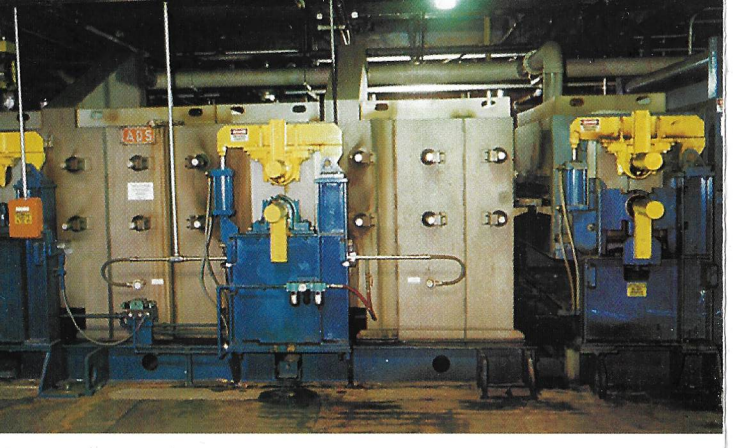

water that falls back into each section or stage is recirculated to the spray headers. Water overflows from one stage to the next, cascading counter to strip travel. Fresh make-up water is introduced into the last stage, so the cleanest water is in the final rinse stage. The more stages there are, the less make-up water that is needed. **A·D·S** builds cascade rinse tanks with two to five stages, depending upon the application. Wringer rolls confine the dirtiest water to stage #1, and remove most of the moisture before the strip enters the hot air dryer.

Hot air dryer

Before it exits the system, the strip must be absolutely dry to prevent water staining or subsequent oxidation. This dryer has four upper and four lower headers that blast hot air onto the strip. A manifold connects the headers to the blower. Incoming air can be heated by gas (direct or indirect), steam, or electrical resistance. The air stream is normally heated to at least 150° F above the ambient temperature. Sound absorbing materials keep the noise level at less than 85 Dba within ten feet of the machine.

We include *White Glove* Strip Cleaning Systems in our A·D·S strip processing lines …but they are also available as retrofits for your existing lines

We design and manufacture a broad range of strip processing lines, and *White Glove* Strip Cleaning Systems are incorporated wherever cleaning is required. But **A·D·S** *White Glove* systems are also available as retrofits for existing lines. If you have a requirement for clean strip, let us show you what we can do for you. Call **(330) 399-3601.**

- ☑ Pickling Lines
- ☑ Electrolytic Cleaning Lines
- ☑ Annealing Lines
- ☑ Galvanizing Lines
- ☑ Coil Coating Lines
- ☑ Tension Leveling Lines
- ☑ *White Glove* Strip Cleaning Systems
- ☑ Coil Handling Equipment
- ☑ Strip Accumulators
- ☑ Plate Mill Ancillary Equipment

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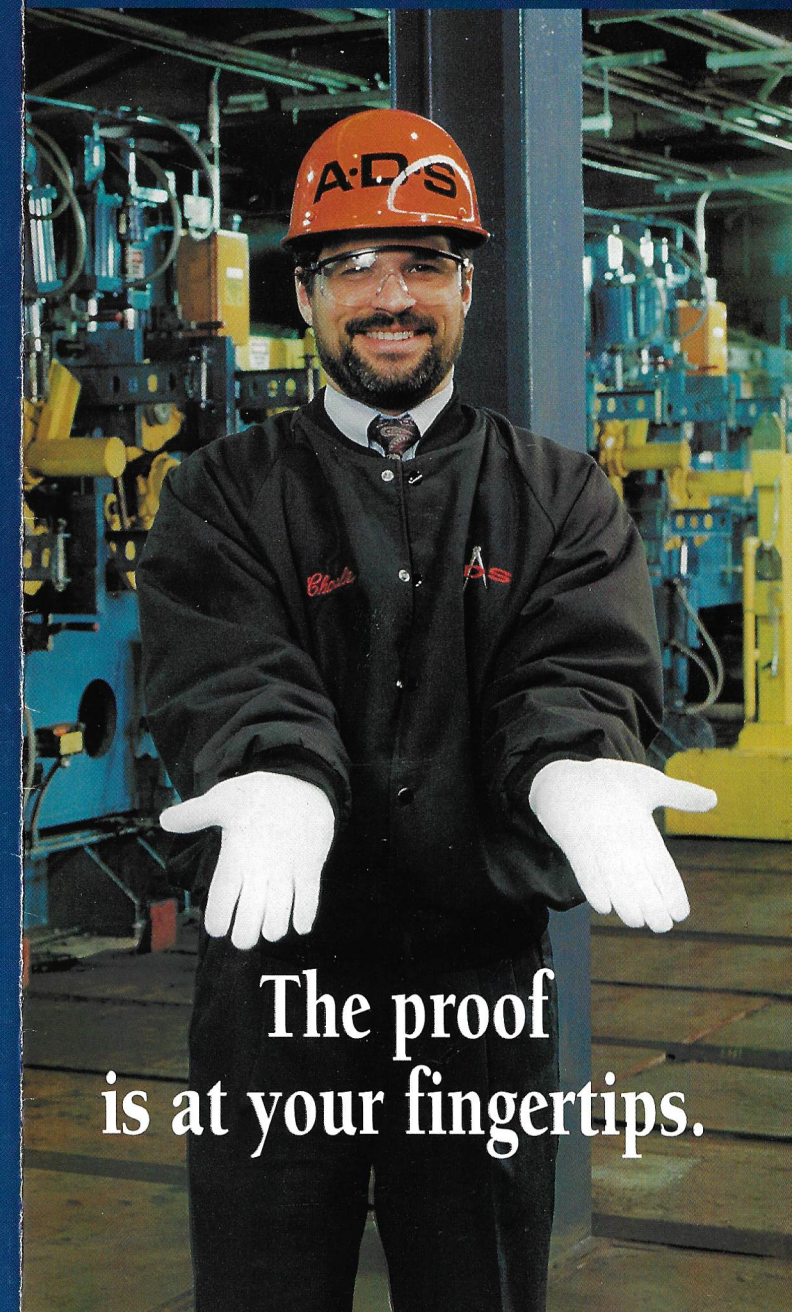
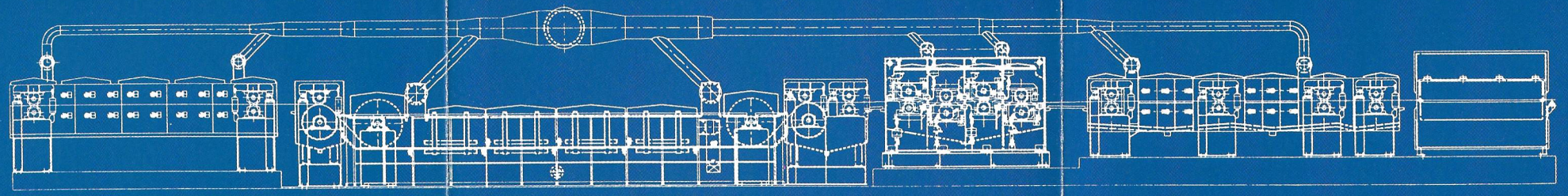
A·D·S
White Glove
STRIP CLEANING SYSTEMS



The proof is at your fingertips.

Typical *White Glove* Cleaning System



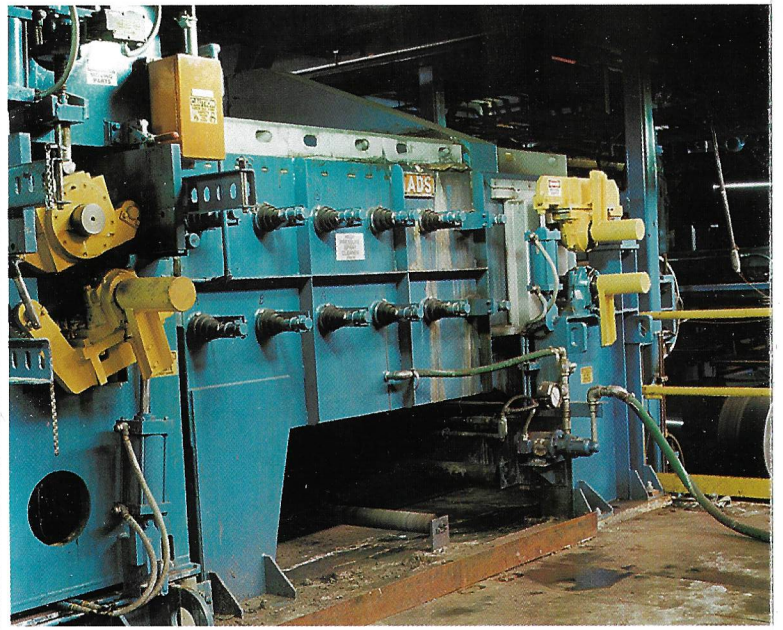
High Pressure Spray Cleaner | Electrolytic Cleaning Tank | Brushing Machine | Cascade Rinse | Hot Air Dryer

Built to last

Your **A·D·S** *White Glove* Strip Cleaning System will stand up to the unrelenting effects of moisture, chemical detergents, and elevated temperatures. And, of course, it will get the strip clean, dry, and ready for the next operation.

Our corrosion-resistant tanks are made of stainless steel or polypropylene and reinforced with steel framing. Our statically balanced, fabricated rolls are covered with elastomer all the way to the journals. Baffles and slingers on the roll necks keep solution away from the bearings. Separate, sturdy, steel stanchions support the rolls and their adjustable speed drives.

Relying on proven technology, we engineer each system for its particular application. Ancillaries, such as the fume exhaust system and off-line storage tanks, are totally compatible with other components in the system. The typical system shown here includes the following equipment:



High pressure spray cleaner

Incoming strip enters the spray cleaner, where recycled detergent solution removes rolling oils and loose particulate matter. The solution is pumped through high impingement nozzles. Spray headers mounted above and below the strip are easily removed for cleaning, repair, or replacement while the line is operating. Optional self-cleaning nozzles are available.

Entry and exit wringer rolls serve as damming rolls to contain the solution within the tank and to prevent dragout.

Electrolytic cleaner

Electrolytic cleaning is highly effective in removing rolling oil. The choice of medium or high current density cleaning depends upon the application.

Steel electrode grids are supported in a polypropylene tank, about twenty-five feet long, with a wall thickness of at least one inch. We connect automatic polarity reversing rectifiers to the grids with heavy copper bus bars. Rectifier voltage varies, but it is in the range of 18 to 45 volts D.C. Rectifier current, which can be as high as 20,000 amps, is controlled automatically as a function of line speed. The rectifiers can be either air- or water-cooled.

Deflector rolls and large diameter sink rolls guide the strip into and out of the tank. Exit wringer rolls minimize carryover of the solution.

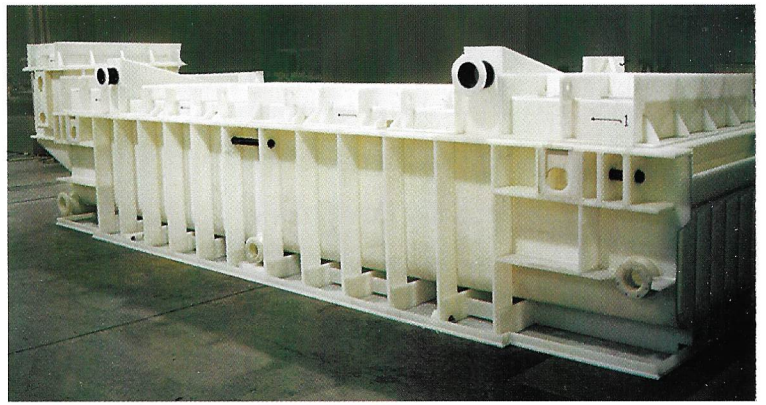
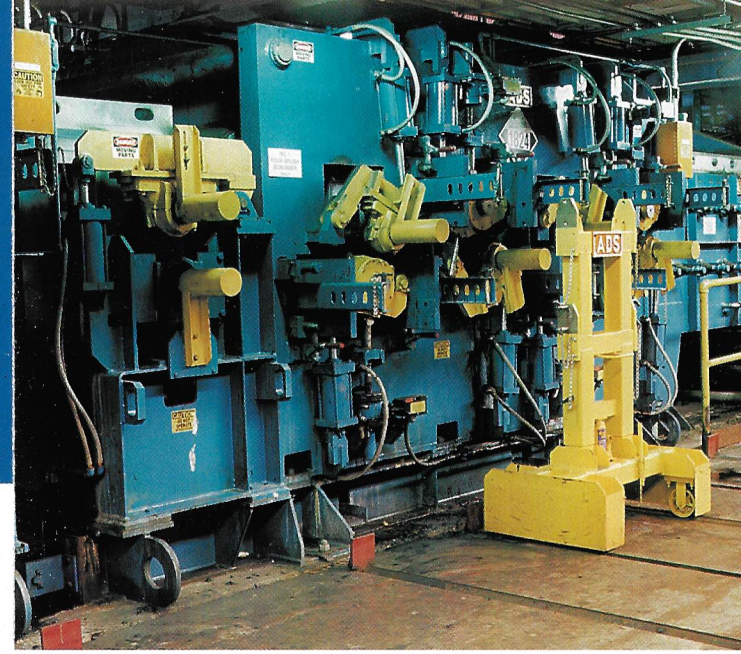


PHOTO: ALLEGHENY PLASTICS



Brushing machine

Mechanical brushing effectively removes metal fines and annealing smut. Motor-driven screw jacks automatically position the four brushes–two below and two above the strip–to adjust for brush wear. Preset watt loads on the motors determine the brush contact pressure

Backup rolls support the strip at each brush: pneumatic cylinders pivot them out of the way quickly for weld or stitch passage. Spray headers before and after each brush wet the strip and flush loose matter from the surfaces. The spray headers and the brushes are designed for easy removal. Wringer rolls minimize carryover into the rinse section. Pneumatic cylinders open the top wringer roll for threading. (Some installations have a second brushing machine in place of the electrolytic cleaner.)

Cascade rinse

Cascade rinsing conserves water and heat by spraying large volumes of recirculated water onto both surfaces of the strip in a sectioned tank. The