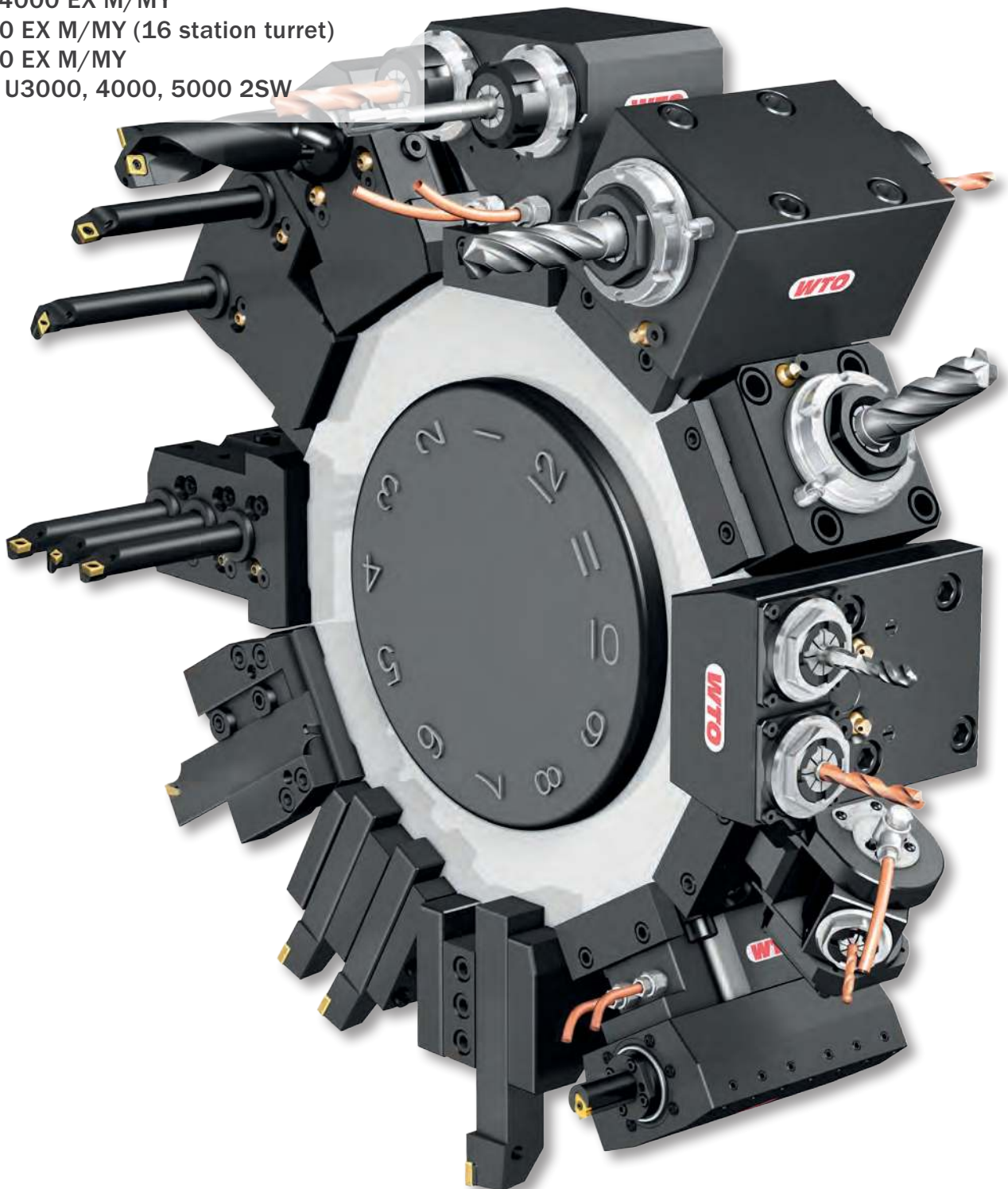


# Toolholder Program

GENOS L200, L2000-e M/MY (VDI30)  
GENOS L300, L3000-e M/MY (VDI40)  
GENOS L300 MW/MYW, L3000-e M/MY  
LB/LU 2000-3000 EX (II) M/MY/MW/MYW  
LB/LU 4000 EX M/MY  
LT 2000 EX M/MY (16 station turret)  
LT 3000 EX M/MY  
Multus U3000, 4000, 5000 2SW





## QuickFlex®

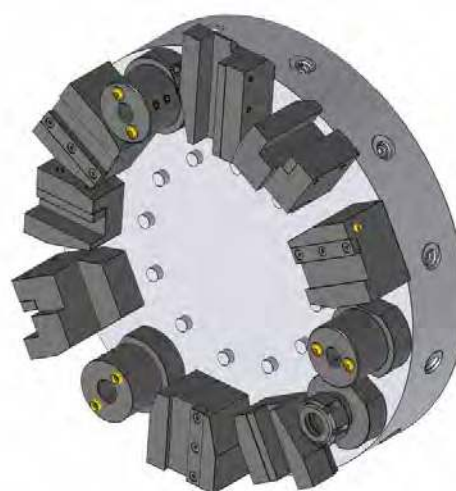
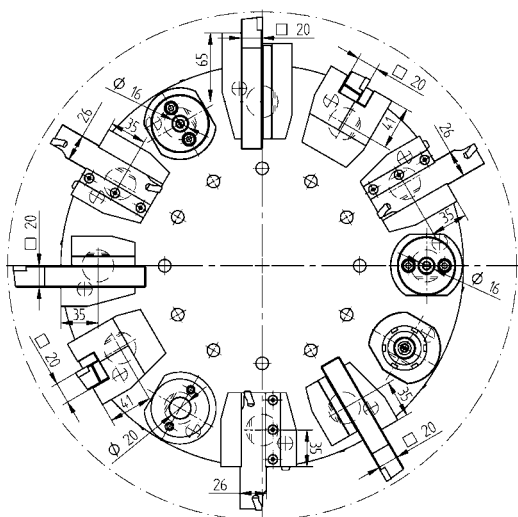
The new quick change system for high performance and precision.

Minimal investment, maximal expandability.



GENOS L200, L2000-e M/MY (VDI30)	Page	4 - 6
GENOS L300, L3000-e M/MY (VDI40)	Page	7 - 9
GENOS L300 MW/MYW, L3000-e M/MY	Page	10 - 12
LB/LU 2000-3000 EX (II) M/MY/MW/MYW	Page	13 - 16
LB/LU 4000 EX M/MY	Page	17 - 20
LT 2000 EX M/MY (16 station turret)	Page	21 - 23
LT 3000 EX M/MY	Page	24 - 26
Multus U3000, 4000, 5000 2SW	Page	27 - 29
Reduction sleeves	Page	30 - 31
Collets	Page	32 - 34

**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

**Radial square toolholder, left hand, short, Form B2**

20	48-B2-30x20
20	48-B2-30x20x60

**Radial square toolholder, left hand inverted, short, Form B4**

20	48-B4-30x20
20	48-B4-30x20x60

**Radial square toolholder, left hand, long, Form B6**

20	48-B6-30x20
20	48-B6-30x20x60
3/4"	48-B6-30x075

**Radial square toolholder, left hand inverted, long, Form B8**

20	48-B8-30x20
3/4"	48-B8-30x075

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

20	48-C2-30x20
3/4"	48-C2-30x075

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

20	48-C4-30x20
----	-------------

**Cut-off holder, adjustable height, left hand**

SH 26	48-AL-30x26
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**Cut-off holder, adjustable height, left hand inverted**

SH 26	48-ALU-30x26
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## Static Toolholders - Standard Program

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

SH 26	48-102686R	IC 80 bar
SH 26	48-102686L	IC 80 bar
SH 32	48-102688R	IC 80 bar
SH 32	48-102688L	IC 80 bar

**Holder for indexable insert drills, internal coolant supply, Form E1**

Ø 16	48-E1-30x16
Ø 20	48-E1-30x20
Ø 25	48-E1-30x25
Ø 32	48-E1-30x32

**Boring bar holder, internal coolant supply, Form E2**

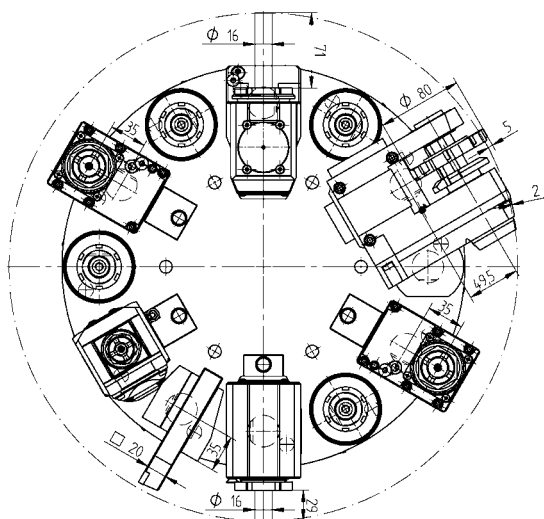
Ø 8	48-E2-30x8
Ø 10	48-E2-30x10
Ø 12	48-E2-30x12
Ø 16	48-E2-30x16
Ø 20	48-E2-30x20
Ø 25	48-E2-30x25
Ø 30	48-E2-30x30
Ø 32	48-E2-30x32

**ER collet chuck holder, internal coolant supply, Form E4**

ER 25	48-E4-30x25
	107525000
ER 32	48-E4-30x32
	107532000
ER 40	48-E4-30x40
	107540000

**Plug, steel, Form Z2**



Steel	48-Z2-30-S
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## Driven Toolholders - Enhanced Program







**Face drill/milling unit, offset**

<b>ER 25</b>	410116133-30  00675000932	1:1	EC
<b>ER 25</b>	410116125-30  00675000932	1:1	IC 80 bar





## ER 20 410113041-

<b>ER 20</b>	410113041-30  00675000939	1:2	EC
<b>ER 20</b>	410113042-30  00675000939	1:2	IC 80 bar
<b>ER 25</b>	410116126-30  00675000932	2:1	EC
<b>ER 25</b>	410116127-30  00675000932	2:1	IC 80 bar





ER 20      410513028-30      1:2      EC

<b>ER 20</b>	410513028-30  00675000833	1:2	EC
<b>ER 20</b>	410513029-30  00675000833	1:2	IC 80 bar







ER 25      410516046-30      2:1      EC

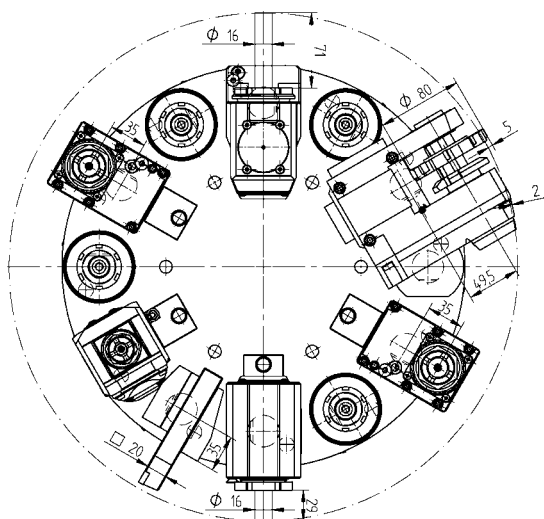
<b>ER 25</b>	410516046-30	2:1	EC
	 00675000801		
<b>ER 25</b>	410516048-30	2:1	IC 80 bar
	 00675000801		



ER 16	411010012-30	1:1	EC
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		00675000902		
<b>ER 16</b>		411010013-30	1:1	IC 80 bar
		00675000902		
<b>ER 11</b>		411007013-30	1:2	EC
		00675000914		
<b>ER 11</b>		411007014-30	1:2	IC 80 bar
		00675000914		





## Driven Toolholders - Enhanced Program



### Offset slitting saw unit

Type 14-2 411500006-30 2.73:1 EC

00675000460

160016142  $\phi 16$

160022142  $\phi 22$

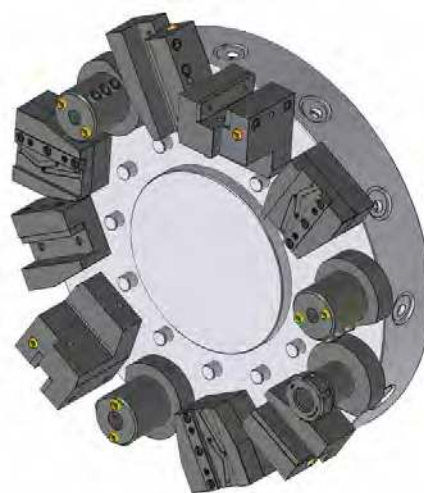
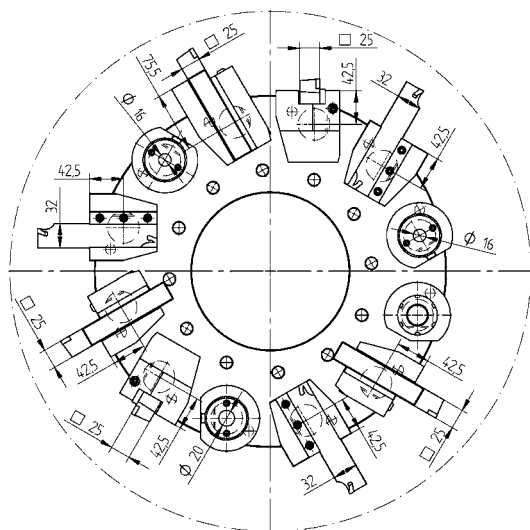
160027142  $\phi 27$

160015142  $\phi 5/8"$

160019142  $\phi 3/4"$

160023142  $\phi 7/8"$

160025142  $\phi 1"$



## Static Toolholders - Standard Program



**Radial square toolholder, left hand, short, Form B2**

25 48-B2-40x25



**Radial square toolholder, left hand inverted, short, Form B4**

25 48-B4-40x25  
1" 48-B4-40x100



**Radial square toolholder, left hand, long, Form B6**

25 48-B6-40x25



**Radial square toolholder, left hand inverted, long, Form B8**

25 48-B8-40x25  
1" 48-B8-40x100



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

25 48-C2-40x25



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

25 48-C4-40x25  
1" 48-C4-40x100



**Cut-off holder, adjustable height, left hand SH 32**

48-AL-40x32



**Cut-off holder, adjustable height, left hand inverted SH 32**

48-ALU-40x32



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

SH 32 48-102690R IC 80 bar  
SH 32 48-102690L IC 80 bar

## Static Toolholders - Standard Program



**Holder for indexable insert drills, internal coolant supply, Form E1**

Ø 16 48-E1-40x16  
Ø 20 48-E1-40x20  
Ø 25 48-E1-40x25  
Ø 32 48-E1-40x32  
Ø 40 48-E1-40x40  
Ø 1" 48-E1-40x100



**Boring bar holder, internal coolant supply, Form E2**

Ø 8 48-E2-40x8  
Ø 10 48-E2-40x10  
Ø 12 48-E2-40x12  
Ø 16 48-E2-40x16  
Ø 20 48-E2-40x20  
Ø 25 48-E2-40x25  
Ø 30 48-E2-40x30  
Ø 32 48-E2-40x32  
Ø 40 48-E2-40x40



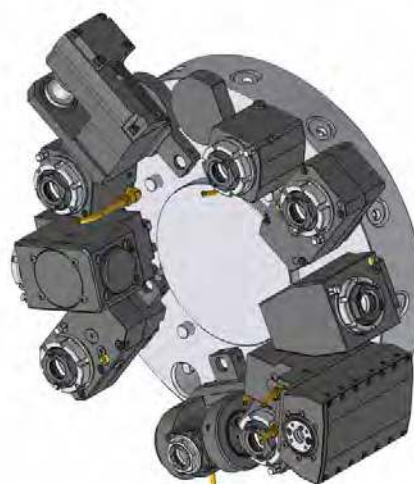
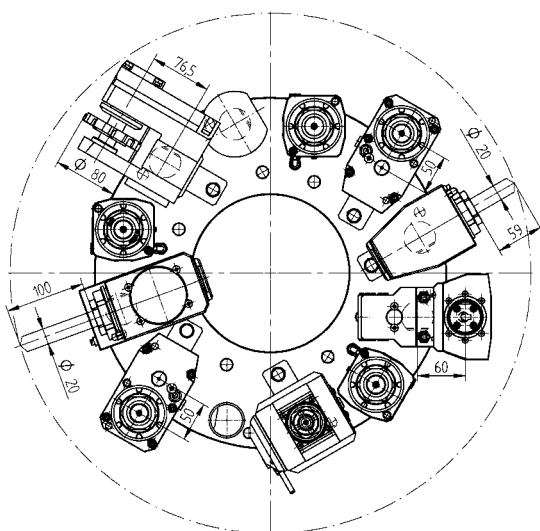
**ER collet chuck holder, internal coolant supply, Form E4**

ER 25 48-E4-40x25  
107525000  
ER 32 48-E4-40x32  
107532000  
ER 40 48-E4-40x40  
107540000



**Plug, steel, Form Z2**

Steel 48-Z2-40-S



## Driven Toolholders - QuickFlex®

**Face drill/milling unit**

<b>ER-32 QF</b>	420132061-40	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420132062-40	1:1	IC 80 bar
	0067732000		

**OD drill/milling unit**

<b>ER-32 QF</b>	420532123-40	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420532124-40	1:1	IC 80 bar
	0067732000		

## Driven Toolholders - Enhanced Program

**Face drill/milling unit, offset**

<b>ER-32 QF</b>	420132089-40	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420132090-40	1:1	IC 80 bar
	0067732000		
<b>ER-25 QF</b>	420125046-40	1:2	EC
	0067725001		
<b>ER-25 QF</b>	420125047-40	1:2	IC 80 bar
	0067725001		
<b>ER-32 QF</b>	420132095-40	2:1	EC
	0067732000		
<b>ER-32 QF</b>	420132096-40	2:1	IC 80 bar
	0067732000		

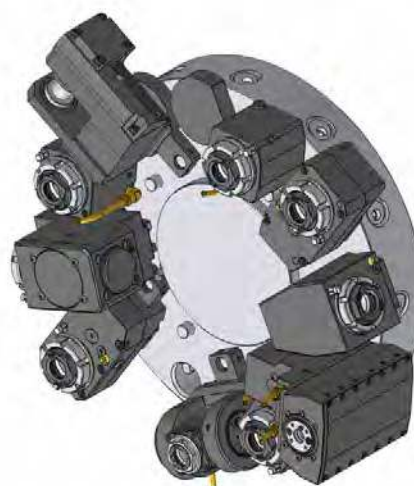
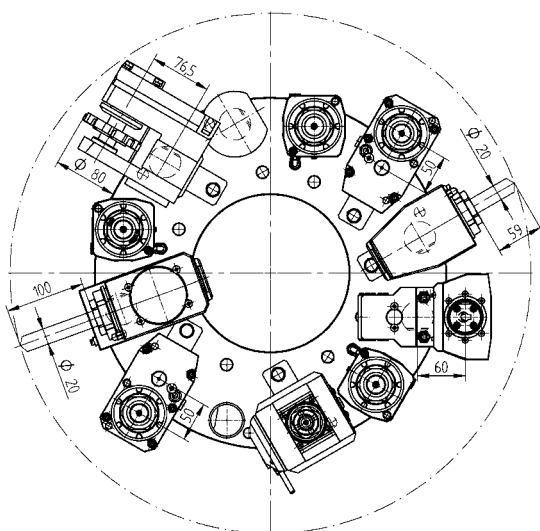
**Straight milling unit with combination mill arbor DIN 6358**

<b>Ø 22</b>	410222021-40	1:1	EC
	00675000479		

**OD drill/milling unit**

<b>ER 25</b>	410516074-40	1:2	EC
	00675000801		
<b>ER 25</b>	410516075-40	1:2	IC 80 bar
	00675000801		
<b>ER 32</b>	410520116-40	2:1	EC
	00675000490		
<b>ER 32</b>	410520126-40	2:1	IC 80 bar
	00675000490		





## Driven Toolholders - Enhanced Program

**OD back set drill/milling unit**

<b>ER-32 QF</b>	420532098-40	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420532099-40	1:1	IC 80 bar
	0067732000		
<b>ER-40 QF</b>	420540019-40	2:1	EC
	0067740000		
<b>ER-40 QF</b>	420540020-40	2:1	IC 80 bar
	0067740000		

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

<b>Ø 22</b>	410622015-40	1:1	EC
	00675000160		

**Adjustable angle drill/milling unit**

<b>ER 25</b>	411016010-40	1:1	EC
	00675000934		
<b>ER 25</b>	411016031-40	1:1	IC 80 bar
	00675000934		
<b>ER 16</b>	411010022-40	1:2	EC
	00675000936		
<b>ER 16</b>	411010023-40	1:2	IC 80 bar
	00675000936		

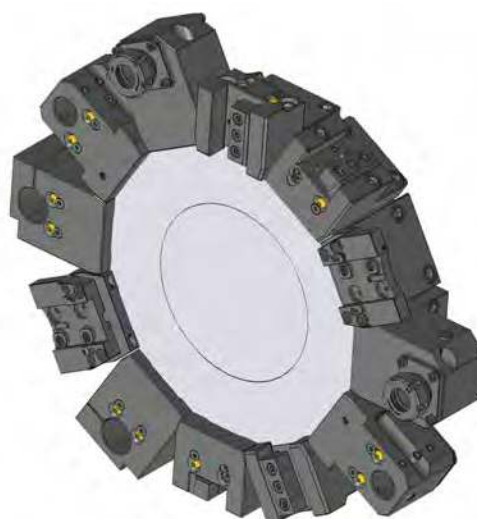
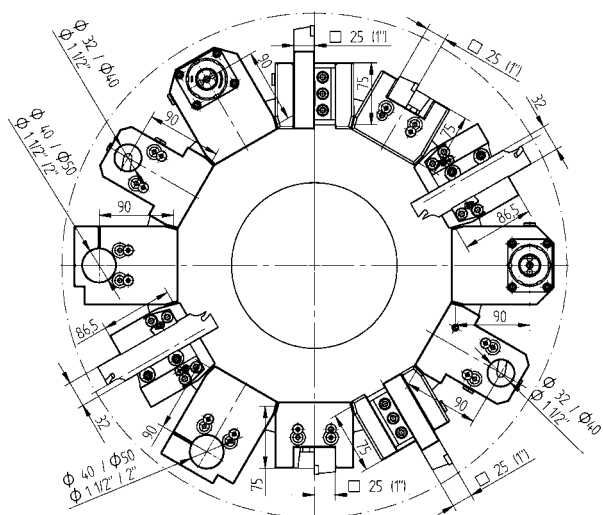
## Driven Toolholders - Enhanced Program

**Offset slitting saw unit**

<b>Type 14-2</b>	411500006-40	2.73:1	EC
	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"		

**Broaching unit for ID and OD**

<b>TN765050</b>	414132005-40	1:1	EC
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## Static Toolholders - Standard Program

**OD cutting holder**

25 48-86471  
1" 48-86473

**OD cutting holder, HP-IC**

25 48-86471-HP IC 80 bar  
1" 48-86473-HP IC 80 bar

**OD cutting holder, both sides**

25 48-86475  
1" 48-86478

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

25 48-86475-HP IC 80 bar  
1" 48-86478-HP IC 80 bar

**Face cutting holder**

25 48-86480  
1" 48-86482

**Face cutting holder, HP-IC**

25 48-86480-HP IC 80 bar  
1" 48-86482-HP IC 80 bar

**Face cutting holder, both sides**

25 48-86484  
1" 48-86487

**Combination toolholder**

Ø 32 48-78611 IC 80 bar  
Ø 40 48-78494 IC 80 bar  
Ø 1 1/2" 48-78841 IC 80 bar

**Plug**

48-79267

## Static Toolholders - Enhanced Program

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

20 (3/4") 48-78534

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

20 (3/4") 48-79965

**Cut-off holder, adjustable**

SH 32 48-99034

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

SH 32 48-102282R IC 80 bar  
SH 32 48-102282L IC 80 bar

**Boring bar holder, with slot**

Ø 40 48-80539  
Ø 50 48-80511  
Ø 1 1/2" 48-80542  
Ø 2" 48-80541

**Collet face drill holder**

ER 32 48-81096 IC 80 bar  
107532000

**Collet face drill holder, both sides**

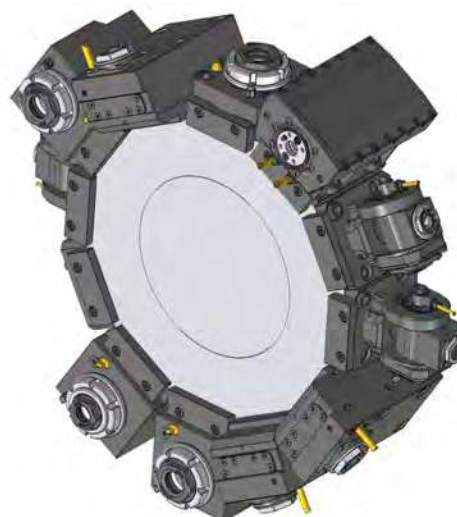
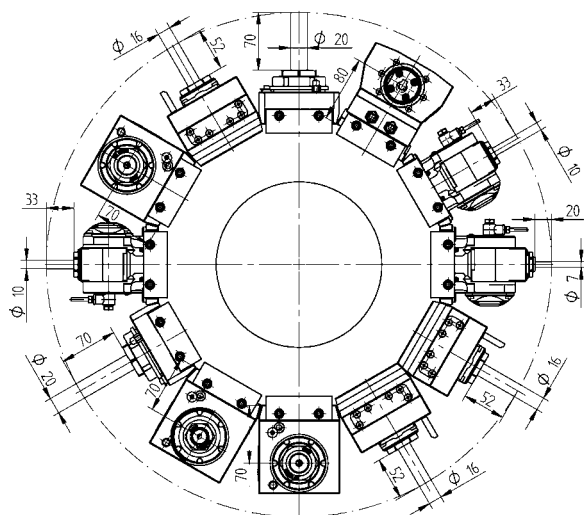
ER 32 48-81097 IC 80 bar  
107532000

**VDI adapter, left**

VDI 30 48-79671  
VDI 40 48-79839

**VDI adapter, right**

VDI 30 48-79982  
VDI 40 48-79983



## Driven Toolholders - QuickFlex®

**OD drill/milling unit**

**ER-32 QF** 420132012-60 1:1 EC  
0067732000

**ER-32 QF** 420132013-60 1:1 IC 80 bar  
0067732000

**Face drill/milling unit**

**ER-32 QF** 420532014-60 1:1 EC  
0067732000

**ER-32 QF** 420532015-60 1:1 IC 80 bar  
0067732000

**Face drill/milling unit, both sides**

**ER-32 QF** 420532018-60 1:1 EC  
0067732000

## Driven Toolholders - Enhanced Program

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

**Ø 22** 410222014-60 1:1 EC  
00675000483

**Ø 1"** 410225004-60 1:1 EC  
00675000483

**OD drill/milling unit, offset**

**ER 25** 410116035-60 1:1 EC  
00675000932

**ER 25** 410116034-60 1:1 IC 80 bar  
00675000932

**ER 20** 410113003-60 1:2 EC  
00675000939

**ER 20** 410113004-60 1:2 IC 80 bar  
00675000939

**Face drill/milling unit**

**ER-25 QF** 420525012-60 1:2 EC  
0067725001

**ER-25 QF** 420525013-60 1:2 IC 80 bar  
0067725001

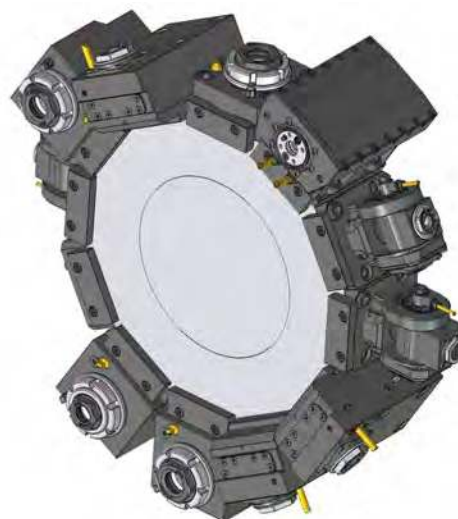
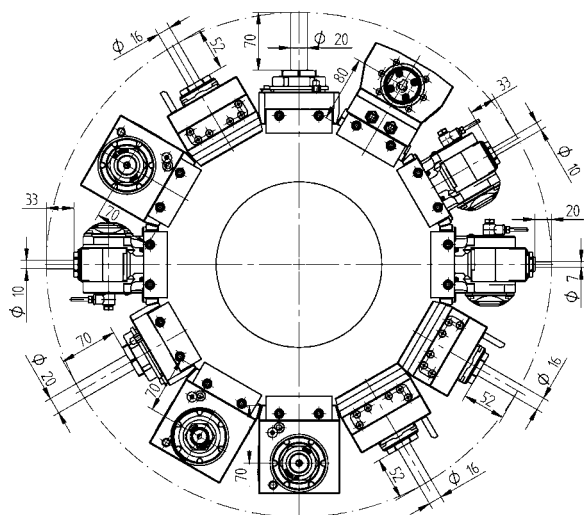
**ER-32 QF** 420532016-60 2:1 EC  
0067732000

**ER-32 QF** 420532017-60 2:1 IC 80 bar  
0067732000

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

**Ø 22** 410622002-60 1:1 EC  
00675000557

**Ø 1"** 410625002-60 1:1 EC  
00675000483



## Driven Toolholders - Enhanced Program

**Adjustable angle drill/milling unit**

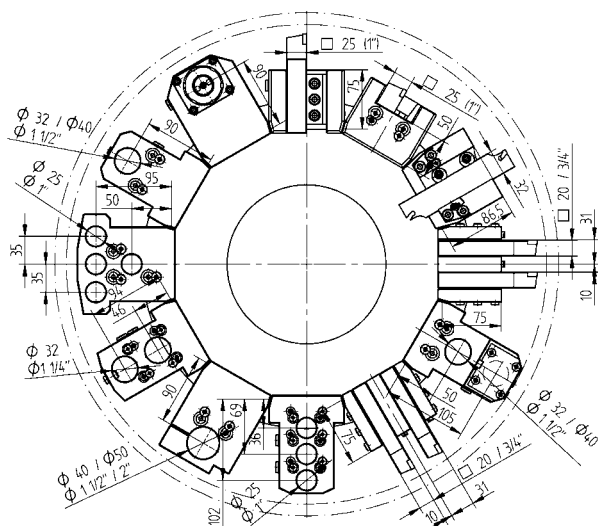
<b>ER 16</b>	411010003-60	1:1	EC
	00675000902		
<b>ER 16</b>	411010004-60	1:1	IC 80 bar
	00675000902		
<b>ER 11</b>	411007001-60	1:2	EC
	00675000914		
<b>ER 11</b>	411007002-60	1:2	IC 80 bar
	00675000914		

**Gear hobbing unit**

<b>Type 16-1</b>	411500013-60	1:1	EC
	00675000962		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		
<b>Type 16-1</b>	411500015-60	2:1	EC
	00675000962		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		

**Broaching unit for ID and OD**

<b>TN765050</b>	414532001-60	1:1	EC
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## Static Toolholders - Standard Program



25	48-86471
1"	48-86473



<b>25</b>	48-86471-HP	IC 80 bar
<b>1"</b>	48-86473-HP	IC 80 bar



<b>25</b>	48-86475
<b>1"</b>	48-86478



<b>25</b>	48-86475-HP	IC 80 bar
<b>1"</b>	48-86478-HP	IC 80 bar



<b>25</b>	48-86480
<b>1"</b>	48-86482



<b>25</b>	48-86480-HP	IC 80 bar
<b>1"</b>	48-86482-HP	IC 80 bar



25	48-86484
1"	48-86487



Ø 32	48-78611	IC 80 bar
Ø 40	48-78494	IC 80 bar
Ø 1 1/2"	48-78841	IC 80 bar

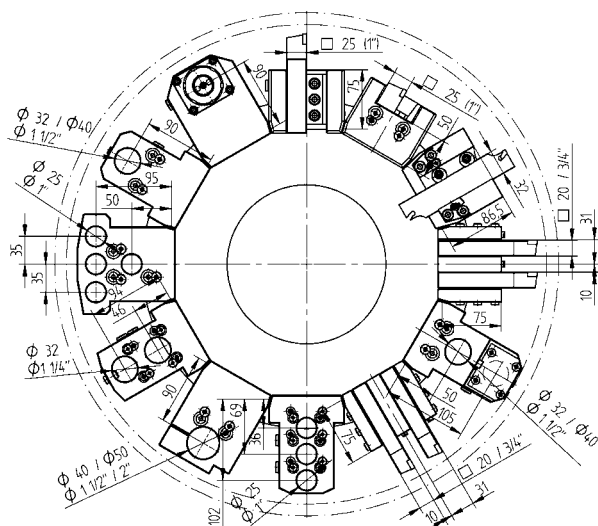


Ø 32	48-78726	IC 80 bar
Ø 40	48-78547	IC 80 bar
Ø 1 1/2"	48-78845	IC 80 bar



48-79267





## Static Toolholders - Enhanced Program



20 (3/4") 48-78534



20	48-97154
3/4"	48-97155



20 (3/4") 48-79965



SH 32 48-99034



SH 32	48-102282R	IC 80 bar
SH 32	48-102282I	IC 80 bar



<b>SH 32</b>	48-101968R	IC 80 bar
	343-810100R48	
<b>SH 32</b>	48-101968L	IC 80 bar
	343-810100L48	



Ø 40	48-80539
Ø 50	48-80511
Ø 1 1/2"	48-80542
Ø 2"	48-80541



Ø 32	48-79972	IC 80 bar
Ø 1 1/4"	48-79997	IC 80 bar



Ø 25	48-97157	IC 80 bar
Ø 1"	48-97158	IC 80 bar



Ø 32	48-79888	IC 80 bar
Ø 1 1/4"	48-79996	IC 80 bar



Ø 25	48-79975
Ø 1"	48-79998



Ø 25	48-78538
Ø 1"	48-78825



ER 32 48-81096 IC 80 bar  
107532000



ER 32 48-81097 IC 80 bar  
107532000



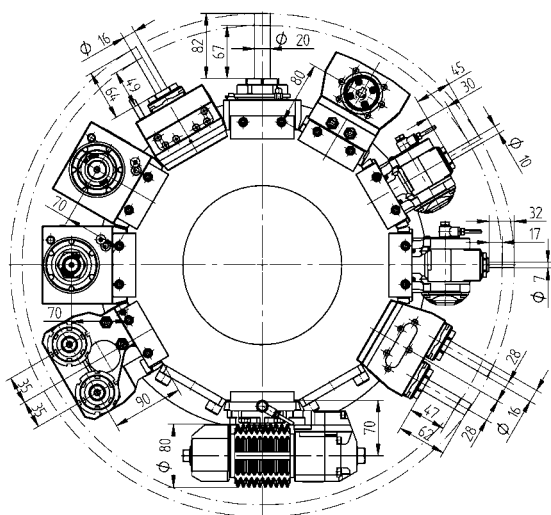
**VDI 30** 48-79671  
**VDI 40** 48-79839



<b>VDI 30</b>	48-79982
<b>VDI 40</b>	48-79983





48-81082




## Driven Toolholders - QuickFlex®


**OD drill/milling unit**

**ER-32 QF** 420132012-60 1:1 EC  
 0067732000


**ER-32 QF** 420132013-60 1:1 IC 80 bar  
 0067732000

**Face drill/milling unit**

**ER-32 QF** 420532014-60 1:1 EC  
 0067732000


**ER-32 QF** 420532015-60 1:1 IC 80 bar  
 0067732000


**Face drill/milling unit, both sides**

**ER-32 QF** 420532018-60 1:1 EC  
 0067732000


## Driven Toolholders - Enhanced Program


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


**Ø 22** 410222014-60 1:1 EC  
 00675000483


**Ø 1"** 410225004-60 1:1 EC  
 00675000483

**OD drill/milling unit, offset**


**ER 25** 410116035-60 1:1 EC  
 00675000932


**ER 25** 410116034-60 1:1 IC 80 bar  
 00675000932


**ER 20** 410113003-60 1:2 EC  
 00675000939


**ER 20** 410113004-60 1:2 IC 80 bar  
 00675000939

**Face drill/milling unit**


**ER-25 QF** 420525012-60 1:2 EC  
 0067725001


**ER-25 QF** 420525013-60 1:2 IC 80 bar  
 0067725001

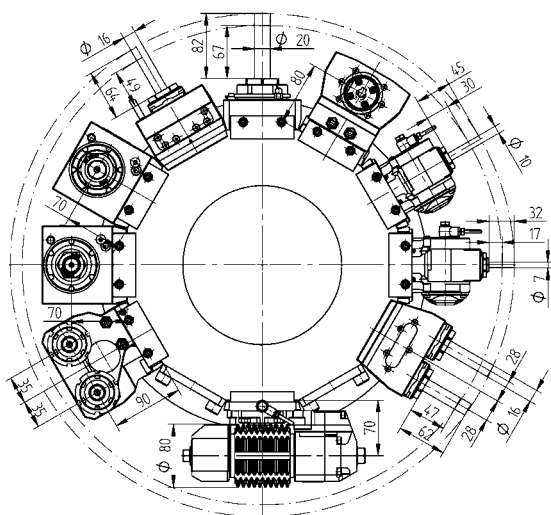
**ER-32 QF** 420532016-60 2:1 EC  
 0067732000

**ER-32 QF** 420532017-60 2:1 IC 80 bar  
 0067732000

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

**Ø 22** 410622002-60 1:1 EC  
 00675000557

**Ø 1"** 410625002-60 1:1 EC  
 00675000483



## Driven Toolholders - Enhanced Program

**Adjustable angle drill/milling unit**

<b>ER 16</b>	411010003-60	1:1	EC
	00675000902		
<b>ER 16</b>	411010004-60	1:1	IC 80 bar
	00675000902		
<b>ER 11</b>	411007001-60	1:2	EC
	00675000914		
<b>ER 11</b>	411007002-60	1:2	IC 80 bar
	00675000914		

**Gear hobbing unit**

<b>Type 16-1</b>	411500013-60	1:1	EC
	00675000962		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		
<b>Type 16-1</b>	411500015-60	2:1	EC
	00675000962		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		

## Driven Toolholders - Enhanced Program

**OD drill/milling unit, double, Y axis**

<b>ER 25</b>	413002009-60	1:1	EC
	00675000932		
<b>ER 25</b>	413002010-60	1:1	IC 80 bar
	00675000932		

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

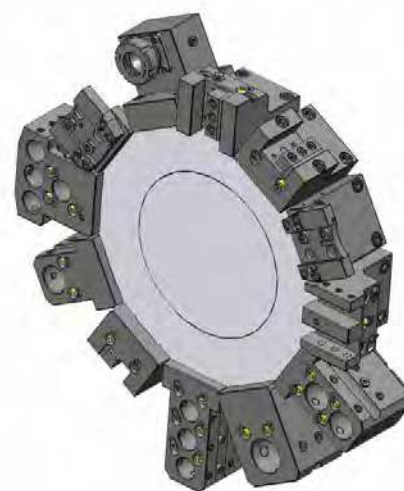
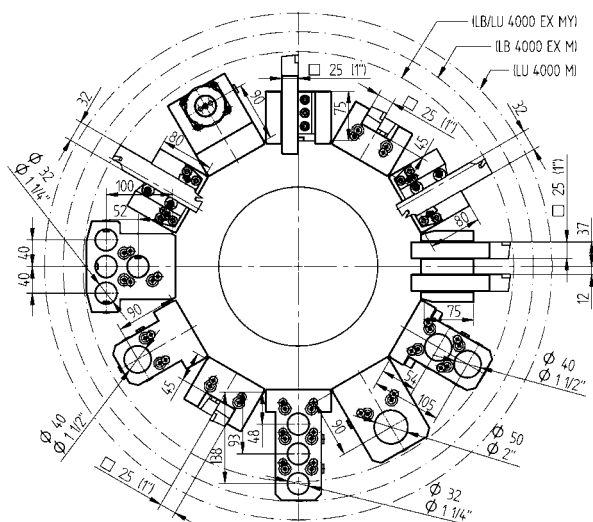
<b>ER 25</b>	413502003-60	1:1	EC
	00675000915		
<b>ER 25</b>	413502004-60	1:1	IC 80 bar
	00675000915		

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

<b>ER 25</b>	413502005-60	1:1	EC
	00675000915		

**Broaching unit for ID and OD**

<b>TN765050</b>	414532001-60	1:1	EC
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## Static Toolholders - Standard Program

**OD cutting holder**

25 48-86427  
1" 48-86428

**OD cutting holder, HP-IC**

25 48-86427-HP IC 80 bar  
1" 48-86428-HP IC 80 bar

**Face cutting holder**

1" 48-86430

**Face cutting holder, HP-IC**

25 48-86429-HP IC 80 bar  
1" 48-86430-HP IC 80 bar

**Combination toolholder**

Ø 40 48-78587 IC 80 bar  
Ø 50 48-82043 IC 80 bar  
Ø 1 1/2" 48-78860 IC 80 bar  
Ø 2" 48-82044 IC 80 bar

**Plug**

48-79268

## Static Toolholders - Enhanced Program

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

25(1") 48-79787

**Cut-off holder, adjustable**

SH 32 48-99290

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

SH 32 48-99304R IC 80 bar  
SH 32 48-99304L IC 80 bar

**Boring bar holder, with slot**

Ø 40 48-102335  
Ø 50 48-102334  
Ø 60 48-86827  
Ø 1 1/2" 48-102351  
Ø 2" 48-86819

**Combination toolholder, double**

Ø 40 48-79898 IC 80 bar  
Ø 1 1/2" 48-80003 IC 80 bar

**Boring bar holder, triple**

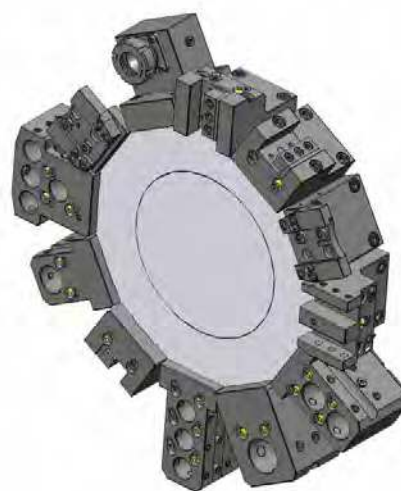
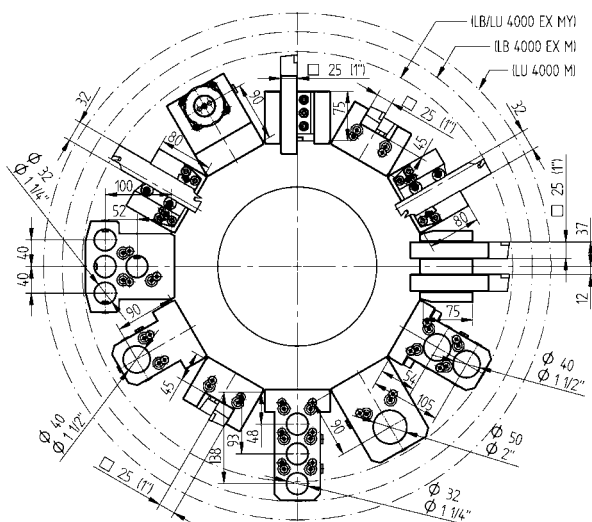
Ø 32 48-79984  
Ø 1 1/4" 48-80002

**Boring bar holder, multiple, Y axis**

Ø 32 48-79802  
Ø 1 1/4" 48-79850

**Collet face drill holder**

ER 40 48-81098 IC 80 bar  
107540000



### Static Toolholders - Enhanced Program



**VDI adapter, left**  
VDI 40 48-79672

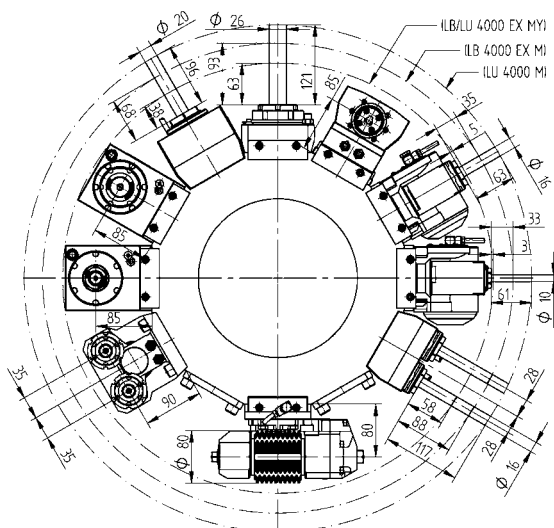


**VDI adapter, right**  
VDI 40 48-79986



**Boring bar holder, blank**  
48-81083





## Driven Toolholders - QuickFlex®

**OD drill/milling unit**

<b>ER-40 QF</b>	420140012-60	1:1	EC
	0067740000		
<b>ER-40 QF</b>	420140013-60	1:1	IC 80 bar
	0067740000		

**Face drill/milling unit**

<b>ER-40 QF</b>	420540010-60	1:1	EC
	0067740000		
<b>ER-40 QF</b>	420540011-60	1:1	IC 80 bar
	0067740000		

## Driven Toolholders - Enhanced Program

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

<b>Ø 27</b>	410227012-60	1:1	EC
	00675000245		
<b>Ø 1"</b>	410225005-60	1:1	EC
	00675000483		

**OD drill/milling unit, offset**

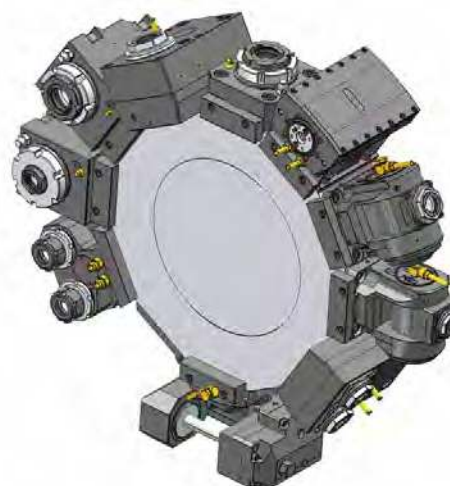
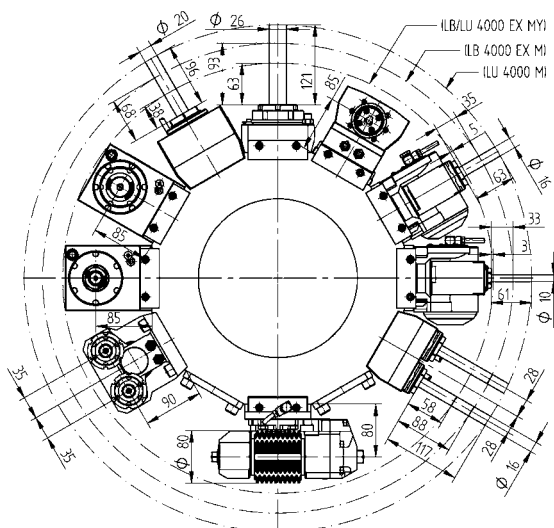
<b>ER 32</b>	410120053-60	1:1	EC
	00675000958		
<b>ER 32</b>	410120054-60	1:1	IC 80 bar
	00675000958		
<b>ER 25</b>	410116028-60	1:2	EC
	00675000959		
<b>ER 25</b>	410116029-60	1:2	IC 80 bar
	00675000959		

**Face drill/milling unit**

<b>ER-25 QF</b>	420525014-60	1:2	EC
	0067725002		
<b>ER-25 QF</b>	420525015-60	1:2	IC 80 bar
	0067725002		
<b>ER-40 QF</b>	420540024-60	2:1	EC
	0067740000		
<b>ER-40 QF</b>	420540025-60	2:1	IC 80 bar
	0067740000		

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

<b>Ø 27</b>	410627005-60	1:1	EC
	00675000245		
<b>Ø 1"</b>	410625005-60	1:1	EC
	00675000483		



## Driven Toolholders - Enhanced Program

**Adjustable angle drill/milling unit**

<b>ER 25</b>	411016001-60	1:1	EC
	00675000934		
<b>ER 25</b>	411016002-60	1:1	IC 80 bar
	00675000934		
<b>ER 16</b>	411010005-60	1:2	EC
	00675000936		
<b>ER 16</b>	411010006-60	1:2	IC 80 bar
	00675000936		

**Gear hobbing unit**

<b>Type 16-1</b>	411500011-60	1:1	EC
	00675000927		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		
<b>Type 16-1</b>	411500010-60	2:1	EC
	00675000927		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		

## Driven Toolholders - Enhanced Program

**OD drill/milling unit, double, Y axis**

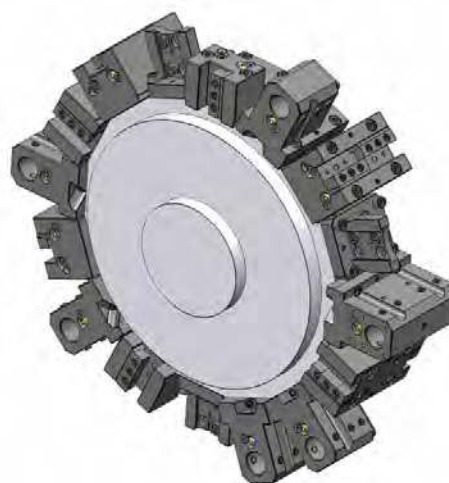
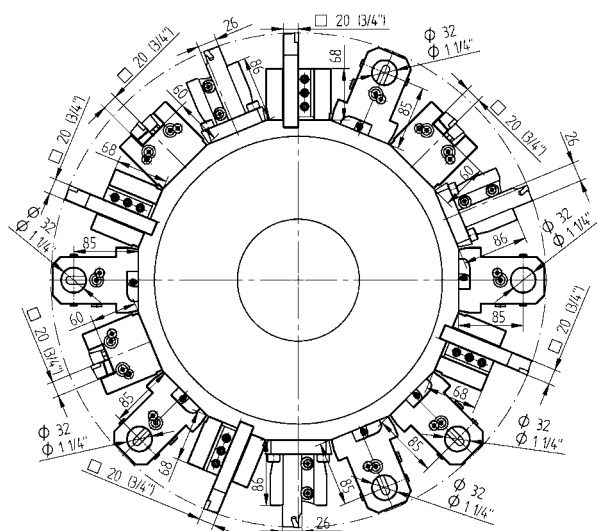
<b>ER 25</b>	413002004-60	1:1	EC
	00675000932		
<b>ER 25</b>	413002005-60	1:1	IC 80 bar
	00675000932		

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

<b>ER 25</b>	413502006-60	1:1	EC
	00675000915		
<b>ER 25</b>	413502007-60	1:1	IC 80 bar
	00675000915		

**Broaching unit for ID and OD**

<b>TN765050</b>	414532002-60	1:1	EC
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## Static Toolholders - Standard Program

**OD cutting holder**

<b>20</b>	48-90520
<b>3/4"</b>	48-90521

**OD cutting holder, HP-IC**

<b>20</b>	48-90520-HP	IC 80 bar
<b>3/4"</b>	48-90521-HP	IC 80 bar

**OD cutting holder, both sides**

<b>20</b>	48-90522
<b>3/4"</b>	48-90523

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

<b>20</b>	48-90522-HP	IC 80 bar
<b>3/4"</b>	48-90523-HP	IC 80 bar

**Face cutting holder, both sides**

<b>20</b>	48-90524
<b>3/4"</b>	48-90525

**Combination toolholder**

<b>Ø 32</b>	48-90526	IC 80 bar
<b>Ø 1 1/4"</b>	48-90527	IC 80 bar

**Combination toolholder, both sides**

<b>Ø 32</b>	48-90528	IC 80 bar
	241132016 ER25	
	241132020 ER32	
<b>Ø 1 1/4"</b>	48-90529	IC 80 bar

**Plug**

48-90530

## Static Toolholders - Enhanced Program

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

<b>20 (3/4")</b>	48-100562
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**Cut-off holder, adjustable**

<b>SH 26</b>	48-99058
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**Cut-off holder, adjustable, HP-IC**

<b>SH 26</b>	48-102280R	IC 80 bar
<b>SH 26</b>	48-102280L	IC 80 bar

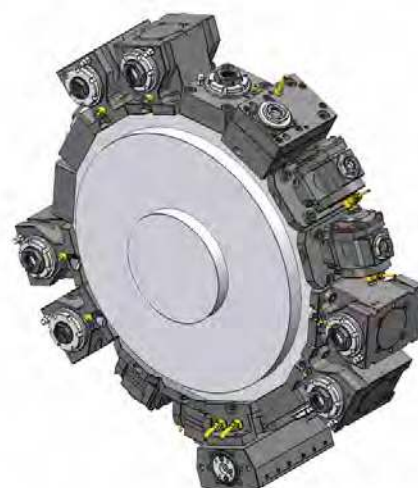
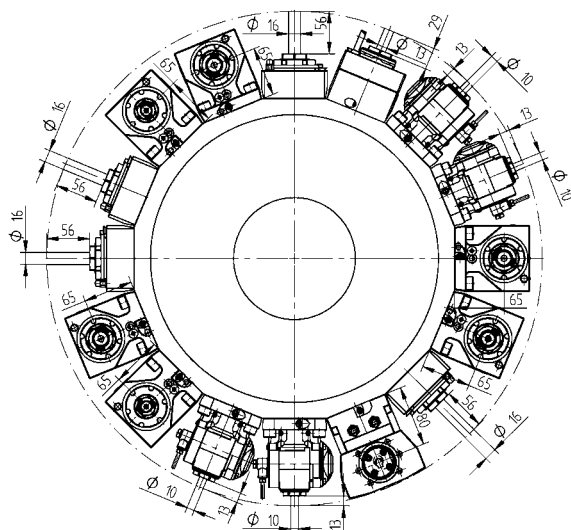
**Boring bar holder, double, both sides**

<b>Ø 25</b>	48-100564
<b>1"</b>	48-100565

**Boring bar holder, blank**

48-110682





## Driven Toolholders - Enhanced Program



### Slitting saw unit

Type 14-2 411500007-55 2.73:1 EC

00675000489

160016142 Ø 16

160022142 Ø 22

160027142 Ø 27

160015142 Ø 5/8"

160019142 Ø 3/4"

160023142 Ø 7/8"

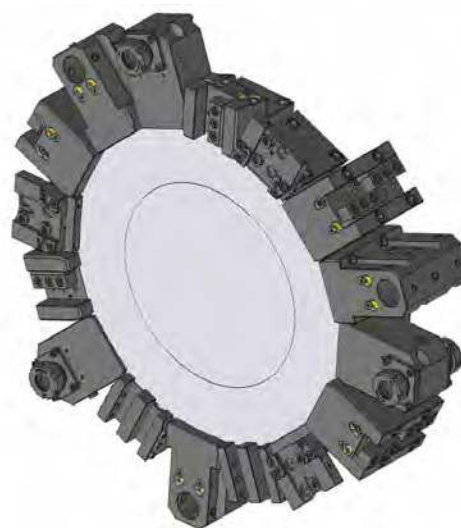
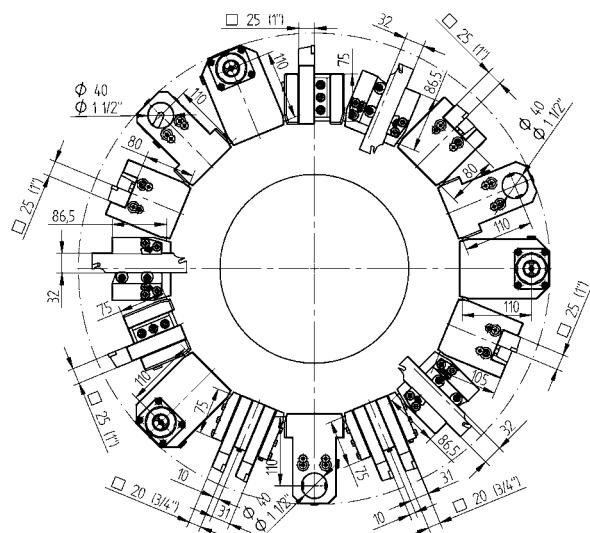
160025142 Ø 1"



### Broaching unit for ID and OD

TN765050 414532002-55 1:1 EC





## Static Toolholders - Standard Program

**OD cutting holder**

25 48-86471  
1" 48-86473

**OD cutting holder, HP-IC**

25 48-86471-HP IC 80 bar  
1" 48-86473-HP IC 80 bar

**OD cutting holder, both sides**

25 48-86475  
1" 48-86478

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

25 48-86475-HP IC 80 bar  
1" 48-86478-HP IC 80 bar

**Face cutting holder, both sides**

25 48-95357  
1" 48-95358

**Combination toolholder**

Ø 40 48-95360 IC 80 bar  
Ø 1 1/2" 48-95361 IC 80 bar

**Combination toolholder, both sides**

Ø 40 48-95363 IC 80 bar  
Ø 1 1/2" 48-95364 IC 80 bar

**Plug**

48-79267

## Static Toolholders - Enhanced Program

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

20 (3/4") 48-78534

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

20 (3/4") 48-79965

**Cut-off holder, adjustable**

SH 32 48-99034

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

SH 32 48-101968R IC 80 bar  
343-810100R48  
SH 32 48-101968L IC 80 bar  
343-810100L48

**Boring bar holder, multiple, both sides, Y axis**

Ø 25 48-78538  
Ø 1" 48-78825

**Collet face drill holder**

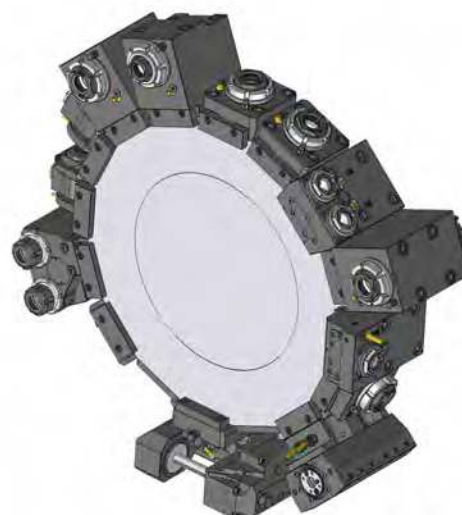
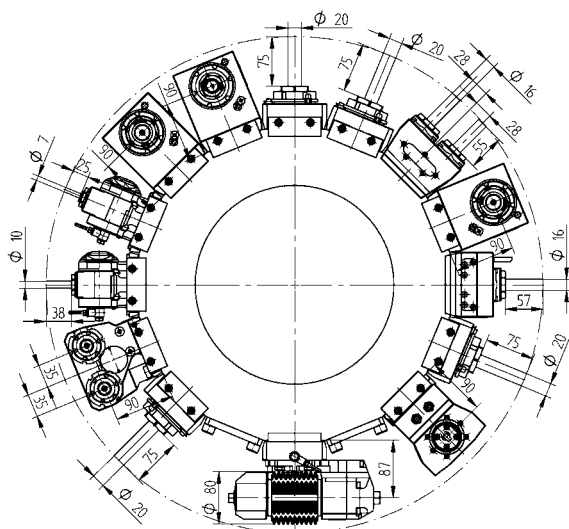
ER 32 48-95365 IC 80 bar  
107532000

**Collet face drill holder, both sides**

ER 32 48-95366 IC 80 bar  
107532000

**Boring bar holder, blank**

48-95367



## Driven Toolholders - QuickFlex®

**OD drill/milling unit**

<b>ER-32 QF</b>	420132016-60	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420132017-60	1:1	IC 80 bar
	0067732000		

**Face drill/milling unit**

<b>ER-32 QF</b>	420532025-60	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420532026-60	1:1	IC 80 bar
	0067732000		

**Face drill/milling unit, both sides**

<b>ER-32 QF</b>	420532029-60	1:1	EC
	0067732000		

## Driven Toolholders - Enhanced Program

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

<b>Ø 22</b>	410222015-60	1:1	EC
	00675000483		
<b>Ø 1"</b>	410225006-60	1:1	EC
	00675000483		

**OD drill/milling unit, offset**

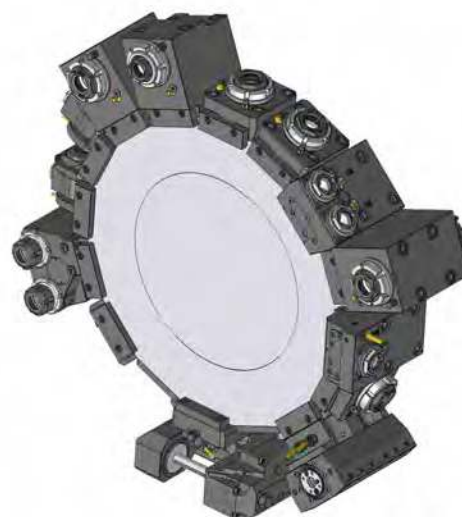
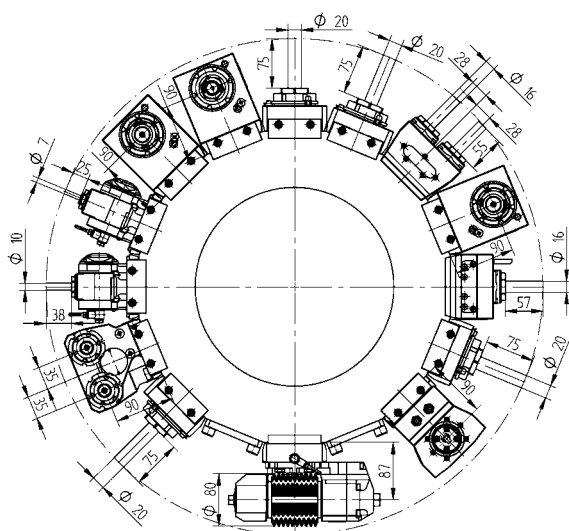
<b>ER 25</b>	410116037-60	1:1	EC
	00675000932		
<b>ER 25</b>	410116038-60	1:1	IC 80 bar
	00675000932		
<b>ER 20</b>	410113005-60	1:2	EC
	00675000939		
<b>ER 20</b>	410113006-60	1:2	IC 80 bar
	00675000939		

**Face drill/milling unit**

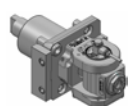
<b>ER-25 QF</b>	420525016-60	1:2	EC
	0067725001		
<b>ER-25 QF</b>	420525017-60	1:2	IC 80 bar
	0067725001		
<b>ER-32 QF</b>	420532027-60	2:1	EC
	0067732000		
<b>ER-32 QF</b>	420532028-60	2:1	IC 80 bar
	0067732000		

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

<b>Ø 22</b>	410622010-60	1:1	EC
	00675000483		
<b>Ø 1"</b>	410625006-60	1:1	EC
	00675000483		



## Driven Toolholders - Enhanced Program

**Adjustable angle drill/milling unit**

<b>ER 16</b>	411010009-60	1:1	EC
	00675000902		
<b>ER 16</b>	411010010-60	1:1	IC 80 bar
	00675000902		
<b>ER 11</b>	411007003-60	1:2	EC
	00675000914		
<b>ER 11</b>	411007004-60	1:2	IC 80 bar
	00675000914		

**Gear hobbing unit**

<b>Type 16-1</b>	411500022-60	1:1	EC
	00675000962		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
<b>Type 16-1</b>	411500023-60	2:1	EC
	00675000962		
	160016161 Ø 16		
	160022161 Ø 22		
	160027161 Ø 27		
	160015161 Ø 5/8"		
	160019161 Ø 3/4"		
	160025161 Ø 1"		
	96394		

**OD drill/milling unit, double, Y axis**

<b>ER 25</b>	413002013-60	1:1	EC
	00675000932		
<b>ER 25</b>	413002014-60	1:1	IC 80 bar
	00675000932		

## Driven Toolholders - Enhanced Program

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

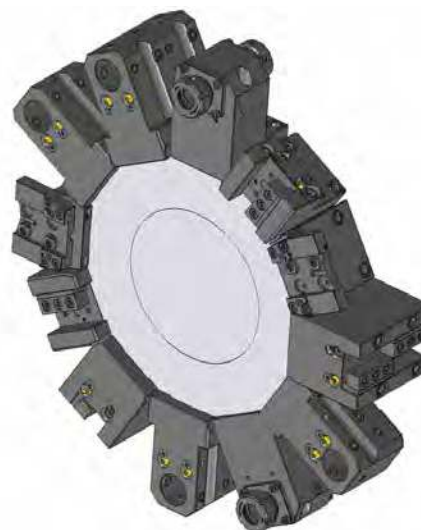
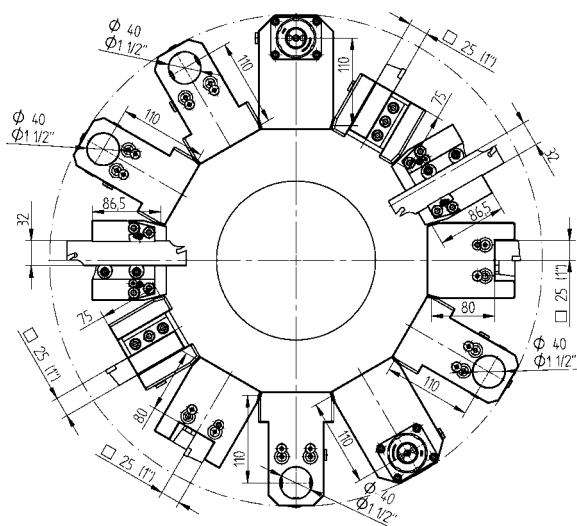
<b>ER 25</b>	413502015-60	1:1	EC
	00675000915		
<b>ER 25</b>	413502016-60	1:1	IC 80 bar
	00675000915		

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

<b>ER 25</b>	413502017-60	1:1	EC
	00675000915		

**Broaching unit for ID and OD**

<b>TN765050</b>	414532003-60	1:1	EC
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## Static Toolholders - Standard Program

**OD cutting holder**

**25** 48-86471  
**1"** 48-86473

**OD cutting holder, HP-IC**

**25** 48-86471-HP IC 80 bar  
**1"** 48-86473-HP IC 80 bar

**OD cutting holder, both sides**

**25** 48-86475  
**1"** 48-86478

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

**25** 48-86475-HP IC 80 bar  
**1"** 48-86478-HP IC 80 bar

**OD cutting holder, both sides, long**

**25** 48-104779

**Face cutting holder, both sides**

**25** 48-95357  
**1"** 48-95358

**Combination toolholder**

**Ø 40** 48-95360 IC 80 bar  
**Ø 1 1/2"** 48-95361 IC 80 bar

**Combination toolholder, both sides**

**Ø 40** 48-95363 IC 80 bar  
**Ø 1 1/2"** 48-95364 IC 80 bar

**Plug**

48-79267

## Static Toolholders - Enhanced Program

**Cut-off holder, adjustable**

**SH 32** 48-99034

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

**SH 32** 48-102282R IC 80 bar  
**SH 32** 48-102282L IC 80 bar

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

**SH 32** 48-101968R IC 80 bar  
 343-810100R48  
**SH 32** 48-101968L IC 80 bar  
 343-810100L48

**Collet face drill holder**

**ER 32** 48-95365 IC 80 bar  
 107532000

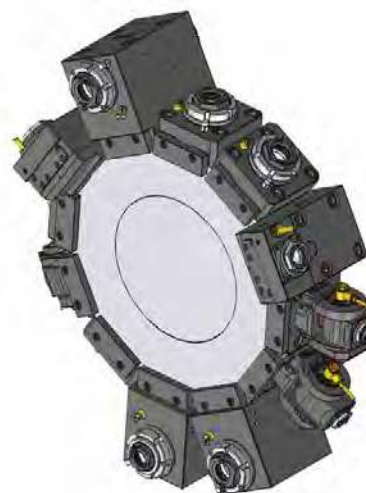
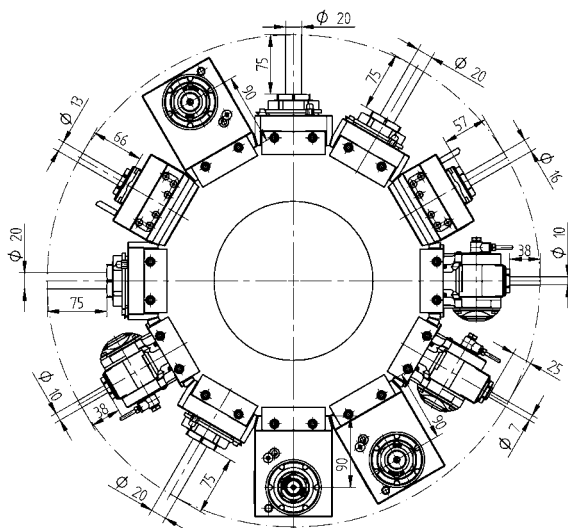
**Collet face drill holder, both sides**

**ER 32** 48-95366 IC 80 bar  
 107532000

**Boring bar holder, blank**

48-95367





## Driven Toolholders - QuickFlex®

**OD drill/milling unit**

<b>ER-32 QF</b>	420132012-60	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420132013-60	1:1	IC 80 bar
	0067732000		

**Face drill/milling unit**

<b>ER-32 QF</b>	420532032-60	1:1	EC
	0067732000		
<b>ER-32 QF</b>	420532033-60	1:1	IC 80 bar
	0067732000		

**Face drill/milling unit, both sides**

<b>ER-32 QF</b>	420532034-60	1:1	EC
	0067732000		

## Driven Toolholders - Enhanced Program

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

<b>Ø 22</b>	410222014-60	1:1	EC
	00675000483		
<b>Ø 1"</b>	410225004-60	1:1	EC
	00675000483		

**OD drill/milling unit, offset**

<b>ER 25</b>	410116035-60	1:1	EC
	00675000932		
<b>ER 25</b>	410116034-60	1:1	IC 80 bar
	00675000932		
<b>ER 20</b>	410113003-60	1:2	EC
	00675000939		
<b>ER 20</b>	410113004-60	1:2	IC 80 bar
	00675000939		

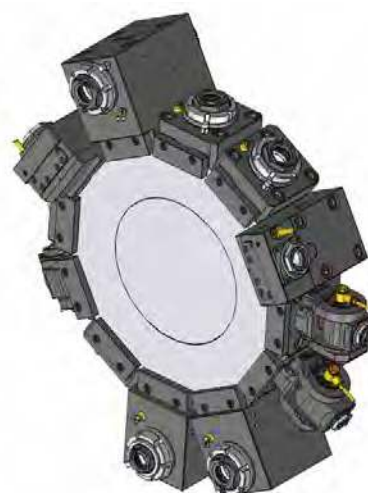
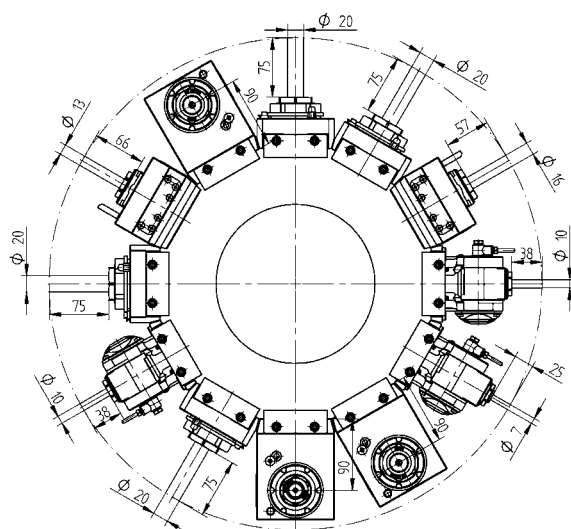
**Face drill/milling unit**

<b>ER-25 QF</b>	420525018-60	1:2	EC
	0067725001		
<b>ER-25 QF</b>	420525019-60	1:2	IC 80 bar
	0067725001		
<b>ER-32 QF</b>	420532035-60	2:1	EC
	0067732000		
<b>ER-32 QF</b>	420532036-60	2:1	IC 80 bar
	0067732000		

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

<b>Ø 22</b>	410622011-60	1:1	EC
	00675000483		
<b>Ø 1"</b>	410625007-60	1:1	EC
	00675000483		





### Driven Toolholders - Enhanced Program



#### Adjustable angle drill/milling unit

ER 16	411010003-60	1:1	EC
	00675000902		
ER 16	411010004-60	1:1	IC 80 bar
	00675000902		
ER 11	411007001-60	1:2	EC
	00675000914		
ER 11	411007002-60	1:2	IC 80 bar
	00675000914		

## 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
240025016	ø 16
240025020	ø 20



### Reduction sleeve Ø 32

240032006	ø 6
240032008	ø 8
240032010	ø 10
240032012	ø 12
240032016	ø 16
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



### 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"

## Standard reduction sleeves - cylindrical



### 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"
2400200088	ø 7/8"
2400200100	ø 1"
2400200125	ø 1 1/4"
2400200150	ø 1 1/2"
2400200175	ø 1 3/4"

### Standard reduction sleeves - morse taper



#### 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 sleeve Ø 50

240550002	MT 2
240550003	MT 3
240550004	MT 4

## Collets DIN 6499B (ER/ESX)



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



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



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

## Collets DIN 6499B (ER/ESX)



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



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

Collets DIN 6499B (ER/ESX)



<b>ER 40</b>	mm	inch
190040000	ø 26-3	ø 1.024-0.118
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

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



<b>ER 11</b>	mm	inch
191011030	ø 3	
191011040	ø 4	
191011050	ø 5	
191011060	ø 6	
191111013-in		ø 0.125
191111019-in		ø 0.188
191111025-in		ø 0.25



<b>ER 16</b>	mm	inch
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	
191116001		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



<b>ER 20</b>	mm	inch
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	
191120001		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



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

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



<b>ER 25</b>	mm	inch
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	
191125001		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



<b>ER 40</b>	mm	inch
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	
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



<b>ER 32</b>	mm	inch
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	
191132001		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



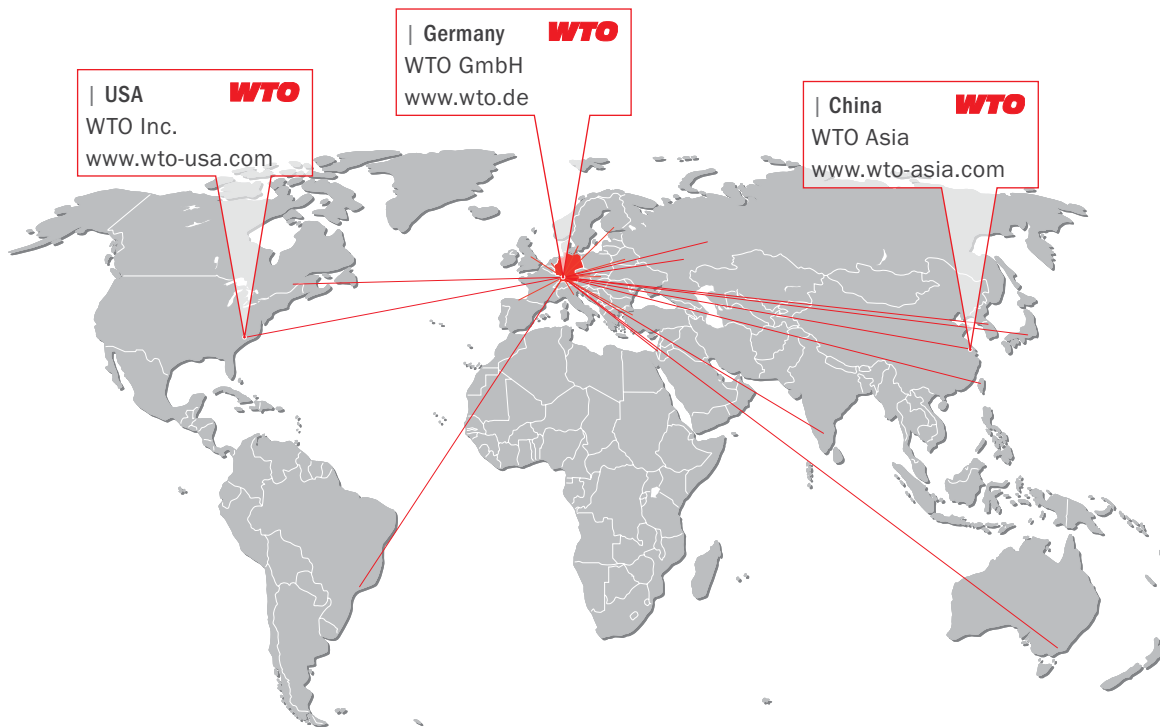
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