FENN offers several standard Rolling Mill types, however custom mills can be designed to suit any application or production requirement. Standard Rolling Mill types include:



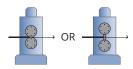
#### Two-High

Generally used for hot or cold breakdown and finishing of bar, sheet or strip. A wide range of sizes with separating force capacities from 10,000 lbs. (4.53 MT) to over 3,000,000 lbs. (1360 MT) are available.



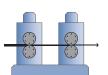
#### Four-High

For finish rolling of thin gauge stock. Six-High roll inserts are also available for narrow width ribbon and foil products.



#### Combination

A versatile "two-in-one" type mill that permits both Two-High and Four-High rolling.



#### **Tandem**

For multiple pass rolling combining two or more mill stands, often used with FENN Turks Heads, Edgers, Dancers, Inter-Stand Tensiometers, Payoff and Take-up Equipment.



#### Horizontal

Designed for the field of powdered metallurgy, plastics and battery industries.



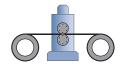
#### Laboratory

Specialized mills engineered to meet the critical requirements of metallurgists and scientists in research and university fields as well as pilot line development.



#### Three-High

An economic milling solution for the breakdown of rod and ingot.



### Mill with Winders

Allows for the rolling of continuous coil for sheet or thin foil.





# Rolling Mills

For any application up to 3.3 million lbs. (1500 MT) separating Force.

860.259.6600 | sales@fenn-torin.com

# Trust the Leader in Custom Engineered Metal Forming Machinery

For more than a century, FENN has been in the business of designing and building rugged, dependable metal forming machinery.

FENN offers a wide range of standard and custom size Rolling Mills for a variety of applications including heavy ingot breakdown, laboratory research, coil to coil rolling and precision strip. From initial design, to manufacturing and equipment support, FENN has a full team of experts including customer service technicians, product managers, and engineers to ensure your project's success.

All FENN machinery is proudly designed and built in our Connecticut, USA headquarters by our experienced staff. Contact us today to see how FENN can customize a Rolling Mill best suited for your application requirements.

A complete offering of material handling, processing, gauging and labor-saving accessories are available for all FENN Rolling Mills.





FERROUS • NON-FERROUS • ALLOY • EXOTIC METALS • ENGINEERED METALS

## **Standard Features**

**FENN** offers a full range of Rolling Mills for the production of precision strip in straight lengths or coil to coil rolling. Every mill is designed with features to maximize uptime and increase production quantities.

*Typical standard features include:* 

- Automatic gauge control
- Data acquisition system
- Automatic pass scheduling
- Asymmetric rolling
- Motorized conveyor tables
- Built in roll change rig
- Drive shaft support system
- Interlock safety guarding





In addition to these standard offerings, FENN's expert staff regularly collaborates with clients to create a Rolling Mill suited to their unique requirements.

FENN Rolling Mills are available for a variety of materials, and a wide range of applications, across a diverse list of industries:

#### **Materials**

Aluminum

- Superconducting Steel
- Exotic Metals Copper
- Precious Metals Lead
- Ferrous Platinum

#### **Applications**

- Mint

#### **Industries Served**

- Materials Research
- Aerospace
- Consumer
- Automotive
- Renewable Energy
- Military

#### Research Bonding Strip

- Plate Powder
- Rod

#### Hot or Cold Rolling

Sheet

# **Available Options**

### Mills have been produced in a variety of sizes:

- Minimum Roll Size: 3" (76 mm) diameter for various research facilities and universities
- Maximum Roll Size: 30" (762 mm) diameter for reducing large strip

#### Screwdown options include:

- Mechanical
- · Electro-mechanical
- Servo-hydraulic

## Software

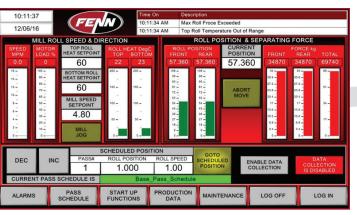
## FENN's experts will customize your Rolling Mill software to meet your unique production requirements.

The Software used in the operator HMI will enable functions such as:

- Displaying separating force
- Setting mill direction & speed
- Setting roll gap & thickness gauging
- Setting automatic pass schedules
- Diagnostic screen











## Anatomy of a FENN Rolling Mill

Non-Ferrous

