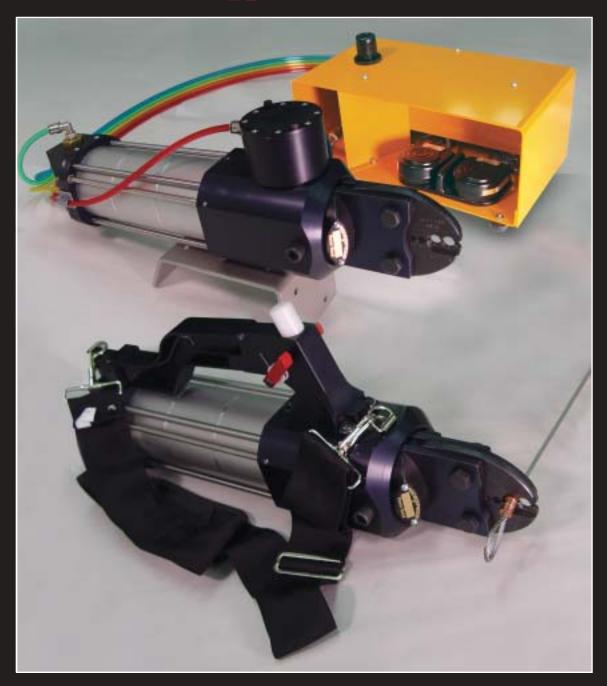
# NICOPPESS® PRODUCTS



Crimp Tools for Automating Manufacture of Cable & Wire Rope Assemblies

## Bench Mounted Crimping Tools



At last, the next generation of automated pneumatic crimping tools for wire rope is here. Of course it's from the 102 year old company that invented and first pat-

ented oval splicing sleeves – *Nicopress*®.

These new crimp tools drastically reduce cable assembly time thereby lowering your "total installed cost". The tools are available as hand or bench mounted models, so you can bring the tool to the work or cen-

tralize production assembly work at a bench. Since the units are light weight and completely portable, production lines can be readily moved and adjusted to optimize production.

The *Nicopress* tools cover the broadest range of wire sizes in the industry (1/32" to 3/8").

Single groove and multi-groove power crimp heads can easily be changed over from cable size to cable size in minutes keeping setup time very low.

All units operate on 85-95 psi shop air pressure.

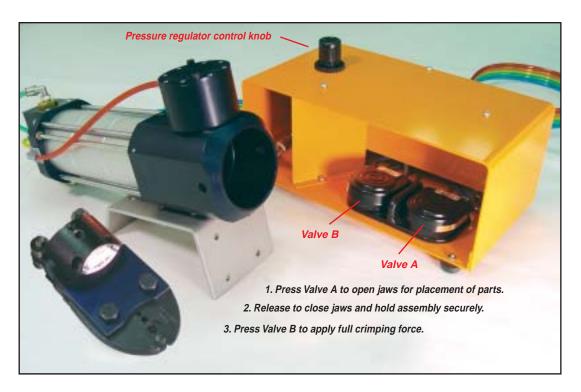
New crimp tools drastically reduce cable assembly time thereby lowering your "total installed cost".

Bench models, pictured above, incorporates a "positive cycle" air logic control system assuring uniformly reliable crimp connections are made again and again.

The *Nicopress* "professional grade" application tools used

in conjunction with genuine **Nicopress** splicing sleeve products will make your cable assembly operations more productive and profitable.

Nicopress – The tool and sleeve combination made to work together for a perfect splice!



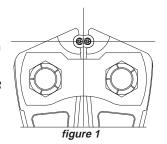
Model ATB-330 shown above with jaws removed

#### **Making the Crimp**

The jaws are spring loaded normally closed for safety. Foot pressure on *valve A* (shown in the photo above) opens the jaws for the wire and sleeve assembly to be inserted as shown in *figure 1*.

Releasing *valve A* allows the crimp jaws to close lightly and hold the assembly securely in place.

Foot pressure on *valve B* actuates the heart of the tool, a force-multiplying pneumatic cylinder that powers the cam operated jaws to the closed crimping position.



#### A Perfect Splice Every Time

The circuitry in the foot operated control box includes a pressure sensing valve that can be adjusted for various crimp pressures. The valve is extremely accurate and in essence delivers **automatic quality control**.

For example, if the supply pressure should fall below the sensing valve setting, the valve will not provide a "crimp" signal to the tool. The tool will stall without making a bad crimp and without ruining the parts. Once pressure is restored, the cycle will continue. The parts that had been in the jaws will be finished as a "good assembly".

#### **Features**

- Crimping tool size: 6" H x 4" W x 15" L.
- · Weight: 13 pounds with jaws installed.
- Control box size: 5-1/2" H x 7" W x 13" L.
- · Weight: Approximately 10 pounds.
- Normal operating pressure range of 85 to 95 psi.
- Air filter &regulator built into control box to insure long service life.
- · Maximum operating pressure is 135 psi.
- Cycle time at 85 psi is 1.4 seconds.
- · Cycle time increases with addition of booster option.
- 1/4 NPT air input.
- Normally closed crimping jaws for safety.
- · Easily adjustable crimp height adjustment.
- Safety designed foot operated control box.
- Quick change crimp heads allow fast change-over for varying sizes of cable and wire.
- Bench mount adapter plate allows vertical, upright, or angled bench mount positions.
- Shipped complete with bench mount bracket, hex wrenches, "go" gauge & operating instruction manual.

### Portable, Handled Crimping Tools



Change jaws quickly to accomodate different wire sizes!

#### **Bringing Your Tool to the Work**

**Nicopress** pneumatic crimp tools are also available as light weight, completely portable, handled models. They deliver the same crimping power as their bench mounted counterparts. They run on standard shop air pressure (85 to 95 psi) and accommodate the broadest range of wire sizes in the industry – 1/32" to 3/8"! Dual triggers allow the tool to be operated using either left or right hand with or without gloves. Ergonomically balanced at the triggers, the tool minimizes operator fatigue. The convenient shoulder strap allows one hand operation.

A wide selection of single groove and multi-groove crimp heads is available. The heads can be quickly interchanged with minimal setup time.

#### **Making the Crimp**

Depressing the white button at the top of the handle opens the jaws to receive the assembly. Releasing the button allows the jaws to spring closed and grip the parts securely. Pulling either of the red triggers releases a lock so the valve can be tripped by squeezing the index finger. This actuates the power cylinder driving the jaws into their closed crimping position.

#### Crimp the broadest range of wire sizes - 1/32" to 3/8"!

#### **Convert to Bench Operation**

Handled tools can be converted to bench operation with the Optional Foot Switch Control Assembly. To order use Model Number AT-330-FC.

#### **Features**

- Size: 7-1/2"H x 4"W x 15" L.
- Weight: 13 pounds with jaws installed.
- Normal operating pressure range of 85 to 95 psi.
   Properly operating air filter & regulator is recommended at all times.
- · Maximum operating pressure is 135 psi.
- Cycle time at 85 psi is 1.4 seconds.
- Cycle time increases with addition of booster option.
- 1/4 NPT air input.
- Normally closed crimping jaws for safety.
- Easily adjustable crimp height adjustment.
- Quick change crimp heads allow fast change-over for varying sizes of cable and wire.
- Can be operated from the left or right handed position, with or without work gloves.
- Shoulder strap frees operator's hands.
- Ergonomic design balances the handle near the trigger mechanism to reduce operator fatigue.
- Unit is shipped complete with hex wrenches, "go" gauge and operating instruction manual.

## **Splices**

#### **Making Eye Splices**

Pull enough cable through the sleeve so that the end will still protrude after crimping. Line up the sleeve



between the tool jaws with the long axis crosswise to the jaws as shown in *figure 1* on page 3.

#### Lap or Running Splices

Lap or running splices can also be made with Nicopress

Oval Sleeves when lengthening a cable or in making grommet slings. Usually



two sleeves are needed to develop a splice equal to the breaking strength of the wire. Pull the ends of both cables through both sleeves. Again, line up the sleeve between the tool jaws with the long axis crosswise to the jaws as shown in *figure 1* on page 3. Leave a little space between the sleeves to allow for extrusion of the sleeves

during crimping. The finished crimp should also have a little space between sleeves for flexibility as shown in *figure 3*.

#### **Gauging the Results**

"Go" gauges assure that your crimp will meet specifications. Through pull testing it has been determined that **Nicopress** copper, copper plated, and stainless steel

oval sleeves will hold aircraft cable to its breaking strength when the cable is made to MIL-W-83420 (9/7/73) for cable construction 3x7, 7x7, and 7x19.

Nicopress sleeves may be used with other wire ropes of different construction.

But, proof testing is required to assure proper selection of materials, the correct crimping pressure, and the assurance of an adequate margin of safety for the intended use.

### **Booster Accessories**

### Booster Accessory Installs Quickly on Both Bench Mounted and Portable Models

Larger cables require higher forces for proper crimping. An optional booster accessory is available to increase the supply air pressure to an acceptable level.

Boosters are easily attached to the rear of all *Nicopress* tools – bench mounted or portable, handled models.

First, detach the supply air line and remove the porting plate from the rear of the tool (Photo shows that porting plate has already been removed).

Next, align the booster accessory to the back of the tool and tighten the four socket cap screws. Reattach the supply air line.

See pages 6 and 7 for selection of proper crimping heads to accommodate various *Nicopress* sleeve sizes and materials. The Tables indicate products that require the Booster Accessory.



Model AT-Booster

# Selecting the Proper Crimping Head



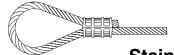




#### **Oval Sleeves**

Cable Size	Copper Oval Sleeve #	Zinc/Copper Oval Sleeve #	Tin/Copper Oval Sleeve #	Aluminum Oval Sleeve #	Crimp Power Head Model #	Tool Groove	# of Crimps Required
3/64"	18-11-B4	28-11-B4	428-1.5-VB4	188-1.5-VB4	AT-B4	OVAL B4	1
1/16"	18-1-C	28-1-C	428-2-VC	188-2-VC	AT-C AT-CGMP	OVAL C	1 1
3/32"	18-2-G	28-2-G	428-3-VG	188-3-VG	AT-G AT-CGMP	OVAL G OVAL G	1 1
1/8"	18-3-M	28-3-M	428-4-VM	188-4-VM	AT-M AT-CGMP AT-XPM	OVAL M OVAL M OVAL M	3 3 3
5/32"	18-4-P	28-4-P	428-5-VP	188-5-VP	AT-P AT-CGMP AT-XPM	OVAL P OVAL P OVAL P	3 3 3
3/16"	18-6-X	28-6-X	428-6-VX	188-6-VX	AT-X AT-XPM AT-X-F6‡	OVAL X OVAL-X OVAL X	4 4 4
7/32"	18-8-F2	28-8-F2	428-7-VF2	_	AT-F2	OVAL F2	4
1/4"	18-10-F6	28-10-F6	428-8-VF6	188-8-VF6	AT-X-F6‡	OVAL F6	5
5/16"	18-13-G9	28-13-G9	428-10-VG9	— 188-10-VG92	AT-G9‡ AT-G9‡	OVAL G9 OVAL G9	

Note<sup>‡</sup> Must be crimped using Accessory Booster Kit





#### **Stainless Steel Oval Sleeves**

Cable Size	Stainless Steel Oval Sleeve #	Crimp Power Head Model #	Tool Groove	# of Crimps Required
3/64"	168-1.5-VB4	AT-B4	OVAL B4	1
1/16"	168-2-VB4	AT-B4	OVAL B4	1
3/32"	168-3-VC	AT-C	OVAL C	1
1/8"	168-4-VG	AT-G	OVAL G	1
5/32"	168-5-VM	AT-M	OVAL M	3
3/16"	168-6-VP	AT-P	OVAL P	4
7/32"	168-7-VX	AT-X ‡	OVAL X	4
1/4"	168-8-VF2	AT-F2 ‡	OVAL F2	5

Note ‡ Must be crimped using accessory booster kit



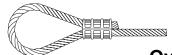


### Stop Sleeves



Cable Size	Copper Stop Sleeve #	Zinc/Copper Stop Sleeve #	Aluminum Stop Sleeve #	Crimp Power Head Model #	Tool Groove	# of Crimps Required
3/64"	871-12-B4	872-12-B4	_	AT-B4	OVAL B4	1
1/16"	871-1-C	872-1-C	878-2-VC	AT-C	OVAL C	1
				AT-CGMP	OVAL C	1
3/32"	871-17-J	872-17-J	878-3-J	AT-MJ	J	1
3/32"	871-33-VG	872-33-VG	_	AT-CGMP	OVAL G	1
1/8"	871-18-J	872-18-J	878-4-J	AT-MJ	J	1
1/8"	871-34-VG	872-34-VG	_	AT-CGMP	OVAL G	1
5/32"	871-19-M	872-19-M	878-5-M	AT-MJ	М	1
5/32"	871-35-VM	872-35-VM	_	AT-CGMP	OVAL M	2
				AT-XPM	OVAL M	2
3/16"	871-20-M	872-20-M	878-6-M	AT-MJ	М	1
	871-36-VM	872-36-VM	_	AT-CGMP	OVAL M	2
				AT-XPM	OVAL M	2
7/32"	871-22-M	872-22-M		AT-MJ	M	2
	871-37-VM	872-37-VM		AT-CGMP	OVAL M	3
				AT-XPM	OVAL M	3
1/4"	871-23-F6	872-23-F6	878-8-VF6	AT-F6*	OVAL-F6	3
5-16"	871-26-F6	872-26-F6	878-10-FF6	AT-F6*	OVAL-F6	3
3/8"	871-27-F6	872-27-F6	_	AT-F6*	OVAL-F6	3

Note<sup>‡</sup> Must be crimped using Accessory Booster Kit





### **Oval Sleeves for Fiber Rope**

Fiber Rope Size	Aluminum Oval Sleeve #	Crimp Power Head Model #	Tool Groove	# of Crimps Required
1/16"	1700-C	AT-C AT-CGMP	OVAL C OVAL C	1 1
1/8"	1700-M	AT-CGMP AT-XPM	OVAL M OVAL M	3 3
3/16"	1582-P	AT-P AT-CGMP AT-XPM	OVAL P OVAL P OVAL P	3 3 3
1/4"	1700-X	AT-XFM AT-X AT-XPM	OVAL X OVAL X	4 4

Nicopress offers the most extensive line of professional grade tools to meet your specific needs. Contact Nicopress with your specific product requirements.

The Nicopress catalog library includes:

Catalog #CWR-12:

Crimp Tools for Automating Manufacture of Cable & Wire Rope Assemblies

Catalog #PX-27:

Crimp Tools for Automating Pex Plumbing Installations

Catalog #MP-18

Multi-Purpose Pneumatic Tools for Automating Assembly Operations

Catalog #39:

Master Catalog of Tools, Accessories, and Splicing/Reducing Sleeves

Catalog#4:

Nicopress Sleeves and Tools for Aircraft Control Cable, Wire Rope and Fiber Rope

Catalog #F-16: Fence Products



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