Municipal Managers

Rely on Crisafulli™ Products

High Performance Equipment For
Cost Effective Dredging and Pumping Solutions

Municipal managers use the full range of Crisafulli equipment

From years of experience, municipal managers know that Crisafulli pumps, dredges and power units are engineered for performance and manufactured to last. Crisafulli's solid reputation is based on providing you with reliable Crisafulli products supported by superior service.

Vertical Pump, 16" Belt Driven
stormwater pumping station
discharging to the Rock River, Illinois

Many communities install permanent pumping and control structures to enhance their dike and storm water systems. Crisafulli vertical pumps are proven ideal solutions for such **flood control** and **storm water management** stations. Crisafulli pumps pass grit and trash that cause other pumps to fail. *Choose a dual drive (Electric/PTO) Crisafulli,* the pump you can depend on, *if your city faces power outages during storm events* (just when you need your pumps up and running). Crisafulli offers control systems that start Crisafulli pumps automatically. Crisafulli builds custom pumps to provide you with the degree of control you require and to meet your specifications. Other pumps installed now? In most cases, Crisafulli pumps can be retrofitted to your existing stations.

Hundreds of communities use Crisafulli's portable trailer-mounted pumps for **emergency pumping during flood** events. Crisafulli trailer pumps are portable and can be deployed and operating within minutes. Most Crisafulli trailer pumps are PTO powered, but municipalities often choose Crisafulli's diesel engine on the pump frame models, for self-contained units that can be used at remote pump sites – or Crisafulli's electric motor on the pump frame models, for nearly silent running in residential areas.

Public works departments depend on reliable, predictable non-clogging Crisafulli vertical pumps for **sewage lift stations.**

Municipal managers count on Crisafulli dredges to **clean ponds, lagoons or basins of wastewater sludge or biosolids,** and to **remove residuals and settled solids from ponds** at potable water treatment plants. Municipalities that use Crisafulli dredges report it isn't necessary to take their ponds or lagoons out of service to remove settled solids while maintaining water quality. Consulting engineers specify Crisafulli's SRS (Sludge Removal Systems) dredges for **efficient and economical solids management at both wastewater and water treatment** facilities. Crisafulli now offers fully automated FLUMP™ dredging systems. Treatment plant operators and superintendents find automated dredges save time and labor. Cities from coast to coast have chosen Crisafulli's self-propelled Rotomite™ to dredge irregularly shaped ponds, lagoons, canals or waterways. Rotomite's interchangeable cutterheads (special models for sludge, weeds, heavy slurries) and powerful pump ensure the highest flows, while Rotomite's self-propulsion enables convenient and timesaving operation without the need to set up traverse systems.

FLUMP 4" Severe duty
with (optional) liner protection system,
wastewater treatment plant pond

When you move water, wastes, sludges or slurries with a Crisafulli pump or dredge, you'll appreciate:

- The *versatility of Crisafulli pumps,* which efficiently transfer a wide variety of materials from clear water to wastes with high concentrations of solids.
- Crisafulli dredges, pumps, and power units that are quite simply *"best value"*, backed by a minimum one-year warranty and nearly four decades of design refinement.
- *A broad range of dredge, pump and power unit* models in sizes and capacities to meet your most demanding pumping and dredging requirements.
- *Rugged construction, low maintenance, and long-term support* of all Crisafulli products by field representatives and service personnel who are committed to your complete satisfaction.
- Crisafulli's *ability and willingness to custom-design and build* a pump, dredge, or power unit for your special applications.

Municipal Applications:

for Crisafulli Products

- **Manage wastewater biosolids**
- **Remove water treatment residuals & settled solids**
- **Clean ponds, basins & lagoons**
- **Storm water management & Flood control**
- **Sewage lift stations**
- **Emergency pumping**

The stylized pump impeller symbolizes Crisafullis focus on efficient movement of fluids, sludges and slurries.

SRS Crisafulli

Pumps • Dredges • Power Units – Custom or Standard
Manufacturers of reliable Crisafulli products supported by superior service

Municipal

Crisafulli Pumps:

- Vertical Pumps
- Axial Flow Pumps
- Hydraulic Pumps
- Trailer Pumps
- Submersible Electric Pumps

Axial Flow Pump, 24" discharge

Emergency bypass pumping driven by Crisafulli diesel-hydraulic power unit

Your company's obviously sincere commitment to our city is appreciated. You have handled our concerns graciously with an aggressive customer satisfaction attitude. Thank you.
Assistant City Engineer, Moscow, Idaho

Management of storm water achieved, Winnetka, Illinois

"The Village needed to transfer a very large volume of water (due to storms and spring thawing) from a narrow creek to an adjacent river during periods of high water. The storm flow contained a large amount of debris and sticks. Also, electric power was frequently unavailable during storms because of power outages. Because of its non-electric power requirement, high volume pumping and ability to pass debris, the Village first purchased a 12" Crisafulli PTO-driven Humpback Trailer Pump™. After using the Crisafulli trailer pump effectively through one storm season, the Village then purchased a Crisafulli 16" PTO-driven vertical pump to supplement the trailer pump. During the same year, a new lift station was being designed for storm water management at another site in the Village and the type of power source was in question. A Crisafulli 16" dual drive (PTO/Electric) vertical pump was chosen. While electric power would be cheaper than manning a PTO-driven pump, if electricity is not available during a storm event, the PTO drive still works.

For the next three storm water stations, engineers outside the Village specified another brand of pumps. The project was completed and results were unsatisfactory. The cast pumps could not handle the debris from the storm water runoff. Three Crisafulli 16" vertical pumps for about half the cost eventually replaced the competitor's pumps.

After the success of the Crisafulli pumps for the Village, the decision for them to buy a Crisafulli hydraulic pump for a replacement to a competitor's pump was a given. This hydraulic pump is used by street department personnel to dewater various pits and manholes."

– Marshall-Bond, Inc.,
New London, WI

Storm and Flood water control along the Red River Valley of the North:

During the winter of 1996-1997 there were seven or eight major blizzards and heavy snowfall in the watershed area. The Canadian portion of the watershed was still frozen when the spring thaw hit in '97. Most of the dikes along the Red River were not built high enough to accommodate this much water. Flood waters rose to record levels and stayed up for six weeks in some areas.

To minimize future damage, as advised by the US Army Corps of Engineers and several consulting engineering firms, most communities along the river installed permanent pumping and control structures to enhance their dike and stormwater systems. 27 Crisafulli Vertical Pumps, ranging in discharge size from 10-inches to 16-inches were installed by cities along the Red River Valley to control the storm and flood waters. A typical flood control structure included a manhole with a divider, a sluice gate, and a Crisafulli pump on the storm water side pumping over the wall to the river side. During the spring when the river is at flood stage, the flood gates are closed to isolate the river from storm sewer and the automatic pump station handles any snow melt or rainfall. *"Most of these communities were familiar with the tractor-driven Crisafulli portable pumps so it was natural for the engineers to utilize the Crisafulli design in these permanent installations. The Crisafulli pump design used more horsepower than a vertical propeller pump, but it (the Crisafulli pump) was a better application for this project because it did not require screening. Another feature of the Crisafulli pump is its low profile. Even with the right angle gear drive option, it was three or four feet shorter than the propeller pump with a combination right angle gear drive. The aesthetics of this lower profile are significant when the pump is located on top of a 25 foot high dike."*

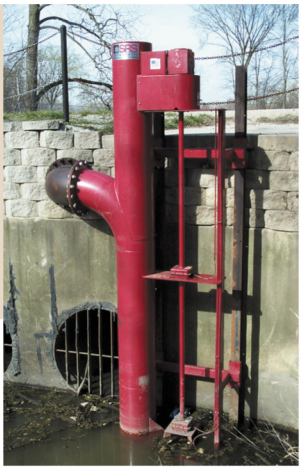
– Northwestern Power Equipment,
Roseville, MN

Managers

use the full range of Crisafulli™ pumps and power units

Crisafulli Power Units:

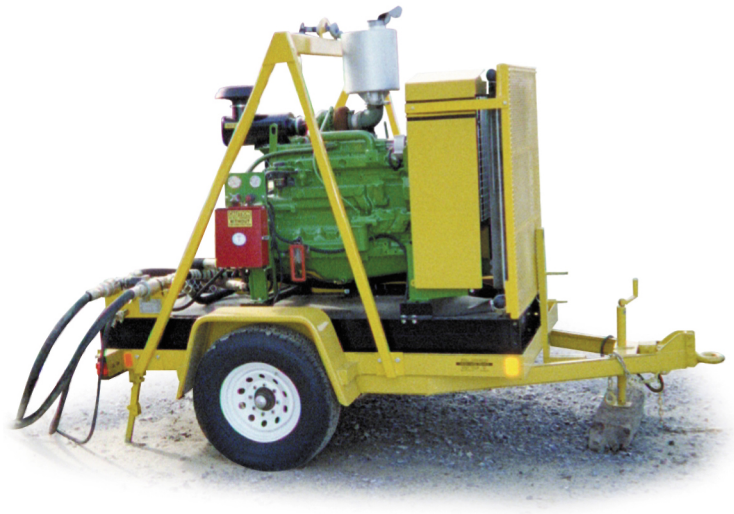
- Diesel-Hydraulic
- Electric-Hydraulic
- Diesel-PTO
- Portable or Stationary Models



Vertical Pump

16" PTO-powered,
stormwater control application

Our sludge processing plant uses one of your barge (dredge) units and a semi-portable submersible pump. The latter unit was used effectively and with complete satisfaction during a period of severe flooding to dewater operating areas of the Utility's principal wastewater treatment facility. – Manager, Engineering Design Division, Water & Wastewater Utility, City of Austin, TX



Crisafulli diesel-hydraulic power unit

Powered Trailer Pump

16" diesel-on-frame style

Municipal Managers

rely on Crisafulli™ pumps to transfer high volumes of water, to pass remarkably large solids, and to pump viscous materials.

Rugged, reliable Crisafulli pumps move millions of gallons of water, waste, sludges and slurries in municipalities worldwide. Crisafulli pumps are available in more than 100 models and five categories – submersible electric pumps, hydraulic pumps, trailer (portable) pumps, vertical pumps, all of which are submersible centrifugal style, as well as axial flow (propeller-type) pumps. Public works directors remark on the versatility of Crisafulli pumps and their ability to move everything from clear water to sludge and slurries. Whatever your requirement, from handling storm and flood waters to the toughest high-solids transfer applications, Crisafulli offers proven reliable pumps for the job.

Versatile, dependable Crisafulli **Vertical Pumps** are designed for stationary applications, such as *stormwater pumping stations, sewage lift stations, and sumps.* Optional guide rail systems eliminate the need for confined space entry, assuring operator safety.

Crisafulli **Trailer Pumps**, used by municipalities and government agencies nationwide for *flood control and emergency pumping*, are driven by the power take-off on any tractor or by a Crisafulli power unit (diesel, gas, electric or LP) mounted directly on the pump frame, or on a separate trailer or skid.

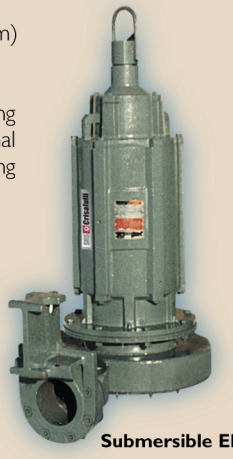
Crisafulli **Hydraulic Pumps** are *ideal for waste handling*; add an optional slurry gate to make your pump a powerful mixer. Municipal utilities often employ Crisafulli hydraulic powered pumps to dewater excavation sites, ditches, pits and manholes.

Crisafulli's **Vertical, Trailer, and Hydraulic Pumps** are available in discharge sizes to 24" (610mm) and flows to 18,000 gallons per minute (1,135 liters per second).

A new rugged, reliable Crisafulli **Submersible Electric Pump** can often cost less than repairing your old submersible. If the material to be pumped is in a pit or sump, use Crisafulli's optional *guide rail system* to bring the pump to the surface for routine maintenance, thereby eliminating the need for confined space entry by your personnel.

For your peak flow demands, specify Crisafulli's **Axial Flow (propeller) Pumps**, offering pumping rates to 50,000 gallons per minute (3,154 liters per second). Efficiencies above 70% make these pumps most economical to operate for high flows at relatively low heads.

Anywhere your public works department needs hydraulic power, Crisafulli **Power Units** can provide exactly what you require. Choose from standard configurations including diesel-hydraulic or electric-hydraulic or we will build to your specs. Power units are trailer or skid mounted for your convenience and ease of use.



Submersible Electric Pump
8" severe duty

Hydraulic Pump
3" standard duty

Visit our web site at **www.crisafulli.com**

SRS Crisafulli

To manage settled wastes in ponds and lagoons,

Municipal Managers

rely on Crisafulli™ to save them time, money… and get the job done

Crisafulli Dredges:

- FLUMP
- Rotomite
- Sludge Dredges

FLUMP, 3" Standard duty with (optional) siphon manifold, *Potable water plant, removal of alum sludge from primary settling basins*

A case of two water treatment problems solved...

"This letter is to inform you of our success using SRS Crisafulli standard duty FLUMP dredges to remove settled solids from two of our primary settlings basins at the Hanahan Water Treatment Plant. The two basins were built around 1904 and had no provisions for removal of settled solids other than draining the entire contents. These basins contain approximately six million gallons each and produce twenty-two million gallons of treated water per day each. The draining of either of these units every four months caused immense loading problems for our solids handling facility, not to mention the loss of a major portion of our water production capacity. This often occurred during peak demand periods when volume and water quality were critical.

We began looking at sludge dredges but were very cautious of cutterheads that might disturb the settled solids blankets, affecting water quality. Our goal was simple. Remove the solids on a continuous basis without affecting water quality and keep both basins in service while this was being performed.

We purchased a standard duty FLUMP (and equipped it with a siphon manifold in place of the cutterhead). We were able to remove solids at a rate of 300 to 500 gallons per minute on a daily basis without affecting water quality. Shortly thereafter, we purchased a second FLUMP. The use of these two units has allowed us to solve two major problems at the Hanahan Water Treatment Plant.

1. *Keeping the two major basins in service while removing solids on a continuous basis.*
2. *Eliminating the frequent solids loading problem, allowing our solids handling facility to function as designed without overload.*

Now, with the use of the (modified) standard duty FLUMPs, we only drain the basins annually for a scheduled routine cleaning and maintenance. We have been very pleased with the service that these (Crisafulli FLUMP) units have provided and would recommend them to anyone having a similar problem."

– Kenneth A. Dorr,
Assistant Superintendent,
Hanahan Water Treatment Plant,
Charleston, SC

Biosolids management program a success with help from a Crisafulli Rotomite...

Though less than 1,000 people reside in Decatur, Arkansas, its wastewater treatment plant deals with flows comparable to a population of 40,000, chiefly because a poultry processing plant discharges to Decatur's municipal facility, increasing its total throughput to 2 mgd, comprised of storm, sanitary and industrial flows. For several years, the town's Utility Manager planned for land application of biosolids. Flows are screened to remove solids as they enter the plant, followed by a four-stage process which includes a primary lagoon (where settling occurs), an activated aeration cell, a polishing pond (secondary lagoon), terminating in a sludge pond from which the biosolids are removed. The city needed a way to produce consistent solids flow from the sludge pond in order to reach their target of land applying a million gallons of biosolids each summer. With an SRS Crisafulli Rotomite dredge, Decatur transferred up to 1,000 gallons per minute of biosolids, at solids rates of 10% by weight, 60 to 80% by volume, to a truck waiting at the shoreline, from which the solids are then land applied. When fully operational, Decatur expects its biosolids management program to save $50,000 annually.

SRS Crisafulli is proud to have served Municipalities for over 30 years. Give us the privilege of serving your town, village or city and we believe you'll agree with the water plant manager who rented a Crisafulli FLUMP dredge and wrote: "We would like to thank you for your wonderful FLUMP. We have been dealing with our wet sludge lagoon for many years and have not always been totally successful. We found your system to be of excellent design and robust construction. The control system is direct and easy to understand. The FLUMP has exceeded our expectations. From beginning to end, you, your machine and the people who work for you are clearly first rate. We are looking forward to purchasing a sludge pump system and yours is certainly our first choice." Ethan V. Howard III, Manchester Water Works, Manchester, NH

Municipal Managers

use the full range of Crisafulli™ dredges

SRS Crisafulli Dredges: • FLUMP • Rotomite • Sludge Dredges

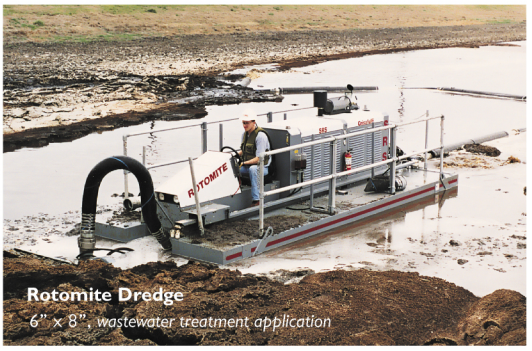
FLUMP, 3" severe duty

Operated by Karen McHale, SRSC Factory Rep, using hand-held radio remote, *wastewater treatment plant*

Built tough to ensure dependable service, even in harsh environments, Crisafulli dredges are designed for reliable performance in municipal waste removal applications. These versatile dredges process biosolids, water treatment residuals, sludges, sediments and slurries.

Crisafulli's FLUMP *is the small dredge that's big on performance.* Priced right for today's tight municipal budgets, use the FLUMP to clean your pond or lagoon of biosolids, lime & alum sludges, residuals, and to keep water intake structures clear of silt and sediment. Remotely controlled for worker safety and lower labor costs, order your Crisafulli FLUMP with basic controls, handheld radio remote, or fully automated. Choose from standard, severe duty, or custom FLUMP designs to match your particular application.

Interchangeable cutterheads (special models for sludge, weeds, heavy slurries) make Crisafulli's Rotomite dredge *a multi-function public works solution*, useful to manage alum and lime sludges, as well as aquatic vegetation. Its powerful pump ensures the highest flows, while Rotomite's self-propulsion enables convenient and time-saving operation without the need to set up a traverse system.



Rotomite Dredge
6" x 8", wastewater treatment application

The rugged Crisafulli Sludge Dredge series includes our largest dredges for the bigger jobs. Diesel-hydraulic driven, these custom-designed dredges can dredge to depths of 60 feet, handle solids up to 6 inches in diameter, and are available in a variety of materials including special metals for abrasive, corrosive or caustic dredging applications.

Visit our web site at **www.crisafulli.com**

for specs, details and case studies on Crisafulli's full line of equipment.

Contact us today at the factory or through a Crisafulli Dealer or representative to discuss your special applications.

Call today toll-free:
1-800-442-7867
or visit us on the web:
www.crisafulli.com

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