

DEPRAG DC-SPINDLE ASSEMBLY UNIT

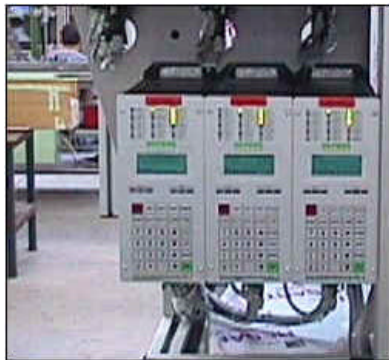
[this Station assembles a high voltage transformer. Due to confidentiality requirements, we are not able to show a picture of this particular product]

MACHINE REQUIREMENTS

- multi-stage, synchronous screw assembly, shut-off at torque with angle control, variable tightening stages.
- high contact pressure during screw driving [2 tons]
- 180° rotation of the part under pressure
- adjustable and controlled spindle hole pattern
- detection and control of component changes
- part recognition at conveyor inlet

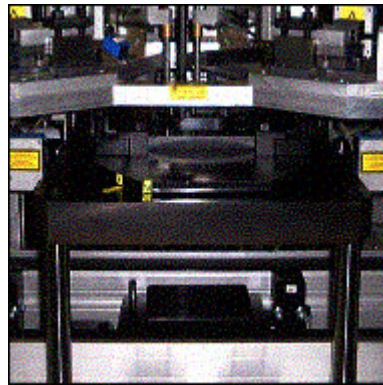
COMPONENT LISTING:

Screwdriver Controller AST2



- four different part variations, each with five screw assembly
- programs (total 20 programs)
- multi-stage tightening for an even load distribution on the part
- display curve on the PC
- document the screwdriving results
- angle control
- transfer of programs from/to PC

Tox Press Cylinder (pneumatic)



Applies contact pressure of 2 tons and rotates part by 180° while under load
Additional specifications:

- total of 100mm stroke; 6mm stroke at 2 ton contact pressure
- the lift unit rotates and is powered by a cogged belt and stepper motor
- absorption of the contact pressure by an frame enclosure

DC-Electric Screwdriver Spindles

- Smallest possible hole pattern diameter = 25mm
- Standard size-2 offset gears
- Reversible Spindle
- Bit guide bushing integrated



Controlled Indexing of Spindles

Construction Unit can be indexed to four different positions for individual hole pattern

Manual adjustment with integrated assistance

Analog laser sensor to control the adjustment (PLC - evaluation)

Linkage of the part information with the spindle position to release "screws"

Part Recognition System

Part recognition at conveyor inlet by light curtain

Part presence, part type and the correct alignment of the part is detected and evaluated by the PLC

