## FFW : Fine Flat Wire Rolling Mill

A Complete Range of FINE FLAT WIRE ROLLING MILLS for Non Ferrous, Stainless steel and Precious Metal.

In the field of fine flat wires, the NEWLEAD Group also offers a series of plants that has been tried and tested over many years – the FFW (Fine Flat Wire).

The FFW is a series of rolling mills for non-ferrous metals, stainless steel and precious metals and can thus be used in a wide range of industries.

FFW offers exactly the right concept with the stable and reinforced machine stand and a high-precision roll adjustment to be able to produce the required dimensions and their tolerances.

With a modular concept, 2 or more stands can be arranged. This series is available in both vertical and horizontal versions with continuous thickness and width measurement after each stand.

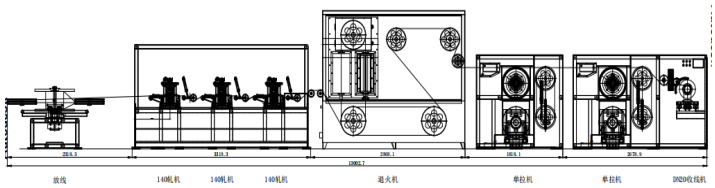
Especially the low space requirement in the vertical design has helped the FFW to its triumphal march.

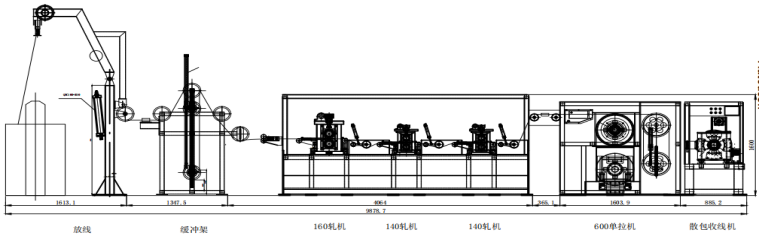
This series also comes in different sizes with a wide range of options.

### Drawing and Rolling mills for Brass, stainless steel, carbon steel

**Usage and characteristics:**
**Suitable for producing high-precision alloy flat wire with rounded corners through the "drawing and rolling" process**
**★ Applicable materials: brass, stainless steel, carbon steel, etc. ★ Incoming wire diameter of 2~8mm, product cross-sectional area ≤ 30mm²**
**★ Quick roll change ★ High precision hard alloy roller, roller runout<1 μ m**
**★ Dual servo drive rolling, maximum linear speed 180m/min ★ Electric roll gap adjustment**

| Item | parameters | parameter |
|---|---|---|
| Roller seam adjustment method | electric | electric |
| Roller material | Hard alloy ultra-fine tungsten steel | Hard alloy ultra-fine tungsten steel |
| Roller drive | Dual servo drive | Dual servo drive |
| Note | Centralized lubrication series, cooling system | Centralized lubrication series, cooling system |
| Roller seam adjustment method | electric | electric |



## Features

- The RMW - **HC** 5-Stands Rolling Mills are dedicated to the processing of copper round drawn wires into rectangular wires with rolled edges, according to DIN - BS or IEC standards.

## Flexible and efficient design

- One pay-off spooler, hydraucaly operated
- One two-high breakdown rolling mill
- Two two-high finishing rolling mill, with motorized screwdown system and parallelism adjustment
- Two motorized edger, type E150, with fast changing system
- Four tensiometers, located between the stands to make the settings easier
- One filtration system (spraying liquid)
- One continuous automatic control gauge
- One take-up traversing spooler

## Advanced operator HMI interface

- The equipment control panel is designed to easily move all along the rolling mill
- Provides easy display of production and maintenance data
- Allows to easily create production jobs and to provide full reports
- Monitors a detailled synoptic of the rolling mill to provides a full actual process picture with settings at the operator's fingertips

| Configuration | | RMW 200-150HC | RMW 422-150HC | RMW 522-150HC |
|---|---|---|---|---|
| Breakdown Two-high mill | Ø mm | **160** | **220** | **250** |
| First Edger mill | Ø mm | 150 | 150 | 150 |
| Second Two-high mill | Ø mm | 120 | 160 | 160 |
| Second Edger mill | Ø mm | 150 | 150 | 150 |
| Third Two-high mill | Ø mm | 120 | 160 | 160 |
| Available rolling power | kW | **220** | **320** | **400** |
| Max entry wire | Ø mm | 10 | 13 | 15 |
| Max entry wire / 70% breakdown | Ø mm | 8 | 10 | 12 |
| Cross section | mm² | 2 to 60 | 2 to 100 | 2 to 125 |
| Yearly capacity reference | Ton | 3500 | 4000 | 5000 |

# FFW

*A Complete Range of **FINE FLAT WIRE ROLLING MILLS***
*for Non Ferrous, Stainless steel and Precious Metal*

## Features

- Strong and Stiff Machine Frame high precision screwdown system
- Multiple range of Rolling Cassettes with different rolls diameters for a wide range of application
- User friendly through open design and easy spool loading

| Configuration | | FFW502 | FFW1002 | FFW302 | FFW303 |
|---|---|---|---|---|---|
| Number of stand | | 2 | 2 | 2 | 3 |
| Roll diameter - Stand 1 | mm | 100 | 100 | 50 | 50 |
| Roll diameter - Stand 2 | mm | 50 | 100 | 30 | 30 |
| Min. Thickness | mm | 0,025 | 0,050 | 0,010 | 0,010 |
| Max W/T in one pass | - | 25 | 15 | 30 | 60 |

## Improved Quality and Performance

- Continuous measurement of width and thickness after each stand
- High accuracy tension control and width control thickness
- High accuracy thickness control with Tolerances of final product shown in µm

## Lower Operation Costs

- Low energy consumption and reduced footprint
- Quick change of roll cassettes
- Full Digital Control through REDEX´s Firmware

## FFW Options

- Dry or immersed version
- Available combined Induction Annealer

| Technical Data | | | |
|---|---|---|---|
| Entry copper wire diameter | | mm | 0,05 … 0,9 |
| | | AWG | 44 … 19 |
| Entry wire dia. SS Steel | | mm | 0,05 … 0,6 |
| Production Speed | | m/min | 100 / 400 / 600 |
| Spooler - Spool dimensions | Min spool flange dia. | mm | 60 |
| | Max spool flange dia | mm | 250 |
| | Min bore dia. | mm | 160 |
| | Max. usefull width | mm | 12 |
| Overall dimension | width x deep x height | M | 2.6 x 1.4 x 2.5 |
| Weight | | kg | 2200 |