



**INCH  
LINE**



**SOLID CARBIDE END  
MILL INCH SIZES**

*FRESAS DE METAL DURO CON  
MEDIDAS EN PULGADAS*



# WORKING FOR YOUR SUCCESS

Since 1952



HELION TOOLS S.L. is owned by Molins family with more than 70 years of experience in the machining industry. *HELION TOOLS S.L. es una empresa propiedad de la Familia Molins con más de 70 años de experiencia en el sector del mecanizado.*

**They offer solutions and collaborate back-to-back with their partners.**

Since its foundation in 1952, it has grown continuously with the attitude and business philosophy of: "We work for your success". The success of its customers is Helion's number one priority.

**Specialist in the manufacturing of cutting tools**

within its main market segment: endmills, drills and taps in the production facility in Manresa – Spain, a wholly-owned cutting tools production site at full capacity to serve both nationally and to another 23 countries.

**Cutting tools in stock and its flexibility in producing**

translates into immediate deliveries of purchase orders.

Thanks to its means of production, Helion Tools can ensure an optimal and agile service level to meet supply needs. Helion Tools brand guarantees products are developed, tested and commercialized with its factory.

**Helion Tools is a relationship-driven company.**

In its opinion, the most important resource is people. This is remarked and identifies its business culture while guaranteeing a solid foundation for its future.

Upright behavior is a deep-rooted value among Helion Tools. It is the commitment from both the company and its partners to carry out a fair competition within the market under the premise of respect, equity and forging their own future.

**Nowadays, there must be a sense of great responsibility**

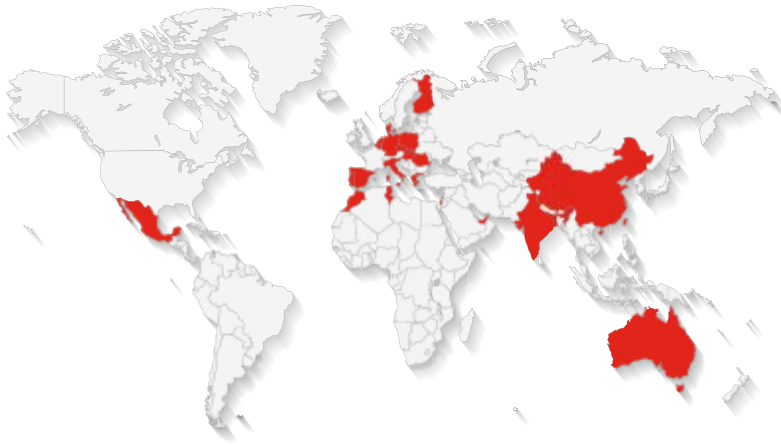
towards society and the environment. They are convinced that the only way to be successful in the long term is to take always this factor into account. For this reason, Helion Tools uses natural resources in an efficient way, avoids contaminating and disposes of waste in an adequate manner.

**"Each obstacle is a new challenge that encourages us to keep growing as we remain in the vanguard of state-of-the-art technologies, changing automation processes and the passion that keeps as all together for the mechanization sector...let's move forward together!"** Josep Ma. Molins Pujol - President





AUSTRALIA / BELGIUM / CHINA / CZECH REPUBLIC / DENMARK / FINLAND / FRANCE / GREECE / HUNGARY  
/ INDIA / ISRAEL / ITALY / MEXICO / MOROCCO / NETHERLANDS / POLAND / PORTUGAL / ROMANIA /  
SLOVAKIA / SLOVENIA / SPAIN / TUNISIA / UNITED ARAB EMIRATES



Production facility located in Manresa – Spain, a wholly-owned cutting tools production site at full capacity to serve both nationally and to another 23 countries. *Planta de producción en Manresa – España, una producción propia de herramientas a pleno rendimiento en diferentes sectores industriales del país y una red de distribuidores con presencia en 23 países.*

**Ofrece soluciones y acompaña a sus colaboradores en el proceso.** Desde su fundación en el año 1952, ha crecido continuamente con la actitud de su filosofía de negocio: “Trabajamos para su éxito”. El triunfo de sus clientes es lo mejor que les puede pasar.

**Especialistas en la fabricación de herramientas de corte** en su segmento principal de fresas, brocas y herramientas de roscar en la planta de producción en Manresa – España, una producción propia de herramientas a pleno rendimiento en diferentes sectores industriales del país y una red de distribuidores con presencia en 23 países.

**Herramientas en stock y flexibilidad en la producción** que se traduce en la entrega inmediata de las órdenes de pedido. Disponen de medios de producción propios que aseguran un óptimo nivel de servicio y agilidad en el suministro. La marca Helion Tools, es 100% garante de productos desarrollados, probados y comercializados en su fábrica.

**Helion Tools es una empresa cercana** y convencida que el recurso más importante son las personas,

hecho que identifica a su cultura empresarial y les garantiza una sólida base de futuro.

**La conducta íntegra tiene para Helion Tools un gran valor,** es su compromiso y el de sus colaboradores llevar a cabo una competencia leal en el mercado bajo la premisa de respeto, equidad y proyección de futuro.

**Conscientes que hoy más que nunca tienen una gran responsabilidad** frente a la sociedad y el medio ambiente al estar convencidos de que el éxito a largo plazo dependerá de ello, de esta manera, disponen de los recursos naturales de forma eficiente, previniendo la contaminación y gestionando los residuos de forma adecuada.

**“Cada dificultad es un nuevo reto que nos proyecta a continuar creciendo al mantenernos a la vanguardia de las nuevas tecnologías, crecientes procesos de automatización y la pasión que nos une por el sector del mecanizado... avancemos juntos!”**

**Josep Ma. Molins Pujol - Presidente**

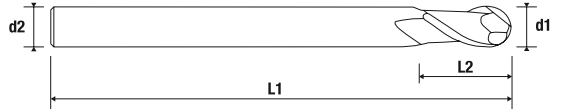


## 80.7421F

### BALL NOSE END MILL Z2 · 35°

Fresa esférica de metal duro Z2 · 35°

**NEW PRODUCT**



**SC**

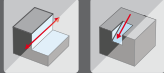
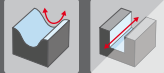
**HELIX 35°** **RACER PLUS**

**600 1200 N/mm²** **45 HRC**

**62 HRC** **INOX**

**GG(G)** **ALU NE**

**TITAN INCONEL** **UNI**



**HSC** **HHC**



| Cod.       | d1   | d2   | L1    | L2    | Z |
|------------|------|------|-------|-------|---|
| 807421F116 | 1/16 | 1/8  | 1-1/2 | 3/16  | 2 |
| 807421F564 | 5/64 | 1/8  | 1-1/2 | 3/16  | 2 |
| 807421F332 | 3/32 | 1/8  | 1-1/2 | 9/32  | 2 |
| 807421F764 | 7/64 | 1/8  | 1-1/2 | 3/8   | 2 |
| 807421F18  | 1/8  | 1/8  | 1-1/2 | 3/8   | 2 |
| 807421F316 | 3/16 | 3/16 | 2     | 5/8   | 2 |
| 807421F14  | 1/4  | 1/4  | 2-1/2 | 3/4   | 2 |
| 807421F516 | 5/16 | 5/16 | 2-1/2 | 13/16 | 2 |
| 807421F38  | 3/8  | 3/8  | 2-1/2 | 1     | 2 |
| 807421F12  | 1/2  | 1/2  | 3     | 1     | 2 |
| 807421F58  | 5/8  | 5/8  | 3-1/2 | 1-1/4 | 2 |

Unit: Inch / Unidad: Pulgadas



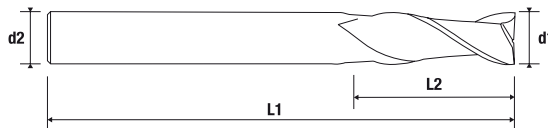
C. CONDITIONS

## SQUARE END MILL Z2 · 35°

Fresa plana de metal duro Z2 · 35°

# 80.7202F

**NEW PRODUCT**



| Cod.       | d1   | d2   | L1    | L2    | Z |
|------------|------|------|-------|-------|---|
| 807202F116 | 1/16 | 1/8  | 1-1/2 | 3/16  | 2 |
| 807202F564 | 5/64 | 1/8  | 1-1/2 | 3/16  | 2 |
| 807202F332 | 3/32 | 1/8  | 1-1/2 | 9/32  | 2 |
| 807202F764 | 7/64 | 1/8  | 1-1/2 | 3/8   | 2 |
| 807202F18  | 1/8  | 1/8  | 1-1/2 | 3/8   | 2 |
| 807202F316 | 3/16 | 3/16 | 2     | 5/8   | 2 |
| 807202F14  | 1/4  | 1/4  | 2-1/2 | 3/4   | 2 |
| 807202F516 | 5/16 | 5/16 | 2-1/2 | 13/16 | 2 |
| 807202F38  | 3/8  | 3/8  | 2-1/2 | 1     | 2 |
| 807202F12  | 1/2  | 1/2  | 3     | 1     | 2 |
| 807202F58  | 5/8  | 5/8  | 3-1/2 | 1-1/4 | 2 |

Unit: Inch / Unidad: Pulgadas



**SC**

**HELIX 35°** **RACER PLUS**

**600 1200 N/mm²** **45 HRC**

**65 HRC** **GG(G)**

**INOX** **ALU NE**

**NI ALLOYS** **UNI**



**HA** **HSC**

**HHC**

**AIR**



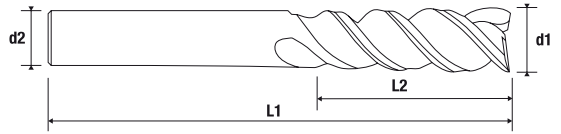
C. CONDITIONS

84.0303F

SQUARE END MILL ALU Z3 · 45°

Fresa plana de metal duro ALU Z3 · 45°

NEW PRODUCT

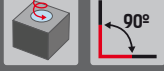
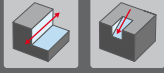


SC

HELIX 45° BRIGHT

ALU NE PLASTIC

BRONZE



POLISHED HSC

MULTI TASK Cutter



| Cod.       | d1   | d2   | L1    | L2    | Z |
|------------|------|------|-------|-------|---|
| 840303F18  | 1/8  | 1/8  | 1-1/2 | 3/8   | 3 |
| 840303F316 | 3/16 | 3/16 | 2     | 9/16  | 3 |
| 840303F14  | 1/4  | 1/4  | 2     | 3/4   | 3 |
| 840303F516 | 5/16 | 5/16 | 2-1/2 | 5/8   | 3 |
| 840303F38  | 3/8  | 3/8  | 2-1/2 | 1-1/4 | 3 |
| 840303F12  | 1/2  | 1/2  | 3     | 1-1/4 | 3 |
| 840303F58  | 5/8  | 5/8  | 3-1/2 | 1-5/8 | 3 |

Unit: Inch / Unidad: Pulgadas



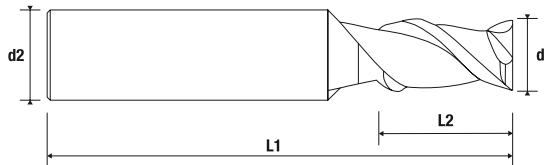
**i** C. CONDITIONS APPLICATION

## SQUARE END MILL HIGH FEED HELIX ALU Z2 · 45°

Fresa plana de metal duro de alto avance ALU Z2 · 45°

# 84.3202F

**NEW PRODUCT**



| Cod.       | d1   | d2   | L1    | L2    | Z |
|------------|------|------|-------|-------|---|
| 843302F14  | 1/4  | 1/4  | 2     | 3/4   | 2 |
| 843302F516 | 5/16 | 5/16 | 2-1/2 | 5/8   | 2 |
| 843302F38  | 3/8  | 3/8  | 2-1/2 | 1-1/4 | 2 |
| 843302F12  | 1/2  | 1/2  | 3     | 1-1/4 | 2 |
| 843302F58  | 5/8  | 5/8  | 3-1/2 | 1-5/8 | 2 |

Unit: Inch / Unidad: Pulgadas

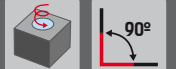
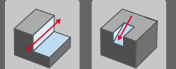


**SC**

HELIX  
**45°** SPEED  
ZR

ALU  
NE PLASTIC

BRONZE



POLISHED HSC

HPC

MULTI  
TASK  
Cutter



C. CONDITIONS

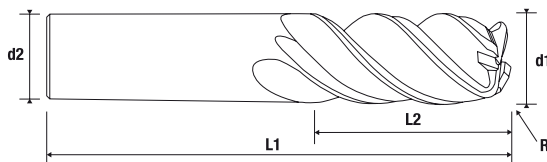


# 91.7414F

## SQUARE END MILL CORNER RADIUS Z4 · 30°

Fresa plana de metal duro tórica Z4 · 30°

**NEW PRODUCT**



Helion

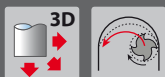
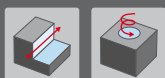
**SC**

HELIX 42° RACER PLUS

600 1200 N/mm<sup>2</sup> 45 HRC

INOX GG(G)

TITAN INCONEL



HPC HSC

MULTI TASK Cutter



MQL AIR

| Cod.        | d1   | R     | d2   | L1    | L2    | Z |
|-------------|------|-------|------|-------|-------|---|
| 917414F141  | 1/4  | 0,015 | 1/4  | 2-1/2 | 9/16  | 4 |
| 917414F142  | 1/4  | 0,030 | 1/4  | 2-1/2 | 9/16  | 4 |
| 917414F143  | 1/4  | 0,060 | 1/4  | 2-1/2 | 9/16  | 4 |
| 917414F5161 | 5/16 | 0,015 | 5/16 | 2-1/2 | 11/16 | 4 |
| 917414F5162 | 5/16 | 0,030 | 5/16 | 2-1/2 | 11/16 | 4 |
| 917414F5163 | 5/16 | 0,060 | 5/16 | 2-1/2 | 11/16 | 4 |
| 917414F381  | 3/8  | 0,020 | 3/8  | 2-1/2 | 13/16 | 4 |
| 917414F382  | 3/8  | 0,030 | 3/8  | 2-1/2 | 13/16 | 4 |
| 917414F383  | 3/8  | 0,060 | 3/8  | 2-1/2 | 13/16 | 4 |
| 917414F384  | 3/8  | 0,090 | 3/8  | 2-1/2 | 13/16 | 4 |
| 917414F121  | 1/2  | 0,020 | 1/2  | 3     | 1     | 4 |
| 917414F122  | 1/2  | 0,030 | 1/2  | 3     | 1     | 4 |
| 917414F123  | 1/2  | 0,060 | 1/2  | 3     | 1     | 4 |
| 917414F124  | 1/2  | 0,090 | 1/2  | 3     | 1     | 4 |
| 917414F125  | 1/2  | 0,125 | 1/2  | 3     | 1     | 4 |
| 917414F581  | 5/8  | 0,030 | 5/8  | 3-1/2 | 1-1/4 | 4 |
| 917414F582  | 5/8  | 0,060 | 5/8  | 3-1/2 | 1-1/4 | 4 |
| 917414F583  | 5/8  | 0,090 | 5/8  | 3-1/2 | 1-1/4 | 4 |
| 917414F584  | 5/8  | 0,125 | 5/8  | 3-1/2 | 1-1/4 | 4 |

Unit: Inch / Unidad: Pulgadas



C. CONDITIONS

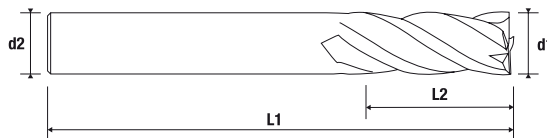


**SQUARE END MILL Z4 · 35°**

Fresa plana de metal duro Z4 · 35°

**80.7402F**

**NEW PRODUCT**



| Cod.       | d1   | d2   | L1    | L2    | Z |
|------------|------|------|-------|-------|---|
| 807402F116 | 1/16 | 1/8  | 1-1/2 | 3/16  | 4 |
| 807402F564 | 5/64 | 1/8  | 1-1/2 | 3/16  | 4 |
| 807402F332 | 3/32 | 1/8  | 1-1/2 | 9/32  | 4 |
| 807402F764 | 7/64 | 1/8  | 1-1/2 | 3/8   | 4 |
| 807402F18  | 1/8  | 1/8  | 1-1/2 | 3/8   | 4 |
| 807402F316 | 3/16 | 3/16 | 2     | 5/8   | 4 |
| 807402F14  | 1/4  | 1/4  | 2-1/2 | 3/4   | 4 |
| 807402F516 | 5/16 | 5/16 | 2-1/2 | 13/16 | 4 |
| 807402F38  | 3/8  | 3/8  | 2-1/2 | 1     | 4 |
| 807402F12  | 1/2  | 1/2  | 3     | 1     | 4 |
| 807402F58  | 5/8  | 5/8  | 3-1/2 | 1-1/4 | 4 |

Unit: Inch / Unidad: Pulgadas



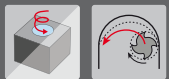
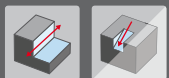
**SC**

**HELIX 35°** **RACER PLUS**

**600 1200 N/mm²** **62 HRC**

**GG(G)** **ALU NE**

**NI ALLOYS** **UNI**



**HA** **HSC**

**HHC**

**AIR**



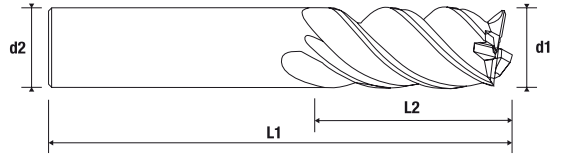
C. CONDITIONS

# 91.7404F

## VARIABLE HELIX SC END MILL Z4 · 35°/38°

Fresa plana de metal duro con hélice variable Z4 · 35°/38°

**NEW PRODUCT**



**SC**

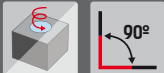
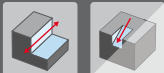
**HELIX 35/38°** **RACER PLUS**



**600 1200 N/mm²** **55 HRC**

**INOX GG(G)**

**NI ALLOYS TITAN INCONELL**



**HPC HSC**



| Cod.       | d1   | d2   | L1    | L2    | Z |
|------------|------|------|-------|-------|---|
| 917404F14  | 1/4  | 1/4  | 2-1/2 | 1/2   | 4 |
| 917404F516 | 5/16 | 5/16 | 2-1/2 | 13/16 | 4 |
| 917404F38  | 3/8  | 3/8  | 2-1/2 | 7/8   | 4 |
| 917404F12  | 1/2  | 1/2  | 3     | 1     | 4 |
| 917404F58  | 5/8  | 5/8  | 3-1/2 | 1-1/4 | 4 |

Unit: Inch / Unidad: Pulgadas



C. CONDITIONS

# Helion

# LIFT



## Productivity and flexibility

We have automated our logistic process to guarantee our customer a faster and more precise control of the goods.

**WORKING FOR YOUR SUCCES** Since 1952

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Tel. +34 93 877 08 69

[info@helion-tools.com](mailto:info@helion-tools.com)

Calle Miquel Servet 37 Nave 13 · Polígono Industrial Bufalvent - 08243 Manresa · Barcelona · Spain

# ICONOGRAPHY / ICONOGRAFÍA

**SC** **HSS** **HSS-E** **HSSCO** **M42** **HSS-E-PM** **CBN SOLID** **PM** **TOOL MATERIAL**  
**TIPO DE MATERIAL**

**m7** **h6** **h7** **H7** **h8** **6HX** **6H** **6G** **2B** **TOLERANCE**  
**TOLERANCIA**

**HA** Without Sin Weldon **HB** With Con Weldon **SHANK DESIGN**  
**FORMA DEL MANGO** **1,5XD** **2XD** **3XD** **5XD** **8XD** **10XD** **12XD** **CUTTING DEPTH**  
**PROFUNDIDAD DE CORTE**

**Full-stot** Ranurado **Copy** Copiado **Side Milling** Fresado Lateral **Ramping** Rampa **Interpolation** Interpolación **Trochoidal** Trocoidal **APPLICATION**  
**OPERACIÓN**

**HSC** High Speed Cutting Corte de Gran Avance **HHC** High Hard Cutting Corte de Materiales Templados **HPC** High Performance Cutting Corte de Alto Rendimiento **MULTI TASK** Multi Task Cutter Corte Multi Área

**3D** 3D Side Trajectory, Ramp and Drilling Trayectoria lateral, rampa y taladrado **2D** 2D Side Trajectory and Ramping Trayectoria lateral y rampa **Axial** Axial Trajectory Trayectoria axial **Side Trajectory** Trayectoria lateral **TRAJECTORY**  
**TRAYECTORIA**

**VARIABLE HELIX** Frontal Unequal Angle Angulo Frontal Desigual **HELIX 30°** **HELIX 35°** **HELIX 40°** **HELIX 42°** **HELIX ANGLE** Ángulo de la Hélice ... **POINT ANGLE** Ángulo de la Punta

**90°** Cutting Edge Canto Vivo **Toric** Tórica **45°** Chamfer Chafán **Ball Nose** Esférica **Corner Radius** Radio de Canto **EDGE SHAPE**  
**FORMA DE LA ARISTA**

**MQL** Minimum Quantity of Lubricant Micro Lubricación **AIR** Air Cooling Refrigeración por Aire **Dry or With Coolant** Dry or With Coolant Machining Mecanizado en seco con Refrigeración **With Coolant** Con Refrigeración **Without Coolant** Sin Refrigeración **COOLANT**  
**REFRIGERACIÓN**

**INTERNAL COOLANT** REFRIGERACIÓN INTERNA **Blind Hole** Agujero Ciego **Through Hole** Agujero Pasante **HOLE TYPE** TIPO DE AGUJERO **FORM B** P<sub>x4</sub> **FORM C** P<sub>x2,5</sub> **FORM D** P<sub>x3</sub> **FORM E** P<sub>x1,5</sub> **HEAD SHAPE**  
**FORMA DE PUNTA**

**HELION NORM** NORMA HELION **DIN 13** **DIN 212E** **DIN 327** **DIN 333** **DIN 335** **DIN 338** **DIN 371** **DIN 374** **DIN 376** **DIN 371/376** **ISO NORM**  
**NORMA ISO**

**RACER** **RACER PLUS** **VOLCANO** **VOLCANO PLUS** **VOLCANO GOLD** **DEEP BLUE** **SPEED** **SPEED ZR** **DRILLANT** **DSC** **SHARK** **TIN UP** **DIAMOND** **BLACK HVA** **BRIGHT** **COATINGS**  
**RECUBRIMIENTOS**

**NEW** New Product Nuevo Producto **UNI** Universal Application Aplicación Universal **Micro Tools** Micro Herramientas **POLISHED** Polished Pulido **OTHERS PICTOGRAMS**  
**OTROS ICONOS**

**600** 1200 N/mm<sup>2</sup> **45** HRC **55** HRC **60** HRC **70** HRC **INOX** **GG(G)** **ALU** NE **PLASTIC** **GFK** CFK **BRONZE** **SI ≥ 7%** **TITAN** INCONELL **NI** ALLOYS **GRAPHITE** **MATERIALS**  
**MATERIALES**







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SUCCESS  
SINCE 1952**

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[www.helion.tools](http://www.helion.tools)