-102647L IC 80 bar

SH 32

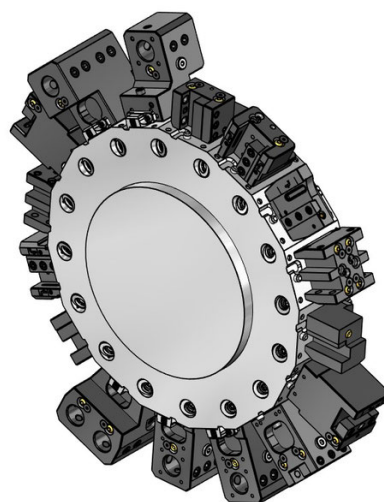
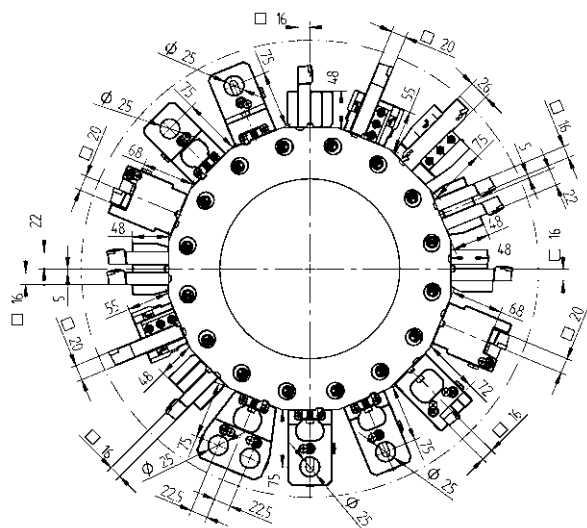
48-106937R IC 80 bar

343-810100R80

SH 32

48-106937L IC 80 bar

343-810100L80



Static Toolholders - Enhanced Program



Ø 25

**Combination toolholder, double, both sides**

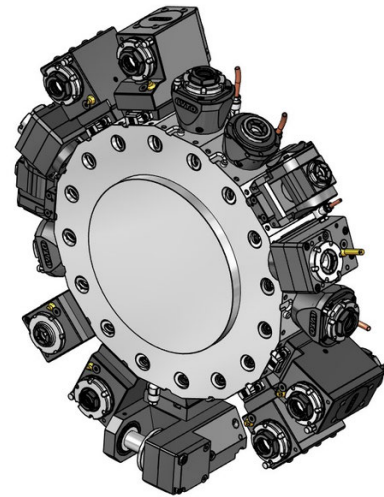
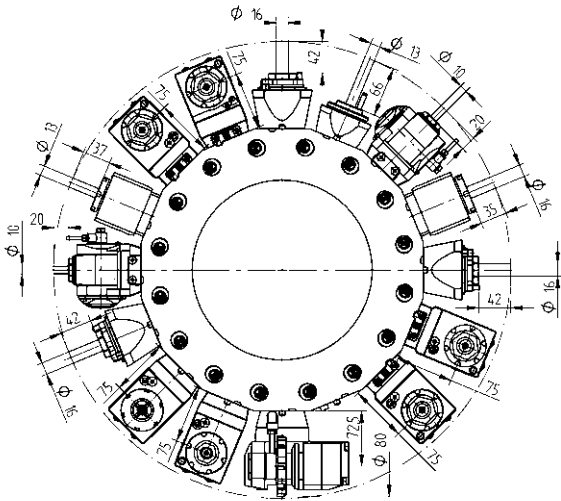
48-119657



Ø 25

**Combination toolholder, double, both sides,  
Trifix®**

48-109204



Driven Toolholders - QuickFlex®



**Straight drill/milling unit**

- |                 |                         |     |           |
|-----------------|-------------------------|-----|-----------|
| <b>ER-25 QF</b> | 420125010-25<br>R2Z471W | 1:1 | EC        |
|                 | 0067725010              |     |           |
| <b>ER-25 QF</b> | 420125011-25            | 1:1 | IC 80 bar |
|                 | 0067725010              |     |           |

Driven Toolholders - QuickFlex®



**Right angle back set drill/milling unit, Trifix®**

- |                 |               |     |           |
|-----------------|---------------|-----|-----------|
| <b>ER-25 QF</b> | 420525027-25R | 1:1 | EC        |
|                 | 0067725010    |     |           |
| <b>ER-25 QF</b> | 420525028-25R | 1:1 | IC 80 bar |
|                 | 0067725010    |     |           |



**Right angle drill/milling unit, Trifix®**

- |                 |               |     |           |
|-----------------|---------------|-----|-----------|
| <b>ER-25 QF</b> | 420525010-25L | 1:1 | EC        |
|                 | 0067725010    |     |           |
| <b>ER-25 QF</b> | 420525011-25L | 1:1 | IC 80 bar |
|                 | 0067725010    |     |           |



**Right angle drill/milling unit, both sides, Trifix®**

- |                 |              |     |    |
|-----------------|--------------|-----|----|
| <b>ER-25 QF</b> | 420525012-25 | 1:1 | EC |
|                 | 0067725010   |     |    |



**Right angle drill/milling unit, Trifix®**

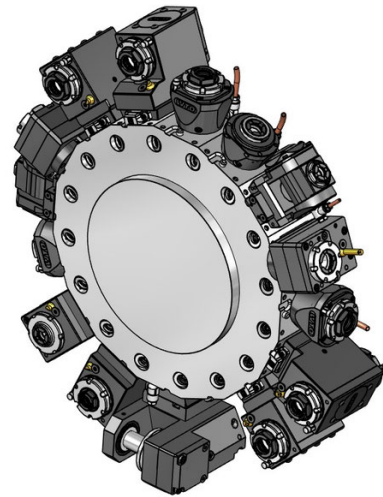
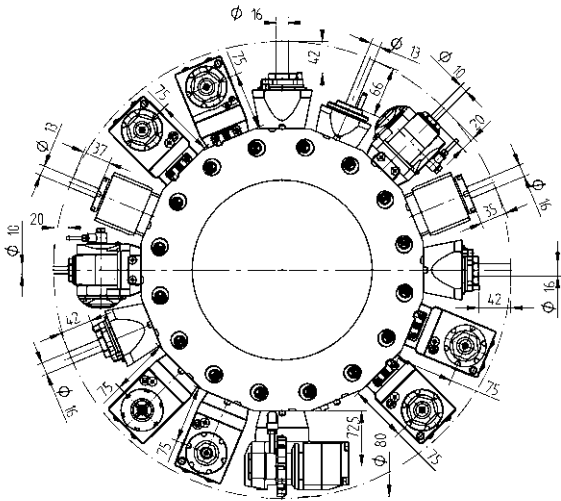
- |                 |               |     |           |
|-----------------|---------------|-----|-----------|
| <b>ER-25 QF</b> | 420525010-25R | 1:1 | EC        |
|                 | 0067725010    |     |           |
| <b>ER-25 QF</b> | 420525011-25R | 1:1 | IC 80 bar |
|                 | 0067725010    |     |           |



**Right angle back set drill/milling unit, Trifix®**

- |                 |               |     |           |
|-----------------|---------------|-----|-----------|
| <b>ER-25 QF</b> | 420525027-25L | 1:1 | EC        |
|                 | 0067725010    |     |           |
| <b>ER-25 QF</b> | 420525028-25L | 1:1 | IC 80 bar |
|                 | 0067725010    |     |           |





Driven Toolholders - Enhanced Program



**Straight drill/milling unit, short**  
**ER 20** 410113004-25 1:1 EC  
 R2Z490  
 00675000700



**Straight milling unit with combination mill arbor DIN 6358**  
**Ø 16** 410216003-25 1:1 EC  
 00675000854



**Straight offset drill/milling unit**  
**ER 25** 410116017-25 1:1 EC  
 00675000801  
**ER 20** 410113003-25 1:2 EC  
 00675000887  
**ER 16** 410410000-25 1:3 EC  
 00675000636  
**ER 25** 410116013-25 2:1 EC  
 00675000801

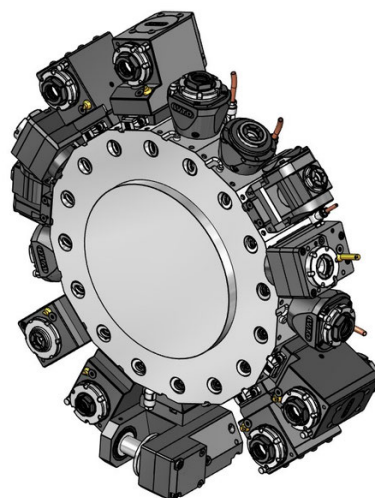
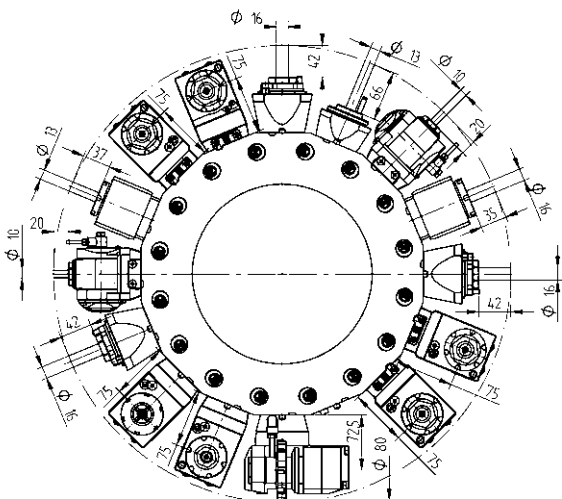
Driven Toolholders - Enhanced Program



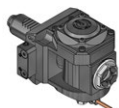
**Right angle drill/milling unit**  
**ER-20 QF** 420520019-25 1:2 EC  
 0067720011  
**ER-20 QF** 420520020-25 1:2 IC 80 bar  
 0067720011  
**ER 16** 410810012-25 1:3 EC  
 00675000841  
**ER 16** 410810013-25 1:3 IC 80 bar  
 00675000841  
**ER-25 QF** 420525032-25 2:1 EC  
 0067725010  
**ER-25 QF** 420525033-25 2:1 IC 80 bar  
 0067725010



**Right angle milling unit with combination mill arbor DIN 6358**  
**Ø 16** 410616002-25 1:1 EC  
 00675000854  
**Ø 22** 410622005-25 2:1 EC  
 00675000483  
**Ø 27** 410627002-25 2:1 EC  
 00675000245



Driven Toolholders - Enhanced Program



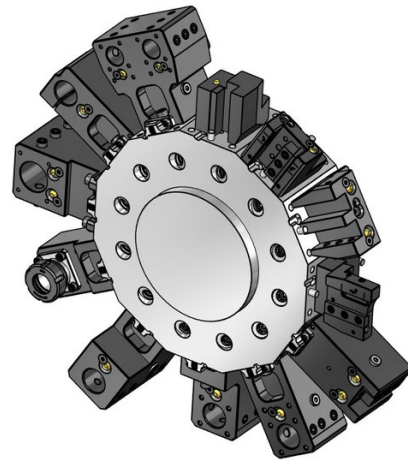
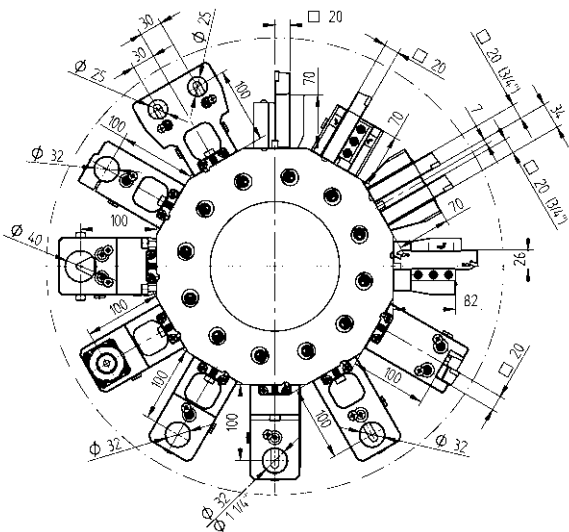
**Adjustable angle drill/milling unit**

<b>ER 16</b>	411010003-25	1:1	EC
	00675000902		
<b>ER 16</b>	411010010-25	1:1	IC 80 bar
	00675000902		
<b>ER 11</b>	411007006-25	1:2	EC
	00675000914		
<b>ER 11</b>	411007007-25	1:2	IC 80 bar
	00675000914		



**Offset slitting saw unit**

<b>Type 14-2</b>	411500002-25	2.727:1EC
	00675000460	
	160016142 Ø 16	
	160022142 Ø 22	
	160027142 Ø 27	
	160015142 Ø 5/8"	
	160019142 Ø 3/4"	
	160023142 Ø 7/8"	
	160025142 Ø 1"	



Static Toolholders - Standard Program

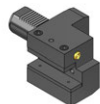
Static Toolholders - Standard Program



20(16)  
3/4"

**Axial square toolholder, right hand, Form C1**

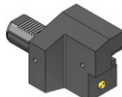
48-C1-30x20  
48-C1-30x075



20(16)

**Axial square toolholder, left hand, Form C2**

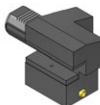
48-C2-30x20



20(16)  
3/4"

**Axial square toolholder, right hand inverted, Form C3**

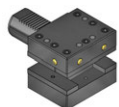
48-C3-30x20  
48-C3-30x075



20(16)

**Axial square toolholder, left hand inverted, Form C4**

48-C4-30x20



20(16)

**Universal square toolholder, Form D1**

48-D1-30x20



20(16)

**Universal square toolholder, inverted, Form D2**

48-D2-30x20



20

**OD cutting holder, left**

48-71932  
R4Z410W



20

**OD cutting holder, right**

48-72047  
R4Z230W



20

**OD cutting holder, both sides**

48-71216  
R6Z410W



20

**Face cutting holder**

48-105756



20

**Face cutting holder, Trifix®**

48-109793



Ø 32

**Combination toolholder, universal, LF=100**

48-71434

 241132016 ER25

 241132020 ER32



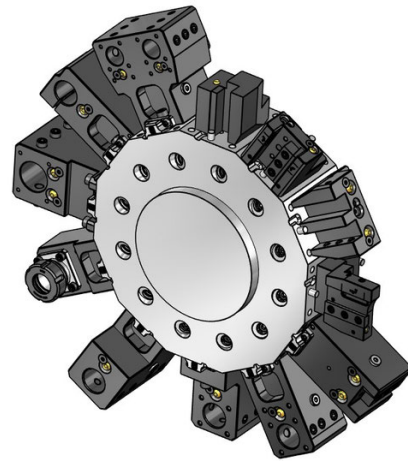
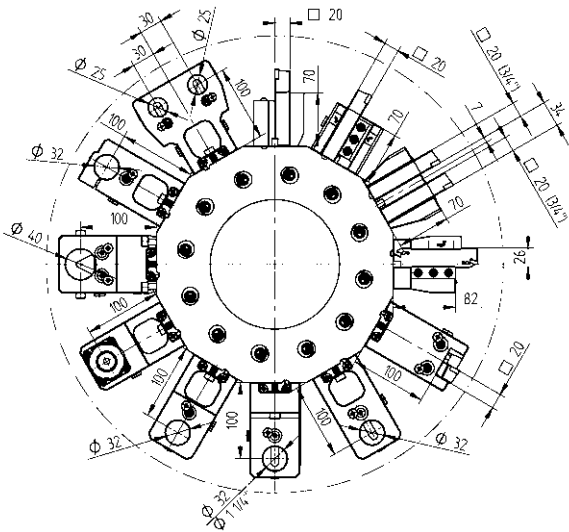
Ø 32

**Combination toolholder, universal, Trifix®, LF=100**


48-96995



 241132016 ER25

 241132020 ER32






Static Toolholders - Standard Program



 **Combination toolholder, back set, left hand, LF=100**

- Ø 32 48-71438  
 241132016 ER25
- Ø 1 1/4" 48-74548  
 241132020 ER32



 **Combination toolholder, back set, left hand, Trifix®, LF=100**

- Ø 32 48-97531  
 241132016 ER25
- Ø 1 1/4" 48-97536  
 241132020 ER32


 **Combination toolholder, back set, right hand, LF=100**


- Ø 32 48-71436  
 241132016 ER25
- Ø 1 1/4" 48-74544  
 241132020 ER32


 **Combination toolholder, back set, right hand, Trifix®, LF=100**



- Ø 32 48-97553  
 241132016 ER25
- Ø 1 1/4" 48-97555  
 241132020 ER32



Static Toolholders - Standard Program



 **Combination toolholder, both sides, LF=100**  
 Ø 32 48-88781

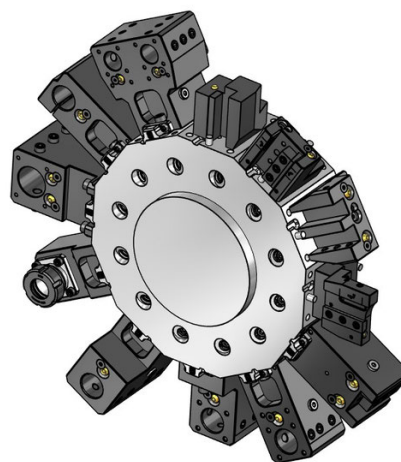
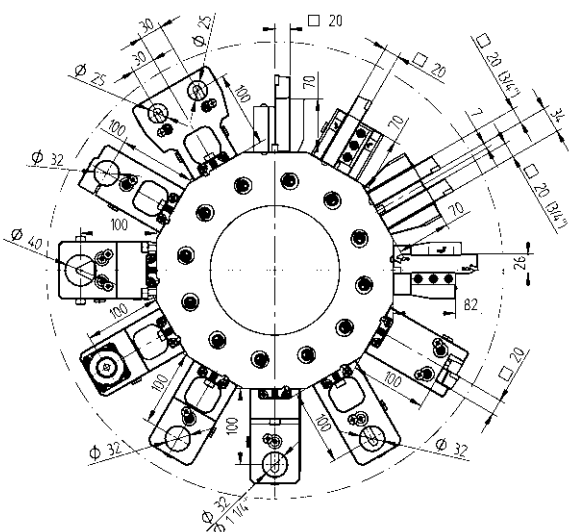
 **Combination toolholder, both sides, Trifix®, LF=100**  
 Ø 32 48-97496

 **Collet face drill holder, LF=100**  
 ER 32 48-82824 IC 80 bar  
 107532000

 **Collet face drill holder, Trifix®, LF=100**  
 ER 32 48-100198 IC 80 bar  
 107532000

 **Collet face drill holder, both sides, LF=100**  
 ER 32 48-82847 IC 80 bar  
 107532000

 **Collet face drill holder, both sides, Trifix®, LF=100**  
 ER 32 48-100199 IC 80 bar  
 107532000



Static Toolholders - Standard Program



Steel

**Plug, steel, Form Z2**  
48-Z2-30-S

Static Toolholders - Enhanced Program



20

**OD cutting holder, HP-IC - double VDI serration**  
48-105977-HP IC 80 bar



20

**OD cutting holder, both sides, HP-IC**  
48-71216-HP IC 80 bar



20 (3/4")

**OD cutting holder, double, Y axis - double VDI serration**  
48-84593



20 (3/4")

**OD cutting holder, both sides, double, Y axis**  
48-77395  
442750W



SH 26

**Cut-off holder, adjustable - double VDI serration**

SH 32

48-98991  
R4Z451W  
48-99017  
R9Z450



SH 26

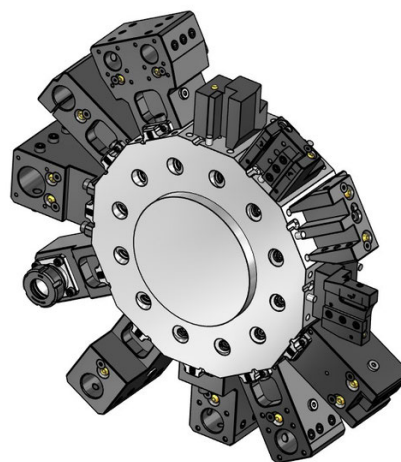
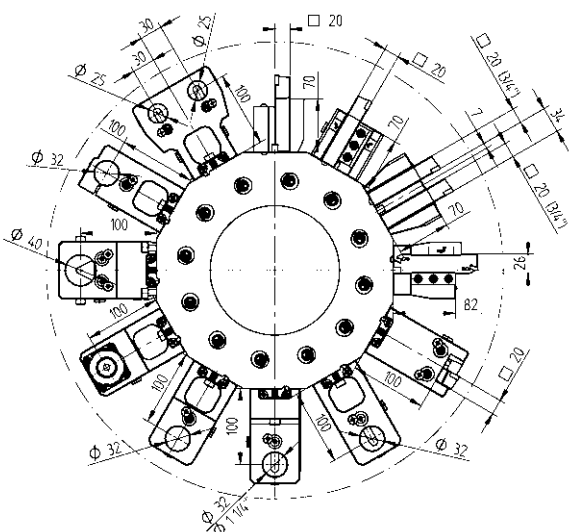
**Cut-off holder, adjustable, HP-IC - double VDI serration**

SH 26

48-102630R  
343-810100R42  
48-102630L  
343-810100L42

SH 32

48-102632R IC 80 bar  
48-102632L IC 80 bar



Static Toolholders - Enhanced Program

Static Toolholders - Enhanced Program



Ø 40

**Combination toolholder, universal, Trifix®, LF=100 - BMT**

48-99669

241140020 ER32

241140026 ER40



Ø 25

**Combination toolholder, universal, double, Y axis, LF=100, Trifix®**

48-99635

241125016 ER25



Ø 25

**Combination toolholder, both sides - long**

48-113666



Ø 32

**Boring bar holder, with slot, LF=100**

48-87088



Ø 32

**Boring bar holder, with slot, Trifix®, LF=100**

48-97588



Ø 40

**Boring bar holder, with slot, Trifix®, LF=100 - BMT**

48-96994

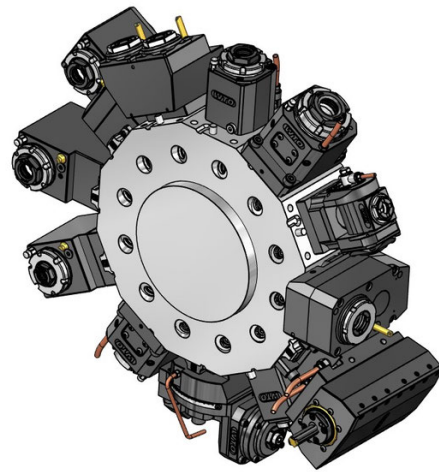
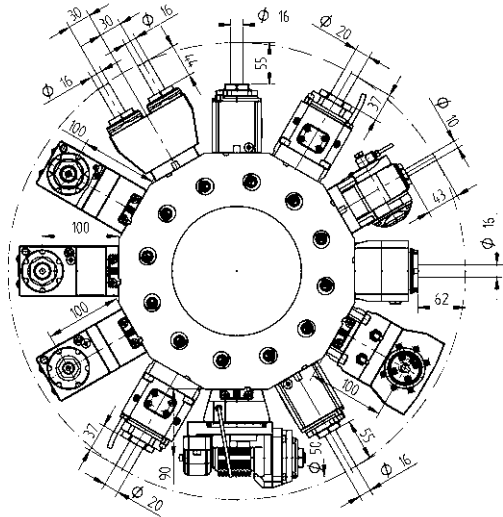


Ø 25

**Combination toolholder, universal, double, Y axis, LF=100**

48-79026

241125016 ER25



Driven Toolholders - QuickFlex®

Driven Toolholders - QuickFlex®



**Straight drill/milling unit (6000 RPM)**

- ER-25 QF** 420125010-30L 1:1 EC  
440441W  
0067725010
- ER-25 QF** 420125019-30L 1:1 IC 80 bar  
0067725010



**Right angle drill/milling unit, Trifix®, (6000 RPM)**

- ER-25 QF** 420525055-30R 1:1 EC  
0067725010
- ER-25 QF** 420525056-30R 1:1 IC 80 bar  
0067725010



**Straight drill/milling unit (12000 RPM)**

- ER-25 QF** 420125014-30L 1:1 EC  
0067725010
- ER-25 QF** 420125015-30L 1:1 IC 80 bar  
0067725010



**Right angle drill/milling unit, Trifix®, (12000 RPM)**

- ER-25 QF** 420525057-30R 1:1 EC  
0067725010
- ER-25 QF** 420525058-30R 1:1 IC 80 bar  
0067725010



**Right angle drill/milling unit, Trifix®, (6000 RPM)**

- ER-25 QF** 420525055-30L 1:1 EC  
0067725010
- ER-25 QF** 420525056-30L 1:1 IC 80 bar  
0067725010



**Right angle back set drill/milling unit, Trifix®, (6000 RPM)**

- ER-25 QF** 420525089-30L 1:1 EC  
0067725010
- ER-25 QF** 420525090-30L 1:1 IC 80 bar  
0067725010



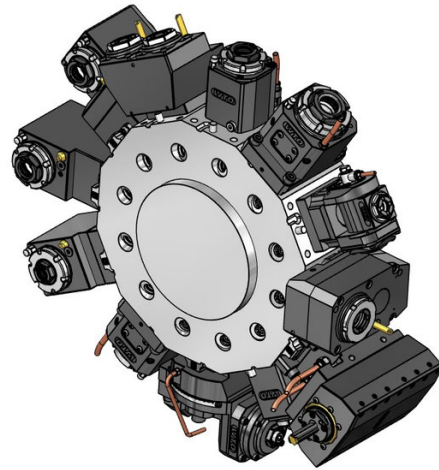
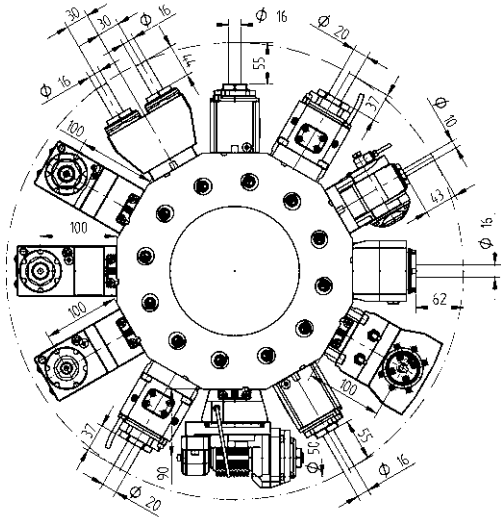
**Right angle drill/milling unit, Trifix®, (12000 RPM)**

- ER-25 QF** 420525057-30L 1:1 EC  
0067725010
- ER-25 QF** 420525058-30L 1:1 IC 80 bar  
0067725010



**Right angle back set drill/milling unit, Trifix®, (12000 RPM)**

- ER-25 QF** 420525060-30L 1:1 EC  
0067725010
- ER-25 QF** 420525061-30L 1:1 IC 80 bar  
0067725010



Driven Toolholders - QuickFlex®



**Right angle back set drill/milling unit, Trifix®, (6000 RPM)**

**ER-25 QF** 420525089-30R 1:1 EC  
 0067725010

**ER-25 QF** 420525090-30R 1:1 IC 80 bar  
 0067725010



**Right angle back set drill/milling unit, Trifix®, (12000 RPM)**

**ER-25 QF** 420525060-30R 1:1 EC  
 0067725010

**ER-25 QF** 420525061-30R 1:1 IC 80 bar  
 0067725010



**Right angle drill/milling unit, both sides, Trifix®, (6000 RPM)**

**ER-25 QF** 420525086-30 1:1 EC  
 0067725010



**Right angle drill/milling unit, both sides, Trifix®, (12000 RPM)**

**ER-25 QF** 420525095-30 1:1 EC  
 0067725010

Driven Toolholders - Enhanced Program



**Straight drill/milling unit - BMT**

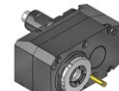
**ER-32 QF** 420132010-30 1:1 EC  
 0067732000

**ER-32 QF** 420132011-30 1:1 IC 80 bar  
 0067732000



**Straight milling unit**

**Ø 16** 410216014-30 1:1 EC  
 00675000854



**Straight offset drill/milling unit**

**ER 25** 410116058-30 1:1 EC  
 00675000801

**ER 25** 410116057-30 1:1 IC 80 bar  
 00675000801

**ER 20** 410113010-30 1:2 EC  
 00675000591

**ER 20** 410113009-30 1:2 IC 80 bar  
 00675000591

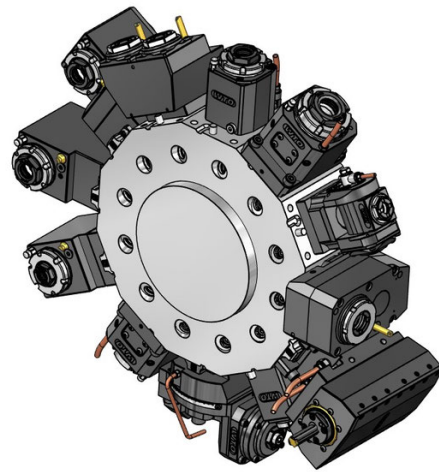
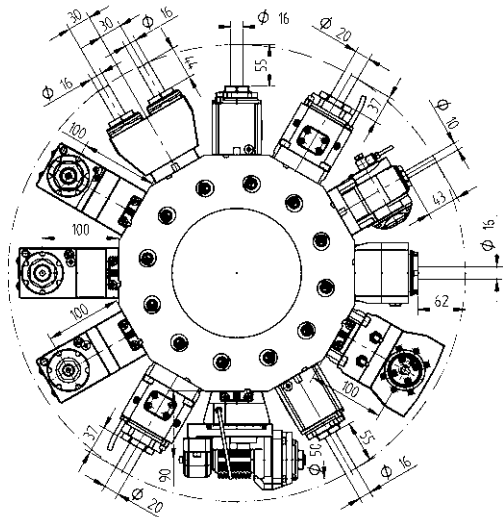
**ER 25** 410116059-30 2:1 EC  
 00675000801

**ER 25** 410116060-30 2:1 IC 80 bar  
 00675000801

**ER 32** 410120027-30 2:1 EC  
 00675000592

**ER 32** 410120032-30 2:1 IC 80 bar  
 00675000592





Driven Toolholders - Enhanced Program



**Straight offset drill/milling unit - double VDI serration**

- ER 16 410410002-30 1:3 EC  
00675000937
- ER 16 410410001-30 1:3 IC 80 bar  
00675000937



**Right angle drill/milling unit**

- ER-20 QF 420520013-30 1:2 EC  
0067720011
- ER-20 QF 420520014-30 1:2 IC 80 bar  
0067720011
- ER 16 410810012-30 1:3 EC  
00675000841
- ER 16 410810013-30 1:3 IC 80 bar  
00675000841
- ER-25 QF 420525096-30 2:1 EC  
0067725010
- ER-25 QF 420525097-30 2:1 IC 80 bar  
0067725010



**Right angle drill/milling unit, Trifix®**

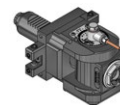
- ER-20 QF 420520015-30L 1:2 EC  
0067720011
- ER-20 QF 420520016-30L 1:2 IC 80 bar  
0067720011

Driven Toolholders - Enhanced Program



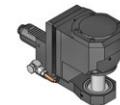
**Right angle back set drill/milling unit**

- ER 32 410520013-30 2:1 EC  
00675000592
- ER 32 410520014-30 2:1 IC 80 bar  
00675000592



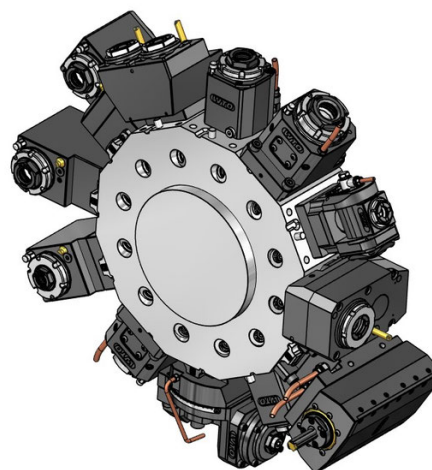
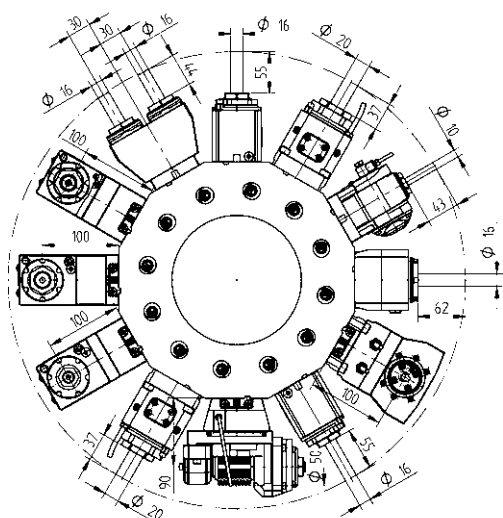
**Adjustable angle drill/milling unit**

- ER 16 411010015-30 1:1 EC  
00675000902
- ER 16 411010016-30 1:1 IC 80 bar  
00675000902
- ER 11 411007018-30 1:2 EC  
00675000914
- ER 11 411007019-30 1:2 IC 80 bar  
00675000914



**Slitting saw unit**

- Type 14-2 410900008-30 2.615:1EC  
00675000460
- 160016142 Ø 16
- 160022142 Ø 22
- 160027142 Ø 27
- 160015142 Ø 5/8"
- 160019142 Ø 3/4"
- 160023142 Ø 7/8"
- 160025142 Ø 1"



Driven Toolholders - Enhanced Program

Driven Toolholders - Enhanced Program



**Gear hobbing unit, Trifix®**

- |                  |                  |     |    |
|------------------|------------------|-----|----|
| <b>Type 15-2</b> | 410900025-30     | 1:1 | EC |
|                  | 00675001015      |     |    |
|                  | 160008152 Ø 8    |     |    |
|                  | 160010152 Ø 10   |     |    |
|                  | 160013152 Ø 13   |     |    |
|                  | 160016152 Ø 16   |     |    |
|                  | 160022152 Ø 22   |     |    |
|                  | 160015152 Ø 5/8" |     |    |
|                  | 160019152 Ø 3/4" |     |    |
|                  | 110587           |     |    |



**2-spindle - Face drill/milling unit, both sides, Y axis**

- |              |              |     |    |
|--------------|--------------|-----|----|
| <b>ER 25</b> | 413502009-30 | 1:1 | EC |
|              | 00675000915  |     |    |



**Broaching unit for ID and OD, Trifix® - BMT**

- |                |               |     |    |
|----------------|---------------|-----|----|
| <b>Type 32</b> | 414532001-30L | 1:1 | EC |
|----------------|---------------|-----|----|



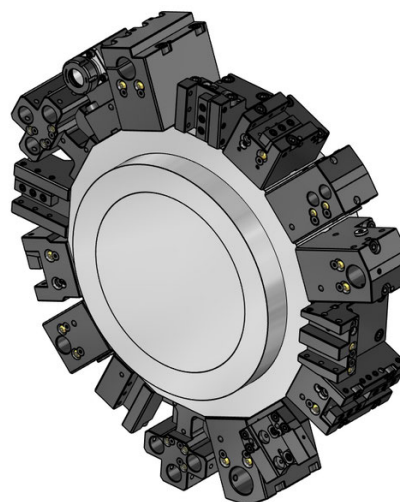
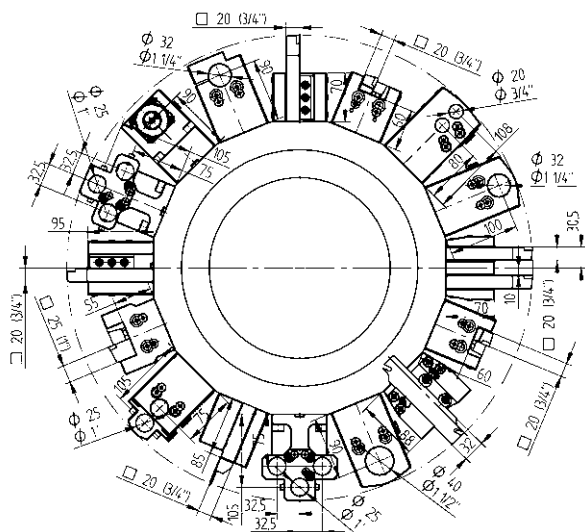
**Drill/milling unit - double, Y axis**

- |              |              |       |           |
|--------------|--------------|-------|-----------|
| <b>ER 25</b> | 413002008-30 | 1:1.5 | EC        |
|              | 00675000930  |       |           |
| <b>ER 25</b> | 413002009-30 | 1:1.5 | IC 80 bar |
|              | 00675000930  |       |           |



**2-spindle - Face drill/milling unit, Y axis**

- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 413502000-30 | 1:1 | EC        |
|              | 00675000915  |     |           |
| <b>ER 25</b> | 413502004-30 | 1:1 | IC 80 bar |
|              | 00675000915  |     |           |



Static Toolholders - Standard Program

Static Toolholders - Standard Program



- OD cutting holder, short**
- 20 48-T00224  
T00224
  - 25 48-T00267  
T00267
  - 3/4" 48-T00234  
T00234
  - 1" 48-T00272  
T00272



- OD cutting holder, both sides, short, HP-IC**
- 20 48-T00228-HP IC 80 bar  
T00228
  - 25 48-86523-HP IC 80 bar
  - 3/4" 48-T00250-HP IC 80 bar  
T00250
  - 1" 48-86524-HP IC 80 bar



- OD cutting holder, short, HP-IC**
- 20 48-T00224-HP IC 80 bar  
T00224
  - 25 48-T00267-HP IC 80 bar  
T00267
  - 3/4" 48-T00234-HP IC 80 bar  
T00234
  - 1" 48-T00272-HP IC 80 bar  
T00272



- OD cutting holder, both sides, long**
- 20 48-T00226  
T00226
  - 3/4" 48-T00249  
T00249



- OD cutting holder, long**
- 20 48-T00225  
T00225
  - 3/4" 48-T00235  
T00235



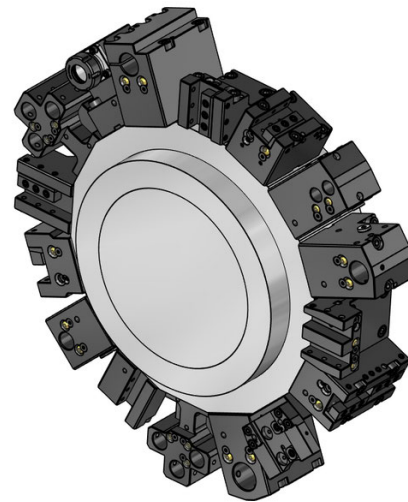
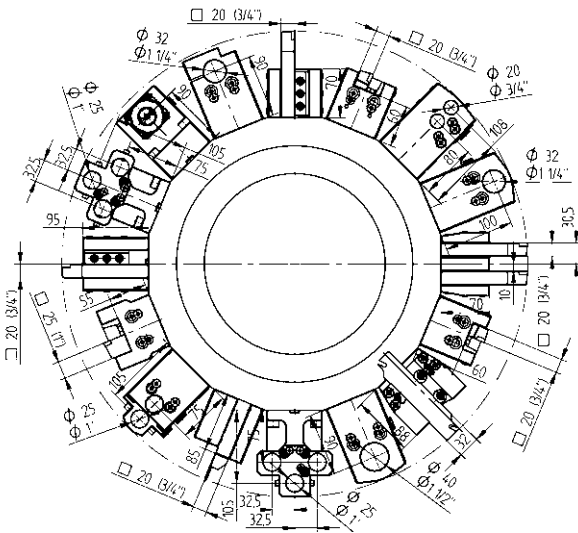
- Face cutting holder**
- 25 48-T03024  
T03024
  - 3/4" 48-T03018  
T03018
  - 1" 48-T03025  
T03025



- OD cutting holder, both sides, short**
- 20 48-T00228  
T00228
  - 25 48-86523
  - 3/4" 48-T00250  
T00250
  - 1" 48-86524



- Face cutting holder, HP-IC**
- 20 48-T03017-HP IC 80 bar  
T03017
  - 3/4" 48-T03018-HP IC 80 bar  
T03018



Static Toolholders - Standard Program



- Cut-off holder, right hand**
- 20 48-T00251  
T00251
  - 25 48-T00268  
T00268, T00356
  - 3/4" 48-T00252  
T00252
  - 1" 48-T00359  
T00359, T00357



- Boring bar holder**
- Ø 32 48-T10115  
T10115
  - Ø 1 1/4" 48-T10119  
T10119



- Combination toolholder**
- Ø 32 48-T13132 IC 80 bar  
T13132
  - Ø 40 48-77999 IC 80 bar
  - Ø 1 1/4" 48-T13135 IC 80 bar  
T13135
  - Ø 1 1/2" 48-80016 IC 80 bar



- Boring bar holder, both sides**
- Ø 25 48-T10117  
T10117
  - Ø 1" 48-T10139  
T10139

Static Toolholders - Enhanced Program



- OD cutting holder, double, Y axis**
- 20 (3/4") 48-77726



- OD cutting holder, both sides, double, Y axis**
- 20 (3/4") 48-77727



- Face cutting holder, both sides**
- 20 48-79608
  - 3/4" 48-79609



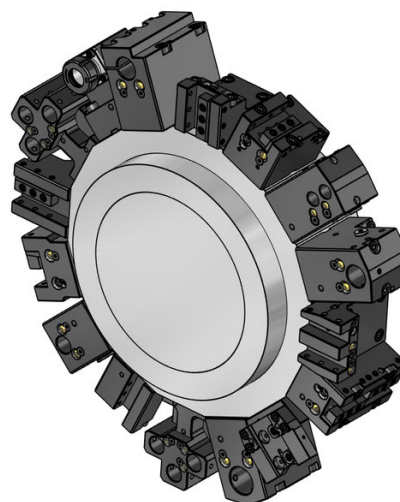
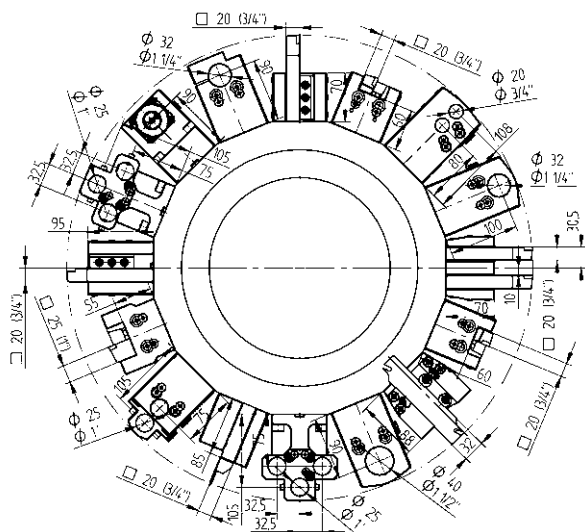
- Cut-off holder, adjustable**
- SH 32 48-98891



- Cut-off holder, adjustable, HP-IC**
- SH 32 48-102261R IC 80 bar
  - SH 32 48-102261L IC 80 bar



- Boring bar holder, with slot**
- Ø 32 48-82057
  - Ø 40 48-82058
  - Ø 1 1/4" 48-82059
  - Ø 1 1/2" 48-82060



Static Toolholders - Enhanced Program

Static Toolholders - Enhanced Program



**Boring bar holder, double, universal**  
 Ø 20 48-75406  
 Ø 3/4" 48-75416



**Boring bar holder, double, both sides**  
 Ø 20 48-75404  
 Ø 3/4" 48-75417



**Combination toolholder, both sides, triple, Y axis**  
 Ø 25 48-85908 IC 80 bar  
 Ø 1" 48-85985 IC 80 bar



**Collet face drill holder**  
 ER 25 48-107230 IC 80 bar  
 107525000  
 ER 32 48-81031 IC 80 bar  
 107532000



**Collet face drill holder, both sides**  
 ER 25 48-107227 IC 80 bar  
 107525000  
 ER 32 48-80509 IC 80 bar  
 107532000



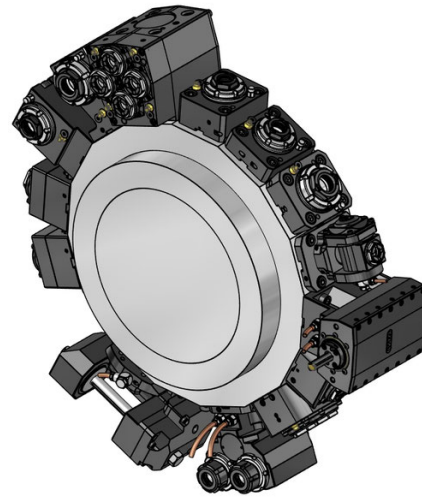
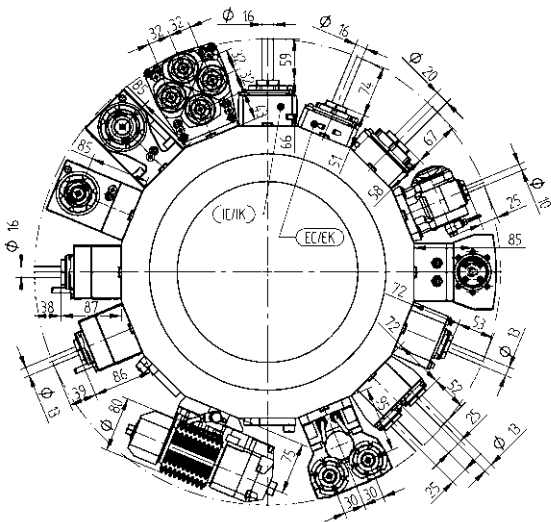
**VDI adapter, left**  
 VDI 30 48-77732



**VDI adapter, right**  
 VDI 30 48-78687



**Boring bar holder, blank**  
 48-80506



Driven Toolholders - QuickFlex®

Driven Toolholders - QuickFlex®



- OD drill/milling unit (12000 RPM)**
- ER-25 QF** 420125012-40 1:1 EC  
T32433  
0067725000
  - ER-25 QF** 420125013-40 1:1 IC 80 bar  
0067725000
  - ER-32 QF** QF32-DNE-MS40A-050-E-HS-A 1:1 EC  
0067732000
  - ER-32 QF** QF32-DNE-MS40A-067-I-HS-A 1:1 IC 100 bar  
0067732000



- Face drill/milling unit (12000 RPM)**
- ER-25 QF** 420525013-40 1:1 EC  
T32434  
0067725000
  - ER-25 QF** 420525014-40 1:1 IC 80 bar  
T32436  
0067725000
  - ER-32 QF** QF32-DNI-MS40A-085-E-HS-A 1:1 EC  
0067732000
  - ER-32 QF** QF32-DNI-MS40A-085-I-HS-A 1:1 IC 100 bar  
0067732000



- OD drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**
- ER-32 QF** QF32-DNE-MS40A-067-I-HS-SB-A 1:1 IC 100 bar  
0067732000  
LI-F12-01



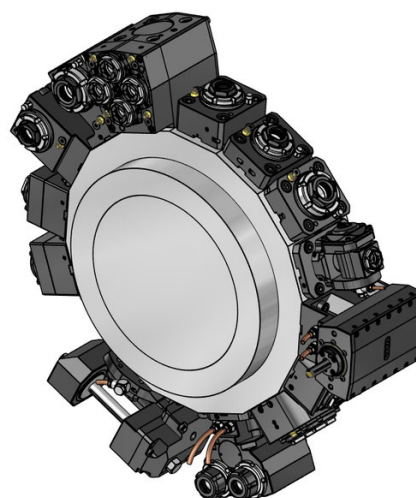
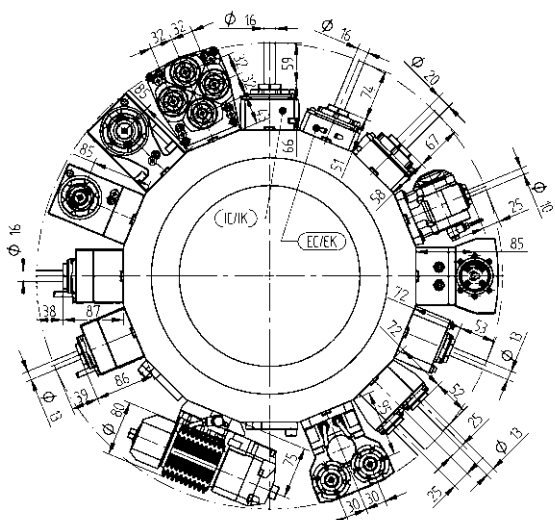
- Face drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**
- ER-32 QF** QF32-DNI-MS40A-085-I-HS-SB-A 1:1 IC 100 bar  
0067732000  
LI-F12-01



- OD drill/milling unit (6000 RPM, Heavy Duty)**
- ER-25 QF** 420125010-40 1:1 EC  
T32274, T32450  
0067725000
  - ER-25 QF** 420125011-40 1:1 IC 80 bar  
T32287  
0067725000
  - ER-32 QF** 420132010-40 1:1 EC  
T32475, T32484  
0067732000
  - ER-32 QF** 420132011-40 1:1 IC 80 bar  
0067732000



- Face drill/milling unit (6000 RPM, Heavy Duty)**
- ER-25 QF** 420525010-40 1:1 EC  
T32275, T32297  
0067725000
  - ER-25 QF** 420525011-40 1:1 IC 80 bar  
T32288, T32435  
0067725000
  - ER-32 QF** 420532010-40 1:1 EC  
T32476, T32485  
0067732000



Driven Toolholders - QuickFlex®



**Face drill/milling unit, both sides (12000 RPM)**

**ER-25 QF** 420525049-40 1:1 EC  
 0067725000

**ER-32 QF** 420532148-40 1:1 EC  
 0067732000

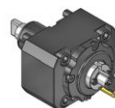


**Face drill/milling unit, both sides (6000 RPM, Heavy Duty)**

**ER-25 QF** 420525012-40 1:1 EC  
 T32276, T32437  
 0067725000

**ER-32 QF** 420532012-40 1:1 EC  
 0067732000

Driven Toolholders - Enhanced Program



**OD milling unit with combination mill arbor DIN 6358**

**Ø 16** 410216010-40 1:1 EC  
 00675000854

**Ø 22** 410222016-40 1:1 EC  
 T32280, T32486  
 00675000483

**Ø 3/4"** 410219003-40 1:1 EC  
 00675000483



**OD drill/milling unit, offset**

**ER 25** 410116050-40 1:1 EC  
 T32488  
 00675000932

**ER 25** 410116057-40 1:1 IC 80 bar  
 00675000932

**ER 20** 410113060-40 1:2 EC  
 00675000939

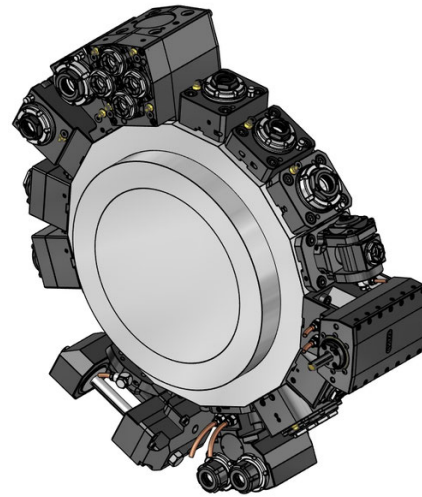
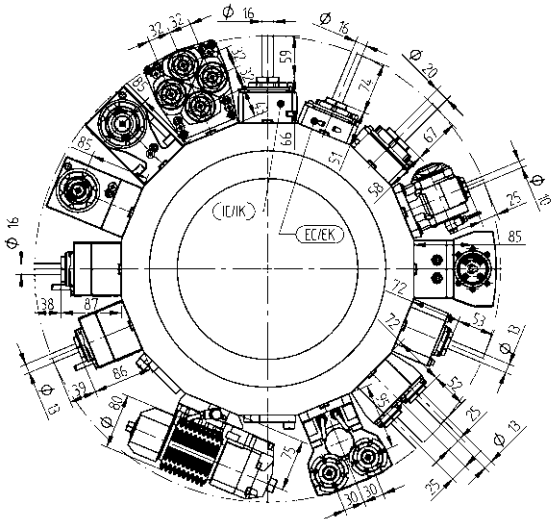
**ER 20** 410113068-40 1:2 IC 80 bar  
 00675000939

**ER 16** 410410003-40 1:3 EC  
 00675000937

**ER 16** 410410004-40 1:3 IC 80 bar  
 00675000937

**ER 25** 410116051-40 2:1 EC  
 00675000932

**ER 25** 410116058-40 2:1 IC 80 bar  
 00675000932



Driven Toolholders - Enhanced Program

Driven Toolholders - Enhanced Program



- OD drill/milling unit, offset (12000 RPM)**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 410116060-40 | 1:1 | EC        |
|              | 00675000932  |     |           |
| <b>ER 25</b> | 410116059-40 | 1:1 | IC 80 bar |
|              | 00675000932  |     |           |



- Face back set drill/milling unit**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 410516153-40 | 1:1 | EC        |
|              | 00675000801  |     |           |
| <b>ER 25</b> | 410516154-40 | 1:1 | IC 80 bar |
|              | 00675000801  |     |           |



- Face drill/milling unit**
- |                 |                          |     |            |
|-----------------|--------------------------|-----|------------|
| <b>ER-20 QF</b> | 420520010-40             | 1:2 | EC         |
|                 | 0067720001               |     |            |
| <b>ER-20 QF</b> | 420520011-40             | 1:2 | IC 80 bar  |
|                 | 0067720001               |     |            |
| <b>ER 16</b>    | 410810012-40             | 1:3 | EC         |
|                 | 0067825001               |     |            |
| <b>ER 16</b>    | 410810013-40             | 1:3 | IC 80 bar  |
|                 | 0067825001               |     |            |
| <b>ER-32 QF</b> | 420532013-40             | 2:1 | EC         |
|                 | 0067732000               |     |            |
| <b>ER-32 QF</b> | QF32-DNI-MS40A-085-I-T-A | 2:1 | IC 100 bar |
|                 | 0067732000               |     |            |

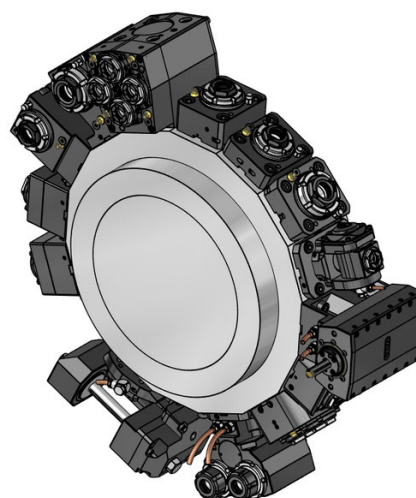
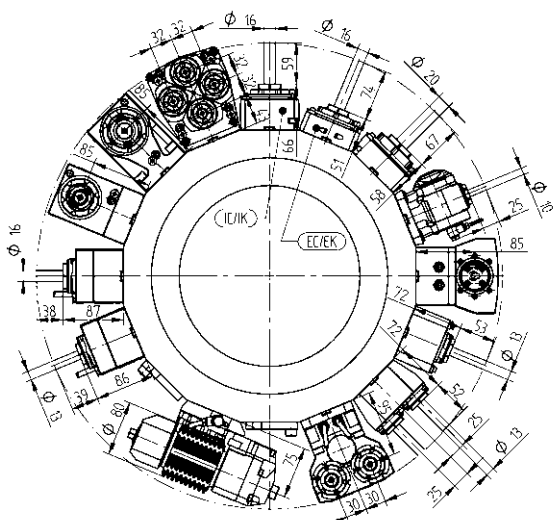


- Adjustable angle drill/milling unit**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 16</b> | 411010008-40 | 1:1 | EC        |
|              | 00675000913  |     |           |
| <b>ER 16</b> | 411010009-40 | 1:1 | IC 80 bar |
|              | 00675000913  |     |           |
| <b>ER 11</b> | 411007001-40 | 1:2 | EC        |
|              | 00675000914  |     |           |
| <b>ER 11</b> | 411007002-40 | 1:2 | IC 80 bar |
|              | 00675000914  |     |           |



- Face milling unit with combination mill arbor DIN 6358**
- |               |              |     |    |
|---------------|--------------|-----|----|
| <b>Ø 16</b>   | 410616013-40 | 1:1 | EC |
|               | 00675000854  |     |    |
| <b>Ø 22</b>   | 410622030-40 | 1:1 | EC |
|               | 00675000483  |     |    |
| <b>Ø 3/4"</b> | 410619003-40 | 1:1 | EC |
|               | 00675000483  |     |    |





Driven Toolholders - Enhanced Program

Driven Toolholders - Enhanced Program



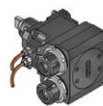
- Gear hobbing unit**
- |                  |                    |     |    |
|------------------|--------------------|-----|----|
| <b>Type 16-1</b> | 411500017-40       | 1:1 | EC |
| <b>Type 16-1</b> | 411500018-40       | 2:1 | EC |
|                  | 00675000954        |     |    |
|                  | 160016161 Ø 16     |     |    |
|                  | 160022161 Ø 22     |     |    |
|                  | 160027161 Ø 27     |     |    |
|                  | 160015161 Ø 5/8"   |     |    |
|                  | 160019161 Ø 3/4"   |     |    |
|                  | 160025161 Ø 1"     |     |    |
|                  | 160031161 Ø 1 1/4" |     |    |
|                  | 110587             |     |    |



- OD drill/milling unit, both sides**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 20</b> | 413002015-40 | 1:1 | EC        |
|              | 00675000947  |     |           |
| <b>ER 20</b> | 413002018-40 | 1:1 | IC 80 bar |
|              | 00675000947  |     |           |



- OD drill/milling unit, double, Y axis**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 20</b> | 413002014-40 | 1:1 | EC        |
|              | 00675000947  |     |           |
| <b>ER 20</b> | 413002017-40 | 1:1 | IC 80 bar |
|              | 00675000947  |     |           |



- 2-spindle - Face drill/milling unit, Y axis**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 413502008-40 | 1:1 | EC        |
|              | 00675000915  |     |           |
| <b>ER 25</b> | 413502009-40 | 1:1 | IC 80 bar |
|              | 00675000915  |     |           |



- 2-spindle - Face drill/milling unit, both sides, Y axis**
- |              |              |     |    |
|--------------|--------------|-----|----|
| <b>ER 25</b> | 413502007-40 | 1:1 | EC |
|              | 00675000915  |     |    |



- 4-spindle - Face drill/milling unit**
- |              |              |     |    |
|--------------|--------------|-----|----|
| <b>ER 20</b> | 413504001-40 | 1:1 | EC |
|              | 00675000947  |     |    |



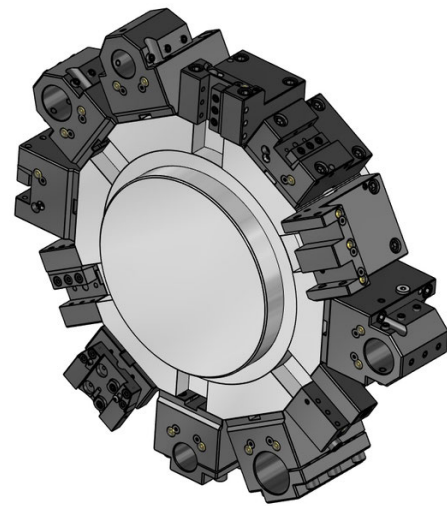
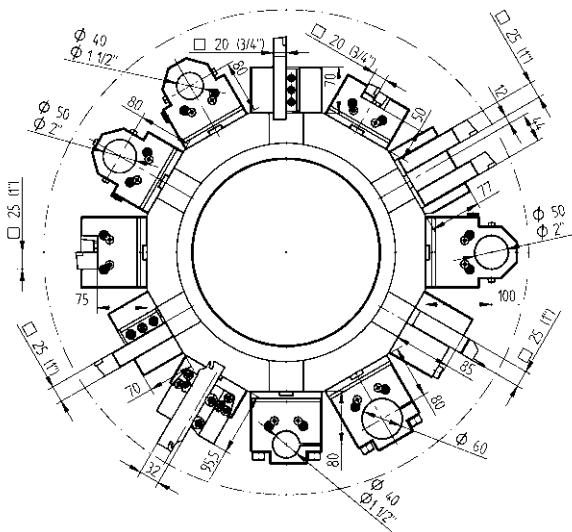
- 4-spindle - Face drill/milling unit, both sides**
- |              |              |     |    |
|--------------|--------------|-----|----|
| <b>ER 20</b> | 413504000-40 | 1:1 | EC |
|              | 00675000947  |     |    |



- Broaching unit for ID and OD**
- |                |              |     |    |
|----------------|--------------|-----|----|
| <b>Type 32</b> | 414532000-40 | 1:1 | EC |
|----------------|--------------|-----|----|



- Broaching unit for ID and OD**
- |                |              |     |    |
|----------------|--------------|-----|----|
| <b>Type 52</b> | 414552002-40 | 1:1 | EC |
|----------------|--------------|-----|----|



Static Toolholders - Standard Program



**OD cutting holder**

- 20 48-T00187  
T00187
- 25 48-T00186  
T00186
- 3/4" 48-T00203  
T00203
- 1" 48-T00202  
T00202



**OD cutting holder, HP-IC**

- 25 48-T00186-HP IC 80 bar  
T00186
- 1" 48-T00202-HP IC 80 bar  
T00202



**Face cutting holder**

- 20 48-T03006  
T03006
- 25 48-T03005  
T03005
- 3/4" 48-T03014  
T03014
- 1" 48-T03013  
T03013



**Face cutting holder, HP-IC**

- 25 48-T03005-HP IC 80 bar  
T03005
- 1" 48-T03013-HP IC 80 bar  
T03013

Static Toolholders - Standard Program



**Cut-off holder, right hand**

- 25 48-T00197  
T00197
- 1" 48-T00198  
T00198



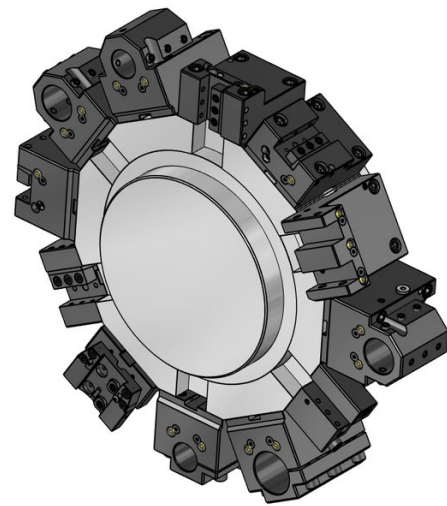
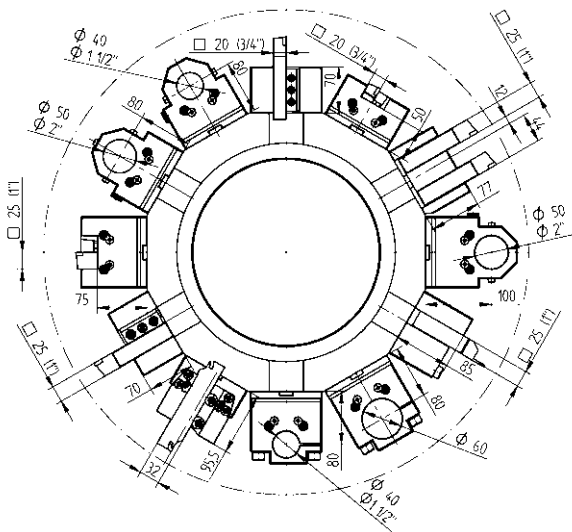
**Boring bar holder, LF=80**

- Ø 40 48-T10097  
T10097
- Ø 50 48-T10098  
T10098
- Ø 1 1/2" 48-T10101  
T10101
- Ø 2" 48-T10102  
T10102
- Ø 2 1/2" 48-70080



**Boring bar holder, LF=100**

- Ø 40 48-T10181  
T10181
- Ø 50 48-T10185  
T10185
- Ø 1 1/2" 48-T10195  
T10195
- Ø 2" 48-T10186  
T10186



Static Toolholders - Standard Program



**Combination toolholder, LF=80**

<b>Ø 40</b>	48-T13128	IC 80 bar
	T13128	
<b>Ø 50</b>	48-T13139	IC 80 bar
	T13139	
<b>Ø 1 1/2"</b>	48-T13130	IC 80 bar
	T13130	
<b>Ø 2"</b>	48-T13140	IC 80 bar
	T13140	



**Combination toolholder, LF=100**

<b>Ø 40</b>	48-110098	IC 80 bar
<b>Ø 50</b>	48-110099	IC 80 bar
<b>Ø 1 1/2"</b>	48-110414	IC 80 bar
<b>Ø 2"</b>	48-110415	IC 80 bar

Static Toolholders - Enhanced Program



**OD cutting holder, right hand, long, HP-IC**

<b>25</b>	48-T00385-HP	IC 80 bar
	T00385	
<b>1"</b>	48-T00386-HP	IC 80 bar
	T00386	



**OD cutting holder, left hand, long, HP-IC**

<b>25</b>	48-T00387-HP	IC 80 bar
	T00387	
<b>1"</b>	48-T00388-HP	IC 80 bar
	T00388	



**OD cutting holder, short**

<b>25</b>	48-79591
<b>1"</b>	48-79593



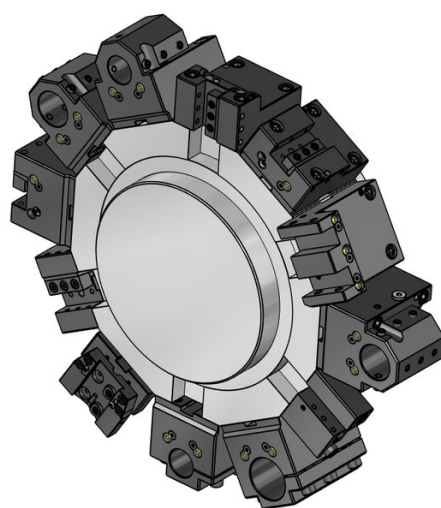
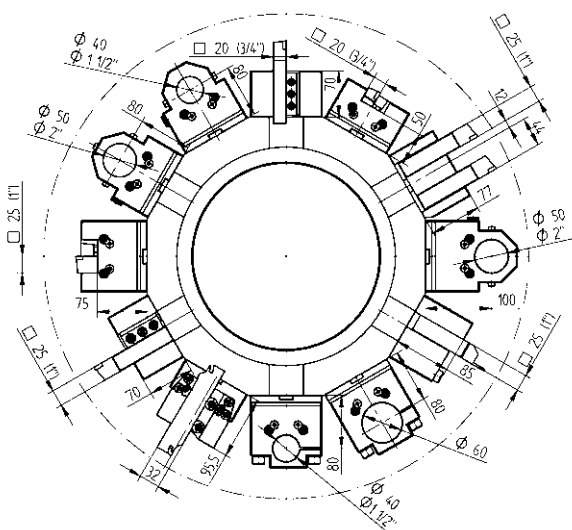
**OD cutting holder, extended**

<b>25</b>	48-T00236
	T00236
<b>1"</b>	48-T00245
	T00245



**OD cutting holder, double, Y axis**

<b>25(1")</b>	48-71865
	T00206, T00210



Static Toolholders - Enhanced Program

Static Toolholders - Enhanced Program



**SH 32** Cut-off holder, adjustable  
48-98901



**SH 32** Cut-off holder, adjustable, HP-IC  
**SH 32** 48-102262R IC 80 bar  
48-102262L IC 80 bar



**SH 32** Cut-off holder, adjustable, extended  
48-77478



**Boring bar holder, with slot**  
**Ø 40** 48-T10136  
T10136  
**Ø 50** 48-T10137  
T10137  
**Ø 60** 48-70811  
**Ø 1 1/2"** 48-T10143  
T10143  
**Ø 2"** 48-T10142  
T10142



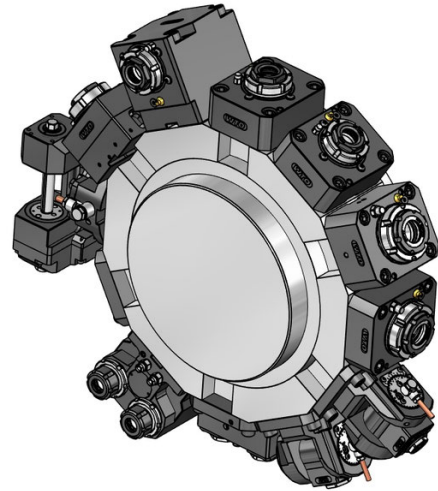
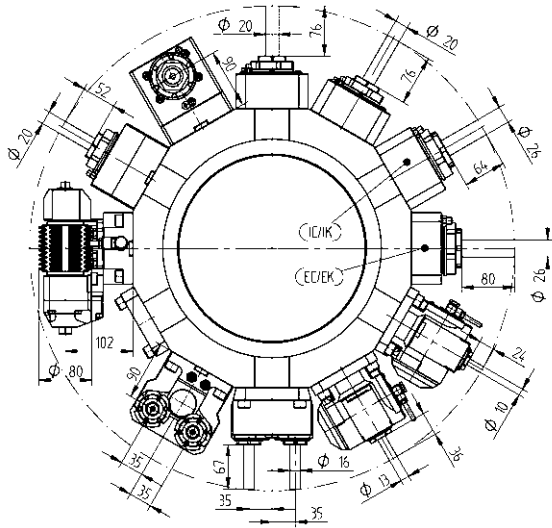
**VDI 30** VDI adapter, left  
48-77127  
**VDI 40** 48-72984



**VDI 30** VDI adapter, right  
48-74796  
**VDI 40** 48-77955



**Boring bar holder, blank**  
48-81080



Driven Toolholders - QuickFlex®

Driven Toolholders - QuickFlex®



**OD drill/milling unit (12000 RPM)**

- ER-32 QF** QF32-DNE-MS60A-072-E-HS-A 1:1 EC  
0067732000
- ER-32 QF** QF32-DNE-MS60A-072-I-HS-A 1:1 IC 100 bar  
0067732000



**OD drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**

- ER-32 QF** QF32-DNE-MS60A-072-I-HS-SB-A 1:1 IC 100 bar  
0067732000
- LI-F12-01



**OD drill/milling unit (6000 RPM, Heavy Duty)**

- ER-32 QF** 420132011-60 T32232, T32478 1:1 IC 80 bar  
0067732000
- ER-40 QF** 420140010-60 T32213 1:1 EC  
0067740000
- ER-40 QF** 420140011-60 T32234 1:1 IC 80 bar  
0067740000



**Right angle drill/milling unit (12000 RPM)**

- ER-32 QF** QF32-DNI-MS60A-090-E-HS-A 1:1 EC  
0067732000
- ER-32 QF** QF32-DNI-MS60A-090-I-HS-A 1:1 IC 100 bar  
0067732000



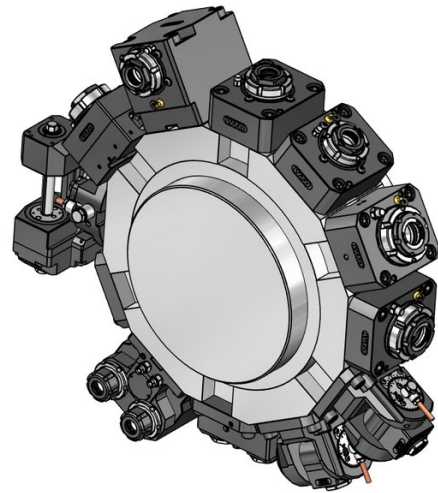
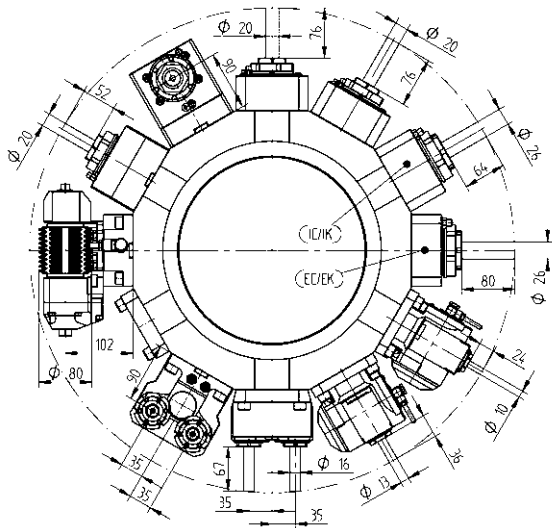
**Face drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**

- ER-32 QF** QF32-DNI-MS60A-090-I-HS-SB-A 1:1 IC 100 bar  
0067732000
- LI-F12-01



**Face drill/milling unit (6000 RPM, Heavy Duty)**

- ER-40 QF** 420540012-60 T32214 1:1 EC  
0067740000
- ER-40 QF** 420540013-60 T32235 1:1 IC 80 bar  
0067740000



Driven Toolholders - Enhanced Program



**OD milling unit with combination mill arbor  
DIN 6358**

<b>Ø 16</b>	410216000-60 00675000854	1:1	EC
<b>Ø 22</b>	410222007-60 T32268 00675000483	1:1	EC
<b>Ø 27</b>	410227008-60 00675000245	1:1	EC
<b>Ø 3/4"</b>	410219000-60 00675000483	1:1	EC
<b>Ø 1"</b>	410225000-60 T32217 00675000483	1:1	EC



**OD drill/milling unit, offset**

<b>ER-32 QF</b>	420132019-60 0067732000	1:1	EC
<b>ER-32 QF</b>	420132020-60 0067732000	1:1	IC 80 bar
<b>ER-25 QF</b>	420125010-60 0067725001	1:2	EC
<b>ER-25 QF</b>	420125011-60 0067725001	1:2	IC 80 bar
<b>ER-32 QF</b>	420132021-60 0067732000	2:1	EC
<b>ER-32 QF</b>	420132022-60 0067732000	2:1	IC 80 bar

Driven Toolholders - Enhanced Program



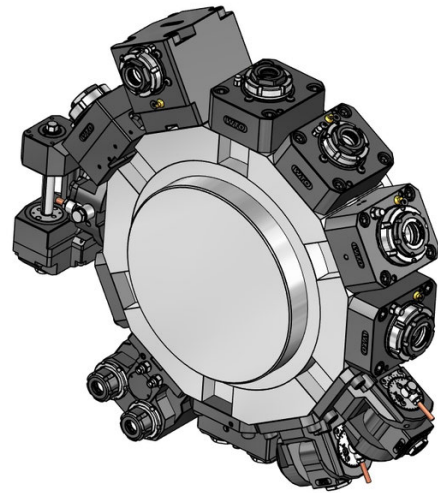
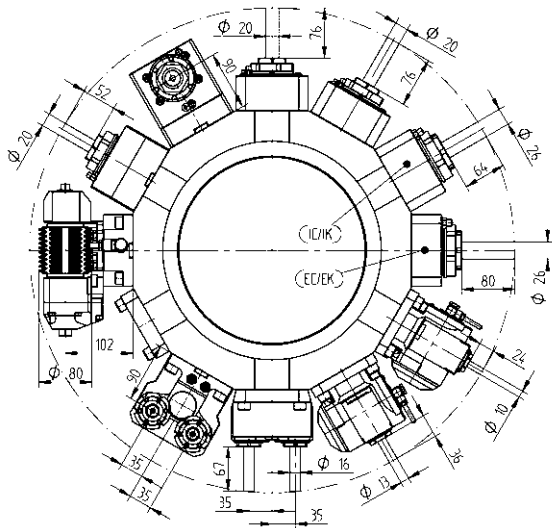
**Face drill/milling unit**

<b>ER-25 QF</b>	QF25-DNI-MS60A-090-E-S-A 0067725001	1:2	EC
<b>ER-25 QF</b>	QF25-DNI-MS60A-090-I-S-A 0067725001	1:2	IC 100 bar
<b>ER-40 QF</b>	420540014-60 0067740000	2:1	EC
<b>ER-40 QF</b>	420540015-60 0067740000	2:1	IC 80 bar



**Adjustable angle drill/milling unit**

<b>ER 20</b>	411013009-60 T32474 00675000928	1:1	EC
<b>ER 20</b>	411013010-60 00675000928	1:1	IC 80 bar
<b>ER 16</b>	411010001-60 00675000936	1:2	EC
<b>ER 16</b>	411010002-60 00675000936	1:2	IC 80 bar



Driven Toolholders - Enhanced Program



- Slitting saw unit**
- |                  |                    |     |    |
|------------------|--------------------|-----|----|
| <b>Type 19-2</b> | 411500006-60       | 3:1 | EC |
|                  | 00675000855        |     |    |
|                  | 160022192 Ø 22     |     |    |
|                  | 160027192 Ø 27     |     |    |
|                  | 160032192 Ø 32     |     |    |
|                  | 160040192 Ø 40     |     |    |
|                  | 160023192 Ø 7/8"   |     |    |
|                  | 160025192 Ø 1"     |     |    |
|                  | 160031192 Ø 1 1/4" |     |    |
|                  | 160038192 Ø 1 1/2" |     |    |

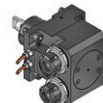


- Gear hobbing unit**
- |                  |                    |     |    |
|------------------|--------------------|-----|----|
| <b>Type 16-1</b> | 411500007-60       | 1:1 | EC |
| <b>Type 16-1</b> | 411500008-60       | 2:1 | EC |
|                  | 00675000926        |     |    |
|                  | 160016161 Ø 16     |     |    |
|                  | 160022161 Ø 22     |     |    |
|                  | 160027161 Ø 27     |     |    |
|                  | 160015161 Ø 5/8"   |     |    |
|                  | 160019161 Ø 3/4"   |     |    |
|                  | 160025161 Ø 1"     |     |    |
|                  | 160031161 Ø 1 1/4" |     |    |
|                  | 110587             |     |    |

Driven Toolholders - Enhanced Program



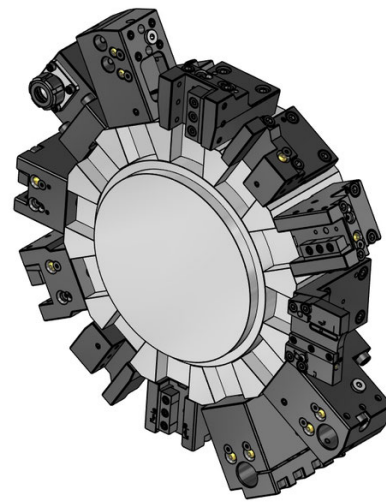
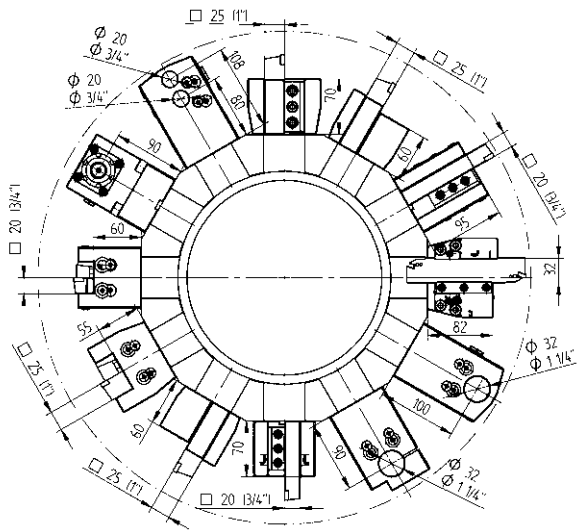
- OD drill/milling unit, double, Y axis**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 413002000-60 | 1:1 | EC        |
|              | T32267       |     |           |
|              | 00675000907  |     |           |
| <b>ER 25</b> | 413002012-60 | 1:1 | IC 80 bar |
|              | 00675000907  |     |           |



- 2-spindle - Face drill/milling unit, Y axis**
- |              |              |     |           |
|--------------|--------------|-----|-----------|
| <b>ER 25</b> | 413502000-60 | 1:1 | EC        |
|              | T32264       |     |           |
|              | 00675000915  |     |           |
| <b>ER 25</b> | 413502002-60 | 1:1 | IC 80 bar |
|              | 00675000915  |     |           |



- Broaching unit for ID and OD**
- |                |              |     |    |
|----------------|--------------|-----|----|
| <b>Type 32</b> | 414532000-60 | 1:1 | EC |
| <b>Type 52</b> | 414552000-60 | 1:1 | EC |



Static Toolholders - Standard Program

Static Toolholders - Standard Program



- OD cutting holder, short**
- 20 48-T00224  
T00224
  - 25 48-T00267  
T00267
  - 3/4" 48-T00234  
T00234
  - 1" 48-T00272  
T00272



- OD cutting holder, short, HP-IC**
- 20 48-T00224-HP IC 80 bar  
T00224
  - 25 48-T00267-HP IC 80 bar  
T00267
  - 3/4" 48-T00234-HP IC 80 bar  
T00234
  - 1" 48-T00272-HP IC 80 bar  
T00272



- OD cutting holder, long**
- 20 48-T00225  
T00225
  - 3/4" 48-T00235  
T00235



- Face cutting holder**
- 25 48-T03024  
T03024
  - 3/4" 48-T03018  
T03018
  - 1" 48-T03025  
T03025



- Face cutting holder, HP-IC**
- 20 48-T03017-HP IC 80 bar  
T03017
  - 3/4" 48-T03018-HP IC 80 bar  
T03018



- Cut-off holder, right hand**
- 20 48-T00251  
T00251
  - 25 48-T00268  
T00268, T00356
  - 3/4" 48-T00252  
T00252
  - 1" 48-T00359  
T00359, T00357

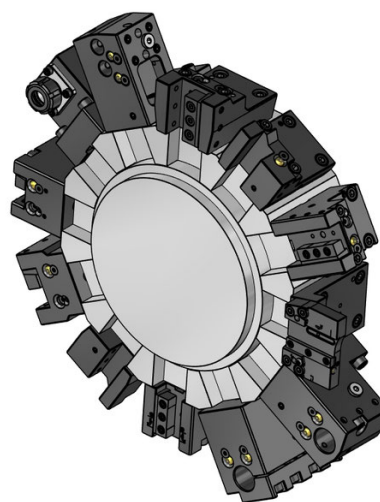
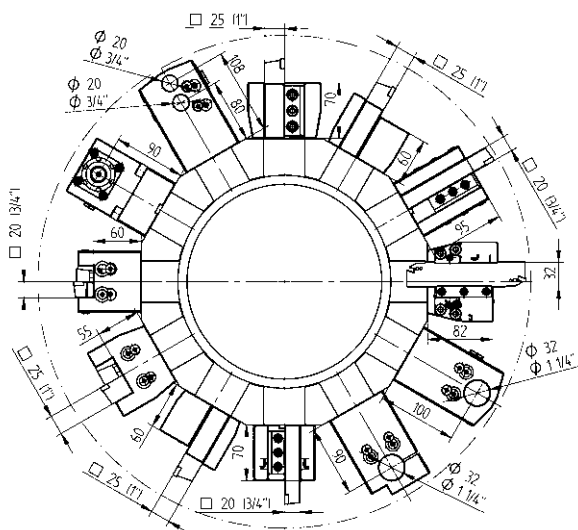


- Boring bar holder**
- Ø 32 48-T10115  
T10115
  - Ø 1 1/4" 48-T10119  
T10119



- Combination toolholder**
- Ø 32 48-T13132 IC 80 bar  
T13132
  - Ø 40 48-77999 IC 80 bar
  - Ø 1 1/4" 48-T13135 IC 80 bar  
T13135
  - Ø 1 1/2" 48-80016 IC 80 bar





Static Toolholders - Enhanced Program

Static Toolholders - Enhanced Program



**SH 32** Cut-off holder, adjustable  
48-98891



**SH 32** Cut-off holder, adjustable, HP-IC  
48-102261R IC 80 bar  
**SH 32** 48-102261L IC 80 bar



**Boring bar holder, with slot**  
Ø 32 48-82057  
Ø 40 48-82058  
Ø 1 1/4" 48-82059  
Ø 1 1/2" 48-82060



**Boring bar holder, double, universal**  
Ø 20 48-75406  
Ø 3/4" 48-75416



**Collet face drill holder**  
**ER 25** 48-107230 IC 80 bar  
107525000  
**ER 32** 48-81031 IC 80 bar  
107532000



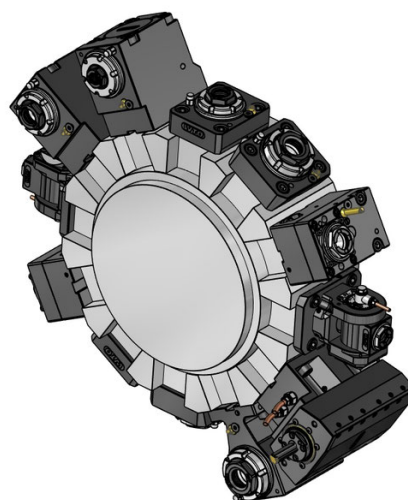
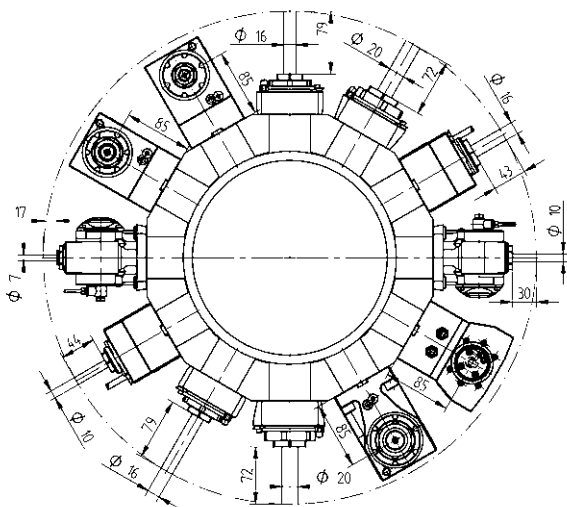
**VDI 30** VDI adapter, left  
48-77732



**VDI 30** VDI adapter, right  
48-78687



**Boring bar holder, blank**  
48-80506



Driven Toolholders - QuickFlex®



- OD drill/milling unit (12000 RPM)**
- ER-25 QF** 420125012-40 1:1 EC  
T32433  
0067725000
  - ER-25 QF** 420125013-40 1:1 IC 80 bar  
0067725000
  - ER-32 QF** QF32-DNE-MS40A-050-E-HS-A 1:1 EC  
0067732000
  - ER-32 QF** QF32-DNE-MS40A-067-I-HS-A 1:1 IC 100 bar  
0067732000



- OD drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**
- ER-32 QF** QF32-DNE-MS40A-067-I-HS-SB-A 1:1 IC 100 bar  
0067732000  
LI-F12-01



- OD drill/milling unit (6000 RPM, Heavy Duty)**
- ER-25 QF** 420125010-40 1:1 EC  
T32274, T32450  
0067725000
  - ER-25 QF** 420125011-40 1:1 IC 80 bar  
T32287  
0067725000
  - ER-32 QF** 420132010-40 1:1 EC  
T32475, T32484  
0067732000
  - ER-32 QF** 420132011-40 1:1 IC 80 bar  
0067732000



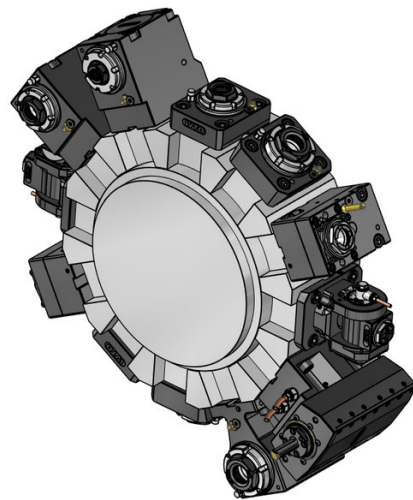
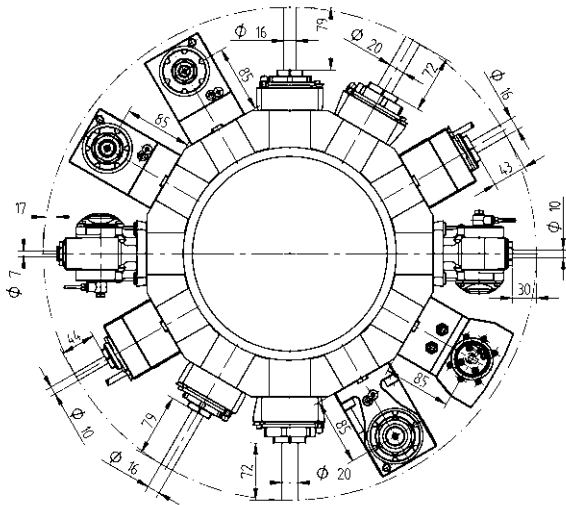
- Face drill/milling unit (12000 RPM)**
- ER-25 QF** 420525013-40 1:1 EC  
T32434  
0067725000
  - ER-25 QF** 420525014-40 1:1 IC 80 bar  
T32436  
0067725000
  - ER-32 QF** QF32-DNI-MS40A-085-E-HS-A 1:1 EC  
0067732000
  - ER-32 QF** QF32-DNI-MS40A-085-I-HS-A 1:1 IC 100 bar  
0067732000



- Face drill/milling unit (12000 RPM) - QF smart (EU, US, CA, JP)**
- ER-32 QF** QF32-DNI-MS40A-085-I-HS-SB-A 1:1 IC 100 bar  
0067732000  
LI-F12-01



- Face drill/milling unit (6000 RPM, Heavy Duty)**
- ER-25 QF** 420525010-40 1:1 EC  
T32275, T32297  
0067725000
  - ER-25 QF** 420525011-40 1:1 IC 80 bar  
T32288, T32435  
0067725000
  - ER-32 QF** 420532010-40 1:1 EC  
T32476, T32485  
0067732000



Driven Toolholders - Enhanced Program



OD drill/milling unit, offset			
ER 25	410116050-40 T32488 00675000932	1:1	EC
ER 25	410116057-40 00675000932	1:1	IC 80 bar
ER 20	410113060-40 00675000939	1:2	EC
ER 20	410113068-40 00675000939	1:2	IC 80 bar
ER 16	410410003-40 00675000937	1:3	EC
ER 16	410410004-40 00675000937	1:3	IC 80 bar
ER 25	410116051-40 00675000932	2:1	EC
ER 25	410116058-40 00675000932	2:1	IC 80 bar



OD drill/milling unit, offset (12000 RPM)			
ER 25	410116060-40 00675000932	1:1	EC
ER 25	410116059-40 00675000932	1:1	IC 80 bar

Driven Toolholders - Enhanced Program



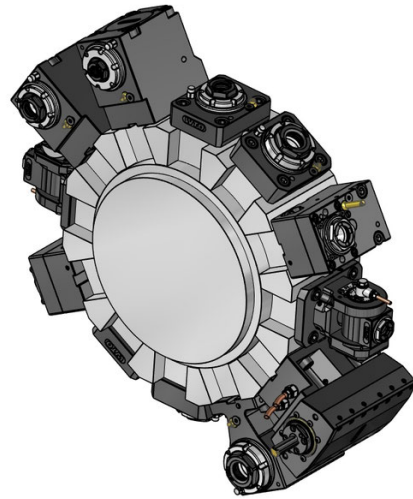
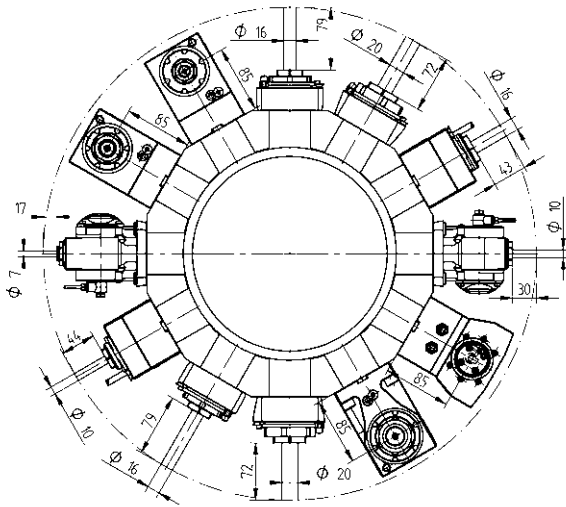
Face drill/milling unit			
ER-20 QF	420520010-40 0067720001	1:2	EC
ER-20 QF	420520011-40 0067720001	1:2	IC 80 bar
ER 16	410810012-40 0067825001	1:3	EC
ER 16	410810013-40 0067825001	1:3	IC 80 bar
ER-32 QF	420532013-40 0067732000	2:1	EC
ER-32 QF	QF32-DNI-MS40A-085-I-T-A 0067732000	2:1	IC 100 bar



Adjustable angle drill/milling unit			
ER 16	411010008-40 00675000913	1:1	EC
ER 16	411010009-40 00675000913	1:1	IC 80 bar
ER 11	411007001-40 00675000914	1:2	EC
ER 11	411007002-40 00675000914	1:2	IC 80 bar



Broaching unit for ID and OD			
Type 32	414532000-40	1:1	EC

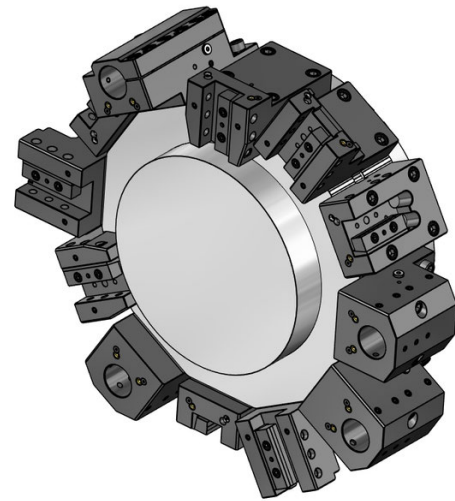
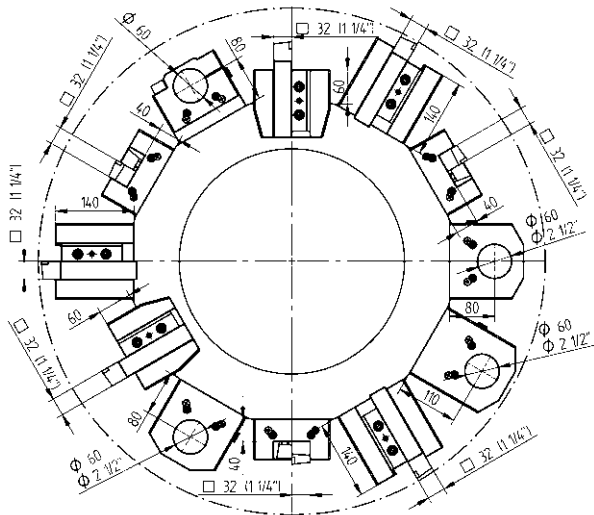


Driven Toolholders - Enhanced Program



**Broaching unit for ID and OD**

Type 52    414552002-40    1:1    EC



Static Toolholders - Standard Program

Static Toolholders - Standard Program



- OD cutting holder**
- 32** 48-T00432  
T00432
  - 1 1/4"** 48-T00433  
T00433



- Combination toolholder, LF=110**
- Ø 60** 48-T12149 IC 80 bar  
T12149
  - Ø 2 1/2"** 48-T12150 IC 80 bar  
T12150



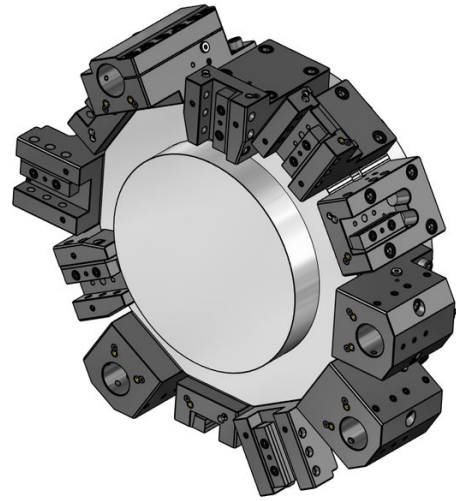
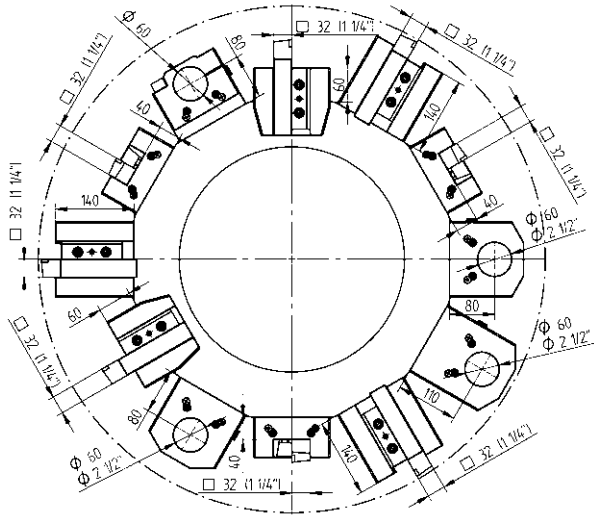
- OD cutting holder, long (only for turret 1)**
- 32** 48-T00434  
T00434
  - 1 1/4"** 48-T00435  
T00435



- Face cutting holder**
- 32** 48-T03042  
T03042
  - 1 1/4"** 48-T03043  
T03043



- Combination toolholder, LF=80**
- Ø 60** 48-T10203 IC 80 bar  
T10203
  - Ø 2 1/2"** 48-T10204 IC 80 bar  
T10204
  - Ø 80** 48-115987 IC 80 bar
  - Ø 3"** 48-115988 IC 80 bar



Static Toolholders - Enhanced Program



Ø 60

**Boring bar holder, with slot**

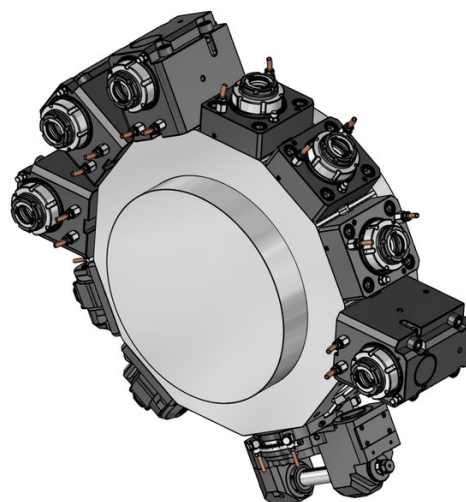
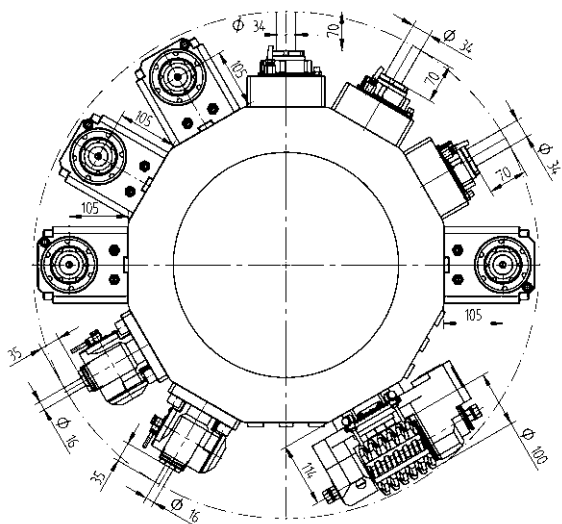
48-108639



Ø 80

**Boring bar holder, with slot (only for turret 1)**

48-118772



Driven Toolholders - QuickFlex®

Driven Toolholders - Enhanced Program



- OD drill/milling unit (8000 RPM)**
- ER-50 QF** 420150012-75 1:1 EC  
T32659  
0067750000
  - ER-50 QF** 420150013-75 1:1 IC 80 bar  
0067750000



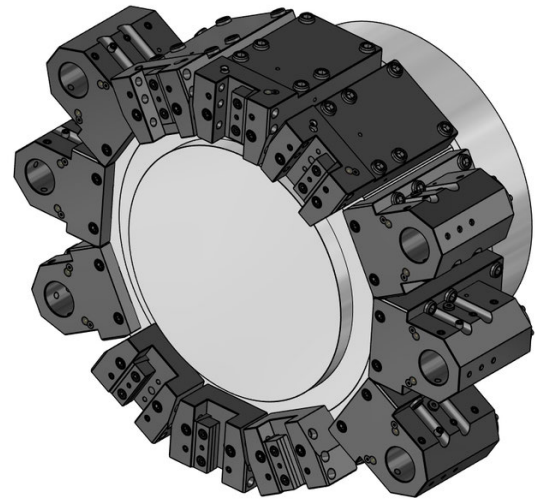
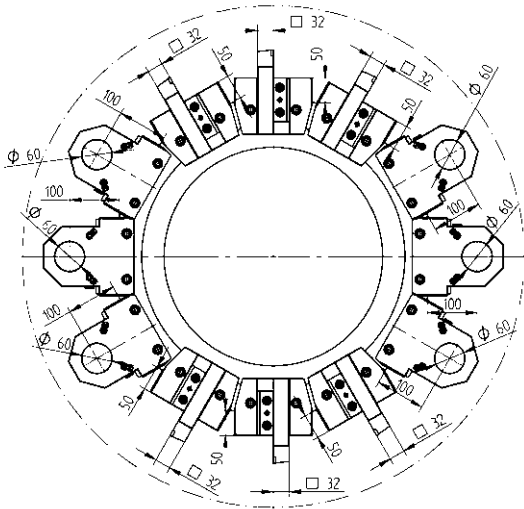
- Face drill/milling unit (8000 RPM)**
- ER-50 QF** 420550012-75 1:1 EC  
T32660  
0067750000
  - ER-50 QF** 420550013-75 1:1 IC 80 bar  
0067750000



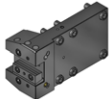
- Adjustable angle drill/milling unit**
- ER 25** 411016002-75 1:1 EC  
00675000934
  - ER 25** 411016003-75 1:1 IC 80 bar  
00675000934
  - ER 16** 411010004-75 1:2 EC  
00675000936
  - ER 16** 411010005-75 1:2 IC 80 bar  
00675000936



- Gear hobbing unit**
- Type C5-1** 410900000-75 2:1 EC  
00675001008
  - 160022C51 Ø 22
  - 160027C51 Ø 27
  - 160032C51 Ø 32
  - 160019C51 Ø 3/4"
  - 160025C51 Ø 1"
  - 160031C51 Ø 1 1/4"
  - 110587



Static Toolholders - Standard Program



32

**OD cutting holder**

48-T00372  
T00372



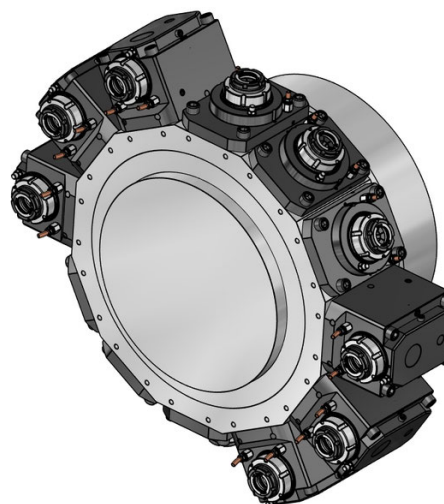
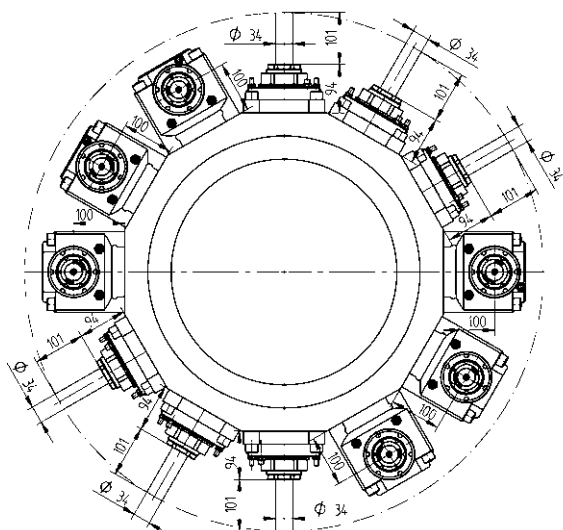
Ø 60

**Combination toolholder**

48-T10168  
T10168

IC 80 bar





Driven Toolholders - Performance Series

Driven Toolholders - QuickFlex®



- ER 50** **OD drill/milling unit** 420150000-A1 1:1 EC  
T32495  
0067550000
- ER 50** 420150001-A1 1:1 IC 80 bar  
0067550000



- ER-50 QF** **OD drill/milling unit** 420150010-A1 1:1 EC  
T32495  
0067750000
- ER-50 QF** 420150011-A1 1:1 IC 80 bar  
0067750000



- ER 50** **Face drill/milling unit** 420550000-A1 1:1 EC  
T32496  
0067550000
- ER 50** 420550001-A1 1:1 IC 80 bar  
0067550000



- ER-50 QF** **Face drill/milling unit** 420550010-A1 1:1 EC  
T32496  
0067750000
- ER-50 QF** 420550011-A1 1:1 IC 80 bar  
0067750000

Standard reduction sleeves - cylindrical



**Reduction sleeve Ø 20**

240020006	ø 6
240020008	ø 8
240020010	ø 10
240020012	ø 12
240020014	ø 14
240020016	ø 16



**Reduction sleeve Ø 25**

240025006	ø 6
240025008	ø 8
240025010	ø 10
240025012	ø 12
240025014	ø 14
240025016	ø 16
240025020	ø 20



**Reduction sleeve Ø 32**

240032006	ø 6
240032008	ø 8
240032010	ø 10
240032012	ø 12
240032014	ø 14
240032016	ø 16
240032018	ø 18
240032020	ø 20
240032025	ø 25



**Reduction sleeve Ø 40**

240040006	ø 6
240040008	ø 8
240040010	ø 10
240040012	ø 12
240040014	ø 14
240040016	ø 16
240040020	ø 20
240040025	ø 25
240040032	ø 32



**Reduction sleeve Ø 50**

240050010	ø 10
240050012	ø 12
240050016	ø 16
240050020	ø 20
240050025	ø 25
240050032	ø 32
240050040	ø 40

Standard reduction sleeves - cylindrical



**Reduction sleeve Ø 3/4"**

2400075025	ø 1/4"
2400075032	ø 5/16"
2400075038	ø 3/8"
2400075050	ø 1/2"
2400075063	ø 5/8"



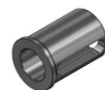
**Reduction sleeve Ø 1"**

2400100025	ø 1/4"
2400100031	ø 5/16"
2400100038	ø 3/8"
2400100050	ø 1/2"
2400100063	ø 5/8"
2400100075	ø 3/4"



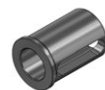
**Reduction sleeve Ø 1 1/4"**

2400125038	ø 3/8"
2400125050	ø 1/2"
2400125063	ø 5/8"
2400125075	ø 3/4"
2400125088	ø 7/8"
2400125100	ø 1"



**Reduction sleeve Ø 1 1/2"**

2400150038	ø 3/8"
2400150050	ø 1/2"
2400150063	ø 5/8"
2400150075	ø 3/4"
2400150088	ø 7/8"
2400150100	ø 1"
2400150125	ø 1 1/4"



**Reduction sleeve Ø 2"**

2400200050	ø 1/2"
2400200063	ø 5/8"
2400200075	ø 3/4"
2400200088	ø 7/8"
2400200100	ø 1"
2400200125	ø 1 1/4"
2400200150	ø 1 1/2"
2400200175	ø 1 3/4"



**Reduction sleeve Ø 3"**

2400300075	ø 3/4"
2400300100	ø 1"
2400300125	ø 1 1/4"
2400300150	ø 1 1/2"
2400300200	ø 2"
2400300250	ø 2 1/2"

Standard reduction sleeves - cylindrical, with slot

Standard reduction sleeves - morse taper



**Reduction sleeve Ø 25**

240125006	ø 6
240125008	ø 8
240125010	ø 10
240125012	ø 12
240125014	ø 14
240125015	ø 15
240125016	ø 16
240125020	ø 20



**Reduction sleeve Ø 32**

240132008	ø 8
240132010	ø 10
240132012	ø 12
240132015	ø 15
240132016	ø 16
240132020	ø 20
240132025	ø 25



**Reduction sleeve Ø 40**

240140010	ø 10
240140012	ø 12
240140015	ø 15
240140016	ø 16
240140020	ø 20
240140025	ø 25
240140032	ø 32



**Reduction sleeve Ø 50**

240150020	ø 20
240150025	ø 25
240150032	ø 32
240150040	ø 40



**Reduction sleeve Ø 60**

240160032	ø 32
240160040	ø 40
240160050	ø 50



**Reduction sleeve Ø 32**

240532001	MT 1
240532002	MT 2
240532003	MT 3



**Reduction sleeve Ø 40**

240540001	MT 1
240540002	MT 2
240540003	MT 3
240540004	MT 4

Reduction sleeves for boring bar holders - cylindrical

Reduction sleeves for boring bar holders - cylindrical



**Reduction sleeve Ø 25**

24-T20180	ø 8
24-T20182	ø 10
24-T20184	ø 12
24-T20186	ø 16
24-T20188	ø 20



**Reduction sleeve Ø 1 1/2"**

24-T20089	ø 3/8"
24-T20091	ø 1/2"
24-T20093	ø 5/8"
24-T20095	ø 3/4"
24-T20097	ø 1"
24-T20099	ø 1 1/4"



**Reduction sleeve Ø 32**

24-T20112	ø 8
24-T20114	ø 10
24-T20116	ø 12
24-T20118	ø 16
24-T20120	ø 20
24-T20122	ø 25



**Reduction sleeve Ø 2"**

24-T20163	ø 1/2"
24-T20165	ø 5/8"
24-T20167	ø 3/4"
24-T20169	ø 1"
24-T20171	ø 1 1/4"
24-T20173	ø 1 1/2"



**Reduction sleeve Ø 40**

24-T20086	ø 8
24-T20088	ø 10
24-T20090	ø 12
24-T20092	ø 16
24-T20094	ø 20
24-T20096	ø 25
24-T20098	ø 32



**Reduction sleeve Ø 50**

24-T20160	ø 10
24-T20162	ø 12
24-T20164	ø 16
24-T20166	ø 20
24-T20168	ø 25
24-T20170	ø 32
24-T20172	ø 40



**Reduction sleeve Ø 60**

24-T20136	ø 32
24-T20138	ø 40
24-T20140	ø 50



**Reduction sleeve Ø 1"**

24-T20181	ø 3/8"
24-T20183	ø 1/2"
24-T20185	ø 5/8"
24-T20187	ø 3/4"



**Reduction sleeve Ø 1 1/4"**

24-T20115	ø 3/8"
24-T20117	ø 1/2"
24-T20119	ø 5/8"
24-T20121	ø 3/4"
24-T20123	ø 1"

Reduction sleeves for boring bar holders - cylindrical, extended



**Reduction sleeve Ø 32**

24-T20124	ø 8
24-T20126	ø 10
24-T20128	ø 12
24-T20130	ø 16



**Reduction sleeve Ø 40**

24-T20106	ø 8
24-T20108	ø 10
24-T20110	ø 12
24-T20194	ø 16
24-T20196	ø 20
24-T20216	ø 25



**Reduction sleeve Ø 1 1/4"**

24-T20127	ø 3/8"
24-T20129	ø 1/2"
24-T20131	ø 5/8"



**Reduction sleeve Ø 1 1/2"**

24-T20109	ø 3/8"
24-T20111	ø 1/2"
24-T20195	ø 5/8"
24-T20197	ø 3/4"

Reduction sleeves for boring bar holders - morse taper



**Reduction sleeve Ø 40**

24-T22046	MT 2
24-T22042	MT 3



**Reduction sleeve Ø 50**

24-T22044	MT 4
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Collets DIN 6499B (ER/ESX)

Collets DIN 6499B (ER/ESX)



ER 11	mm	inch
190011000	∅ 7-0.5	∅ 0.276-0.020
190011010	∅ 1-0.5	∅ 0.039-0.020
190011015	∅ 1.5-1	∅ 0.059-0.039
190011020	∅ 2-1.5	∅ 0.079-0.059
190011025	∅ 2.5-2	∅ 0.098-0.079
190011030	∅ 3-2.5	∅ 0.118-0.098
190011035	∅ 3.5-3	∅ 0.138-0.118
190011040	∅ 4-3.5	∅ 0.158-0.138
190011045	∅ 4.5-4	∅ 0.177-0.158
190011050	∅ 5-4.5	∅ 0.197-0.177
190011055	∅ 5.5-5	∅ 0.217-0.197
190011060	∅ 6-5.5	∅ 0.236-0.217
190011065	∅ 6.5-6	∅ 0.256-0.236
190011070	∅ 7-6.5	∅ 0.276-0.256



ER 25	mm	inch
190025000	∅ 16-1	∅ 0.630-0.039
190025010	∅ 1-0.5	∅ 0.039-0.020
190025020	∅ 2-1	∅ 0.079-0.039
190025030	∅ 3-2	∅ 0.118-0.079
190025040	∅ 4-3	∅ 0.157-0.118
190025050	∅ 5-4	∅ 0.197-0.157
190025060	∅ 6-5	∅ 0.236-0.197
190025070	∅ 7-6	∅ 0.276-0.236
190025080	∅ 8-7	∅ 0.315-0.276
190025090	∅ 9-8	∅ 0.354-0.315
190025100	∅ 10-9	∅ 0.394-0.354
190025110	∅ 11-10	∅ 0.433-0.394
190025120	∅ 12-11	∅ 0.472-0.433
190025130	∅ 13-12	∅ 0.512-0.472
190025140	∅ 14-13	∅ 0.551-0.512
190025150	∅ 15-14	∅ 0.591-0.551
190025160	∅ 16-15	∅ 0.630-0.591



ER 16	mm	inch
190016000	∅ 10-0.5	∅ 0.394-0.020
190016010	∅ 1-0.5	∅ 0.039-0.020
190016020	∅ 2-1	∅ 0.079-0.039
190016030	∅ 3-2	∅ 0.118-0.079
190016040	∅ 4-3	∅ 0.158-0.118
190016050	∅ 5-4	∅ 0.197-0.158
190016060	∅ 6-5	∅ 0.236-0.197
190016070	∅ 7-6	∅ 0.276-0.236
190016080	∅ 8-7	∅ 0.315-0.276
190016090	∅ 9-8	∅ 0.354-0.315
190016100	∅ 10-9	∅ 0.394-0.354



ER 32	mm	inch
190032000	∅ 20-2	∅ 0.787-0.079
190032020	∅ 2-1	∅ 0.079-0.039
190032030	∅ 3-2	∅ 0.118-0.079
190032040	∅ 4-3	∅ 0.157-0.118
190032050	∅ 5-4	∅ 0.197-0.157
190032060	∅ 6-5	∅ 0.236-0.197
190032070	∅ 7-6	∅ 0.276-0.236
190032080	∅ 8-7	∅ 0.315-0.276
190032090	∅ 9-8	∅ 0.354-0.315
190032100	∅ 10-9	∅ 0.394-0.354
190032110	∅ 11-10	∅ 0.433-0.394
190032120	∅ 12-11	∅ 0.472-0.433
190032130	∅ 13-12	∅ 0.512-0.472
190032140	∅ 14-13	∅ 0.551-0.512
190032150	∅ 15-14	∅ 0.591-0.551
190032160	∅ 16-15	∅ 0.630-0.591
190032170	∅ 17-16	∅ 0.669-0.630
190032180	∅ 18-17	∅ 0.709-0.669
190032190	∅ 19-18	∅ 0.748-0.709
190032200	∅ 20-19	∅ 0.787-0.748



ER 20	mm	inch
190020000	∅ 13-1	∅ 0.512-0.039
190020010	∅ 1-0.5	∅ 0.039-0.020
190020020	∅ 2-1	∅ 0.079-0.039
190020030	∅ 3-2	∅ 0.118-0.079
190020040	∅ 4-3	∅ 0.157-0.118
190020050	∅ 5-4	∅ 0.197-0.157
190020060	∅ 6-5	∅ 0.236-0.197
190020070	∅ 7-6	∅ 0.276-0.236
190020080	∅ 8-7	∅ 0.315-0.276
190020090	∅ 9-8	∅ 0.354-0.315
190020100	∅ 10-9	∅ 0.394-0.354
190020110	∅ 11-10	∅ 0.433-0.394
190020120	∅ 12-11	∅ 0.472-0.433
190020130	∅ 13-12	∅ 0.512-0.472

Collets DIN 6499B (ER/ESX)



**ER 40**

	mm	inch
190040000	ø 26-3	ø 1.024-0.118
190040030	ø 3-2	ø 0.118-0.079
190040040	ø 4-3	ø 0.157-0.118
190040050	ø 5-4	ø 0.197-0.157
190040060	ø 6-5	ø 0.236-0.197
190040070	ø 7-6	ø 0.276-0.236
190040080	ø 8-7	ø 0.315-0.276
190040090	ø 9-8	ø 0.354-0.315
190040100	ø 10-9	ø 0.394-0.354
190040110	ø 11-10	ø 0.433-0.394
190040120	ø 12-11	ø 0.472-0.433
190040130	ø 13-12	ø 0.512-0.472
190040140	ø 14-13	ø 0.551-0.512
190040150	ø 15-14	ø 0.591-0.551
190040160	ø 16-15	ø 0.630-0.591
190040170	ø 17-16	ø 0.669-0.630
190040180	ø 18-17	ø 0.709-0.669
190040190	ø 19-18	ø 0.748-0.709
190040200	ø 20-19	ø 0.787-0.748
190040210	ø 21-20	ø 0.827-0.787
190040220	ø 22-21	ø 0.866-0.827
190040230	ø 23-22	ø 0.906-0.866
190040240	ø 24-23	ø 0.945-0.906
190040250	ø 25-24	ø 0.984-0.945
190040260	ø 26-25	ø 1.024-0.984



**ER 50**

	mm	inch
190050000	ø 34-10	ø 1.339-0.394
190050060	ø 6-4	ø 0.236-0.157
190050080	ø 8-6	ø 0.315-0.236
190050100	ø 10-8	ø 0.394-0.315
190050120	ø 12-10	ø 0.472-0.394
190050140	ø 14-12	ø 0.551-0.472
190050160	ø 16-14	ø 0.630-0.551
190050180	ø 18-16	ø 0.709-0.630
190050200	ø 20-18	ø 0.787-0.709
190050220	ø 22-20	ø 0.866-0.787
190050240	ø 24-22	ø 0.945-0.866
190050260	ø 26-24	ø 1.024-0.945
190050280	ø 28-26	ø 1.102-1.024
190050300	ø 30-28	ø 1.181-1.102
190050320	ø 32-30	ø 1.260-1.181
190050340	ø 32-30	ø 1.260-1.181

Collets DIN 6499D (ER/ESX) - sealed, for IC



**ER 11**

191011030	ø 3
191011040	ø 4
191011050	ø 5
191011060	ø 6



**ER 16**

191016000	ø 3-10
191016030	ø 3
191016040	ø 4
191016050	ø 5
191016060	ø 6
191016070	ø 7
191016080	ø 8
191016090	ø 9
191016100	ø 10



**ER 20**

191020000	ø 3-12
191020030	ø 3
191020040	ø 4
191020050	ø 5
191020060	ø 6
191020070	ø 7
191020080	ø 8
191020090	ø 9
191020100	ø 10
191020110	ø 11
191020120	ø 12



**ER 25**

191025000	ø 4-16
191025030	ø 3
191025040	ø 4
191025050	ø 5
191025060	ø 6
191025070	ø 7
191025080	ø 8
191025090	ø 9
191025100	ø 10
191025110	ø 11
191025120	ø 12
191025130	ø 13
191025140	ø 14
191025150	ø 15
191025160	ø 16

Collets DIN 6499D (ER/ESX) - sealed, for IC



**ER 32**

191032000	ø 4-20
191032030	ø 3
191032040	ø 4
191032050	ø 5
191032060	ø 6
191032070	ø 7
191032080	ø 8
191032090	ø 9
191032100	ø 10
191032110	ø 11
191032120	ø 12
191032130	ø 13
191032140	ø 14
191032150	ø 15
191032160	ø 16
191032170	ø 17
191032180	ø 18
191032190	ø 19
191032200	ø 20



**ER 40**

191040060	ø 6
191040080	ø 8
191040100	ø 10
191040120	ø 12
191040140	ø 14
191040160	ø 16
191040180	ø 18
191040200	ø 20
191040220	ø 22
191040250	ø 25

Collets DIN 6499D (ER/DM) - metallic sealed, for IC



**ER 11**

191111013-in	ø 0.125
191111019-in	ø 0.188
191111025-in	ø 0.25



**ER 16**

191116001-in	ø 0.125-0.375
191116013-in	ø 0.125
191116019-in	ø 0.188
191116025-in	ø 0.25
191116031-in	ø 0.313
191116038-in	ø 0.375



**ER 20**

191120001-in	ø 0.125-0.5
191120013-in	ø 0.125
191120019-in	ø 0.188
191120025-in	ø 0.25
191120031-in	ø 0.313
191120038-in	ø 0.375
191120044-in	ø 0.438
191120050-in	ø 0.5



**ER 25**

191125001-in	ø 0.25-0.625
191125025-in	ø 0.25
191125031-in	ø 0.313
191125038-in	ø 0.375
191125044-in	ø 0.438
191125050-in	ø 0.5
191125056-in	ø 0.563
191125063-in	ø 0.625



**ER 32**

191132001-in	ø 0.25-0.75
191132025-in	ø 0.25
191132031-in	ø 0.313
191132038-in	ø 0.375
191132044-in	ø 0.438
191132050-in	ø 0.5
191132056-in	ø 0.563
191132063-in	ø 0.625
191132069-in	ø 0.688
191132075-in	ø 0.75



Collets DIN 6499D (ER/DM) - metallic sealed,  
for IC

**ER 40**

191140025-in	ø 0.25
191140031-in	ø 0.313
191140038-in	ø 0.375
191140044-in	ø 0.438
191140050-in	ø 0.5
191140056-in	ø 0.563
191140063-in	ø 0.625
191140069-in	ø 0.688
191140075-in	ø 0.75
191140088-in	ø 0.875
191140100-in	ø 1

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## Quality without compromise.

All manufacturing steps are based on highest precision.

According to our own device that for the manufacture of high precision tooling systems high precision machine tools are essential we only use the latest machine tool technology to manufacture our parts.

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