Rotary stages provide automated material handling capability

Aerotech's CCS series rotary stages (patent pending) with integrated captured collet chucks provide automated material handling capability for a wide range of materials and applications. Collet chucks used with the CCS family accept C-, D- or Levin-style collets that are readily available from machine-tool component suppliers in sizes supporting tube diameters from 0.1 mm to 27 mm. These collets provide outstanding run-out characteristics for applications requiring high-precision gripping of tubular material.

Captured collet design

CCS features a unique collet-chuck design that allows work-piece advance without manual realignment to compensate for axial tube motion during clamp/unclamp cycles. By moving the taper around the collet instead of drawing the collet into the taper, axial motion of the work piece is significantly reduced, eliminating the need for part re-registration after tube advancement and increasing your system throughput.

Wet-cut features

The CCS family is designed with mounting features on the housing to support customer supplied wet-cutting accessories. In addition, the stage will tolerate moderate fluid leakage into the aperture which is inevitable during wet-cutting operations. These features help to prevent encoder contamination and collet-chuck failure to minimize machine downtime.

Brushless direct-drive

The CCS series uses direct-drive brushless motor technology to maximize positioning performance. Direct-drive technology is optimized for 24/7 production environments, with no brushes to replace and no gear trains or belts to maintain. Direct-drive also provides quicker acceleration and higher top speeds than gear- or belt-driven mechanisms, yielding higher total overall throughput.

The low maintenance, high-throughput characteristics of the CCS coupled with the integral material handling capability provide the lowest total cost of ownership when compared to component-level solutions, and make this stage the perfect addition to your production floor.

Aerotech manufactures a wide range of positioning stages, drives and controls to provide a fully integrated and optimized motion solution. We look forward to showing you how we provide a single source for all of your motion needs.

The CCS series data sheet is available at:

http://www.aerotech.com/product-catalog/stages/rotary-stages/ccs.aspx?p=%2fproduct-catalog%2fstages%2frotary-stages.aspx%3fpage%3d2 [1]

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