GROOVING & PARTING

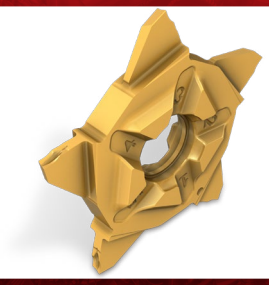
41-2024

JULY 2024

METRIC

NPA

New Product Announcement



No Setup Time

5 Cutting Corners

5 Cutting Corners

Cost Effective Inserts

Member IMC Group

ISCAR

QUICKPENTA

Penta 24 Inserts and Tools for Quick Cutting Edge Indexing with a Safety Lock Clamping Mechanism

NPA New Product Announcement

QUICKPENTA

No Setup Time

5 Cutting Corners

5 Cutting Corners

Cost Effective Inserts

Highlights

NEW QUICKPENTA 24 Inserts and Tools Enable Fast Indexing without Removing the Clamping Screw, and Are Designed with a Safety Clamping Mechanism

- ✓ A new QUICK-PENTA 24 inserts enable edge indexing without removing the clamping screw.
- ✓ Next generation with SAFE-T-LOCK clamping mechanism for precision grooving, parting & light turning applications.
- ✓ Provide superior insert stability, reliable clamping and high precision indexing.
- ✓ The QUICK-PENTA 24 inserts can be clamped on traditional toolholders.
- ✓ Traditional PENTA inserts can't be mounted on the new toolholders.
- ✓ Versatile pinpointed coolant directed to the cutting zone for improved insert tool life & surface finish.
- ✓ 4 Coolant inlets including an MC connection.
- ✓ Insert indexing and replacement can be performed from both sides of the tool.
- ✓ A wide range of inserts from 0.5 up to 3.2mm can be mounted on the same toolholder.
- ✓ The inserts will be available with "C" and "J" type chipformers.

Click for Short Video

Click for Short Video

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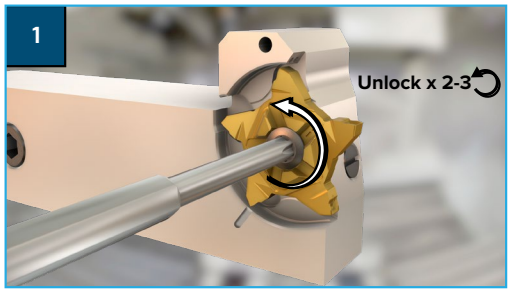
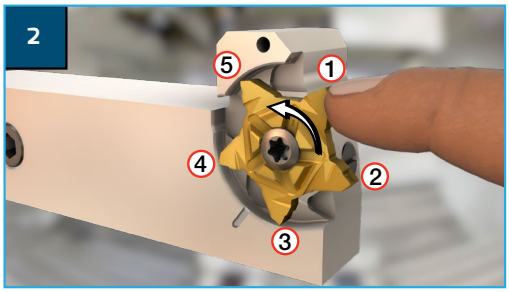
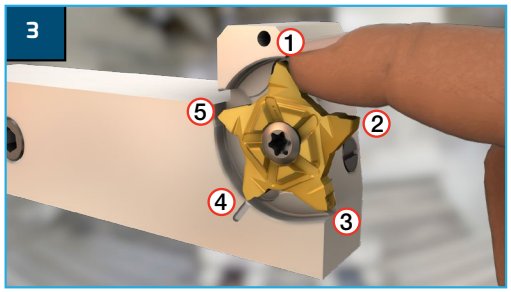
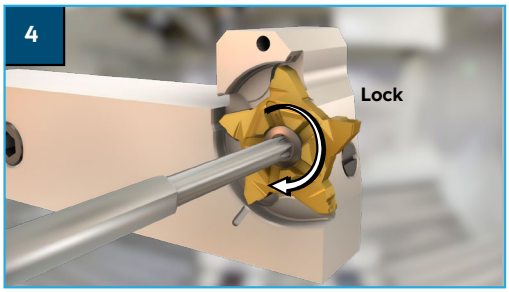
NPA New Product Announcement

QUICKPENTA









No Setup Time

5 Cutting Corners

Cost Effective Inserts

Click for Short Video

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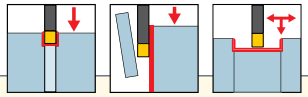
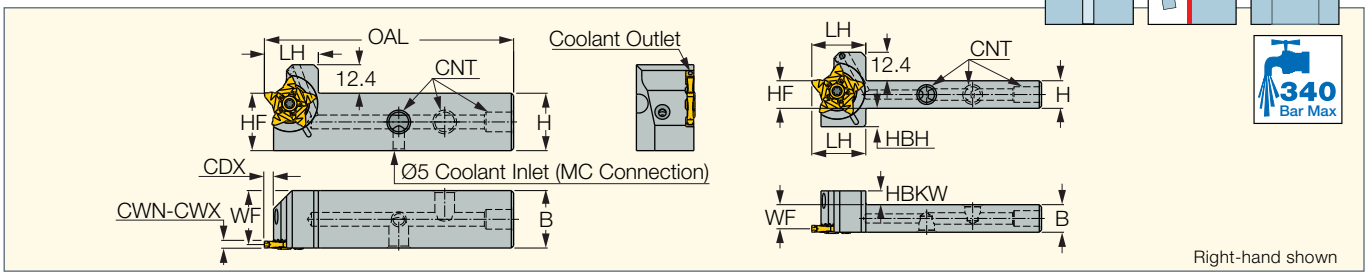
QUICKPENTA

PCHR/L-24-JHP-QC/MC

Grooving, Parting and Recessing Tools with Safety Lock Clamping for Five Cutting Edged Inserts

https://www.iscar.com/eCatalog/Family.aspx?fnum=5314&mapp=TG&GFSTYP=M&srch=1



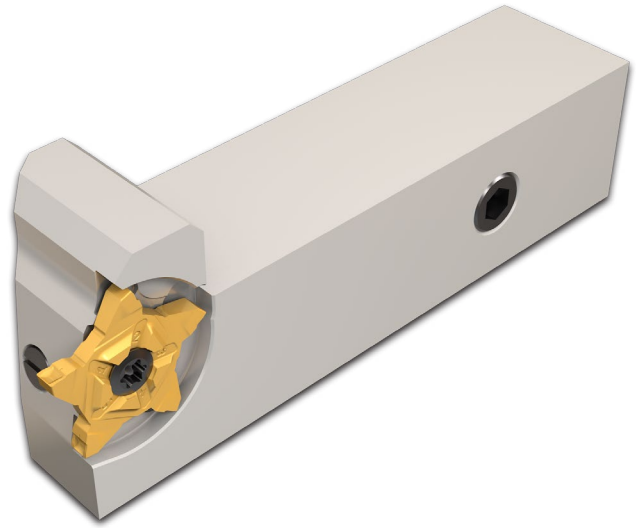


Designation	H	HF	B	CWN[2]	CWX[3]	CDX	WF	HBKW	OAL	CNT	LH	HBH	Insert
PCHR/L 12-24-JHP-QC	12.0	12.0	12.0	0.50	3.18	6.40	10.50	6.00	100.00	UNF 5/16-24	23.5	8.0	PENTA 24...SL
PCHR/L 16-24-JHP-QC	16.0	16.0	16.0	0.50	3.18	6.40	14.50	2.00	93.50	UNF 5/16-24	23.5	4.0	PENTA 24...SL
PCHR/L 20-24-JHP-MC-QC [1]	20.0	20.0	20.0	0.50	3.18	6.40	18.50	-	93.50	G1/8	23.5	-	PENTA 24...SL
PCHR/L 25-24-JHP-MC-QC [1]	25.0	25.0	25.0	0.50	3.18	6.40	23.50	-	108.50	G1/8	23.5	-	PENTA 24...SL

[1] In addition, an MC connection is available for this tool
[2] Minimum cutting width
[3] Maximum cutting width

Spare Parts

Designation	Screw	Plug	Plug 1	Key	Key 1	Key 2	Screw 1
PCHR/L 12-24-JHP-QC	SR 16-212-01397R		SR 5/16UNF TL360		HW 5/32"	T-2010/5	SR M3X0.5X10DIN7991 10.9
PCHR/L 16-24-JHP-QC	SR 16-212-01397R		SR 5/16UNF TL360		HW 5/32"	T-2010/5	SR M3X0.5X10DIN7991 10.9
PCHR/L 20-24-JHP-MC-QC	SR 16-212-01397R	SR M6X6 DIN913 TL360	PLG G1/8 TL360	HW 3.0	HW 5.0	T-2010/5	SR M3X0.5X10DIN7991 10.9
PCHR/L 25-24-JHP-MC-QC	SR 16-212-01397R	SR M6X6 DIN913 TL360	PLG G1/8 TL360	HW 3.0	HW 5.0	T-2010/5	SR M3X0.5X10DIN7991 10.9



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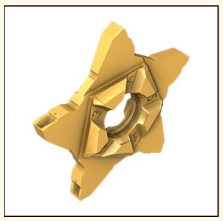
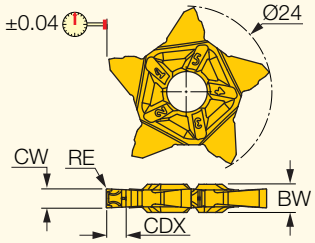
QUICKPENTA

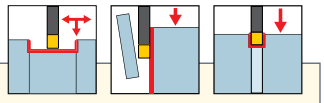
PENTACUT

PENTA 24N-C-SL

First Choice for The Parting of Bars, Hard Materials,
and Tough Applications with a Negative Cutting Rake Angle
https://www.iscar.com/eCatalog/Family.aspx?fnum=5328&mapp=TG&app=0&GFSTYP=M&fr=1





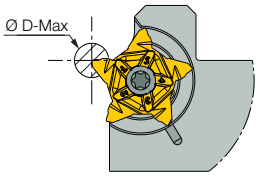


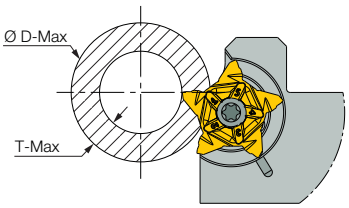
Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	BW	IC808G
PENTA 24N200C020SL	2.00	0.020	0.20	0.030	6.00	4.00	●
PENTA 24N300C020SL	3.00	0.020	0.20	0.030	6.20	4.00	●

• CUTDIA as a function of depth of cut (CDX).
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL





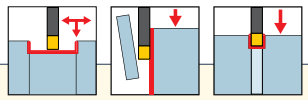
Designation	T-Max	D-Max As a Function of Depth of Cut (T) T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2
PENTA 24N200C020SL	6.0	N.L.	470	210	120	75	45	20	-
PENTA 24N300C020SL	6.2	N.L.	470	210	120	75	60	40	20

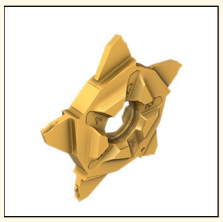
(1) The data in those tables refers to standard inserts only.
(2) As T decreases ,D-Max Increases. See tables for further data.
(3) N.L. = No Limit.

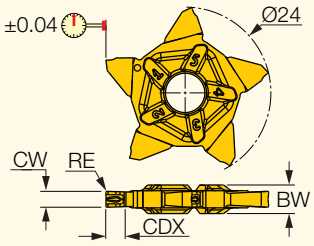
QUICKPENTA

PENTA 24N-J-SL

Five Cutting Edges for Parting and Grooving with Positive Rake Angle Clamped Onto Standard PENTACUT Holders.
https://www.iscar.com/eCatalog/Family.aspx?fnum=5423&mapp=TG&app=0&GFSTYP=M&fr=1





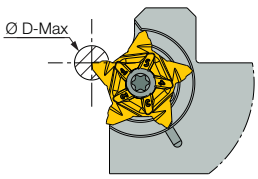


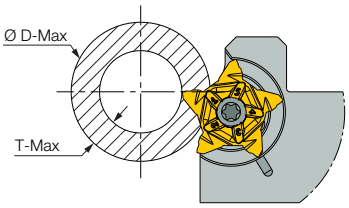
Designation	Dimensions CW	CWTOL(1)	RE	RETOL(2)	CDX(3)	BW	IC808G
PENTA 24N050J004SL	0.50	0.020	0.04	0.020	2.50	4.00	•
PENTA 24N100J006SL	1.00	0.020	0.06	0.020	3.50	4.00	•
PENTA 24N150J010SL	1.50	0.020	0.10	0.020	5.00	4.00	•
PENTA 24N200J020SL	2.00	0.020	0.20	0.030	6.00	4.00	•
PENTA 24N247J020SL	2.47	0.020	0.20	0.030	5.00	4.00	•
PENTA 24N300J020SL	3.00	0.020	0.20	0.030	6.20	4.00	•

• CUTDIA as a function of depth of cut (CDX).
(1) Cutting width tolerance (+/-)
(2) Corner radius tolerance (+/-)
(3) Cutting depth maximum

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars T-Max	D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL





Designation	D-Max As a Function of Depth of Cut (T) T-Max	T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0	T≤6.2
PENTA 24N050J004SL	2.5	-.	-	-	-	-	-	-	-
PENTA 24N100J006SL	3.5	N.L.	250	-	-	-	-	-	-
PENTA 24N150J010SL	5.0	N.L.	470	210	70	30	-	-	-
PENTA 24N200J020SL	6.0	N.L.	470	210	120	75	45	20	-
PENTA 24N247J020SL	5.0	N.L.	470	210	70	30	-	-	-
PENTA 24N300J020SL	6.2	N.L.	470	210	120	75	60	40	20

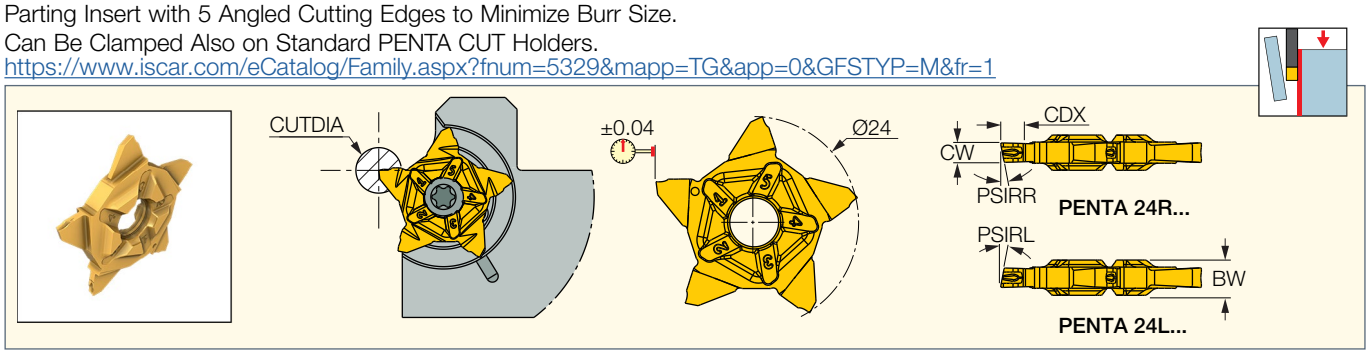
(1) The data in those tables refers to standard inserts only.
(2) As T decreases ,D-Max Increases. See tables for further data.
(3) N.L. = No Limit.

QUICKPENTA

PENTACUT

PENTA 24R/L-DSL

Parting Insert with 5 Angled Cutting Edges to Minimize Burr Size.
Can Be Clamped Also on Standard PENTA CUT Holders.
https://www.iscar.com/eCatalog/Family.aspx?fnum=5329&mapp=TG&app=0&GFSTYP=M&fr=1

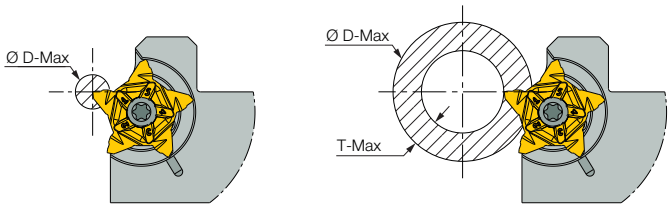


Designation	Dimensions						IC1010
	CW	CWTOL(1)	CDX(2)	PSIRL	PSIRR	CUTDIA	
PENTA 24L100J15DSL	1.00	0.020	3.50	15.0	-	7.0	●
PENTA 24R100J15DSL	1.00	0.020	3.50	-	15.0	7.0	●
PENTA 24L150J06DSL	1.50	0.020	5.00	6.0	-	10.0	●
PENTA 24R150J06DSL	1.50	0.020	5.00	-	6.0	10.0	●
PENTA 24L200J06DSL	2.00	0.020	6.00	6.0	-	12.0	●
PENTA 24R200J06DSL	2.00	0.020	6.00	-	6.0	12.0	●

• CUTDIA - parting to center • CUTDIA as a function of depth of cut (CDX)
(1) Cutting width tolerance (+/-)
(2) Cutting depth maximum

Designation	CW ± 0.02	Parting to Center D-Max	Parting Hollow Bars	
			T-Max	D-Max
PENTA 24...SL	CW = 0.50	5	2.5*	250
	CW = 1.00	7	3.5	250
	CW = 1.50	10	5.0	30
	CW = 2.00	12	6.0	20
	CW = 2.47	10	5.0	30
	CW = 3.00	12.4	6.2	20

*Refers to PENTA 24N050J004SL



Designation	Parting to Center D-Max	D-Max As a Function of Depth of Cut (T) (for Parting Hollow Bars)						
		T≤3.0	T≤3.5	T≤4.0	T≤4.5	T≤5.0	T≤5.5	T≤6.0
PENTA 24R/L100J15DSL	7	N.L.	250	-	-	-	-	-
PENTA 24R/L150J06DSL	10	N.L.	470	210	70	30	-	-
PENTA 24R/L200J06DSL	12	N.L.	470	210	120	75	45	20

(1) The data in those tables refers to standard inserts only.
(2) As T decreases ,D-Max Increases. See tables for further data.
(3) N.L. = No Limit.