

3D-Cut

**HITACHI
TOOL**advanced
by experience

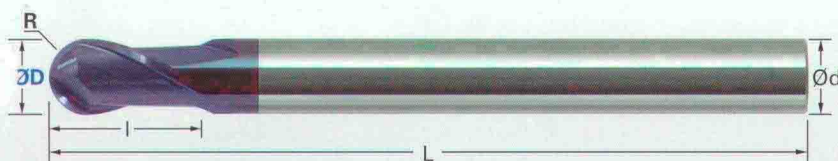
No. 410

PROMOTION

P-Ball

NEW**R 0.5 mm ~ R 6.0 mm (HSC-HPC-HHC)****Carbide Ball End Mill – Century Coated**

P-BALL | Carbide End Mill

V max
High Speed**Ry**
High Precision**▽▽**
Semi-Finishing**▽▽▽**
Finishing**HRC**
60**No. of
Teeth**
2**Carbide**
Micro
Grain**C**
Century
Coating**Rake
Angle**
Positive

ID Code	Item -No.	Z	R	ØD	I	L	Ød	Kč/kus	Type
EL-01	PB-2010	2	0.5	1	1.5	50	4	1367,-	A
EL-02	PB-2020	2	1	2	3	50	6	1461,-	A
EL-03	PB-2030	2	1.5	3	4.5	70	6	1603,-	A
EL-04	PB-2040	2	2	4	6	70	6	1697,-	A
EL-05	PB-2050	2	2.5	5	7.5	80	6	1792,-	A
EL-06	PB-2060	2	3	6	9	90	6	1839,-	B
EL-07	PB-2080	2	4	8	12	100	8	2310,-	B
EL-08	PB-2100	2	5	10	15	100	10	3064,-	B
EL-09	PB-2120	2	6	12	18	110	12	4149,-	B

Type A

Type B



ØD	0/-0.02
R	± 0.01
Ød	h6
	30°

Ball nose slot drill – 2 flute for 3-D milling, semi-finishing and finishing applications.

- Sharp geometry to minimise cutting forces and to maintain stability
- Long straight shank for better chucking and balance
- Recommended for steels, aluminiums and copper alloys

Zweischneidiger Kugelfräser für 3-D Vorschlicht- und Schlacht-Bearbeitungen.

- Scharfe Schneiden für vibrationsfreie Schnitte
- Längere Schaftausführung für individuelle Ausraglängen
- Empfohlen für Stähle, Aluminium und Kupfer

Fresa a copiare con possibilità di penetrare dal pieno – 2 eliche per lavorazione in 3-D - per operazioni di sgrossatura e semi-finitura.

- Geometria molto positiva per ridurre le forze taglienti e mantenere la stabilità
- Maggiore lunghezza dell'attacco per un migliore fissaggio del mandrino
- Raccomandato per acciai, alluminio e leghe di rame

Fresa punta esférica, 2 labios para trabajos de semiacabado y acabado en 3-D.

- Geometría positiva para minimizar el esfuerzo de corte y mantener la estabilidad
- Mango cilíndrico largo para una mejor sujeción y equilibrio
- Recomendada para acero, aluminio y aleaciones de cobre

Fraise 2 dents bout hémisphérique pour fraisage en 3D (semi-finition et finition).

- Géométrie positive pour réduire l'effort de coupe et maintenir la rigidité
- Queue cylindrique longue (meilleure tenue en pince)
- Recommandée pour les aciers, aluminiums et alliages de cuivre

CENY UVEDENY BEZ DPH**Promotion prices
valid until 03/2005****HITACHI TOOL ENGINEERING EUROPE GMBH**