

The Cleaning Edge For Quality...

With today's technology of increasing wire line speeds, the cleaning operation becomes more critical to assure maximum output of wire quality.

MGS Manufacturing, Inc. offers various models of Air Wipes in two configurations:

- 1 Solid Air Wipes are available in a full range of sizes up to 3-inch diameter.
- 2 Multiple Air Wipes, which use interchangeable inserts, can accommodate a wide range of sizes.

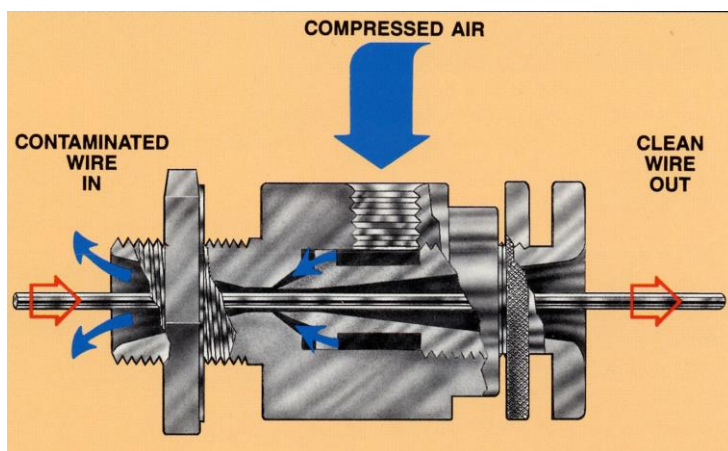
The MGS Air Wipe is designed and precision made to maintain its economy and efficiency indefinitely. It is equipped with a simple but sensitive micrometer adjustment to the air wiping jet, which permits an exact setting and control of the airflow by the operator.

MGS Air Wipes have been used to remove copper dust from wire exits on drawing machines. This installation eliminates the need for a separate cleaning operation before insulating the wire. Their widest application is probably to remove water from the surface of insulated wire at the extruder.



SOLID WIPES:

Referring to the illustration below, the wire-entering opening is a tapered venturi design, which minimizes spatter and scattering of the water or copper dust, which is blown back from the wire.



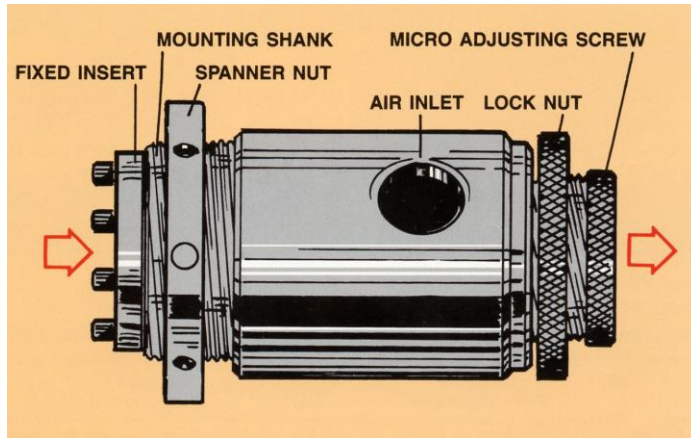
All air and water or other contaminants are ejected in the direction of the incoming wire; this prevents re-wetting or re-contamination of the wire.

Further, there is a well-defined suction and secondary flow at the wire exit, which is also a venturi design to minimize noise.

Wear-resistant carbonyl inserts can be installed in MGS Air Wipes. These insert rings reduce wear damage caused by wire contact with the barrel.

MULTIPLE WIPES:

Multiple Wipes permit the use of a single Air Wipe installation for a wide range of wire sizes because the inside diameter of the wipe can be changed simply by replacing the metal inserts. This feature increases the versatility and economy of an operation.



The Multiple Wipe is equipped with mated pairs of interchangeable inserts, from 1/8 inch to 1½ inch ID. These are divided into two ranges; the smaller one covering from 1/8 inch to ½ inch ID, and the larger one covers from ½ inch to 1½ inch ID.

Multiple Wipes with insert ID greater than 1½ inch are available through special order.

An added benefit of the Multiple Wipe is the ease of replacing damaged inserts. This reduces maintenance costs, since the more costly body portion of the wipe is less likely to be damaged, and inserts can be replaced without changing the complete Air Wipe installation.

Carboloy wear resisting inserts can be installed in the Multiple Air Wipes, if desired, up to 1½-inch diameter.

MICRO-WIPE SOLID AIR WIPES:

Inside Diameter	Mounting Shank Diameter S	Overall Diameter D	Overall Length L	Threads Per Inch	Pipe Tap Size	Net Weight Approx.	
						Lbs.	Oz.
1/8	1	1½	3½	14	¼	1	6
3/16	1	1½	3½	14	¼	1	7
¼	13/8	17/8	37/8	12	¼	2	6
3/8	13/8	17/8	37/8	12	¼	2	2
½	13/8	17/8	37/8	12	¼	2	4
¾	2	2¾	53/16	12	½	5	12
1	23/16	3	53/16	12	½	7	0
1¼	23/16	3¾	5¾	12	½	7	6
1½	2¾	3½	6	12	½	7	11
2*	3	4	71/8	12	¾	4	12
3*	4¼	5½	8½	12	¾	9	4

* The 2-inch and 3-inch ID Air Wipes are made of aluminum. All others are brass, or if so specified, stainless steel.

Threads per inch shown at the left are for both the threads on the mounting shank and the micro adjusting screw.

Full operating instructions accompany each Air Wipe shipment.

WIPE SELECTION:

MGS Air Wipes are available in brass, aluminum, stainless steel, and polypropylene.

Careful selection of the proper size of Air Wipe for any given wiping application is very important. It is difficult to prescribe exactly which size of wipe is indicated for a given wire size. This depends

largely on how closely the wire can be guided, the nature of contaminant to be removed, and the wire speed. The table to the right gives suggested Air Wipe sizes for various wire diameters.

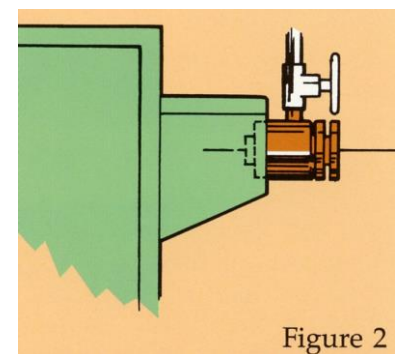
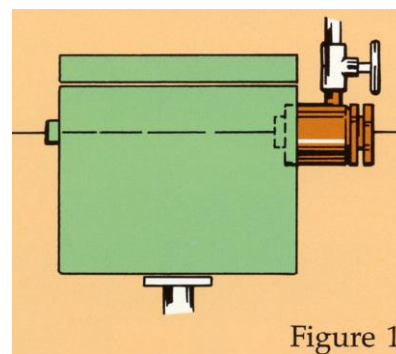
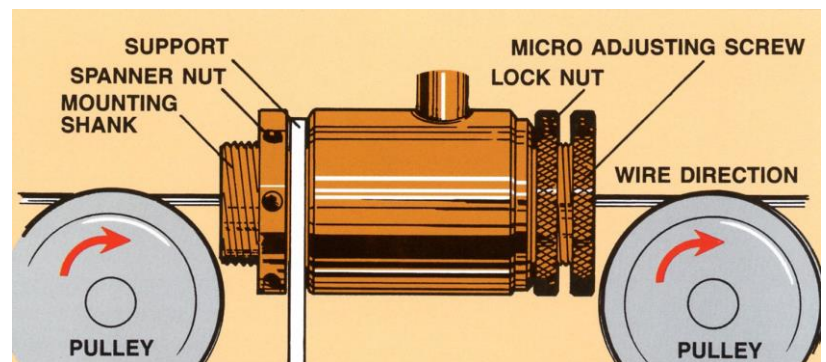
Air Wipe ID	Range Of Wire Diameters
1/8	.005 to .040
3/16	.030 to .060
1/4	.050 to .100
3/8	.080 to .140
1/2	.125 to .200
3/4	.190 to .300
1	.250 to .500
1 1/4	.500 to .750
1 1/2	.750 to 1.000
2	1.000 to 1.500
3	1.500 to 2.250

INSTALLATION:

The MGS Air Wipe is easily installed on a support, using the threaded shank and nut. It is essential for maximum wiping efficiency to provide pulleys, or other guide systems to keep the wire centered in the Air Wipe. (See illustration on the right.)

Although a single Air Wipe normally is adequate, it may be advisable in especially difficult situations, to install two Air Wipes in tandem.

MGS Air Wipes have been successfully used for years in many applications with compressed air. They can also withstand acid concentration solutions in various cleaning operations in the manufacturing of ferrous and non-ferrous round wire, strip flat wire, and special shapes.



For additional noise reduction, the Air Wipe can be mounted on a metal drainage box. Air Wipes are often mounted in a drainage box attached to the side of the Capstan enclosure. They can also be mounted directly on the side of the Capstan enclosure. (See Figure 1 and Figure 2.)

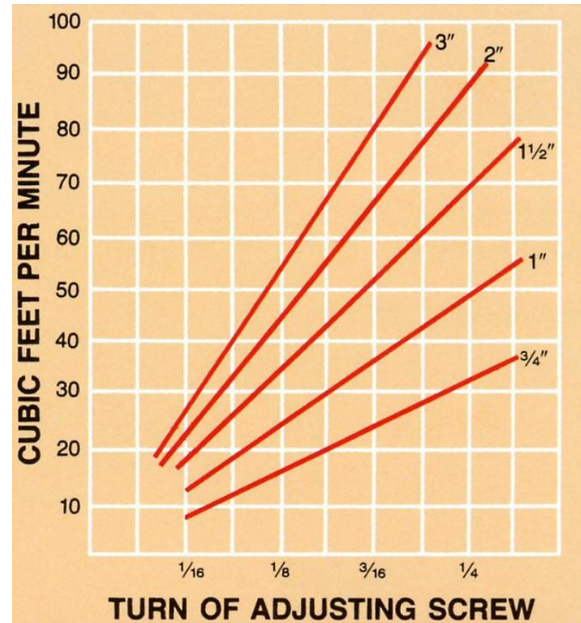
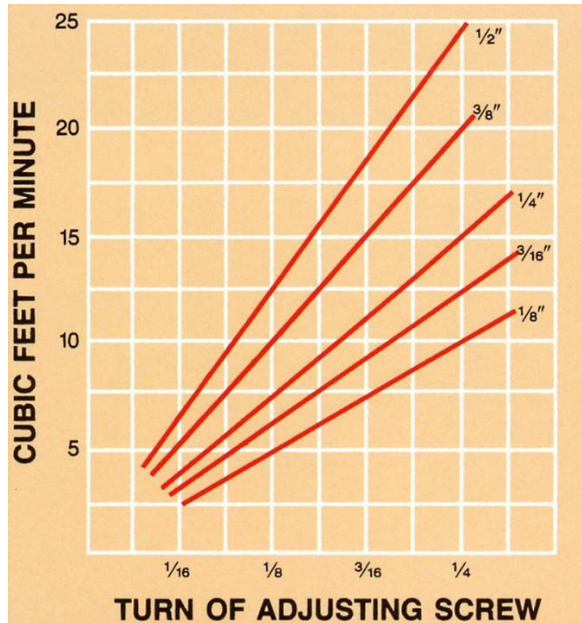
AIR ECONOMY:

The MGS Air Wipe is a real miser in the use of costly compressed air. It uses only a fraction of the air required by other commercially available types while improving wire quality, reducing rejects, and minimizing scrap losses.

The charts are based on 100-PSI air supply. This is an easy way of determining approximate air consumption for various sizes of Air Wipes (or inserts in Multiple Wipes). For air supply pressure less than 100 PSI, air consumption is about proportional to the actual pressure.

Although MGS Air Wipes can be sold simply on the basis of its effectiveness in cleaning wire, the savings are substantial.

The MGS Air Wipe can easily pay for itself just in the saving of costly compressed air.



MGS / HALL designs and manufactures product handling solutions which include Payoffs, Takeups, Dancers, Accumulators, Measuring Machines, and Capstans to handle most any product from sensitive optical fiber to 1000MCM (507-mm²) power cable. We also can handle odd shapes, tubing, ribbon, and tape.

Our Automatic and Semiautomatic Takeups are extremely reliable for on-line packaging of a wide range of products and reels at high speeds, resulting in significant cost savings.

Machines that are built to meet the specifications of the individual customer is a characteristic of MGS/HALL systems. Comprehensive design and engineering capabilities together with meticulous manufacturing techniques and careful testing assure customer satisfaction. Some say we design machines with the user in mind. We like to think we're in the business of solving problems for other business – like yours!

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