RTA Rotary Threading Machine

Description

The RTA is a continuous rotary threading machine with eight stations. The stations consist of cap-carrying spindles equipped with forming tooling. The spindle assemblies mount to the threader hub assembly that is oriented in the vertical plane. The threader hub assembly rotates about its axis, driven by dual v-belts tangential to its perimeter. As the hub assembly rotates, planetary gearing drives the spindles about their own axes. Lubrication fittings are provided at all key points to minimize wear. The RTA is supplied with a 2.0 HP AC motor and AC variable frequency control. PLC-based control packages are available.

Operation

Caps are infed from a tray/chute. As a spindle rotates into position relative to the infeed, caps are picked off, settling onto spindle tooling and secured by covering pressure plates. Spindle tooling is internal to the cap and has a female profile. As the spindles (loaded with caps) are rotated by the hub assembly the caps are driven against stationery tooling which has the complementary male profile. As the caps are driven around the threader hub, interaction of the internal and external tooling profiles achieves complete forming. The finished cap profile includes a knurled section, a rolled outside wire, and a threaded section.

Specifications

Technology Brief: High-speed, continuous rotary threading machine; basic configuration includes 8 work stations (spindles) mounted to a belt-driven hub assembly. As the hub assembly rotates, planetary gearing drives spindles.

Production Rate: Max. 800 caps per minute **Cover Size:** 30 - 53 mm **Dimensions:** 45"W x 37"L x 59"H; 1,500 lbs. **Utilities:** Electric service per customer's requirements



SWANGREN MACHINE DIVISION

Apex Tool Works Inc. 3200 Tollview Drive Rolling Meadows, IL 60008

phone 847.394.5810 fax 847.394.2739 apextool@apextool.com

Concept Through Engineering to Manufacturing Solutions