

WHY STAINLESS STEEL FOR DRAINAGE WASTE SYSTEMS?

EASY TO CLEAN



- There is no greater concern in food preparation areas than hygiene. The smooth non-porous surface of stainless steel is easy to clean and minimizes the potential for bacteria growth.
- Floor drains made of stainless steel are easy to sanitize which aids in the removal of

unwanted bacteria such as Listeria Monocytogenes, that thrive in cool, moist, dark environments.

- Stainless steel is proven to be easier to sanitize than coated cast iron and plastics with no harsh detergents or chemicals which could pollute the environment.
- The smooth surface of stainless steel prevents grease build-up problems that commonly occur with other pipe materials.

CORROSION RESISTANCE



- Stainless steel will not rust when exposed to water and air like standard cast iron and steel products or discolor like some copper alloys used in drain applications.
- Stainless steel is resistant

to many chemicals, detergents and other aggressive effluents commonly discharged into the drain system in a kitchen environment; such as soda, beer, wine, and acidic juices from fruits and vegetables.

FIRE RESISTANT

- Stainless steel does not burn and is classified as nonflammable.
- No harmful fumes or substances are released from the product when subject to fire.
- Floor penetrations not subject to elaborate fire insulation like those required for polypropylenes, PVC and other flammable material.

THERMAL STRESS



- Due to their very low heat expansion coefficient, drainage products made of stainless steel are not in any way influenced by temperatures occurring in drainage waste installations.
- Neither heat nor cold affect stainless steel. It is an excellent material for use in food preparation areas subject to hot dumps from kettles and steam tables directly into the floor drains and pipe system.

DURABLE AND AESTHETICALLY PLEASING

- Stainless steel is inherently durable with no need for painting or coating of other materials which reduces maintenance cost.
- Stainless steel will not easily break or crack. This reduces the possibility of costly and unsanitary leakage into the facility or into the ground, which could contaminate our water systems, streams and rivers.
- Stainless steel has a naturally pleasing appearance and enhances the overall aesthetics of the facility where installed drains or pipes are visible.

LONG TERM VALUE



 When lifetime cost is considered stainless steel is often the least expensive solution for kitchen drainage systems.

ENVIRONMENTALLY FRIENDLY

- Stainless steel is 100% recyclable. Over 50% of new stainless is produced from stainless steel scrap.
- Since paints and other coatings are unnecessary to protect stainless steel, these processes are eliminated; reducing the impact on the environment from paint sprays and other waste byproducts.

THE GREASE PROBLEM IS A NATIONAL CRISIS

THE PROBLEM WITH GREASE

According to the National Restaurant Association, total restaurant-industry sales have grown every year for the past 12 years generating revenues of approximately \$426 Billion dollars.

Restaurants, cafeterias, hospitals, hotels, convention centers, sports arenas, prisons, etc... generate huge amounts of fats, oils, and grease each year. The first problem is grease readily adheres to the inner surface of traditional piping material and over time will form into a hard crust that is as tough as baked clay leading to the replacement of the affected pipes.

Additionally, grease becomes a primary cause for clogs, backups, overflows, and equipment failure when permitted to enter the wastewater system. The main offender cited is undersized or inadequately maintained Grease Interceptors.



SEWER AUTHORITIES

Allowing FOG (Fats, Greases, and Oils) to enter into the sewer system will result in failure of equipment such as lift station pumps and sensors. It also reduces the effectiveness of the biological process used in treating sewage.

The EPA estimates that there are over 40,000 sanitary sewer overflows each year; a majority of them caused by grease. The cost of keeping sewers open, a cost borne by taxpayers at a local level, is more than \$25 billion per year.

Sewer blockages can result in raw sewage backing up into the basements of homes and businesses.

CODE ENFORCEMENT

The Environmental Protection Agency (EPA), The Department of Environmental Protection (DEP), Health Inspectors, and Plumbing Inspectors have the task of implementing and enforcing pretreatment programs to limit grease effluent discharges.

Cleanup or repair of problems created by grease is costly, resulting in fines being levied by the EPA and local authorities.

THE SOLUTION

The unprecedented growth of the restaurant industry combined with the chronic problems caused by excessive grease has increased demands for grease recovery products that are reliable, economical and can meet increasingly rigid regulatory requirements of local municipalities.

Using the Josam patented probe you are now able to read measurements of how much grease has accumulated in the interceptor. The remote monitoring option allows management and code officials the ability to manage their pretreatment program directly from any computer. The Blücher-Josam stainless steel push-fit pipe system is resistant to grease build-up problems. Combined with the Blücher-Josam system, the SUPER-FLO® GI-2000 and EGLD provide a complete economical drainage solution and superior grease management and monitoring capabilities for commercial kitchens.



GREASE RECOVERY

THE HEART OF A PLUMBING DRAINAGE SYSTEM FOR KITCHEN APPLICATIONS

JOSAM SUPER-FLO® GI-2000 Leading the Way in Grease Recovery



• SUPER-FLO® GI-2000 Grease Recovery Device (GRD)

- Fully automatic grease recovery device (Containment and Removal)
- Patented probe measures and monitors grease levels.
- Controller has permanent memory in the event of power loss.
 The microprocessor records clean cycles, displays current status, sounds alarms and fully operates the SUPER-FLO® GI-2000.
- Heating elements liquefy congealed grease within the GRD.
 - Integral Solids Interceptor
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- High velocity pump discharges grease into a remote reclaim tank
- GRD manufactured in 12 gauge stainless steel
- Controller encased in NEMA4 rated enclosure
- Optional modem feature to monitor unit from remote location.

GI-2000 Controller

GREASE FACTS

EPA sued the City of Los Angeles for allowing 2,000 sewer overflows in the past five years and blamed 41% on F.O.G.

Recently, under Boston's City Hall, there was a 36" main with a grease plug over 300' long.

New regulations in Atlanta impose fines of up to \$1,000 per day and mandatory 60 days imprisonment for violation of the local code.

New York City's penalties for non compliance currently range from \$250 to \$1,000 per day

A \$973,000.00 fine was levied against a dairy farm in Orlando, Fl.

The city of Durham reported 41 sewer overflows with 21 totally or partly due to grease.

The city of Burlington reported 20 overflows with 11 totally or partly due to grease.

The city of Greensboro reported 21 overflows with 10 due to grease.

Latches

SUPER-FLO® GI-2000 is designed with ease of maintenance in mind. The quick release stainless steel draw latches make it easy to inspect and maintain.

Gasket

A U-Channel gasket with steel barbs provides an excellent seal and requires no adhesives which frequently fail due to heat, moisture and grease.

Pump

The Josam SUPER-FLO® GI-2000 Grease Recovery Device features a pump which will transfer the grease to a remote reclaim tank.

Probe

With the use of Josam's patented probe the SUPER-FLO® GI-2000 can measure the amount of grease within the Grease Recovery Device. Extensive research has gone into the design and mounting of this patented probe. The Josam probe is available in different lengths that are designed to penetrate and accurately measure the amount of grease within GRD. This design ensures an accurate reading and is not prone to encapsulation by grease that often plagues other monitoring techniques.

Solids Interceptor

Removing solids plays an important role in the performance of an interceptor. The SUPER-FLO® GI-2000 is equipped with an integrated solids interceptor. The solids interceptor basket is designed with details such as a baffle and two different perforated hole patterns to help keep solids from entering the grease separation compartment. An optional automated solids interceptor is also available.

Controller

SUPER-FLO® GI-2000 controller has a NEMA4 enclosure and features permanent memory, data tracking and five different modes of operation.

SUPER-FLO® GI-2000

The SUPER-FLO® GI-2000 electronically controlled automatic self cleaning grease recovery device effectively removes nearly 100% of fats, oils, and grease routinely discharged from commercial kitchens, restaurants and food processing facilities. The SUPER-FLO® GI-2000 combines industry proven methods, superior design and the quality assurance that you have come to expect from Josam Company.

OPERATIONAL FEATURES

Superior Design

The SUPER-FLO® GI-2000 offers superior operating features to those of any other automated grease interceptors on the market today. The Josam SUPER-FLO® GI-2000 Controller features a microprocessor that is user friendly and accurate. The Controller features an LCD Display which clearly displays the system's operating status and easy to use controls. The interceptor is constructed of corrosion resistant 12 gauge type 304 stainless steel and features convenient stainless steel draw latches for easy access to the interceptor.

SUPER-FLO® Smart

The controller provides the facility staff with an audible alarm, LED indicators, a distinctly visible multi-line LCD display of the GRD's system status and operating mode at all times. The test mode feature allows maintenance personnel to easily perform operational system checks of the SUPER-FLO® GI-2000.

Automatic Self-Cleaning

The SUPER-FLO® GI-2000's programmable controller senses the amount of grease held in the GRD's storage tank. Once the amount of grease reaches the unit's preset grease capacity, the controller will automatically (or by manual operator control) activate the heating elements to liquefy the congealed grease. When the grease is liquefied to a set temperature, the controller will activate the internal pump, which discharges the grease into a reclaim tank. The SUPER-FLO® GI-2000 eliminates the need to manually monitor the required amount of cleaning cycles necessary to extricate the facility's grease volume.

User Friendly

The SUPER-FLO® GI-2000 is as simple to install as it is to operate. The plumbing installation of the unit is the same as installing any conventional grease interceptor. The controller is encased in a NEMA-4 rated enclosure that mounts directly to the wall with four screws and the low voltage electrical hook up to the interceptor's interface board is a snap. Power requirements are: 220/208 VAC, single phase, with a ground fault interrupter (GFI). All electrical components and the controls package of the SUPER-FLO® GI-2000 are safe, reliable and UL listed.

Reduced Maintenance Cost

This affordable device replaces the manual grease interceptors that have a tendency not to be maintained properly. Delinquent maintenance is often the cause of grease discharge entering the sewage system, clogging and damaging pipes, on-site treatment facilities and sewage septic fields. The SUPER-FLO® GI-2000 is designed to eliminate the expensive cost of grease interceptor pumping charges, cleaning of blocked sewer lines and sewer discharge fines that the kitchen, restaurant or food processing facility may incur. The SUPER-FLO® GI-2000 controller monitors and continuously displays the number of cleaning cycles of the interceptor for a period up to one year. This unique feature is ideal for monitoring the unit's grease removal process when local or state codes mandate stringent grease removal regulations.

Environmentally Sound

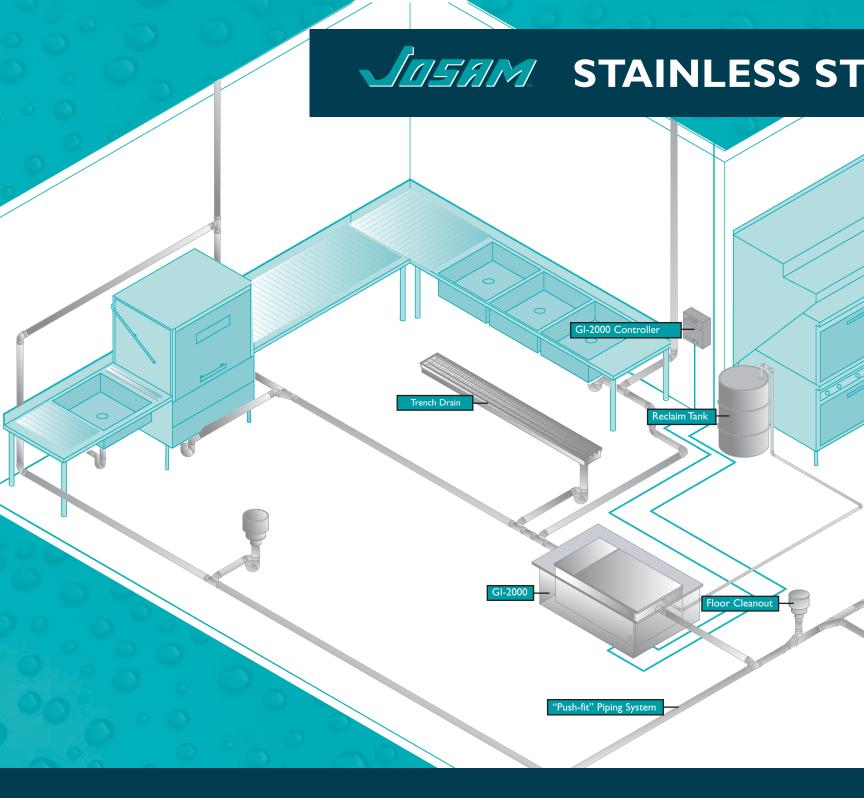
The SUPER-FLO® GI-2000 protects the environment by preventing grease from mixing with other waste material in water treatment plants, waterways and landfills. In addition, the SUPER-FLO® GI-2000 smart controller can be set to ensure that the most stringent grease effluent standards are met, including the widely accepted limit of 100 milligrams per liter.

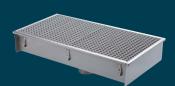
Quality Assurance

The SUPER-FLO® GI-2000 is certified to the PDI-GI0I standard for applicable sizes and meets the requirements of the ASME AI12.14.4 standard for grease recovery devices. All electrical components are UL listed, and all components of the SUPER-FLO® GI-2000 are fully covered under a one-year losam Company warranty.

Authorized Installers

To insure that a proper installation and start up is performed, Josam Company is establishing a nationwide network of Authorized Installers. Josam Authorized Installers are factory trained in all aspects concerning Josam grease removal products including proper sizing techniques, installation procedures, maintenance programs, system monitoring capabilities and warranty dealings. Using a Josam Authorized Installer makes sense; these fully trained professionals are conversant on Josam products, procedures and the national and local plumbing codes required on your installation. To find the nearest Josam Authorized Installer, visit our website at www.josam.com or contact your local Josam representative.





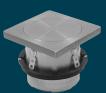
KETTLE DRAINS

A standard range of large capacity floor drains with mesh grating designed for use under tilting kettles; available in several sizes and depths and suitable for various types of flooring.



FLOOR DRAINS

A wide variety of drain configurations for any application: Round and square top drains suitable for tiled, epoxy coated or flexible sheet flooring. Features superior hygiene and flow handling properties. Various gratings available for medium to heavy fork truck loads and optional filter baskets and removable water traps.



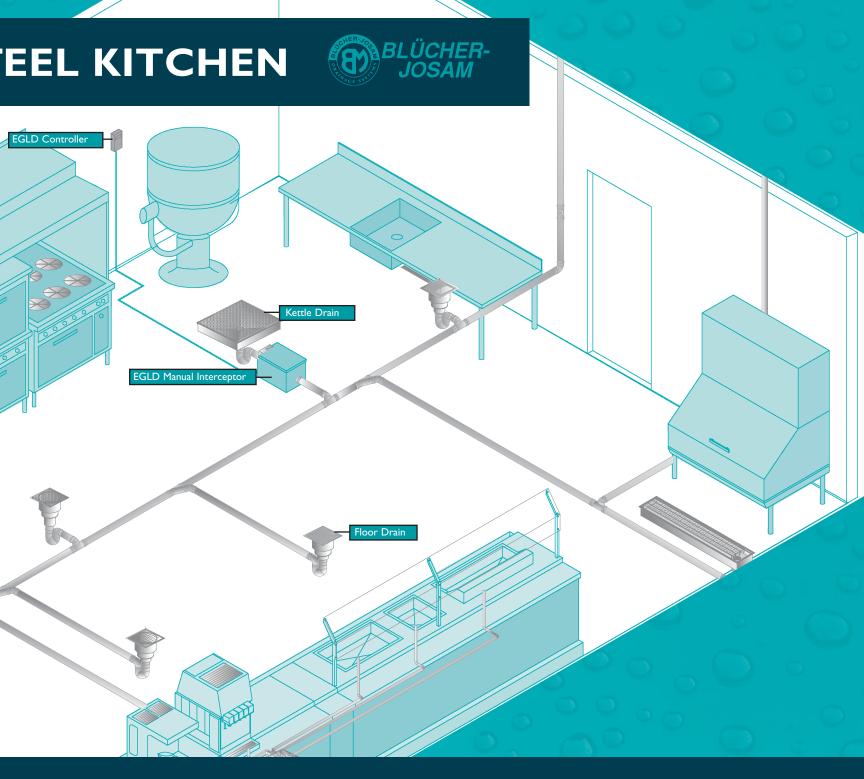
FLOOR CLEANOUTS

A variety of floor cleanouts available including the Blucher-Josam Gas Tight Cover which functions as a cleanout or clean room drain and features a machined o-ring sealed cover with excellent hygiene properties.



TRENCH DRAINS (channels)

A wide variety of standard channel widths and configurations are available for various floor types. A wide selection of gratings and options are offered to meet most application requirements. Flexible custom design capabilities available.





"PUSH-FIT" PIPE & FITTINGS

A complete line of pipe and drainage fittings are available in 2, 3, 4, 5, 6, and 8" nominal pipe sizes. An economical and easy to install stainless steel pipe solution offers superior hygiene for kitchen environments.



SUPER-FLO® GI-2000

Grease Recovery Device (GRD)



EGLD

Electronic grease level detector with sensing probe for use with most manual grease interceptors.



REMOTE MONITORING

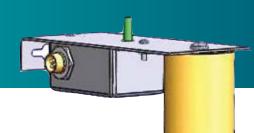
Monitor GI-2000 and EGLD devices from a remote computer (Optional service required).

EGLD-1000 ELECTRONIC GREASE LEVEL DETECTOR

Josam offers the complete solution to effectively remove and monitor grease levels in kitchen facilities.



Do you Know When it's Time to Clean Your Manual Grease Interceptor?



EGLD-1000 Features

- A continuous grease level measurement system.
- The EGLD-1000 grease level monitor can be mounted to most manufacturers' existing indoor and outdoor, manual/passive grease interceptors.
- Patented probe measures grease levels within the interceptor.
- Microprocessor notifies facility personnel when the grease interceptor requires manual cleaning/pumping.
- When interceptors are properly maintained, facility owners will experience fewer blockages in their drainage waste lines, saving costs of maintenance and repairs.

Monitoring service (optional)

- Optional modem feature can monitor the grease level within an interceptor from a remote location via a standard telephone line.
- E-mail notification will alert facility users when their grease interceptors require cleaning.
- Facility managers, grease haulers, maintenance personnel and code inspectors can now monitor manual grease interceptors directly from the internet.
- Reasonable code enforcement of facility violators who neglect cleaning their interceptors is now feasible.

EGLD-Components

- A wall mounted micro-processor based Controller with LED indicators and permanent memory in the event of power outages.
- A patented probe assembly to accurately measure the amount of grease within the interceptor. Various probe lengths are available to fit most existing manufacturer's manual interceptor configurations.
- Adjustable probe interface module to accommodate stricter standards.
- UL listed 9V DC power transformer.
- Interface cable to connect the Controller to the Interceptor Probe Assembly.
- · Optional modem for remote grease level monitoring.

Easy Web-Site Monitoring

• From the comforts of your office or home.

You do now thanks to

Grease Level Detector

Josam's EGLD-1000 Electronic

- Easy to read charts of cleaning cycles.
- Ability to check current grease level at any time of day or night.
- Adjustable alarm levels for increased performance.
- The EGLD-1000 keeps a history of the interceptors cleaning cycles and displays it clearly from the web-site

Interceptor Information You Need to Know

- The PDI G-101 test on the outlet side (effluent) of the interceptor is calculated to be at least 90% efficiency of rating to the interceptor.
- Interceptors may require cleaning when as little as 25% of their rated capacity has been reached depending upon the limits established by local authorities.
- For example a 25 GPM interceptor will hold 50 lbs. of grease capacity. At 40% capacity (grease only) there is 20 lbs. of accumulated grease. Grease weighs approx. 7 lbs. per gallon therefore with less than 3 gallons of grease the discharge is approx. 360 mg/l. (milligrams per liter)
- At 100% capacity the 25 GPM example will have approx. discharge of 2324.92 mg/l.

PERCENTAGE OF RATED CAPACITY	EFFLUENT READING (Approximate)	
10% (5lbs)		
20% (10lbs)	23.97 MG/L	
30% (15lbs)	191.75 MG/L	
40% (20lbs)	359.52 MG/L	
50% (25lbs)	647.14 MG/L	
60% (30lbs)	1126.51 MG/L	
70% (35lbs)	1438.10 MG/L	
80% (40lbs)	1677.78 MG/L	
90% (45lbs)	1989.37 MG/L	
100% (50lbs)	2324.92 MG/L	

The above table is based on data obtained from results of a 25 GPM interceptor being tested to current Grease Interceptor Standards by an independent test laboratory. Other fats, oils, grease, and testing methods may vary results.

REQUIREMENTS FOR PROPER INTERCEPTOR SIZING

Sizing a GRD is based on volume of wastewater in gallons per minute (GPM) that can be discharged from the drainage fixtures and equipment to be served. Selection of the GRD is dependent on the GRD's rated capacity in GPM, which must be suitable to handle the drainage flow requirement. The inlet and the outlet size of the selected GRD determine the size of the connecting pipe. The National Plumbing code and other codes list fixture-unit values for various plumbing fixtures. For fixtures not listed, the code will show a fixture-unit value based on the fixture outlet size or trap size (see Sizing Table).

SIZING TABLE

Fixture - Equipment Drain Outlet or Trap Size	Drainage Fixture- Unit Value	Drainage G.P.M. Equivalent
I-I/4"	ı	7.5
1-1/2"	2	15.0
2"	3	22.5
2-1/2"	4	30.0
3"	5	37.5
4"	6	45.0

FLOOR INSTALLATION

ILLUSTRATION OF **SUPER-FLO GI 2000** INSTALLED ON FLOOR

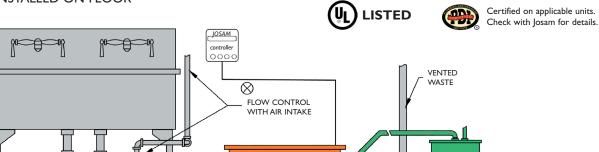
The total fixture unit value of the fixtures serviced by a grease interceptor will determine the volume requirement of the system. Each fixture unit is equivalent to 7.5 GPM. For example, suppose a dual compartment sink is the only fixture to be serviced by a SUPER-FLO® GI-2000 (see illustration). Each I-I/2" outlet is equal to 2 fixture-units or 15.0 GPM (see Sizing Table) for a total of 30 GPM. Once the volume requirement has been determined, use the (GRD Selection Table) to choose the proper size interceptor to handle the flow. For our example, the best interceptor for 30 GPM is the SUPER-FLO® GI-2000 model 60307 which is rated for 35 GPM. A 4" horizontal drain line is required for connection to the interceptor. A properly sized flow control fitting, built-in solids interceptor and grease reclaim tank, (also shown in the illustration) are furnished with each interceptor to assure peak performance and efficiency.

GRD SELECTION TABLE

JOSAM MODEL	FLOW RATE (GPM)	GREASE (Lbs.)	INLET SIZE
60305A	20	40	3"
60306A	25	50	4"
60307A	35	70	4"
60308A	50	100	4"
60309A	75	150	4"
60310A	100	200	4"
60311A	150	300	4"
60312A	200	400	6"
60313A	250	500	6"
60314A	350	700	6"
60315A	500	1000	6"

TANK

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SUPER-FLO

BLÜCHER-JOSAM STAINLESS STEEL PUSH-FIT PLUMBING DRAINAGE SYSTEMS

COMPLETE STAINLESS STEEL PLUMBING DRAINAGE WASTE SYSTEM.

Waste pipe and fittings -2", 3", 4", 5", 6" and 8" nominal pipe sizes

Hangers and accessories

Floor Drains, Floor Cleanouts, Trench Drains, Kettle Drains











BLÜCHER-JOSAM'S PUSH-FIT TECHNOLOGY

- Push-Fit jointing method provides tremendous cost savings for a material that was traditionally coupled with the high cost of welding.
- · Pipes are lightweight, easy to handle and install.
- Pipes, fittings and drains can be installed in a fraction of the time of most traditional drainage waste piping systems.
- No tools are required to make a connection simply lubricate the spigot and turn lightly into the socket.
- The lip-seal jointing method is suitable for gravity or vacuum drainage applications and designed to ensure a watertight joint every time.
- Type 304 and 316L stainless steel available for most items.
- Three types of lip-seal gaskets, EPDM, NBR, and FPM (Viton), are available and suitable for a wide range of applications and temperatures.

Blücher-Josam push-fit pipe and drain systems have been developed from over 30 years of experience in providing drainage systems for the most demanding industries (e.g. commercial kitchens, dairies, breweries, food processing and chemical/pharmaceutical industries). The result is a high quality system that offers a complete, economical and versatile drainage solution made of stainless steel - the natural choice for a durable drainage system with ideal hygienic properties. Please refer to the Blücher-Josam catalog for additional details.

NOTEWORTHY PROJECTS:

ADAMS COUNTY MIDDLE SCHOOL • AMERICAN BAR & GRILL • BARBARY COAST HOTEL & CASINO • BAILEY JR. HIGH SCHOOL • BLUE RIDGE HIGH SCHOOL • CALIFORNIA STATE PRISON • CHILDERNS HOSPITAL • DAVID LAWRENCE CONVENTION CENTER • CONS AGRO • DELAWARE COUNTY PRISON • DIPLOMAT HOTEL • DOG HOUSE CAFÉ • GEORGIA TECH • GEORGE WASHINGTON UNIVERSITY • GETTY CENTER • GRADY HOSPITAL • HANDY'S ICE CREAM • JACKPOT JUNCTION CASINO • KAISER MEDICAL OFFICE BUILDING • KINGS COUNTY HOSPITAL • LANCASTER GENERAL HOSPITAL • MARYLAND STATE PRISON • MEGANS RESTAURANT • MESA FRESH MEXICAN GRILL • MORGAN STANLEY CAFATERIA • MT. SINAI HOSPITAL ORLEANS HOTEL & CASINO • PHILADELPHIA ZOO • PENTAGON • PONAPE FISH PROCESSING PLANT • RANDOLPH MACON WOMEN'S COLLEGE • ROCKLAND PSYCHIATRIC KITCHEN • ROYCE CITY HIGH SCHOOL • SAN BERNARDINO MEDICAL CENTER • SAN DIEGO |AIL INTAKE CENTER • SHARKIES RESTAURANT • SHOGUN RESTURANT • SONY WORLD HEADQUARTERS • SOUTHERN OCEAN COUNTY HOSPITAL • SPAGOS KITCHENS • ST. MARY'S HOSPITAL • ST. JAMES HOSPITAL • ST. JOSEPH'S HOSPITAL UNIVERSITY CALIFORNIA DAVIS • UNITED NATIONS BUILDING • UNIVERSITY OF CALIFORNIA RIVERSIDE • UNIVERSITY OF CHICAGO • USC MEDICAL CENTER • WALLINGFORD SCHOOLS • WALTER REED RESEARCH CENTER • WEST LA COLLEGE • WHITEHALL FERRY TERMINAL • ZIONSVILLE HIGH SCHOOL

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