

STEEL



**GET
CHEMISTRY**

that's as strong
as steel.

Forge a better
steelmaking
operation with
advanced water
treatment solutions
from Buckman.

You want cooling systems
that run efficiently,
wastewater that runs
clean, and a steelmaking
operation that runs
as smooth as polished
stainless. For all that, you

need on-site technical specialists
who can handle the heat, who can bring you superior chemical
solutions and offer uncommon problem-solving skills. In a
word, you need Buckman.

Buckman water treatment systems and cleaners can help
you throughout the steelmaking process, including coke
production, iron making, steelmaking, casting, forming,
and rolling. And that'll keep your whole operation rolling
more efficiently.



Cooling and wastewater programs to optimize your entire mill.

Coke production & byproduct applications

Buckman provides effective water treatment for indirect and direct gas and tar cooling, liquor cooling, and effluent. With high performance flocculants, defoamers, corrosion, and dispersion technologies that block microbial growth, scale, and corrosion, we can assure you of clean systems that operate the way they are supposed to.

In addition, Buckman offers easy, efficient gas line maintenance. Our gas line cleaning and protection products allow direct atomization and injection into the gas lines to help you maintain an even flow of coke oven gas throughout the plant.

Iron making

Buckman can help you optimize the raw materials handling and preparation necessary in iron making and improve furnace cooling. Look to us for:

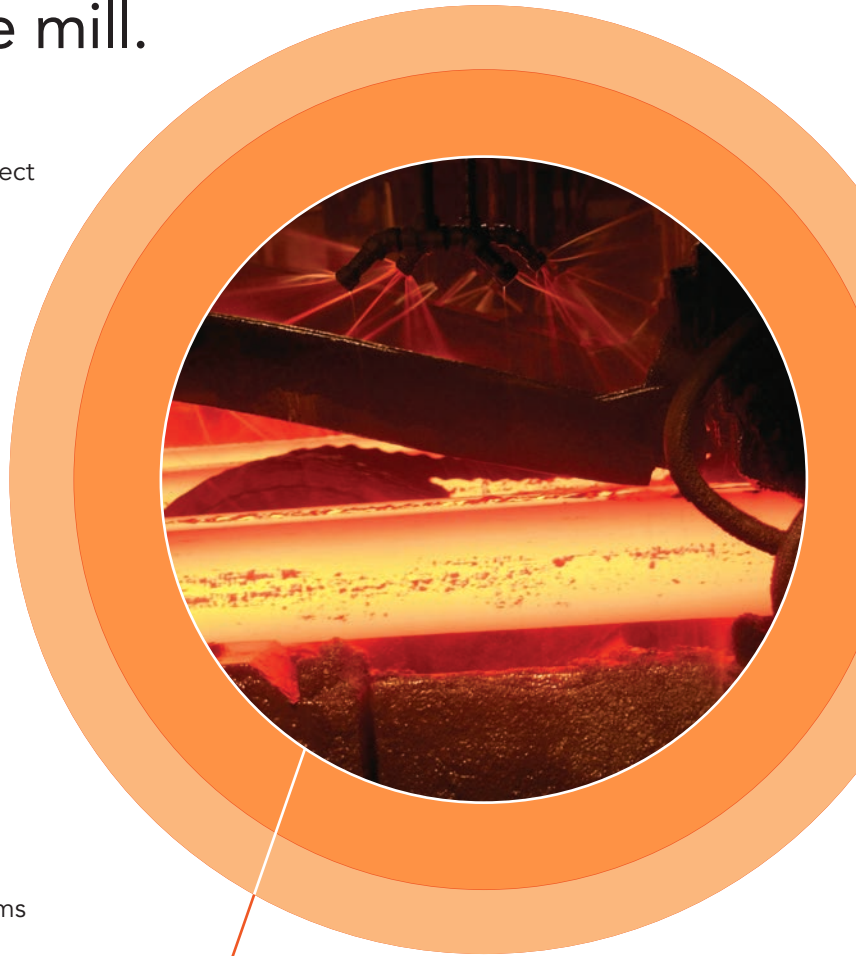
- Treatment programs for all cooling systems, including tuyere and hearth cooling
- Optimization of direct reduction, agglomeration, and blast furnace performance
- Flocculant, defoamer, and scale inhibition programs for gas scrubbing systems
- Wastewater and slag handling treatment programs

Steelmaking

Trust Buckman to prevent scaling and corrosion in basic oxygen furnace hoods, open and closed electric arc furnace cooling systems, and transformer cooling systems. Our wide range of polymer treatment options for wet gas scrubbing waters will remove the suspended solids that can undermine performance. And Buckman can address the specific challenges you face in stainless steel production.

Continuous casting

You want only the best water to come into contact with your steel. Buckman can customize a program for open and closed systems, indirect and direct spray. We can recommend water treatment options that will optimize spraywater systems to prevent breakouts, whaling, and metallurgical



defects. Filter preservation treatment programs will ensure optimal flow of water to your direct cooling system. The bottom line is, our advanced solutions can significantly reduce plant downtime, improve/optimize quality, and save you time and money.

Forming and rolling

For the hot rolling circuit, we provide effective treatment of open and closed cooling systems, waste water treatment, and filter cleaning to ensure trouble-free equipment operation. For cold rolling, we treat direct cooling/wash water systems to prevent flash corrosion and to control harmful contaminants.

We can help with specialized annealing cooling systems in which treatment can have a direct impact on the metallurgical properties of the steel itself. And we can help with galvanizing effluent and heavy metal removal, as well as special needs in your painting and coating departments.

General utilities

Buckman not only keeps your systems clean, we help with environmental compliance through effective chemistries and hands-on service throughout your plant. Turn to Buckman for:

- Raw water clarification and disinfection
- Boiler water treatment
- ZED recycled water system treatments
- Slag quenching treatments
 - Water reuse and downstream applications
- Proven chemistries for steel plants that use oxidizing, inert, and reducing gases
- Comprehensive lab services
 - Real-time monitoring of water chemistry to assure optimum quality
 - Microbiological analysis and identification
 - Failure analysis to determine problems and recommend preventive measures
- Equipment design and installation to fully support our treatment programs

Metalworking fluids

Yeasts, molds, and fungi can cause big problems. Buckman offers biocidal treatment that will prevent blockages, corrosion, and odors in recycled metalworking fluids.



Learn more

Ready for chemistry that's as strong as steel and a commitment to match? Find out more about Buckman's solutions for steel production. Contact your local Buckman representative, or visit us online at buckman.com.

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Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE**. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty.

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