

# SPECIAL CUTTING TOOLS

阶梯钻(高速钢 和 硬质合金, Multi-diameter钻头)

高速钢 Sub-land(阶梯)钻

硬质合金抛光钻

高速钢钻头丝锥

顶点螺纹丝锥和梯开螺纹丝锥

硬质合金阶梯铰刀

桥式铰刀

机用钻头

Step drills(HSS & Carbide, Multi-diameter Drills)

HSS Sub-land (Step) Drills

Carbide Burnishing Drills

HSS Drill Taps

Acme Thread Taps & Trapezoidal thread taps

Carbide step Reamers

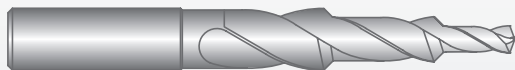
Bridge Reamers

Aircraft drills.



## 阶梯钻 (高速钢&硬质合金, 多直径钻头)

### STEP DRILLS(HSS & CARBIDE, MULTI-DIAMETER DRILLS)



这些刀具可加工多种阶梯孔 (如2层, 3层&4层阶梯钻头)

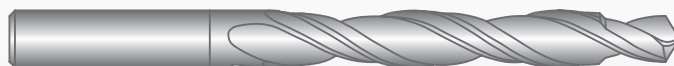


These tools can produce all type of multi-diameters hole.

available 2 step, 3 step & 4 step drill etc.

## 高速钢双刃阶梯钻

### HSS SUB-LAND (STEP) DRILLS



双刃阶梯钻除了在结构上与普通阶梯钻有稍微的不同, 在性能上有着同样的作用.

双刃阶梯钻的优势是两个直径可以使刀具寿命维持不变, 因为在大直径切削刃的再研磨时可以避免碰到小直径的钻边.

制造双刃钻头比普通阶梯钻要稍微贵一些, 但是在再研磨的便利和经济上往往大于第一成本的差额.

The subland (step) drill performs the same function as the step drill though its construction is somewhat different.

The advantage of the subland drill is that the two diameters may be maintained constant throughout the life of drill because in resharping the cutting edges of the large diameter it is unnecessary to touch the margins of the small diameter.

It is somewhat more expensive to manufacture than the step drill, but the convenience and economy in resharping often outweigh the difference in first cost.

## 硬质合金抛光钻头

### CARBIDE BURNISHING DRILLS



抛光钻头有4个钻边为了在钻孔时得到较好的稳定性.

两个额外的抛光钻边有助于使切削钻边切削后抛光孔的表面, 使孔比使用常规钻头得到较好的光洁度.

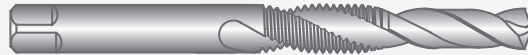


The burnishing drill has four margins which stabilize it as it is drilling.

The two extra "Burnishing" margins also help to smooth the hole after the "Cutting" margin has cut, giving the hole a better finish than a conventional drill.



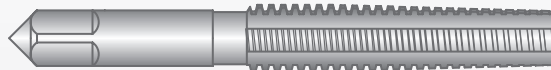
## 高速钢钻孔攻螺纹复合刀具 HSS DRILL TAPS



这些刀具用在钻孔和攻丝一步完成.

These tools are used for drilling & threading in one operation.

## 梯形丝锥 ACME THREAD TAPS & TRAPEZOIDAL THREAD TAPS



梯形丝锥(29°)和梯形丝锥(30°)用于在工作母机和类似设备上通过式运动.  
这些丝锥用来制作横向螺孔的内螺纹.

Acme threads(29°) and trapezoidal threads(30°) are used for purpose of producing traversing motion on machine tools and similar machines.

These taps are used for making internal threads of screw for traversing motion.

## 硬质合金阶梯铰刀 CARBIDE STEP REAMERS



使用硬质合金基体,可得到比高速钢铰刀更长的刀具寿命和较好的表面粗糙度.  
2个或多个阶梯或倒角可以进行一次性加工.

Using carbide substrates, longer tool life and better finish than HSS reamers can be achieved .  
Two or more step diameters or chamfers can be machined in one operation.



## 桥式铰刀

### BRIDGE REAMERS



高速钢桥式铰刀是为特殊用途而设计的，是结构钢，架桥和舰艇建造等精度没有特殊要求的情况下的专用刀具。

Bridge reamers, made of high speed steels, are especially designed for severe service and are particularly adapted for use in structural iron and steel, bridge erection, and ship construction, where extreme precision not required.

## 航器专用钻头

### AIRCRAFT DRILLS.

- Aircraft Extension Drills(6" & 12" O.A.L.)



- Threaded Shank Aircraft Drills



- 1) 航器接长钻 (6" & 12" 全长)
- 2) 螺纹柄部的航器专用钻头Th.  
用于航器材料的钻孔，按照NAS 907规格制作。

- 1) Aircraft Extension Drills(6" & 12" OAL)
- 2) Threaded Shank Aircraft Drills.

Used for drilling aircraft materials and made to NAS 907 specification.



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