

# HCT-NM1225X >

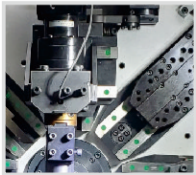
## 十二轴无凸轮数控万能弹簧转线成形机

12Axis Camless CNC Versatile Spring Rotating Forming Machine

### ▶ 送线系统 Feeding System

送线系统装在机器转线机构中，HCT-NM1220X装有2组送线轮，每一组由2个送线轮组成，线径不同时需更换相同线径的线轮，电脑控制其送线系统，每一运动单位约0.01mm，命令最大为99999.99个运动单位。

The feeding system is equipped at the rotation system of the machine, it has 2 pairs feeding rollers, 2 rollers as one pair, different wire size need different feeding rollers, the computer controls the feeding system, the moving unit is 0.01mm, the maximum moving length is 99999.99 unit.



Super Spinner  
伺服自由机械手



Servo Scissor  
伺服剪刀



## ▶ 产品介绍 Description

HCT-NM1220X 十二轴数控万能弹簧成形机采用台湾电脑数控系统和日本安川伺服电机，独特的无凸轮和无摇臂设计，刀架由八组伺服马达独立控制，送线轴，转芯轴，转线轴，卷曲轴。其总成由曲柄连杆成形系统、送线和转线系统、绕线校直系统及转芯系统等组成。本机可配带伺服剪装置，切割噪音小，对芯棒及机器的损害为零。适合于生产各种拉簧，扭簧，压簧，涡卷簧，塔形簧，扁簧等高难度异形弹簧。极大的增加了弹簧加工范围，精密准确，调机快速，生产稳定。曲柄连杆系统含四个刀架，四个刀架由八个日本伺服电机通过VRB减速机独立驱动，可以上下移动，左右移动，互不影响，使弹簧成形得心应手，方便容易。通过CNC程式，对送线和翻线系统作同步控制，使转线的同时送线精度可达到0.1mm之内。

HCT-NM1220X 12 axis Camless CNC Versatile Spring Rotating Forming Machine, is composed by Taiwan computer system and Japan servo motor special designed with no rocker arm and camless, 4 slide up & down movement forming axis, 4 slide lateral movement forming axis, 1 Feeding axis, 1 Quill rotating axis, 1 Wire rotating axis and 1 Spinner axis. It's composed of crank connecting link system, feeding and rotating system, coiling straightening system and quill system. It can be installed with the servo scissor, low noise; the damage is zero on mandrel and machine. It is suitable for making kinds of tension spring, torsion spring, compression spring, scroll spring, tower spring, flat wire spring and such highly difficult springs. Largely increased the spring making range, it is precise, stable and easy to operate. The crank connecting link system includes four slides, which are separately driven by eight Japan servo motors through VRB reducer, each slide can be installed with 2pcs toolings, it can move left & right, up & down, no influence from each other, make the spring forming easily. Controlled the feeding and wire rotation system synchronous through CNC program, at the same time the feeding accuracy can be reach within 0.1mm during wire rotation.

## ▶ 技术参数 Specification

Model	HCT-NM1225X
轴数 Number of Axis	12 轴 (axis)
加工线径 Wire Size Range	Φ0.3-2.5 mm
最大送线速度 Max Feeding Speed	120 m/min
送线轮组数 Feeding Roller Pairs	2组 (Pairs)
送线伺服电机 Feeding Motor	2.9 kw(安川 Yaskawa)/2.7kw(山洋Sanyo)
转芯伺服电机 Quill Motor	1.0 kw
转线伺服电机 Wire Rotation Motor	2.9 kw(安川 Yaskawa)/2.7kw(山洋Sanyo)
成形伺服电机(刀架左右移动)Forming motor(lateral movement)	1.0 kw*4
成形伺服电机(刀架上下移动)Forming motor(Up & Down movement)	1.2 kw*4
卷曲伺服电机 Spinner Motor	0.4kw
机器尺寸 Dimension(LxWxH)	1600*1120*1750mm
机器总重 Weight	1500 kg

以上参数如有变更，恕不另行通知  
Notice shall not be given in case alteration of parameters, please excuse.