

Powering the future. Together.

Products for the Rod and Wire Industry



Your Partner In Business For Rod Rolling And Wire Drawing

Quaker Houghton present his complete range of solutions for the Rod & Wire industry for non-ferrous metals including aluminium and its alloys, copper and plated wires with tin and zinc. We offer our complete solutions package, including our full range of fluid products, equipment and services designed for every segment of the Wire industry.

Join our experts to experience the solutions we can provide to help your business flourish in today's competitive climate, and to celebrate the future we can provide for your business, together.

Your Partners In Success

We are motivated to offer true value to our customers by offering unique new technologies.

Because we continually evaluate our product performance, and stay attuned to the latest changes in the marketplace in order to continually improve our customer results, Quaker Houghton is next to the business with the best portfolio offering:

- Reduction of total oil consumption
- Enhanced surface quality
- Increase of tool life
- · Reduction of total production costs

Solutions That Optimize Performance

Quaker Houghton solutions are the non-ferrous industry standard, proven reliable in the most demanding environments.

Our complete range of solutions include:



Rod & Wire



Cleaning



Hydraulics & Lubricants



Greases



Specialty Additives



Equipment Solutions



Copper Rod Rolling

QH EVEROLL C® and COPPERSHIELD® Series – Synthetic Solutions

The hot rolling of copper rod is a demanding process. Quaker Houghton's QH EVEROLL C® series has proven performance and provides the following benefits.

- Excellent lubrication for increased roll life and productivity
- Outstanding corrosion protection leading to extended asset life
- Extremely stable resulting in longer solution life and reduced coolant spend
- Excellent detergency proving reduced cost associated with mill cleaning

COPPERSHIELD® represents the latest step forward in technology and performance. This development is the result from a deep process knowledge coupled with verified field expertise.

- Improved corrosion inhibitor formulated into product
- · Maintained increased stability and performance
- Improved surface quality

Aluminium Rod Rolling

QUAKERAL®, CINDOL® and QH EVEROLL A® Series - High Performance Emulsions

Hot rolling emulsions for aluminium rod rolling require outstanding lubrication and excellent emulsion stability.

Quaker Houghton's QUAKERAL®, CINDOL® and QH EVEROLL A® emulsions provide exceptional lubrication and emulsion stability based on our own unique lubrication and emulsifier packages which offers the following benefits:

- Outstanding roll life and productivity
- Very high emulsion stability resulting in increased emulsion life and reduced oil spend
- Excellent surface quality reducing rod downgrades and scrap

Copper Wire Drawing

HOUGHTO-DRAW® WD Series - Drawing Compound

Whether drawing copper rod, intermediate, multi-wire or fine wire, Quaker Houghton's HOUGHTO-DRAW® WD Series has a drawing compound with proven performance. Our versatile line of water-dispersible compounds provides excellent lubricating properties for clean, bright wire.

HOUGHTO-DRAW® WD Series offer the following benefits:

- Excellent lubricity
- Superior detergency
- Proper cooling of dies
- Designed wettability
- Low foam properties
- · Good fines separation
- Biostable formulations

| PRODUCT | DESCRIPTION |
|-----------------------------|---|
| HOUGHTO-DRAW® WD 44 | Universal product (from rod break- down to fine/multiwire applica- tions), high stability, extended range |
| HOUGHTO-DRAW® WD 201A | Dedicated to rod breakdown, for fastest machines, longest lifetime |
| HOUGHTO-DRAW® WD 201 S | For in-line enamelling (mineral oil free), highest cleanliness |
| HOUGHTO-DRAW® WD 201 T | Dedicated to rod breakdown, for heaviest operation, like contact wires |
| HOUGHTO-DRAW® R 301/ GLC | Dedicated to annealing operation, to protect the wire and avoid oxidation |
| HOUGHTO-DRAW® WD MM 40 | Dedicated to multiwire / fine wire: the highest detergency for tin or nickel plated copper wires up to 32 wires in parallel |
| HOUGHTO-DRAW® WD MM 60 | Dedicated to multiwire / fire wire: the last development fot in-line enameling, boosted in lubricity, with highest stability |
| HOUGHTO-DRAW® WD 205 | Emulsion for intermediate diameter. Specifically for enamelled wires |
| HOUGHTO-DRAW® WD SZ 21 | Full synthetic for fine /multiwire applications |
| HOUGHTO-DRAW® WD SZ 5 | Full synthetic for extra-fine wire |

applications



Aluminium Wire Drawing

CINDOLUBE® - Lubricants

The CINDOLUBE® line of oil lubricants is formulated with ND, a potent additive that dramatically lowers the coefficient of friction of steel-to-aluminium and aluminium-to-aluminium. It can also be used effectively on stainless steel, bronze, brass, galvanized steel, titanium and other metals. CINDOLUBE® oils provide the following benefits:

- Superior surface finish
- · Lower friction between metals
- · Longer tools and die life
- Reduced wear and galling

| PRODUCT | DESCRIPTION |
|-----------------|---|
| CINDOLUBE® 4601 | The lighter viscosity lubricant for fine wire drawing |
| CINDOLUBE® 4602 | The second lighter viscosity for forming operations |
| CINDOLUBE® 100 | Latest development for new high speed machines dedicated to rod breakdown operation for EC grade alloys |
| CINDOLUBE® 4680 | The best choice for universal operation, all kind of rod breakdown |
| CINDOLUBE® 4683 | A unique metal forming lubricant with ND additive for use on all kind of aluminium alloys |
| CINDOLUBE® 3130 | Additive to extend tank lifetime and improve lubricity |

HOUGHTO-DRAW(R) WD AL water-based lubricants

In addition to tradition neat oil family, Quaker Houghton recently developed a new HOUGHTO-DRAW® WD AL family of compounds for water-based emulsions. Its purpose is to provide the best surface finishing, together with great cleanliness. The portfolio includes:

| PRODUCT | DESCRIPTION |
|-------------------------------|---|
| HOUGHTO-DRAW® WD AL 200 FT | For rod breakdown operations, stable emulsion, high lubricity combined with a proven machine cleanliness |
| HOUGHTO-DRAW® WD AL 100 FT | The lastest development for fine and multi-wires operations, whileproviding optimal fines removal thanks to an innovative chemistry |

Additives For Lubricant Maintenance

With extended field experience and a rigorous product development and qualification protocol, all Quaker Houghton products offer proven higher biostability, extended lifetime, excellent compatibility to wide range of water hardness.

Nevertheless, we know there are cases when a special care is required, in order to correct parameters or support harder conditions. Our laboratories can provide the right suggestion for every cases, without leaving the customer alone. All of these products have to be applied only when recommended in the right minimum amount

| PRODUCT | DESCRIPTION |
|----------------------|---|
| ADDITIVE MWS AF 2290 | To apply in case of foam |
| ADDITIVE MWS PH 3000 | To restore the right pH values |
| ADDITIVE MWS AC 3206 | Anticorrosion inhibitor |
| ADDITIVE MWS 49/9803 | To improve detergency |
| ADDITIVE MWS FL 3201 | Floculant, to improve dirtiness removal |

Ancillary Products

Ancillary products used in wire drawing and rod rolling applications:

- Cleaners
- Fire-resistant hydraulic fluids
- Maintenance greases
- Quenchants

Equipment Solutions

Quaker Houghton carries equipment solutions to create enhanced Total Cost of Ownership savings:

- Filtration
- · On-site analytical fluid testing
- QH FLUIDCARE™ programs
- QH FLUIDTREND® fluid and maintenance management system - record, review and analyse the conditions and trends of your operation

Forward Together™

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