### C C C CABLE CONSULTANTS

# **PRIMARY WIRE WIPE TYPE PW**

(PATENT PENDING)

## **PRODUCT AND APPLICATION DATA** GENERAL DESCRIPTION

The **PRIMARY WIRE WIPE** employs a novel principle: The wire to be cleaned passes between two strips of absorbing material which move in opposite directions laterally so that a clean surface is continuously presented to the wire. The **PRIMARY WIRE WIPE** is designed to remove all visible dust and excessive oil / lubricant from the wire thereby considerably improving the quality of the insulation bond and reducing the number of spark faults. Furthermore the preheater sheave life will increase owing to the reduction of oil and debris deposited on the sheaves causing arching.

The PW should be considered as an economical, low maintenance, environmentally friendly alternative to expensive aqueous or ultra sonic wire cleaning systems.

The PW is suitable for wiping bare, tinned or plated nonferrous wire or strand from 18 to 30 AWG at line speeds compatible with modern extruder lines.

The PW is installed across the axis of the extruder line immediately in front of and close to the preheater or cross head if no preheater is used. Removal of any residual wire drawing compounds, dirt, dust etc. is achieved by two strips of cleaning tape passing across the wire in opposite directions one above and one below the wire. The constant traverse rate of the cleaning tape across the wire ensures a continuous supply of fresh, uncontaminated cleaning tape to the wire. In this manner the wire does not come into contact with contaminated cleaning tape as is the case when rags or stationary felt pads or boxes are used.

#### CLEANING TAPE

The cleaning tape traverse rate is set according to the wire diameter and line speed. The rate of traverse must be set to achieve a series of closely spaced black lines on the cleaning tape. If the black lines are spaced more than 1/8" apart, the traverse rate is probably to high. On the other hand the traverse rate must not be too slow to allow a build up of grease on the cleaning tape or for the wire to cut through the cleaning tape.



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#### **TECHNICAL DATA**

Recommended wire diameter range: 18 to 30 AWG

Details for larger diameters on request

Max. line speed : 8.000 ft. / min.

Materials: smooth non-ferrous wire or strand, tinned, bare or plated

Wire centerline height: adjustable from 36" to 45"

BOYD CONVERTING cleaning tape roll dimensions: 8 1/8" diameter x 6" wide x 3" bore

Power supply: 110 V.

Air pressure: 40 p.s.i.

Space required: 18" long x 27" wide x 54" high

7 Woodland Ave. • Larchmont NY 10538 • Tel 914/834-8865 • Fax 914/834-8903 • e-mail: info@cableconsultantscorp.com website: www.cableconsultantscorp.com

Charlotte, NC Office • Tel 704/375-9313 • Fax 704/375-9321 • e-mail: fhardyccc@carolina.rr.com

#### OPERATION

Lift airvalve lever to open the hinged top pressure plate with foam pressure pad. Feed the wire through the PW so that it lies on the lower cleaning tape. Close the hinged top pressure plate thus sandwiching the wire between the two cleaning tapes. Check that the wire centerline height and the centerline height of the two pressure pads is identical. The wire must not be deflected from its horizontal path by either of the pressure pads. If the wire is deflected upwards or downwards as it enters or exits the pressure pads, the wire could cut into the edge of the cleaning tape,

Start the line and adjust the cleaning tape traverse speed accordingly.

NOTE: The pneumatic cylinder controlling the top pressure pad must be adjusted to ensure the upper and lower cleaning tapes make contact one with the other. The pressure pads MUST NOT FUNCTION AS A CLAMP and prevent the cleaning tape traversing across the wire. Only a light pressure is required.. The cleaning tapes traverse in opposite directions. The correct traversing speed is achieved when the cleaning tapes show a series of closely spaced, continuous black lines across the cleaning tape. If the black lines on the cleaning tape are spaced more than 1/8" apart, the rate of traverse should be reduced.

#### INSTALLATION

The PW is supplied with a base plate and support column with height adjustment. Place the PW in the extruder line between pay-off and pre-heater but as close to the extruder cross head as possible but leaving sufficient space for cross head maintenance. Adjust the height until the lower cleaning tape makes contact with the wire. Tighten clamp on support column. Check the position of the lower cleaning tape. It must be horizontal and it must not deflect the wire upwards. Connect to power supply.

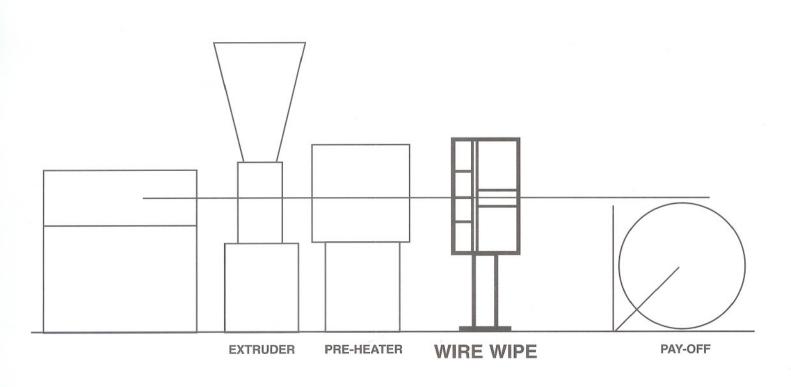
Connect air supply to valve for pressure pad cylinder. No adjustment to the air regulator is required. It has been set prior to shipment.

#### **CLEANING TAPE**

The PW is supplied complete with upper and lower rolls of BOYD CONVERTING cleaning tape. Use only this type of tape. The BOYD chemical bonded, nonwoven cleaning tape has been developed to absorb lubricants during the wiping process without depositing fine fibers on the wire. A potentiometer is mounted on the front of the PW to set the cleaning tape traverse rate. Adjustment of the cleaning tape traverse rate may be undertaken while the line is stationary or running.

#### **OTHER APPLICATIONS**

Details for wiping multiple end and strip products available on request.



*Cable Consultants Corporation • North American Representatives* 7 Woodland Ave. • Larchmont NY 10538 • Tel 914/834-8865 • Fax 914/834-8903 • e-mail: info@cableconsultantscorp.com website: www.cableconsultantscorp.com

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