

PENTACUT

Expansion of the PENTA 24N with J-Type Chipformer

UPDATED

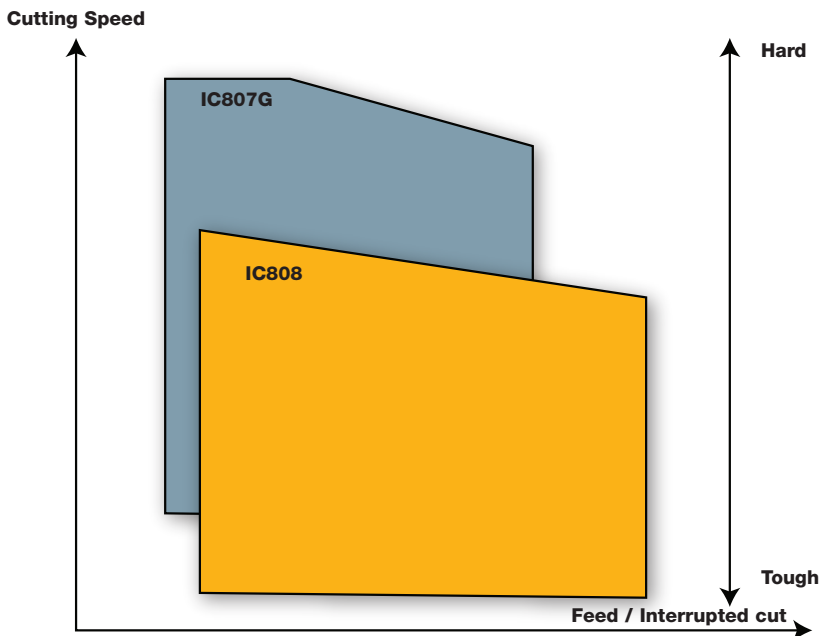
Highlights

- ISCAR is extending the width range of the PENTA 24N:**
- A. J-type chipformer with 3.30 to 4.23 mm insert widths**
 - B. Inserts made from carbide grade IC807G in the most popular width sizes**
 - C. Recently added tools for the new width range of the insert**

The **J-type chipformer** is designed for precision grooving and parting on soft parts.

IC807G grade features a hard submicron substrate and is TiAlN PVD coated. Suitable mainly for grooving and parting heat resistant alloys, austenitic stainless steel and hard steel at medium to high cutting speeds, low to medium feed and stable machining conditions.

Grade Application Range



Alloy Steel	Austenitic Stainless	High Temp. Alloys	Nonferrous Materials	Cast Iron
✓	✓	✓	✗	✓



The new inserts can be mounted on the standard tools.

We are confident that the combination of the most economical five-edged insert and the already popular J-type chipformer is a winning solution for machining any soft and ductile material.

The new inserts will further extend the application options of ISCAR's very successful PENTA 24 tools.

Availability

In stock.

Prices

Your price list will be sent to you by the pricing department and it is available in the **GAL** system.

Sincerely,

A handwritten signature in black ink that reads "D. ZOLA".

David Zola
Chief Technical Officer,
Iskar Headquarters

Sincerely,

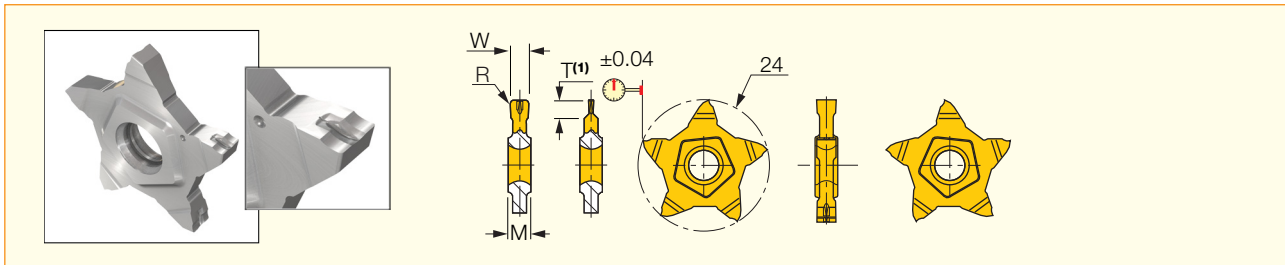
A handwritten signature in black ink that reads "K. Guy".

Kobi Guy
Product Manager,
Parting & Slitting, Grip System
Iskar Headquarters



PENTA 24N-J

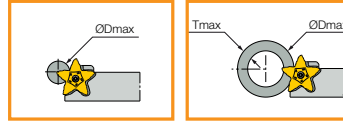
Parting and Grooving Insert with 5 Cutting Edges, for Soft Materials, Parting of Tubes, Small and Thin-Walled Parts



Designation	Dimensions				Tough ↔ Hard			Recommended Machining Data f groove (mm/rev)
	W ^{±0.02}	R	M	T _{max-r} ⁽¹⁾	IC1008	IC908	NEW IC807G	
PENTA 24N050J000	0.50	0.00	4.00	1.00		●		0.02-0.04
PENTA 24N050J004	0.50	0.04	4.00	2.50	●			0.02-0.05
PENTA 24N080J000	0.80	0.00	4.00	1.60		●		0.02-0.05
PENTA 24N100J004	1.00	0.04	4.00	3.50		●		0.03-0.07
PENTA 24N100J006	1.00	0.06	4.00	3.50	●		●	0.03-0.07
PENTA 24N104J000	1.04	0.00	4.00	2.00		●		0.02-0.07
PENTA 24N120J000	1.20	0.00	4.00	2.00		●	●	0.03-0.07
PENTA 24N125J010	1.25	0.10	4.00	2.00		●		0.03-0.07
PENTA 24N140J000	1.40	0.00	4.00	2.00		●		0.03-0.08
PENTA 24N147J000	1.47	0.00	4.00	2.50		●		0.03-0.08
PENTA 24N150J010	1.50	0.10	4.00	5.00	●	●	●	0.03-0.10
PENTA 24N157J015	1.57	0.15	4.00	3.00		●	●	0.00-0.12
PENTA 24N170J010	1.70	0.10	4.00	3.00		●	●	0.03-0.12
PENTA 24N178J018	1.78	0.18	4.00	3.00		●	●	0.04-0.12
PENTA 24N185J015	1.85	0.15	4.00	3.00		●		0.04-0.12
PENTA 24N196J015	1.96	0.15	4.00	3.00		●	●	0.04-0.12
PENTA 24N200J020	2.00	0.20	4.00	6.00	●	●	●	0.04-0.12
PENTA 24N222J015	2.22	0.15	4.00	3.50		●	●	0.04-0.16
PENTA 24N230J020	2.30	0.20	4.00	3.50		●	●	0.04-0.16
PENTA 24N239J015	2.39	0.15	4.00	5.00		●	●	0.04-0.16
PENTA 24N247J020	2.47	0.20	4.00	5.00		●	●	0.04-0.16
PENTA 24N270J010	2.70	0.10	4.00	5.00		●		0.04-0.16
PENTA 24N287J020	2.87	0.20	4.00	6.50		●		0.04-0.16
PENTA 24N300J000	3.00	0.00	4.00	6.50		●		0.04-0.10
PENTA 24N300J020	3.00	0.20	4.00	6.50		●	●	0.04-0.16
PENTA 24N300J040	3.00	0.40	4.00	6.50		●	●	0.04-0.16
PENTA 24N315J015	3.15	0.15	4.00	6.50		●		0.04-0.16
PENTA 24N318J020	3.18	0.20	4.00	6.50		●	●	0.04-0.16
NEW PENTA 24N330J010	3.30	0.10	5.00	6.40		●		0.04-0.16
NEW PENTA 24N348J020	3.48	0.20	5.00	6.40		●		0.04-0.18
NEW PENTA 24N356J020	3.56	0.20	5.00	6.40		●		0.04-0.18
NEW PENTA 24N374J020	3.74	0.20	5.00	6.40		●		0.04-0.18
NEW PENTA 24N398J020	3.98	0.20	5.00	6.20		●		0.04-0.18
NEW PENTA 24N400J040	4.00	0.40	5.00	6.20		●		0.04-0.18
NEW PENTA 24N423J010	4.23	0.10	5.00	6.20		●		0.04-0.18

⁽¹⁾Recessing is possible only with 2.39 mm and wider inserts.

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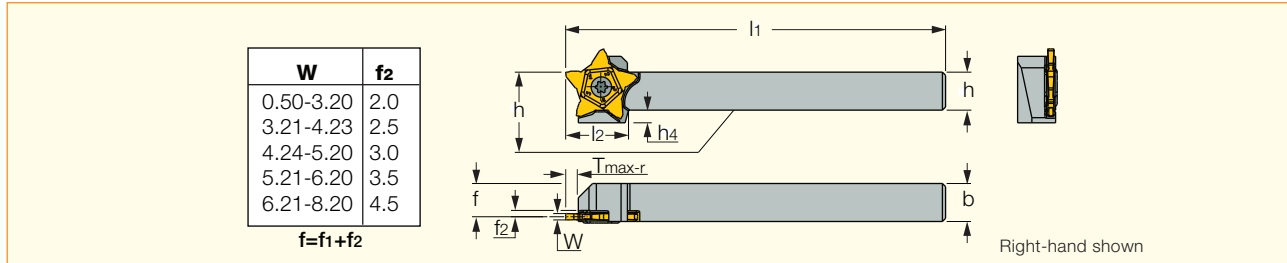
W=0.02	T _{max} ⁽¹⁾	T _{max} / D _{max}	D _{max} as a Function of Parting / Grooving Depth (T) for PENTA 24 Inserts								
			T ≤ 3.0	T ≤ 3.5	T ≤ 4.0	T ≤ 4.5	T ≤ 5.0	T ≤ 5.5	T ≤ 6.0	T ≤ 6.2	T ≤ 6.4
W=0.50	1.0	1.0 / N.L.	-	-	-	-	-	-	-	-	-
W=0.50	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=0.80	1.6	1.6 / N.L.	-	-	-	-	-	-	-	-	-
W=1.00	3.5		N.L.	250	-	-	-	-	-	-	-
1.04 ≤ W ≤ 1.40	2.0	2.0 / N.L.	-	-	-	-	-	-	-	-	-
W=1.47	2.5	2.5 / N.L.	-	-	-	-	-	-	-	-	-
W=1.50	5.0		N.L.	470	210	70	30	-	-	-	-
1.57 ≤ W ≤ 1.96	3.0		N.L.	-	-	-	-	-	-	-	-
W=2.00	6.0 ⁽²⁾		N.L.	470	210	130	75	45	20	-	-
2.22 ≤ W ≤ 2.30	3.5		N.L.	250	-	-	-	-	-	-	-
2.39 ≤ W ≤ 2.50	5.0		N.L.	470	210	70	30	-	-	-	-
2.70 ≤ W ≤ 3.18	6.2		N.L.	470	210	135	100	70	40	20	-
3.19 ≤ W ≤ 3.74	6.4		N.L.	350	180	115	80	52	32	26	20
3.75 ≤ W ≤ 4.00	6.2		N.L.	350	180	115	80	62	32	18	-
4.01 ≤ W ≤ 4.23	6.2		N.L.	350	180	115	80	62	42	25	-

⁽¹⁾ D_{max} for parting = 2 x T_{max}

⁽²⁾ For full radius insert, T_{max} = 3.0, D_{max} = No limit

PCHR/L-24

Grooving, Parting and Recessing Holders for Inserts with 5 Cutting Edges



Designation	h	b	W _{min}	W _{max}	f ₁	T _{max-r} ⁽²⁾	l ₁	l ₂	h ₄	Insert
PCHR/L 10-24	10.0	10.0	0.50	3.20	6.5	6.50	120.00	19.5	6.0	PENTA 24
PCHR/L 12-24	12.0	12.0	0.50	3.20	8.5	6.50	120.00	19.5	4.0	PENTA 24
PCHR/L 16-24	16.0	16.0	0.50	3.20	12.5	6.50	120.00	19.5	-	PENTA 24
PCHR/L 20-24	20.0	20.0	0.50	3.20	16.5	6.50	120.00	19.5	-	PENTA 24
PCHR/L 25-24	25.0	25.0	0.50	3.20	21.5	6.50	135.00	19.5	-	PENTA 24
PCHR/L 16-24-5	16.0	16.0	3.21	5.30	11.5	6.40	120.00	21.5	4.0	PENTA 24-5
PCHR/L 20-24-5	20.0	20.0	3.21	5.30	15.5	6.40	120.00	21.5	-	PENTA 24-5
PCHR/L 25-24-5	25.0	25.0	3.21	5.30	20.5	6.40	135.00	21.5	-	PENTA 24-5
PCHR/L 25-24-8 ⁽¹⁾	25.0	25.0	6.25	8.20	18.5	6.50	135.00	19.5	-	PENTAS 24-8

NEW
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NEW

• f=f₁+f₂ (according to insert width (W) being used)

⁽¹⁾ Used with special inserts only ⁽²⁾ For specific information, refer to insert data.

Spare Parts



Designation	Screw	Key
PCHL 10-24	SR 16-212-01397L	T-2010/5
PCHR 10-24	SR 16-212-01397	T-2010/5
PCHL 12-24	SR 16-212-01397L	T-2010/5
PCHR 12-24	SR 16-212-01397	T-2010/5
PCHL 16-24	SR 16-212-01397L	T-2010/5
PCHR 16-24	SR 16-212-01397	T-2010/5
PCHL 20-24	SR 16-212-01397L	T-2010/5
PCHR 20-24	SR 16-212-01397	T-2010/5
PCHL 25-24	SR 16-212-01397L	T-2010/5
PCHR 25-24	SR 16-212-01397	T-2010/5
PCHL 16-24-5	SR PCHL-8-06642	T-15/5
PCHR 16-24-5	SR PCHR-8-06642	T-15/5
PCHL 20-24-5	SR PCHL-8-06642	T-15/5
PCHR 20-24-5	SR PCHR-8-06642	T-15/5
PCHL 25-24-5	SR PCHL-8-06642	T-15/5
PCHR 25-24-5	SR PCHR-8-06642	T-15/5
PCHL 25-24-8	SR PCHL-8-06642	T-15/5
PCHR 25-24-8	SR PCHR-8-06642	T-15/5