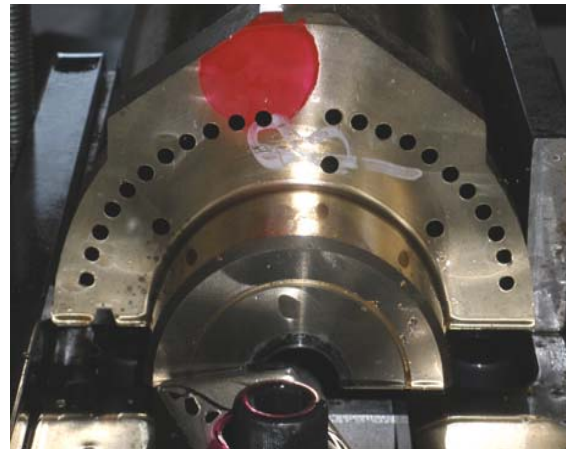


Finished Parts / 工藝樣本

Ref No.:

Date: Oct 14 2010

Workpiece	工件名稱	Wine Bottle Mould
		紅酒瓶玻璃模具
Material	材質	Nickel- Metal Hydride (Ni- H) Copper 鎳氫銅
Machine	使用機型	FW-1000
Drilling dia.	鑽孔孔徑	Ø5.5mm & Ø6mm
Drilling depth	鑽孔深度	305mm
Machining time	加工時間	45min



Key Points / 加工特點說明

This mould is for wine bottled and made in Nickel- Metal Hydride Copper, the surrounding outer deep through holes are the air chilling channels. Compared to coolant chilling, air flow effects less chilling. Therefore, the dimension and centricity of these deep holes are more critical than others to allow smooth air chilling supplied.

Otherwise, the high malleability of copper appears difficulties for small diameter deep hole process, Wei Hong help to select special tool and re-modify the coolant flush solution to help efficient chip removing. The defective rate was reduced from 80% into 0%.

上圖為鎳氫銅材質紅酒瓶模具，在模具外側需要加工氣體冷卻的氣孔(深通孔)，由於空氣冷卻的效率比水冷卻的效率低，故對於孔位的精確度要求較高，以利氣流順暢。

在小孔徑深孔加工中，對於高延展性銅材的加工通常較不容易掌握精度以致成品不良率較高，客戶在此方面遭遇相當大的技術瓶頸，在接洽我司代為開發槍鑽製程時，我司針對加工刀具與排屑方式進行改善，加工之效率提昇 80%且不良率降為 0%。