Operating Manual
Please Read Before Operating Unit

Shown with optional stand

WS1 Wire Straightener
Service and All Spare Parts Available
ORDERING INFORMATION

AR3950 .................... Single station wire straightener complete with position indexable material entry guide

SPECIFICATIONS

**Wire Sizes:** Maximum opening between the straightening rollers is 3/8" (9.53mm). Wire size is dependent on flexibility and degree of straightness. Minimum opening between the straightening rollers is zero.

**Construction:** Robustly constructed from steel with hardened steel straightening rollers running in oilite bearings. Eight position indexable hardened steel wire entry guide.

Size ........ 5-1/4" x 3" x 3" (133.4mm x 76.2mm x 76.2mm)
Weight .................. 3-1/4 lbs. (1.48 Kg)

**STANDS (OPTIONAL)**

**Adjustable Bench:** Positions center of unit 7 1/2" (190.5mm) and 4" (101.6mm) from the work surface. (To adjust height below 6" (152.4mm) requires a 3/8" (9.53mm) hole in the work surface.)

**Fixed Bench:** Must be used in conjunction with the adjustable bench stand above and increases all heights by 7" (177.8mm).

**Adjustable Floor:** Must be used in conjunction with the adjustable bench stand above and enables floor mounting with the center of the unit between 28" (711mm) and 49 1/2" (1257mm) from the floor.

**Accessories**
- IR8207 ..................... Optional adjustable bench stand
- IR0491 ..................... Optional fixed bench stand
- IR0492 ..................... Optional adjustable floor stand
- IR8175 ........ Replacement straightening roller with bearing (Ten per unit)
**SET-UP:**
The WS1 may be purchased separately, for direct mounting onto a wire cutting machine, or for use with one of the optional bench or floor stands.

If the WS1 is to be mounted directly onto a machine, the cutting machine must be drilled to match the threaded mounting points on the output side of the WS1. Use 6-32 screws to mount the WS1 to the machine.

If the WS1 is to be used with the IR8207, optional adjustable bench stand, attach the stand to the WS1 by threading the shaft of the stand into either of the large threaded holes in the plates of the WS1 and tighten the jam nut. Bolt the stand and WS1 to the bench. If the WS1 must be used at a height lower than 6" while on the stand, it will be necessary to drill a hole in the bench surface to allow the stand shaft to drop through. Use the two locking thumbscrews to hold the WS1 at the desired height.

The IR8207 stand may be used in conjunction with either the IR0491 or IR0492 bench or floor stands if increased height is needed. See details in “Specifications.”

**OPERATION:**
Rotate the indexable wire input guide to the appropriate hole size, which will allow minimum clearance over the material to be straightened. Open the straightening rollers, using the adjusting knobs, and then thread the material to be straightened, through both sets of rollers. Close the rollers, insuring that the material is located on the V recess of the roller assemblies.

Adjust the rollers until they come in contact with the material. The desired degree of straightness may now be obtained by further adjustments to the straightening rollers.

**NOTE:** The degree of straightness, which can be achieved by the WS1, is dependent on the material being straightened. The unit is not designed for use on kinked materials.

When the desired degree of straightness has been achieved, the straightening rollers may be locked in place by tightening the recessed screws in the adjusting knob plates.

**CAUTION:** If using the WS1 with a wire cutting machine, care must be taken not to create excessive drag on the material. Too much drag can cause malfunction of the cutting machine and inconsistent cut lengths.

**MAINTENANCE:**
Periodically, apply a drop of light oil to the threaded adjustment shaft of the straightening roller assemblies. Replace the straightening roller and bearing assemblies when worn.

**TROUBLE SHOOTING:**

**PROBLEM:** Material will not track through straightening rollers.

**SOLUTIONS:**
1) Check that the indexable guide is set to the correct hold size for the material to be straightened.
2) Check that the material is being fed through in the proper direction.
3) Check that the roller assemblies have been closed down onto the material.
4) Check that the adjustment knobs have been locked into place.

**PROBLEM:** Material is difficult to pull through unit.

**SOLUTIONS:**
1) Check that the roller assemblies are not adjusted too tightly on material.
2) Check that indexable guide is set to the correct hole size for material.
3) Check that there are no kinks in the material being straightened.

**PROBLEM:** Material does not straighten.

**SOLUTIONS:**
1) Check that the roller assemblies are in contact with the material.
2) Check that there are no kinks in the material being straightened.