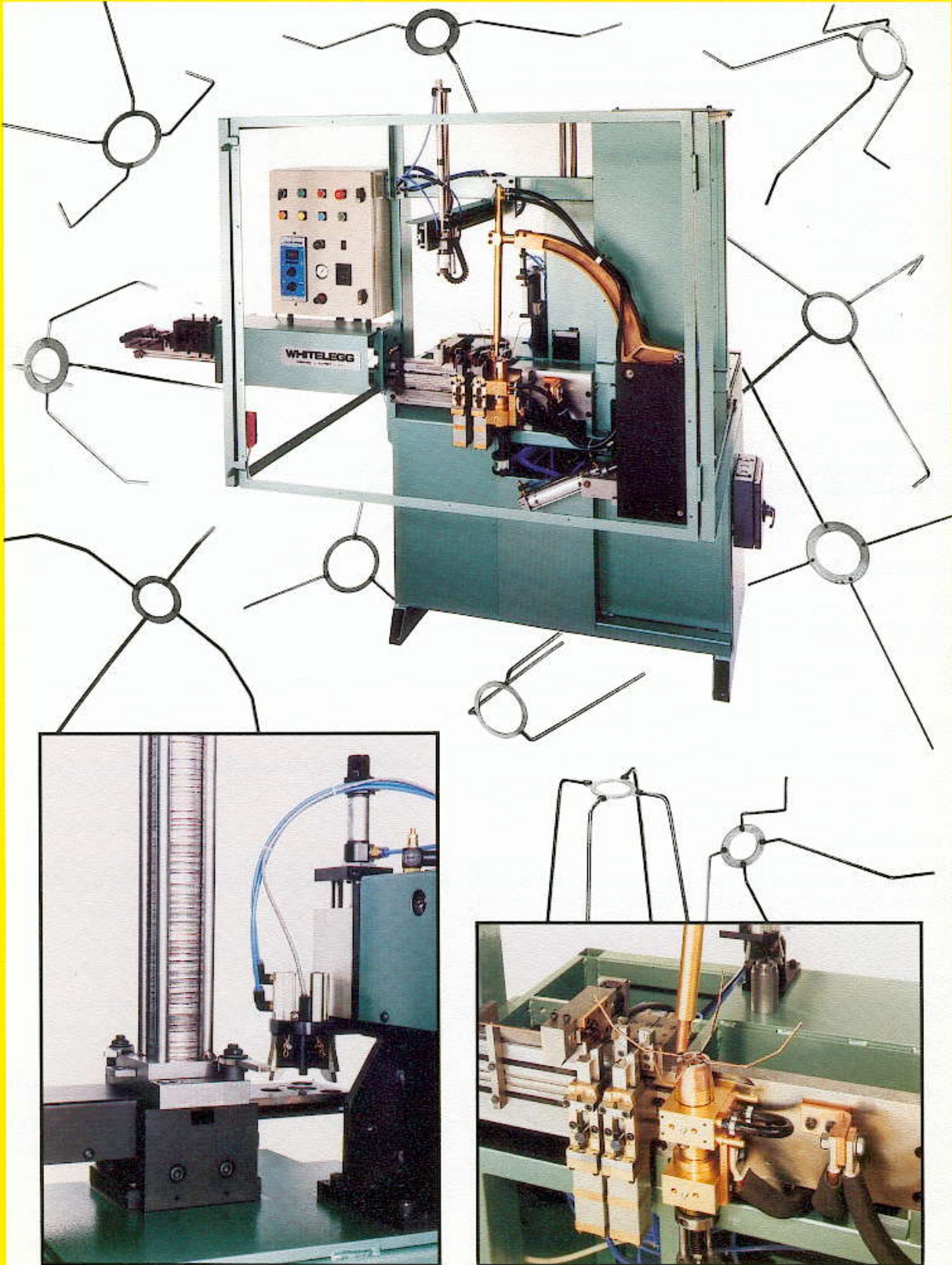


AUTOMATIC LAMPSHADE SPIDER MACHINE
FASSUNGSKREUZ AUTOMAT
MACHINE AUTOMATIQUE POUR LA FABRICATION
DE CROISILLONS D'ABAT-JOUR



AUTOMATIC LAMPSHADE SPIDER MACHINE

Fully Automatic Lampshade Spider Machine Type BA4A

The machine is designed for the fully automatic production of lampshade frame supports (spiders) comprising a washer and a number of struts. The wire is taken from the coil by a reciprocating feeding mechanism. The washer is fed automatically from a magazine and taken to the indexing station by a transfer mechanism. The strut is welded on to the washer, cut and then bent once or twice (a third bending unit is optional). The washer is rotated to the next position, and the welding, cutting and bending operation is repeated. After the last welding sequence is completed, the spider is picked up by a second transfer mechanism and dropped on to a stack.

The washer magazine is provided with a quick-change mechanism, and has a capacity of up to 500 washers.

Specification

| | |
|-------------------|---|
| Wire diameter | 2.5 - 4.0 mm |
| Wire strength | up to 70 kg/mm ² . |
| Wire straightener | twin-plane roller straightener with twelve rollers |
| Feed mechanism | air cylinder and pneumatic clamp with carbide clamping pieces |
| Feed speed | adjustable by air valve |
| Feed length | 12 - 350 mm infinitely variable |
| Length tolerance | +/- 0.2 mm per feed |

Bending Units

Two bending units are provided, which are adjustable for bending in either direction, upwards or downwards. The tooling can be fitted on either side of the bending slide, to allow for the closest possible bend to both the washer and the strut end. Maximum bending angle: 90° upwards, 45° downwards.

Finished Spider

With straight struts 500 mm diameter (220 mm strut length) or with bent struts 350 mm maximum strut length (max. diameter 500 mm). Spiders can be produced with straight legs, one bend or two, and with both upward and downward bending.

Indexing

Pneumatic ratchet mechanism with quick setting device, for spiders with 2, 3, 4, 5 or 6 struts.

Welding Unit

The wire is spot-welded to the top of the washer. The 15 Kva transformer is controlled by a thyristor contactor. Digital weld timer with heat and upslope adjustment.

Controls

Pneumatic sequencing is from a PLC with diagnostic indicators. Automatic or step mode.

Power Requirements

415/380 Volt 3-phase 50 Hz and air supply 6 bar.

Production Rate Examples

Spider with 4 struts, each having 2 bends: 4 - 5 per minute.
Spider with 2 struts, each having 2 bends: 6 - 7 per minute
Spider with 4 struts, no bends: 6 - 7 per minute.