

# 新的螺旋刃钻头



## 针对无铅黄铜的钻削方案

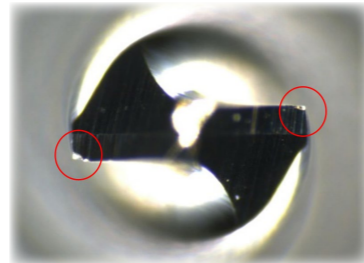
# 螺旋刃钻头 于无铅黄铜

## 加工案例

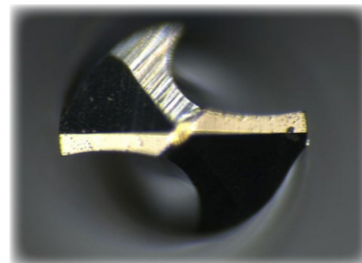
### 案例N°1

#### WEAR RESISTANCE

材料 : CuZn37 (170HV 硬度)  
 $\varnothing$  tool = 0.8 mm  
 n = 20'000 (Vc = 50 m/min)  
 Vf = 400 mm/min (f = 0.02 mm)  
 润滑 : 微量润滑  
 机床 : 3 轴加工中心



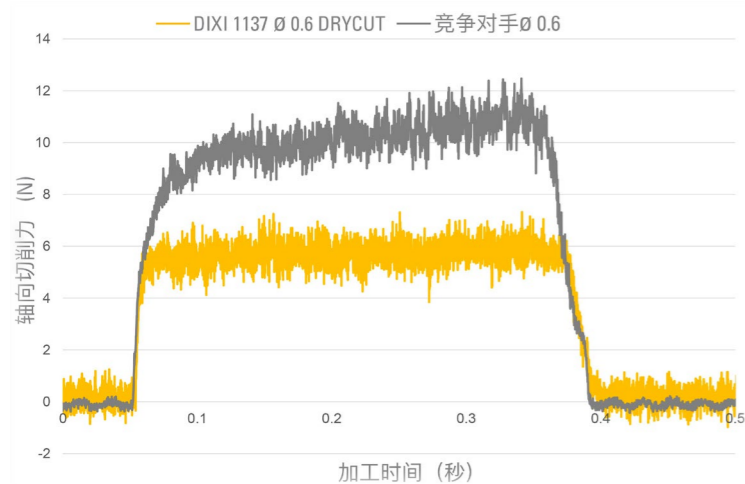
传统钻头  
10个孔  
显著磨损



DIXI 1137 DRYCUT  
900个孔  
没有磨损

### 案例N°2

#### 降低切削力



材料 : CuZn42 (170HV 硬度)  
 $\varnothing$  tool = 0.6 mm  
 n = 20'000 (Vc = 50 m/min)  
 Vf = 400 mm/min (f = 0.02 mm)  
 润滑 : 微量润滑  
 机床 : 3 轴加工中心

### 结论

在同等状况下，DIXI 1137系列钻头可以降低超过30%的切削力

**DIXI 1137**

直径范围从  
 $\varnothing 0.15\text{mm}$   
至  $\varnothing 3.00\text{mm}$

**DIXI 1137 DRYCUT**

1137系列 视频



DIXI POLYTOOL S.A.  
 Av. du Technicum 37  
 CH-2400 Le Locle

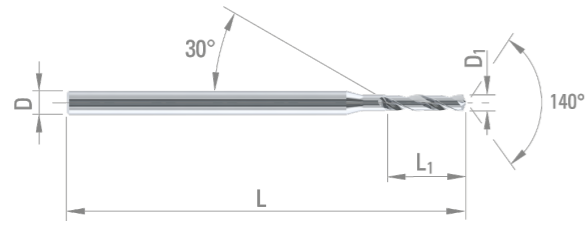
T +41 (0)32 933 54 44  
 F +41 (0)32 931 89 16

dixipoly@dixi.ch

敬请感受瑞士精度

# DIXI 1137

螺旋刃钻头  
用于无铅黄铜



易切钢

Titanium,  
titanium  
alloy

Cu alloy  
Silver  
Gold

Cu alloy  
difficult  
to machine

Alu



$D_1 \geq 0.5$

| $D_{10/-0.004}$ | $L_1$ | $D_{h5}$ | L  | CARBIDE | DRY CUT* |
|-----------------|-------|----------|----|---------|----------|
| 0.15            | 0.8   | 1.0      | 30 | 377730  | 378235   |
| 0.16            | 0.8   | 1.0      | 30 | 377731  | 378236   |
| 0.17            | 0.9   | 1.0      | 30 | 377732  | 378237   |
| 0.18            | 0.9   | 1.0      | 30 | 377733  | 378238   |
| 0.19            | 1.0   | 1.0      | 30 | 377734  | 378239   |
| 0.20            | 1.0   | 1.0      | 30 | 377735  | 378240   |
| 0.21            | 1.1   | 1.0      | 30 | 377736  | 378241   |
| 0.22            | 1.1   | 1.0      | 30 | 377737  | 378242   |
| 0.23            | 1.2   | 1.0      | 30 | 377738  | 378243   |
| 0.24            | 1.2   | 1.0      | 30 | 377739  | 378244   |
| 0.25            | 1.3   | 1.0      | 30 | 377740  | 378245   |
| 0.26            | 1.3   | 1.0      | 30 | 377741  | 378246   |
| 0.27            | 1.4   | 1.0      | 30 | 377742  | 378247   |
| 0.28            | 1.4   | 1.0      | 30 | 377743  | 378248   |
| 0.29            | 1.5   | 1.0      | 30 | 377744  | 378249   |
| 0.30            | 1.5   | 1.0      | 30 | 377745  | 378250   |
| 0.31            | 1.6   | 1.0      | 30 | 377746  | 378251   |
| 0.32            | 1.6   | 1.0      | 30 | 377747  | 378252   |
| 0.33            | 1.7   | 1.0      | 30 | 377748  | 378253   |
| 0.34            | 1.7   | 1.0      | 30 | 377749  | 378254   |
| 0.35            | 1.8   | 1.0      | 30 | 377750  | 378255   |
| 0.36            | 1.8   | 1.0      | 30 | 377751  | 378256   |
| 0.37            | 1.9   | 1.0      | 30 | 377752  | 378257   |
| 0.38            | 1.9   | 1.0      | 30 | 377753  | 378258   |
| 0.39            | 2.0   | 1.0      | 30 | 377754  | 378259   |
| 0.40            | 2.0   | 1.0      | 30 | 377755  | 378260   |
| 0.41            | 2.1   | 1.0      | 30 | 377756  | 378261   |
| 0.42            | 2.1   | 1.0      | 30 | 377757  | 378262   |
| 0.43            | 2.2   | 1.0      | 30 | 377758  | 378263   |
| 0.44            | 2.2   | 1.0      | 30 | 377759  | 378264   |
| 0.45            | 2.3   | 1.0      | 30 | 377760  | 378265   |
| 0.46            | 2.3   | 1.0      | 30 | 377761  | 378266   |
| 0.47            | 2.4   | 1.0      | 30 | 377762  | 378267   |
| 0.48            | 2.4   | 1.0      | 30 | 377763  | 378268   |
| 0.49            | 2.5   | 1.0      | 30 | 377764  | 378269   |
| 0.50            | 2.5   | 1.0      | 30 | 377765  | 378270   |
| 0.51            | 2.6   | 1.0      | 30 | 377766  | 378271   |
| 0.52            | 2.6   | 1.0      | 30 | 377767  | 378272   |
| 0.53            | 2.7   | 1.0      | 30 | 377768  | 378273   |
| 0.54            | 2.7   | 1.0      | 30 | 377769  | 378274   |
| 0.55            | 2.8   | 1.0      | 30 | 377770  | 378275   |
| 0.56            | 2.8   | 1.0      | 30 | 377771  | 378276   |
| 0.57            | 2.9   | 1.0      | 30 | 377772  | 378277   |
| 0.58            | 2.9   | 1.0      | 30 | 377773  | 378278   |
| 0.59            | 3.0   | 1.0      | 30 | 377774  | 378279   |

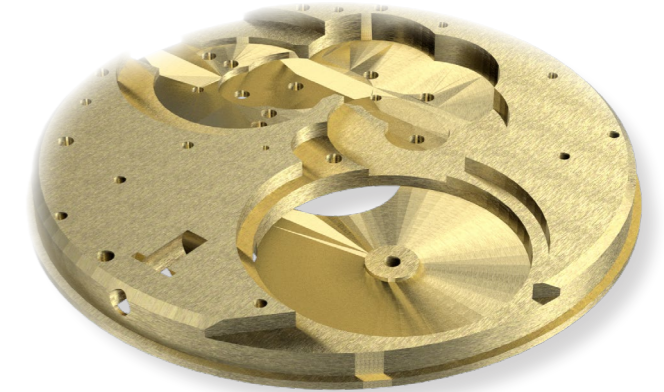
| $D_{10/-0.004}$ | $L_1$ | $D_{h5}$ | L  | CARBIDE | DRY CUT* |
|-----------------|-------|----------|----|---------|----------|
| 0.60            | 3.0   | 1.0      | 30 | 377775  | 378280   |
| 0.61            | 3.1   | 1.0      | 30 | 377776  | 378281   |
| 0.62            | 3.1   | 1.0      | 30 | 377777  | 378282   |
| 0.63            | 3.2   | 1.0      | 30 | 377778  | 378283   |
| 0.64            | 3.2   | 1.0      | 30 | 377779  | 378284   |
| 0.65            | 3.3   | 1.0      | 30 | 377780  | 378285   |
| 0.66            | 3.3   | 1.0      | 30 | 377781  | 378286   |
| 0.67            | 3.4   | 1.0      | 30 | 377782  | 378287   |
| 0.68            | 3.4   | 1.0      | 30 | 377783  | 378288   |
| 0.69            | 3.5   | 1.0      | 30 | 377784  | 378289   |
| 0.70            | 3.5   | 1.0      | 30 | 377785  | 378290   |
| 0.71            | 3.6   | 1.0      | 30 | 377786  | 378291   |
| 0.72            | 3.6   | 1.0      | 30 | 377787  | 378292   |
| 0.73            | 3.7   | 1.0      | 30 | 377788  | 378293   |
| 0.74            | 3.7   | 1.0      | 30 | 377789  | 378294   |
| 0.75            | 3.8   | 1.0      | 30 | 377790  | 378295   |
| 0.76            | 3.8   | 1.0      | 30 | 377791  | 378296   |
| 0.77            | 3.9   | 1.0      | 30 | 377792  | 378297   |
| 0.78            | 3.9   | 1.0      | 30 | 377793  | 378298   |
| 0.79            | 4.0   | 1.0      | 30 | 377794  | 378299   |
| 0.80            | 4.0   | 1.5      | 30 | 377795  | 378300   |
| 0.81            | 4.1   | 1.5      | 30 | 377796  | 378301   |
| 0.82            | 4.1   | 1.5      | 30 | 377797  | 378302   |
| 0.83            | 4.2   | 1.5      | 30 | 377798  | 378303   |
| 0.84            | 4.2   | 1.5      | 30 | 377799  | 378304   |
| 0.85            | 4.3   | 1.5      | 30 | 377800  | 378305   |
| 0.86            | 4.3   | 1.5      | 30 | 377801  | 378306   |
| 0.87            | 4.4   | 1.5      | 30 | 377802  | 378307   |
| 0.88            | 4.4   | 1.5      | 30 | 377803  | 378308   |
| 0.89            | 4.5   | 1.5      | 30 | 377804  | 378309   |
| 0.90            | 4.5   | 1.5      | 30 | 377805  | 378310   |
| 0.91            | 4.6   | 1.5      | 30 | 377806  | 378311   |
| 0.92            | 4.6   | 1.5      | 30 | 377807  | 378312   |
| 0.93            | 4.7   | 1.5      | 30 | 377808  | 378313   |
| 0.94            | 4.7   | 1.5      | 30 | 377809  | 378314   |
| 0.95            | 4.8   | 1.5      | 30 | 377810  | 378315   |
| 0.96            | 4.8   | 1.5      | 30 | 377811  | 378316   |
| 0.97            | 4.9   | 1.5      | 30 | 377812  | 378317   |
| 0.98            | 4.9   | 1.5      | 30 | 377813  | 378318   |
| 0.99            | 5.0   | 1.5      | 30 | 377814  | 378319   |

\*用于非铁材料

# DIXI 1137

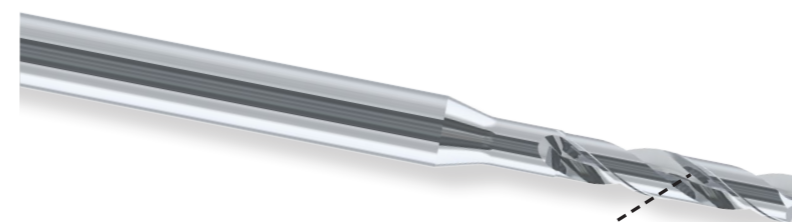
| $D_{10/-0.004}$ | $L_1$ | $D_{h5}$ | L  | CARBIDE | DRY CUT* |
|-----------------|-------|----------|----|---------|----------|
| 1.00            | 5.0   | 1.5      | 30 | 377815  | 378320   |
| 1.05            | 5.3   | 1.5      | 30 | 377816  | 378321   |
| 1.10            | 5.5   | 1.5      | 30 | 377817  | 378322   |
| 1.15            | 5.8   | 1.5      | 30 | 377818  | 378323   |
| 1.20            | 6.0   | 1.5      | 30 | 377819  | 378324   |
| 1.25            | 6.3   | 1.5      | 30 | 377820  | 378325   |
| 1.30            | 6.5   | 1.5      | 30 | 377821  | 378326   |
| 1.35            | 6.8   | 1.5      | 30 | 377822  | 378327   |
| 1.40            | 7.0   | 1.5      | 30 | 377823  | 378328   |
| 1.45            | 7.3   | 1.5      | 30 | 377824  | 378329   |
| 1.50            | 7.5   | 2.0      | 32 | 377825  | 378330   |
| 1.55            | 7.8   | 2.0      | 32 | 377826  | 378331   |
| 1.60            | 8.0   | 2.0      | 32 | 377827  | 378332   |
| 1.65            | 8.3   | 2.0      | 32 | 377828  | 378333   |
| 1.70            | 8.5   | 2.0      | 32 | 377829  | 378334   |
| 1.75            | 8.8   | 2.0      | 32 | 377830  | 378335   |
| 1.80            | 9.0   | 2.0      | 32 | 377831  | 378336   |
| 1.85            | 9.3   | 2.0      | 32 | 377832  | 378337   |
| 1.90            | 9.5   | 2.0      | 32 | 377833  | 378338   |
| 1.95            | 9.8   | 2.0      | 32 | 377834  | 378339   |
| 2.00            | 10.0  | 3.0      | 38 | 377835  | 378340   |
| 2.10            | 10.5  | 3.0      | 38 | 377836  | 378341   |
| 2.20            | 11.0  | 3.0      | 38 | 377837  | 378342   |
| 2.30            | 11.5  | 3.0      | 38 | 377838  | 378343   |
| 2.40            | 12.0  | 3.0      | 38 | 377839  | 378344   |
| 2.50            | 12.5  | 3.0      | 38 | 377840  | 378345   |
| 2.60            | 13.0  | 3.0      | 38 | 377841  | 378346   |
| 2.70            | 13.5  | 3.0      | 38 | 377842  | 378347   |
| 2.80            | 14.0  | 3.0      | 38 | 377843  | 378348   |
| 2.90            | 14.5  | 3.0      | 38 | 377844  | 378349   |
| 3.00            | 15.0  | 3.0      | 38 | 377845  | 378350   |

\*用于非铁材料



## 涂层建议

|         | 没有涂层 | DRY CUT 涂层 |
|---------|------|------------|
| 切削油     | ✓    | ✓          |
| 乳化液或者喷雾 | ✗    | ✓          |



抛光的刃槽

+ 更好的排屑

从Ø0.5开始，钻芯薄化处理

+ 更高的精度

+ 更低的切削力

140°刀尖角

+ 最少的毛刺