

Replacement Sales and Services

KOCH-GLITSCH®

Replacement Sales and Services

KOCH-GLITSCH®

INTRODUCTION



For more than 85 years Koch-Glitsch has provided custom engineered mass transfer technology and equipment for the worldwide refining, petrochemical, chemical, and gas processing industries. From this experience, the Replacement Equipment and Services division of Koch-Glitsch has developed the expertise and capability to deliver cost effective replacement solutions to its customers. Regardless of original equipment manufacturer, we can provide replacement trays, internals, structured packing, random packing and associated hardware.

Tired of looking for old drawings to confirm what you have in your tower? Our Automated Hardware Ordering Program (AHOP) provides an audit of each of your towers to confirm and document all equipment and hardware. This allows customized consignment hardware lockers and/or trailers to be delivered with short notice when and where needed, saving both time and money.

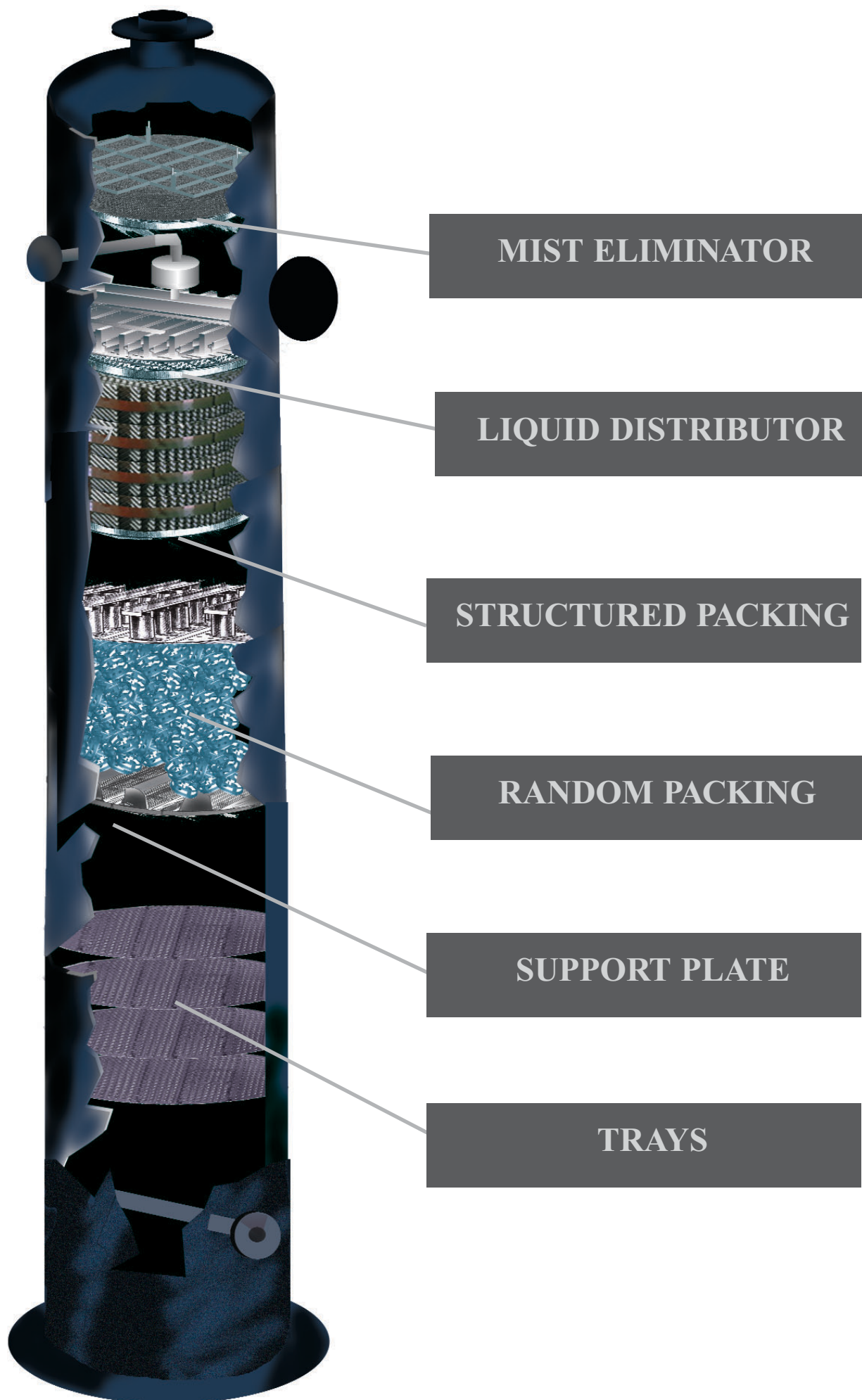
Need specialized tray inspection and/or installation expertise? Our Equipment Support Services (ESS) consultants deliver this experience to you. Available 24/7, our field sales replacement team is committed to provide the solutions tailored to meet your needs.

Teaming up with other divisions of our company, we can offer specialized turnkey solutions that include: scanning and diagnostics, mist eliminators, equipment installation, and other field services. Accurate diagnostics, quick supply of replacement equipment and precise installation means less downtime. As a turnkey package or ala carte, we are your first call for planned or emergency maintenance and repairs.

The Replacement Team can deliver the experience, equipment, and on-site consultation to ensure your plant is rapidly back online.



ESS/FIELD SERVICES



Equipment Support Services (ESS)

Our Equipment Support Service technicians are available to you anywhere in the world to observe and analyze installation from start to finish!

At your work site, the Koch-Glitsch technician will inventory the equipment, witness each phase of the project, and provide advice on installing the equipment to Koch-Glitsch's specifications. You can count on Koch-Glitsch Equipment Support Services to carefully monitor your project from start to finish. By using an experienced technician for all phases of the installation, the project flows smoothly and your problems can be cut to a minimum.

Field technicians are available anywhere to:

- Observe and inspect new and replacement mass transfer equipment installation
- Assist in evaluating and inspecting existing mass transfer equipment during turnarounds or unplanned outages
- Expedite installation and field troubleshooting and offer consulting expertise



Koch Specialty Plant Services

Depend on Koch-Glitsch Field Service to provide expert installation of custom-engineered Koch-Glitsch Mass Transfer products. Integrating design, fabrication and installation ensures faster, safer revamps with minimum down time.

Koch-Glitsch Field Service craftsmen are extensively trained to handle any field installation service need safely and efficiently.

Our crews frequently work at various levels of a tower simultaneously, removing equipment from one level while installing new equipment at another. All vessel modifications are made under ASME code qualifications.

Automated Hardware Ordering Program (AHOP)

Eliminate tray hardware nightmares during turnarounds by taking the guesswork out of what is inside your towers. This free research service is custom tailored to your tower, for both Koch-Glitsch and non-Koch-Glitsch equipment. Our Automated Hardware Ordering Program (AHOP) will:

- Assist with planning budgets prior to turnarounds
- Offer single source for all hardware needs
- Provide a list of hardware for each tower
- Eliminate order delays for mass transfer equipment and hardware

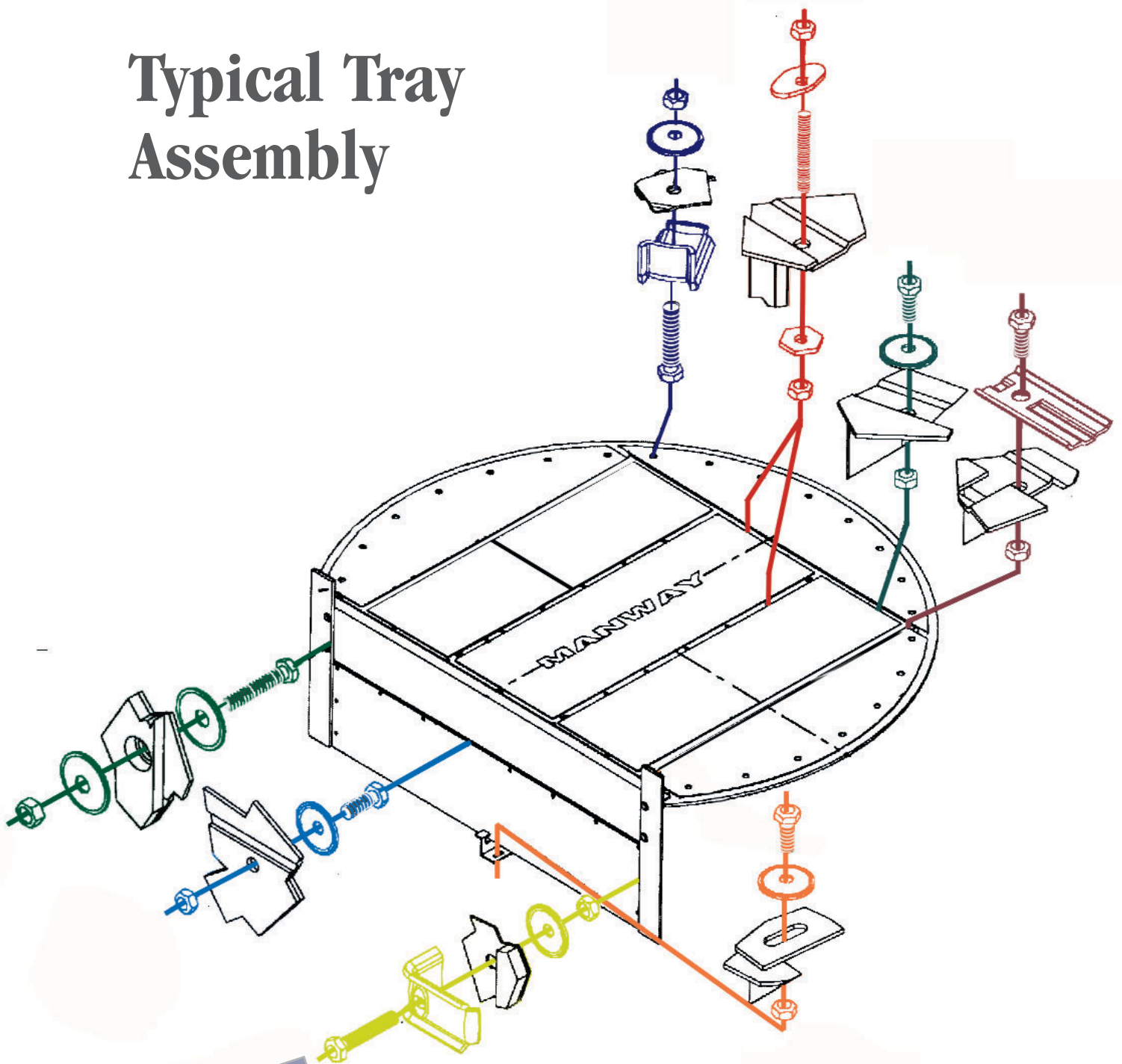
Consignment Hardware Lockers and Trailers

Koch-Glitsch's superior and innovative designs have made us the leading manufacturer of quality hardware items for the hydrocarbon processing industry. Hardware lockers and/or trailers are filled with all the hardware items you need. Because we fully understand the nuts and bolts of your business, this program:

- Is tailored to your turnaround needs
- Ensures you pay only for what you use
- Is available when you need it
- Eliminates unnecessary hot-shot delivery charges



Typical Tray Assembly



*For a complete hardware listing, please refer to
Tower Internals Hardware & Services Catalog*

Tower Internals Hardware

	<div> <div>HEX NUT</div> <div>891</div> </div>		<div> <div>UNIVERSAL LEVER CLAMP #2</div> <div>316</div> </div>		<div> <div>FLEXICAP (SNAP-IN)</div> <div>397</div> </div>
	<div> <div>HEX HEAD BOLT</div> <div>896</div> </div>		<div> <div>MANWAY SEAL CLAMP</div> <div>583</div> </div>		<div> <div>BALLAST UNIT (SNAP-IN)</div> <div>934</div> </div>
	<div> <div>MANWAY LOCK STUD</div> <div>865</div> </div>		<div> <div>MANWAY LOCK CLAMP</div> <div>584</div> </div>		<div> <div>FLEXITRAY CAP & HOLDDOWN</div> <div>310/303</div> </div>
	<div> <div>DOMED WASHER</div> <div>802</div> </div>		<div> <div>BOTTOM TRAY CLAMP "Y"</div> <div>902</div> </div>		<div> <div>TRAY CLAMP</div> <div>940</div> </div>
	<div> <div>FRICTIONAL WASHER</div> <div>800</div> </div>		<div> <div>SEAL PLATE</div> <div>909</div> </div>		<div> <div>GASKET TAPE</div> <div>gkt</div> </div>
	<div> <div>MANWAY LOCK CLAMP #2&3</div> <div>860</div> </div>		<div> <div>WEDGE</div> <div>939</div> </div>		<div> <div>MINI VALVE</div> <div>620</div> </div>
	<div> <div>MANWAY LOCK CLAMP #20</div> <div>861</div> </div>		<div> <div>WEDGE #2</div> <div>821</div> </div>		<div> <div>FLEXITRAY CAP</div> <div>307</div> </div>
			<div> <div>RECTANGULAR VALVE</div> <div>631</div> </div>		

Koch-Glitsch Corporate Offices

Worldwide Headquarters

Koch-Glitsch, LP

4111 East 37 th Street North	Wichita, KS 67220 – United States	tel: (316) 828-5110	fax: (316) 828-7985
---	-----------------------------------	---------------------	---------------------

Europe

Koch-Glitsch Italia S.r.l.

Viale Giulio Cesare 29	24124 Bergamo – Italy	tel: +39 035 2273.411	fax: +39 035 2273.400
------------------------	-----------------------	-----------------------	-----------------------

Asia

Koch-Glitsch Korea, Ltd.

17-8, 8F, Dongsung Bldg. Yoido-dong, Youngdeungpo-ku	Seoul 150-874 – Korea	tel: +82-2-3276-7500	fax: +82-2-3276-7590
---	-----------------------	----------------------	----------------------

Koch-Glitsch (A division of Koch Chemical Technology Group India Pvt. Ltd).

Corporate Park II, 10 th Floor Sion-Trombay Road	Chembur, Mumbai 400 071 – India	tel: +91 22 6771 7171	fax: +91 22 6771 7161
--	---------------------------------	-----------------------	-----------------------

For a complete list of our offices and facilities, visit us on the Web at www.koch-glitsch.com.

Emergency Numbers

US: 1-888-KOCH-911.

Europe: +39-06-928-911, +44-1782-744561, or your local Koch-Glitsch office.

Asia Pacific: Contact your local Koch-Glitsch office.

Trademarks

BALLAST, FLEXITRAY, KOCH-GLITSCH, "K" KOCH-GLITSCH, and MINIVALVE are registered trademarks of Koch-Glitsch, LP and are registered in the US and various countries worldwide. All other trademarks, service marks, or registered trademarks that appear in this document are the trademarks or service marks of their respective owners.

Legal Notice

The information contained in this bulletin is believed to be accurate and reliable, but is not to be construed as implying any warranty or guarantee of performance.

