

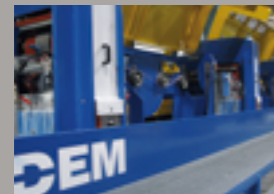
PROFILE WIRE ROLLING

DEM FLAT WIRE ROLLING

DESCRIPTION

DEM designs and supplies cold rolling equipment for flat wire rolling. Different flat sections can be produced for any kind of final application, such as the automotive industry, textile industry, furniture industry, household appliance manufacturers, ornamental steel uses, etc. Typical lines are composed mainly of a pay-off unit (solutions for uncoiling from the top or with rotating devices are available according to the wire dimensions), wire descenders or wire cleaners, pre-straighteners, wire tuning cassettes, cold rolling stands (each composed of two rolls), laser measurement device and at the end recoilers, coilers, spoolers or straighteners for coil or bar production. DEM lines can also be equipped with in-line heating induction furnace for wire annealing. DEM lines are developed with a fully automated system that allows profile measurement and self-adjustment on closed loop control. Working and set-up parameters for each rolled product are stored in the PC memory and can be retrieved any time a product has to be re-rolled for an automatic rolling line set-up. DEM lines are provided with all auxiliary parts, such as cooling system for the rolling equipment and hydraulic unit for auxiliary services.

- Inlet wire diameters from Ø 0.6 to 20 mm
- Coils from 15 to 5000 kg
- Bars up to 12 m
- Rolling speeds up to 600 m/min



FWR WORKING RANGE

APPLICATIONS

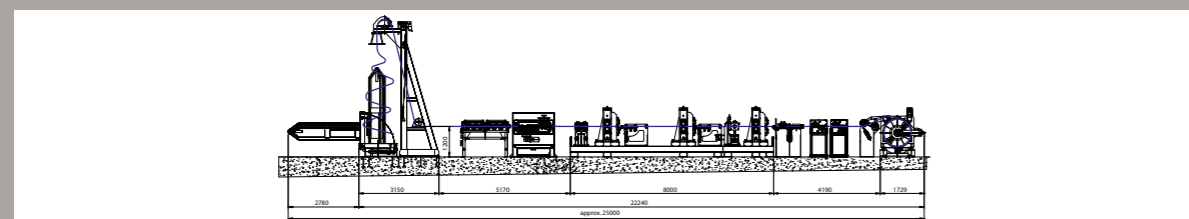
Low, medium and high carbon steel drawn wire or wire rod. Copper, aluminium and brass, etc.

| WIRE | | FLAT WIRE | | ROLLING SPEEDS [m/min] | FWR |
|---------------|-------------------------------|--------------|-------------------|---------------------------|--------------|
| Inlet [mm] | Section [mm ²] | Wide [mm] | Thickness [mm] | | |
| 4.0 | 12.6 | 6.0 | 1.0 | 600 | FWR-06-X-C-B |
| 8.0 | 50.2 | 12 | 2.0 | 400 | FWR-15-X-C-B |
| 14 | 113 | 20 | 3.0 | 200 | FWR-25-X-C-B |
| 20 | 314 | 30 | 4.0 | 150 | FWR-60-X-C-B |

Notes:

- Above data are indicative only.
- Given data are only some examples of sections that can be rolled
- Any profile section can be optimized according to the inlet wire and reduction stands

FWR TYPICAL LAY-OUT



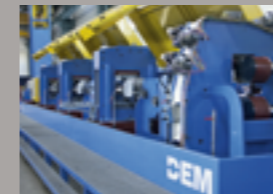
DEM PROFILE WIRE ROLLING

DESCRIPTION

DEM designs and supplies cold rolling equipment for profile wire rolling. Different profile sections can be produced for any kind of final application, such as the automotive industry, textile industry, furniture industry, household appliance manufacturers, square section spring wire makers, ornamental steel uses, etc. The new rolling stand is developed with a fully automated system that allows profile measurement and self-adjustment on closed loop control. All 4 rolls, whether driven or idle, can be moved vertically and horizontally to allow making a vast range of special profiles that cannot be achieved with a traditional line. All working and set-up parameters for each rolled profile are stored in the PC memory and can be retrieved any time a product has to be re-rolled for automatic rolling line set-up. Typical lines are mainly composed of a pay-off unit, wire descenders or wire cleaners, pre-straighteners, wire tuning cassettes, cold rolling stands (each composed of two, three or four rolls according to the wire profile), laser measurement device and at the end recoilers, coilers, spoolers, calander or straighteners for coil or bar production. DEM lines can also be equipped with in-line heating induction furnace for wire annealing.

DEM lines are provided with all auxiliary parts, such as cooling system for the rolling equipment and hydraulic unit for auxiliary services.

- Inlet wire diameters from Ø 0.6 to 30 mm
- Coils from 15 to 5000 kg
- Bars up to 12 m
- Rolling speeds up to 600 m/min



PWR WORKING RANGE

APPLICATIONS

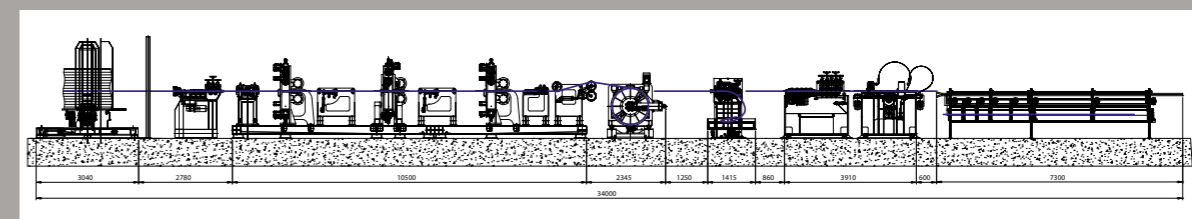
Low, medium and high carbon steel drawn wire or wire rod. Copper, aluminium and brass, etc.

| WIRE | | PROFILE WIRE | ROLLING SPEEDS [m/min] | PWR |
|---------------|-------------------------------|--------------|---------------------------|--------------|
| Inlet [mm] | Section [mm ²] | | | |
| 4.0 | 12.6 | Shaped Wire | 300 | PWR-06-X-C-B |
| 8.0 | 50.2 | Shaped Wire | 300 | PWR-12-X-C-B |
| 14 | 113 | Shaped Wire | 200 | PWR-25-X-C-B |
| 20 | 314 | Shaped Wire | 150 | PWR-60-X-C-B |
| 32 | 804 | Shaped Wire | 90 | PWR-80-X-C-B |

Notes:

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- Given data are only some examples of sections that can be rolled
- Any profile section can be optimized according to the inlet wire and reduction stands

PWR TYPICAL LAY-OUT



DEM FWR AND PWR EQUIPMENT



Wire rod Pay-Off



Wire rod Pay-Off



Wire Descaling



Profile Wire Rolling Stand



Edger



Re-Coiler



Coiler



Wire Straightening and Cutting



Unloading and Tilting Unit



Wire Straightening and Bar Unloading

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