

# Off-Line Stand Setup Systems for bar, structural & universal mills

Shorter production runs, customer quality requirements and continuous pressure to reduce operating costs have created a demand for **faster product startup** and achieve section times in the rolling mill.

Quad has developed a unique approach to allow for more accurate off-line setup of mill stands. Mill delay time to set roll gaps and make startup adjustments to the roll axial alignment and guiding can be reduced or eliminated with Off-line stand setup.

The Off-line setup system allows the roll gaps to be accurately set under load, in the stand setup area. The rolls are leveled, axially adjusted then set to the correct roll gap. Guides and water headers can be mounted and tested for correct fit.

There are a number of setup stand options that can be supplied depending on the specific operating requirements, layout of the stand buildup area and the stand types used in the mill.

A **portable drive system** with replaceable roll end adaptors for each size of mill stand can be used to roll aluminum wire through the roll gap for leveling rolls and setting accurate roll gaps.



This system can be moved from stand to stand with an overhead crane or forklift truck.

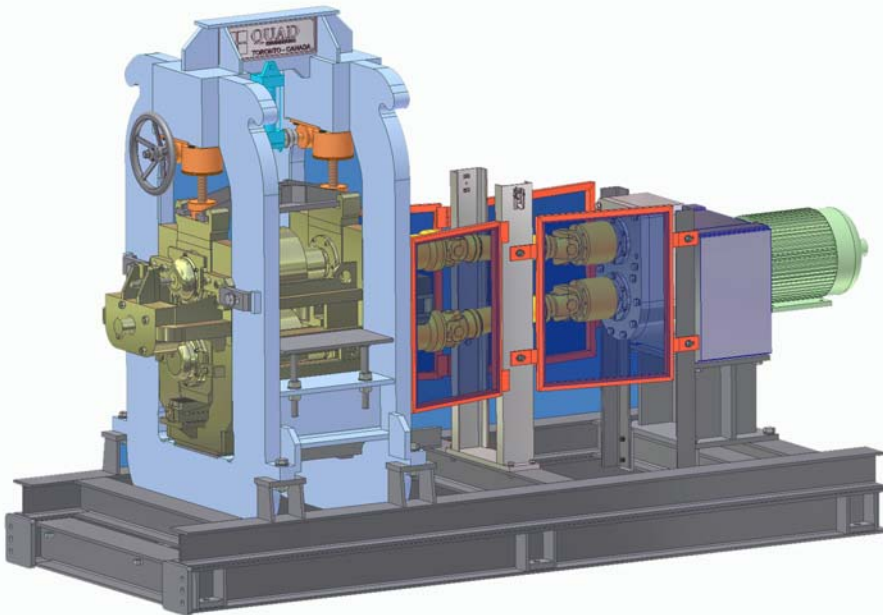
The roll drive center distance is adjusted to fit the range of mill stands & the roll diameters used in the mill.

The drive motor can be plugged into the nearest welding receptacle.



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A **stationary setup stand system** using replaceable roll end adaptors can be used to set the roll gaps and test the guides and water headers for correct assembly on the housing. Either aluminum wire is rolled through the roll gap or hot steel bits from the trail bar furnace are rolled through the pass to set the desired pass gaps.



The drive system also turns the rolls making it possible to check that the guides are set correctly against the roll. The delivery guide casting insert can be checked for a tight fit against the roll, **reducing startup cobbles**.

The pass cooling water headers are tested with mill water under normal operating pressure to ensure the headers are not plugged, that the water hits the pass correctly and that the pipes do not rub against the rolls.

For rolling complex shapes such as Universal beams, channel and special sections, a **laser or optical type measuring system** can be used. This ensures that beam universal vertical rolls are set with equal flange thickness and the axial alignment of the horizontal mains is correct. Angle, channel and special shapes can be set symmetrically. This makes it possible to set the thin gap dimensions required for ultra-lightweight sections.

