

Interact » | Log In | Register

Wednesday, June 22, 2011

SPONSORED BY



RIDE ALONG WITH US ON



FIND VENDORS

LOOKING FOR METALWORKING EQUIPMENT, MATERIALS AND SERVICES? THE METALS DIRECTORY &gt;

Search site



## Tube & Pipe

# Axial end forming

Servo-drive technology helps power a new generation of pipe end forming equipment

By FFJournal staff

June 2011 - The flexForm RU8-12-18 pipe forming machine, launched by **Rosenberger AG**, Simonswald, Germany, is defining a new generation of pipe end forming equipment. The RU8-12-18 incorporates Rosenberger's axial forming technology, which can form simple flanges, beads, reductions and expansions, as well as complicated pipe end shapes. Powered by servo-electrical drives rather than hydraulically driven controllers, the machine merges the existing RU8-12 and RU18 models with technology that evolved through years of experience and previous customer insight, according to a press release.

Rosenberger's website says the company launched a servo-driven tube-bending machine in 1994-an innovation that's behind the RU8-12-18. The servo-electric feature means drives can follow complex material contours and paths as opposed to the limitations of lateral hydraulically driven tools. Additionally, machinists can rely on programmable speed profiles for optimal, precise material flow control.

Quick and quiet The PLC-based CNC control allows all dimensions, paths and motions up to 0.01 mm to be programmable on the clear-text display. Users can select from one of the three models, depending on the end forming axial force required (80kN, 120kN or 180kN). The asynchronous drives are low-noise, require little maintenance and produce minor exhaust heat, which provides up to 80 percent in energy savings, according to a press release.

The RU8-12-18 is capable of end forming speeds from 182 mm/s up to 10.9 m/min, with repeatability of 0.02 mm, according to Rosenberger's specifications. With the ability to freely program ram pressure, speed and cycle time optimization, machinists can dial in process parameters within 0.01 mm accuracy. Built-in memory for parameters makes completing large jobs quick and efficient. Networking connections ensure that those parameters can be backed up and correspond with prevailing interfaces, such as BDE recording. In less than five minutes, machinists can change over tools and enter new programming and select from one of four program modes: automatic, single-step, manual and diagnostics.

Aside from forming flexibility, Rosenberger designed the RU8-12-18 with ergonomics in mind. The vertical tool alignment minimizes the machine's footprint (2.38 m by 1.02 m), which, combined with its lack of hydraulics, makes transportation manageable. Depending on the job, the machine lends itself to a modular approach, as the robot connection allows integration into existing workflows with other machines. Rosenberger's specifications indicate fully automated joining of irregular shapes such as flanges, U-nuts, U-bolts and O-rings.

## Article Utilities

Talk Print Email

Back to Search Results

## Sources

### Rosenberger AG

Simonswald, Germany  
phone: +49 (0) 7683/91900-0  
[www.rosenbergerag.com](http://www.rosenbergerag.com)

## Most Viewed

**Automotive** George Barris continues legacy of car customization [click here](#)

**Aluminum** German designer puts chair into hands of anyone with a computer-- and laser cutter [click here](#)

**Automotive** Part 2 of our interview with Hollywood car customizer George Barris [click here](#)

**Stainless Steel** Motorcycle part supplier JBA Precision enhances tool performance with Prodec 303 from Outokumpu [click here](#)

## What Else is Hot

Videos

Literature

Top Products

Website Showcases

Events

White Papers



Patented 110-Series  
For odd-shaped pallet loads  
[yellowjacket110.com](http://yellowjacket110.com)



Innovation, Simplicity and High Quality, at an Affordable Price  
**BIM**  
METAL CUTTING BANDSAWS




**GULLCO**  
WELDING & CUTTING AUTOMATION

The DoubleTool model of the RU8-12-18 is capable of concurrent processing, which means users can double their output.

A selection of forming accessories unlocks the RU8-12-18's potential. Attachment jaws protect materials with pre-formed or multiple contours, while rotating tools can be implemented to process profile rolls, planes, threads, chamfers and more within a single program run. Combined with the servo-electric drive's free movement and automatic tool calibration, clamping jaws can be installed and oriented vertically or horizontally to tailor a handling solution. The clamping unit, type of tool, axial force and asynchronous drive selection can be set up in modules, giving users a customizable way to produce complex pipe ends and forms. Along with its many process combinations, RU8-12-18's safety hood, minimum pre-force clamping and safety switch protect users and processes from costly errors.FFJ


You are not signed in. You must [LOGIN OR REGISTER](#) to submit comments.

**FIND VENDORS** | LOOKING FOR METALWORKING EQUIPMENT, MATERIALS AND SERVICES? [THE METALS DIRECTORY >](#)



**N-T-S** National Tube Supply Company  
Your choice for carbon and alloy mechanical steel tubing.

MAGAZINE | MEDIA KIT | SUBSCRIPTION | SUSCRIPCIÓN | TERMS OF SERVICE | PRIVACY | CONTACT



FFJournal.net powered by Parkview Technology Group