

# When You Look Beneath The Surface The Choice Is Clear.

**Automatic Internal Separation**  
delivers the most efficient unloading and  
separation of parts from the  
finishing media.

**Air Operated Unload System,**  
standard on larger models, frees the oper-  
ator to perform other functions while the  
mill is running.

**Reversing Capability** allows  
automatic adjustment for  
optimum process and  
unload settings.

**SWECO  
Hot Poured  
Polyurethane  
Lining,** with a 95  
Durometer rating, is the  
most wear resistant  
lining available.

**Closeable Drain Assembly**  
provides maximum process  
versatility by allowing both retention  
and quick drainage of compound/  
abrasive solutions.

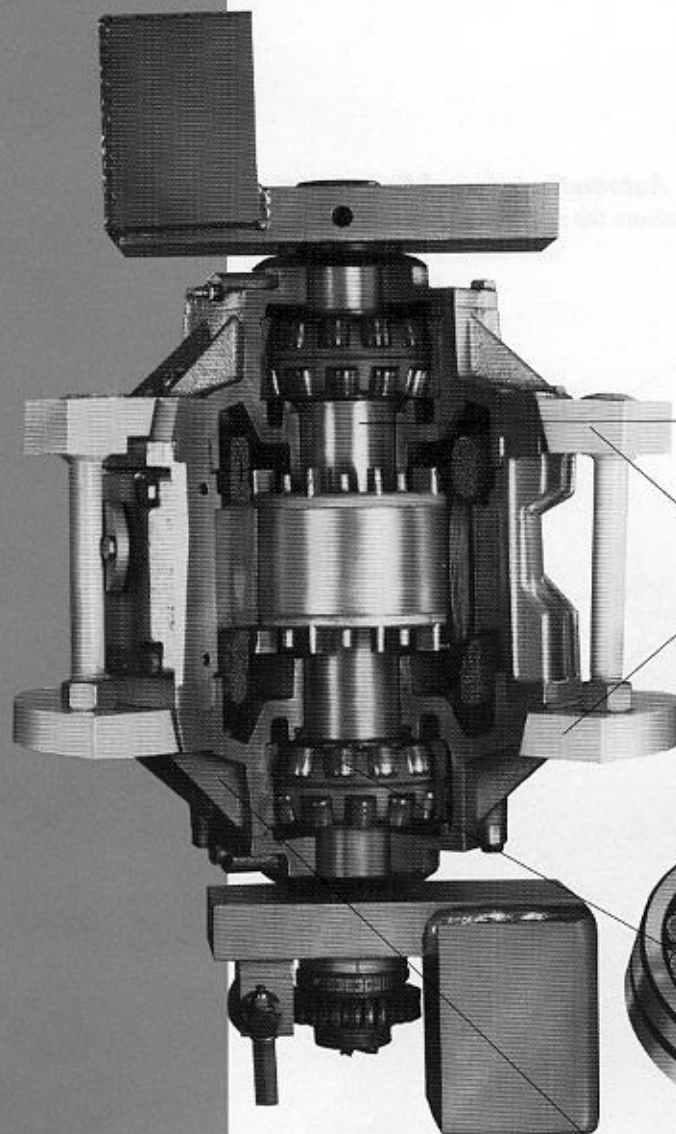
**A Vibro-Energy Motion  
Generator** provides the most  
efficient finishing motion available.  
Sized from 1/3 to 20 horsepower, our  
drive system incorporates oversized dual  
spherical bearings top and bottom, an  
extra large diameter shaft, heavy duty  
casting, and special mounting wedges  
which distribute the vibratory stress  
evenly around the mill chamber.

**Media Discharge Door,** standard on  
all models, provides easy removal of  
media for quick process changes.

Although many finishing mills  
look similar, when you compare  
unique features, SWECO clearly  
stands apart. For nearly forty years,  
we have designed our equipment with  
the highest regard for quality, relia-  
bility, and process versatility. Take a  
closer look and you'll understand why  
SWECO is "The most respected name  
in metal finishing."

ENGINEERING

# VIBRO-ENERGY



## **Vibro-Energy® Motion is the Difference.**

Each component of the SWECO Vibro-Energy motion generator includes heavy-duty design elements for maximum strength and durability. Amplitude levels can be adjusted to meet process requirements by adding/removing lower weight plates, and/or simply adjusting the angular relationship of the upper to lower weights.

**Large Diameter Shaft** - An extra large diameter shaft diminishes shaft deflection and whipping, so there is virtually no rotor rub or bearing loading.

**Motion Generator Mounting** - Mounting is as important to motor life as the bearings. The stresses are intense enough to destroy a conventional foot mount design within a few cycles. Our tapered mounting wedge design securely supports the motion generator top and bottom, yet still allows easy removal.

### **High Quality Windings**

- Made of the highest quality Class F materials, these windings are double dipped and baked for long life and reliability.

### **Oversized Bearings**

- Double row oversized spherical roller bearings, specifically designed for vibration duty, allow "frictionless" motion. The design life for these bearings exceeds 20,000 hours.

**Extra Strength Castings** - These heavy sectioned, extra strength castings provide solid mounting, permanent bearing alignment, and heat dissipation.

A product of forward thinking, the **ADJUST-A-VIBE™** allows precise control of vibration speed, direction, residence times and start/stop cycles to provide optimum processing. On-site adjustments, typically between 900-1500 rpm, are quick and convenient, allowing flexibility in handling variations in your process requirements. A digital speed readout ensures continued process accuracy and repeatability.

Equipped with overload circuitry, the motion controller also functions as a motor starter. No external overload protection is needed to meet National Electrical Code requirements on single motor applications.

*The SWECO Direct Drive Vibro-Energy Motion Generator has been specifically designed to operate under the extreme vibratory stresses inherent in SWECO Finishing Mills. As an integral part of the chamber assembly, energy is transmitted directly into the parts/media mass resulting in greater capacity per horsepower than other vibratory mills.*

## **Chamber Exchange/Motion Generator Exchange Programs To Suit Your Needs**

As a service to our customers, SWECO offers both chamber and motion generator exchange programs. These virtually eliminate downtime, as you may order a chamber or motion generator in advance of your need, then receive credit upon return of your used materials.

One technological breakthrough which has stood the test of time is our three-dimensional Vibro-Energy Motion. This motion subjects parts and media to a consistent high frequency tilting movement as they

travel in a helical/orbital path around the chamber. The resulting compressive scrubbing action not only cleans, but also removes burrs, rounds out sharp corners, and smoothes out surface imperfections.

Because vertical/horizontal amplitudes and the rate of vibration are completely adjustable, your finishing requirements, whether tough or delicate, can be handled quickly and efficiently.



## **Abrasion Resistant Polyurethane Lining**

Only SWECO Finishing Mills feature a polyurethane lining which has been "Degassed, Hot Poured, and Hot Cured." In this involved process, resin and hardener are blended together under heat and pressure, degassed for density, hot poured into the tank, and oven cured. Only with this method can we be assured that you are getting the most wear resistant lining available.

Unlike many "cold-poured" linings, SWECO uses no color pigments which can mask air bubbles and other imperfections, and lead to premature failure.

SWECO linings have a 95 durometer rating, and are superior in wear resistance, as well as tension and tear resistance when compared to other linings on similar applications. Each SWECO polyurethane lined chamber is warranted for 2 full years against wear-through and structural failure. For details, contact your nearby SWECO Representative.

*De-burring,  
De-flashing,  
Ball burnishing,  
Radiusing,  
Edge breaking,  
Pre-plate finishing  
and more.*

FEATURES

# SERVICE

## **A Tradition of Service**

When we pioneered round-bowl vibratory finishing nearly forty years ago we set out to manufacture the **BEST** product on the market, and back it with the **FINEST** service from the most **KNOWLEDGEABLE** reps available. Many of these SWECO reps are still providing solutions to challenging finishing problems today.

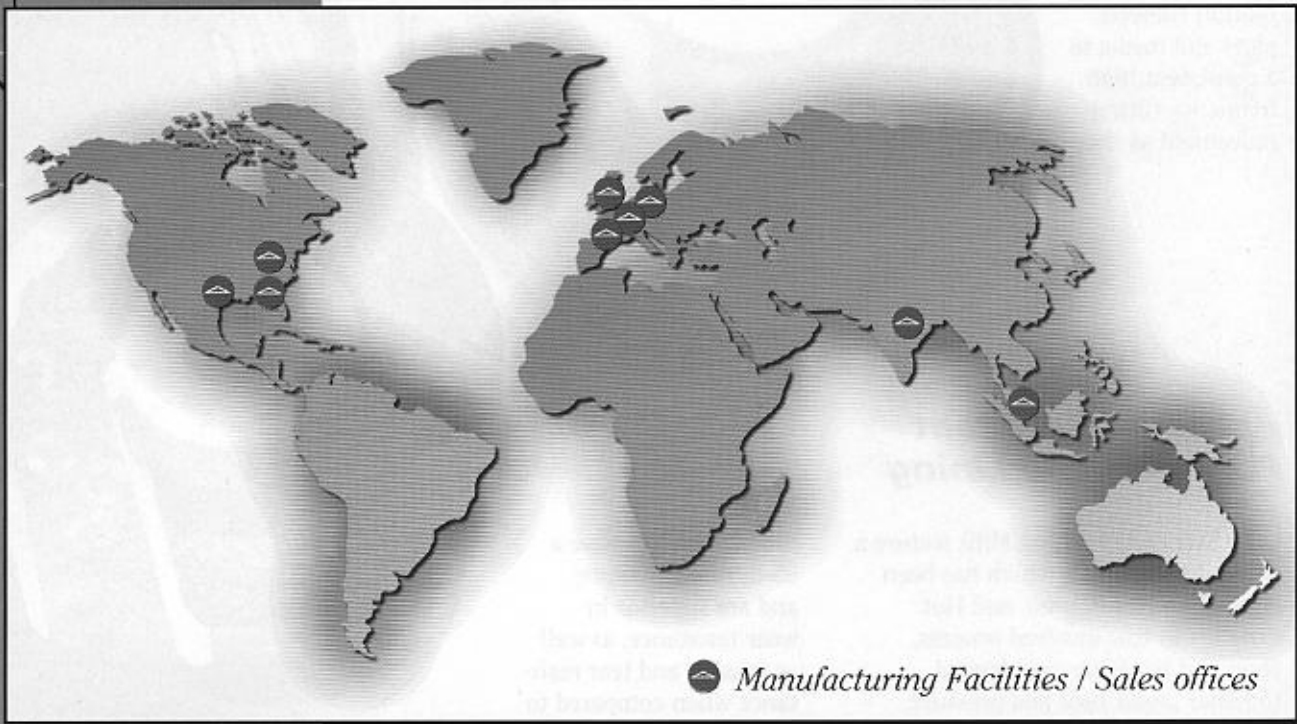
And that's important in an experience based business. While others are trying to "clone" our product, they can never match the years of experience, or the attention to detail that comes from being a SWECO Representative.

## **Worldwide Support and Service**

Whether your plant is in upstate New York or down under in Australia, chances are your local SWECO Representative is just minutes away. With offices worldwide, our reps are ready to serve you, and can typically respond to your request within hours, not days.

From complete process assistance to machine start-up, or anything in between, our rep network spans the globe to be there when you need us.

And, isn't it reassuring to know that the company who sold you your finishing system today will still be around to answer your questions tomorrow?



*At SWECO, we have been providing unique solutions to tough metal-working problems longer than anyone else. We have seen many problems before, and know the intricacies of vibratory finishing. This means that we can provide complete **process-assistance**, whenever and wherever you need it.*