



# SPIRA/FLO

## Pipe and tubing for pneumatic conveying of plastic materials

Whatever you call them in your plant, “angel hairs” or “snakeskins”, they can be a serious problem to your production. They clog up machinery, system terminals and filters. When shipped with your product, they cause rejection and return of shipments and cause product loss and production downtime.

Pipe treatment methods to minimize the problem have been around for a number of years, but all other methods suffer from one or both of these shortcomings:

- Reduction in “angel hairs” produces an increase in fines
- Pipe treatment wears out with use and loses its effectiveness

Only SPIRA/flo has been proven to be the most effective in reducing “angel hairs” without producing fines and without losing its effectiveness. SPIRA/flo piping also has the internal treatment method which has been proven by rigorous comparison testing and years of customer use.

### *SPIRA/flo cuts operating costs*

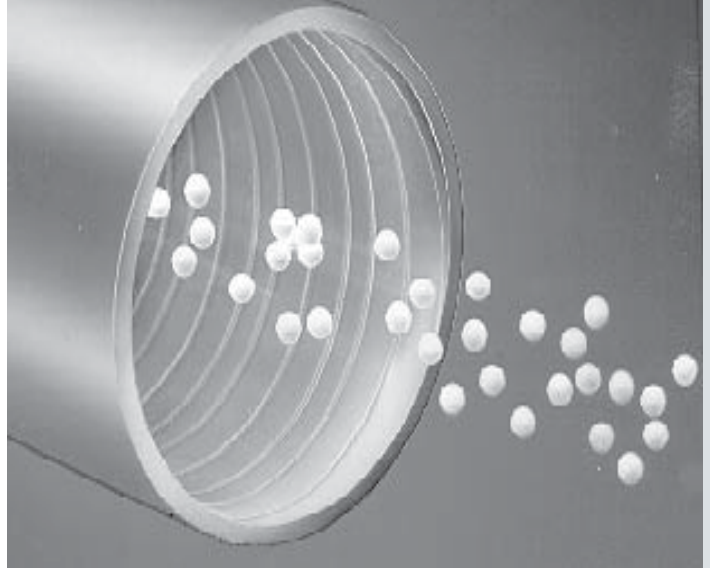
With SPIRA/flo, it is no longer necessary to retreat pipe to maintain its effectiveness. It is common with sandblasted, shot blasted, scratched or other forms of treatment to require removal and retreatment

as frequently as every 12 to 18 months. SPIRA/flo eliminates the high labor cost and downtime required for retreatment. SPIRA/flo does the job best and continues to do the job without loss of its effectiveness. Results are guaranteed.

### *SPIRA/flo wins against other treatment methods*

A very large producer of polyethylene, accustomed to purchasing large quantities of treated aluminum pipe, ran a rigorous test program to determine the most effective pipe treatment on which they might standardize. Test conditions and operating parameters for each test were the same except for the type of pipe. A “pull-push” pneumatic conveying system was set-up and test batches of pellets were run in closed circuit for five hours for each kind of pipe. The system was set to operate at 7,000 ft./min at the pick-up and 8,260 ft./min at the discharge. Two of the 90 bends were heat taped and the entire pipeline was insulated.





## The original spiral grooved piping

At the conclusion of each test run, the system was visually examined and the residue of "angel hairs" and fines was checked. In addition to the various kinds of pipe treatment, the program tested smooth bore aluminum pipe to have a base for comparison.

At the conclusion of the program, a report was prepared which concluded that, "Among the pipes tested, Delta Ducon's SPIRA/flo produced the least amount of "angel hairs" and fines." These results, coupled with Delta Ducon's guarantee of treatment effectiveness have convinced this large user to standardize to SPIRA/flo.

### *Size and availability*

The most common form of SPIRA/flo is aluminum, schedule 10. It is available in pipe sizes 2" to 8" in 20' random lengths. For 10" and 12", schedule 40 material is required. Tubing is also available starting at 2.00" O.D.

Also available is 304 stainless steel, schedule 10, in sizes 2" to 8". Schedule 40 material for 10" and 12" diameters. Lengths are from 20' random lengths as received from the mill.

### *Bends*

SPIRA/flo treatment must be applied to straight pipe or tubing before it is formed into bends by a special

technique. Almost any customer need in pipe bends can be met by Delta Ducon. Most users employ a radius of 10 times or 12 times the pipe diameter. All bends are supplied with straight ends, which are normally two times the diameter length.

## ☐☐☐ Benefits

- Reduces angel hairs, snakeskins, streamers and fines
- Eliminates labor cost and downtime required for retreatment
- Other pipe treatments wear out and lose effectiveness

SPIRA/flo pipe or tubing is guaranteed for 5 years from date of shipment. If purchaser reports loss of effectiveness of SPIRA/flo and condition is confirmed by a Delta Ducon representative, customer shall be given credit for the original purchase. Credit will be prorated for time in use, against purchase of replacement SPIRA/flo pipe or for regrooving of existing pipe. Pipe for regrooving is to be shipped to Delta Ducon manufacturing facility prepaid and will be returned freight collect. Note: Bends cannot be regrooved. Guarantee only applies to plastics and like product sans fillers or abrasive additives.



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