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*CWP 72" x 30,000lbs.
Capacity System*



PROVIDING THE METAL STAMPING INDUSTRY WITH THE
LATEST TECHNOLOGY IN COIL PROCESSING EQUIPMENT.

Special Emphases: Presses, Press Feeders, Conveyors & Coil Handling

PASS ALONG TO: Purchasing Engineering Lobby



Providing The Metal Stamping Industry With The Latest Technology In Coil Processing Equipment by Matt Watson, CWP Marketing Manager

As the economy continues to fluctuate, metal stampers are demanding maximum versatility in their new equipment purchases. Recently, New Standard Corporation (NSC) in York, PA, looked to Cooper-Weymouth, Peterson (CWP) a division of Formtek located in Clinton, ME to supply an automated system to be used with their newly acquired 2600 ton Verson transfer press. The system had to be flexible throughout a broad range of material processing capacities and be operator friendly. NSC stamps components for the appliance, office furniture, and automotive industries. They process material from .020" to .285" thickness with widths ranging from 6" up to 72".

According to Gary Kiehl, Facilities Manager at NSC, "From the initial inquiry through the installation process, CWP was our partner with answers and cooperation as we made changes in equipment design or function."

Flexibility for a Wide Variety of Tooling

To offer maximum flexibility in the design and application of NSC's tooling, CWP provided a model SMXIII 72H6 two roll servo feed with a high performance ServoMaxIII control. The 6" diameter matte chrome finish feed rolls prevent slippage and marking when processing critical surface materials while a unique 4:1 pivot design in the upper feed roll assembly provides the required down pressure to process the heavy HSLA material applications. An automatic lubrication system was provided to ensure that all the critical grease points within the servo feed are greased automatically with a Trabon pump and timer to achieve lasting equipment performance. Anti back-up rolls on the entry of the servo feed prevent loss of material into the looping pit, should the feed experience a loss of power or air pressure. An isolation transformer was wired into the feed and prevent any voltage spikes from damaging the control. An adjustable height cabinet base with powered height and clamping

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—Gary Kiehl, Facilities Manager at NSC

feature allows the operator to adjust the pass line height of the feed +/- 6" with push button control.

Both intricate progressive dies and long blanking dies are run in the 2600-ton Verson press. Because of the wide variety of tooling, a conventional line with independent servo feed and straightener was selected. With this style of equipment a looping pit was required. Model 72PTT21 threading tables were provided to span the looping pit. The tables are double sided which when elevated cover the looping pit and allow material to be jogged from the straightener into the feed hands free. When retracted they form a barrier blocking the looping pit and prevent personnel from getting too close to the



CWP Threading Tables

material and possible injury. The positioning of the tables is all push button controlled.

A model HD72-63PDS11 heavy duty precision power driven stock straightener is designed for pull off operation and was supplied to flatten the wide range of material that NSC has to process. The machine has four 6" diameter matte chrome pinch rolls. The rolls are hydraulically opened for thread up and when closed allow the straightener to pull material from a stock reel. Eleven 3" diameter smooth chrome straightening rolls ensure flat product when processing materials which range from .020"-.285". The 3" diameter straightening rolls were backed up in three places to prevent deflection when running the thicker materials while allowing smaller diameter rolls with closer center distances for superior ability to flatten the thin material. An angular head starts material into the loop sooner and conserves floor space. Handwheel adjustable edge guides allow the operator to control material position within the straightener from a single point of adjustment. A modulating drive system with ultrasonic loop control allows adequate slack material to be maintained within the looping area for the various feed lengths processed through the system. An automatic lubrication system ensures all the critical grease points within the straightener get greased automatically with a Trabon pump and timer ensuring lasting equipment performance. An automated, powered straightener head feature allows the operator to make adjustments during operation.

System Designed for Operator Safety

One key factor in the selection of the equipment was operator safety. According to Gary Kiehl Facilities Manager of NSC, "Our equipment was engineered, designed and built with quality and putting the safety of our production and set-up associates first. Even after installation and start-up of the equipment, CWP was here with support and training. From the perspective of equipment maintenance, the CWP equipment durability speaks for itself, – turn it on and let it run." A coordinat-



CWP 72" HDP System

ed model 72 HDP hold-down-peeler system comprised of an extensive series of features plays a primary role in the ease and safety of material thread up in the system. Some are incorporated into the stock reel, some into the straightener, and others bridge the gap between units to facilitate the threading of material and allow the operator to thread the system hands-free.

HDP FEATURES:

- A **hold-down arm**, mounted to the straightener and extending to the centerline of the coil, is raised and lowered by two large bore air cylinders and has a polyurethane covered rider roll for stock protection and extra threading traction.
- A **rugged motor drive to the rider roll** helps direct the outer wrap of material toward the straightener when the reel is inched.
- A **pneumatically raised and lowered peeler table**, mounted to the entry end of the straightener, helps guide material from the reel at the appropriate angle for various coil diameters. This line is equipped with solenoid operated valving with pushbutton controls.
- An **air extendible peeler blade**, mounted within the peeler table, can be positioned directly under the lead edge of coils fully guiding material during the threading process.
- A **breaker bar**, affixed to the hold-down arm, can be used with the tip of the peeler table to backbend the lead edge of the coil for ease of threading. The line is equipped with **solenoid operated valving** with pushbutton controls and CWP's exclusive "**Auto Ready**" function, that moves all threading features to a neutral position in preparation for automatic operation. A **full diagnostic touchscreen** operator interface utilizes a multicolor display and input panel. The interface provides complete operator prompting of threading procedures, maintenance schedule, service points for the entire system, and in-depth diagnostic fault messages with recommended remedies. The touchscreen also allows the operator to program in the material thickness and yield strength. With this information the control automatically adjusts the powered straightener head to the proper position to remove coil set.

"This is a very user friendly piece of equipment. The digital readout on the straightener rolls makes it easy to adjust when needed. Raw material feeds into the pinch rolls of the straightener automatically & very easily & safely. There is an access door on the straightener rolls for ease of cleaning the rolls. The power assist & power clamps on the feeder work real well for adjusting to varying feed line heights," states Frank Parduski, Plant Manager at NSC.



Graphic, Digital Readout Screens

Efficient Coil Staging and Loading Technology

A model 8R-72 non powered stock reel with 30,000 lbs. capacity was supplied to support the steel coils. The reel has an I.D. range of 19"-24.5" and a O.D. capacity of 72". It also has a variable tension ultrasonic controlled brake system. As the coil depletes an ultrasonic sensor sees a reduction in coil O.D. and adjusts the brake automatically. This gives constant brake tension for smooth processing of coils from full O.D. to coil depletion. This is essential in processing thin critical finished material. Coil staging and positioning on the mandrel is accomplished with a model 30060CLC traveling coil loading car. Coils weighing up to 30,000 lbs. are easily loaded on the stock reel. The car uses a common track system with the stock reel and is hydraulically powered and controlled with a remote jog operator pendant. The coil car has a 24" lift capacity and anti tip arms which allow a wide range of coil widths and outside diameters to be processed. CWP worked very



closely with NSC and the application in which the equipment had to perform in. We knew the system had to be easy to operate, flexible and most of all dependable. As with all CWP equipment this system was supplied with an all inclusive 2-year warranty.

"Quite a bit of data was used to select the system that was eventually specified for the newly installed 2600 ton Verson Transfer Press. Versatility and flexibility were required in order to meet the wide range of coil widths. Thin cold rolled product up to heavier gage 1050 and HSLA would need to be processed through the same equipment. Ease of operator use, integrated controls, training, delivery and cost, along with less maintenance were also strong considerations in the selection. Overall, the CWP system met all of our requirements and has been in operation with no outstanding issues," states Jim Powell, Factory Engineering Support Manager at NSC.

Specializing in Coil Processing System Solutions

CWP is an industry leader in coil processing equipment with over 58 years of experience and innovation. Our ability to maintain 98% of our product production within our facility allows us full control over our shop through put. Our 85,000 sq. ft. facility is designed to allow product to flow from raw material at the fabrication end of the building to finished product shipping to our customers from the assembly end of the building. In the center of our building product flows through a state of the art machine shop that utilizes multiple horizontal turning centers, two of them with automatic bars feed capability, one with dual turret and turning capacity of 19" diameter, 157" between centers and 6600 lb. load-

*New Standard Associates from left to right
Frank Parduski, Jim Powell and Gary Kiehl*

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ing capacity, multiple CNC machining centers and a CNC Bridge Mill with travel capacity of 69"X x 126"Y x 53"Z are critical to our operation. The facility also has roll hardening and grinding capabilities. Program-ming for the machine shop is accomplished with Surf cam software. Our manufacturing department is staffed with 71 highly trained employees. We have an engineering staff of 8 people that allows us to quickly process customer orders as well as provide custom coil processing application solutions. Our sales staff consists of 10 people to rapidly respond to customer applications and provide the quickest quote turnaround time in the industry. The service department is staffed with 7 people, five located in Clinton, ME, and one each in Chicago and Dallas to provide quick response to our customers no matter where they are located. We are currently implementing a true 24/7 service program which will be implemented prior to June 1, 2004.

No matter what your coil processing needs, from a simple servo feed requirement, to a fully automated press feed system, or a fully automated cut-to-length system, CWP has a cost effective solution for your application. For more information about CWP's coil processing equipment please contact:



CWP's 85,000 sq. ft. Facility in Clinton, Maine



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