

# Impact™

## Wastewater Pump Series

The clear choice for  
high-efficiency performance.

**ITT***Engineered for life*

# The new **impact** series of high-efficiency submersible

## **The most efficient system in the market.**

Our unique, self-cleaning impeller and casing are specifically configured to process solids more easily and reduce clogging. The pumps consume less energy and hold up longer, even in high demand conditions.

## **Reduced maintenance.**

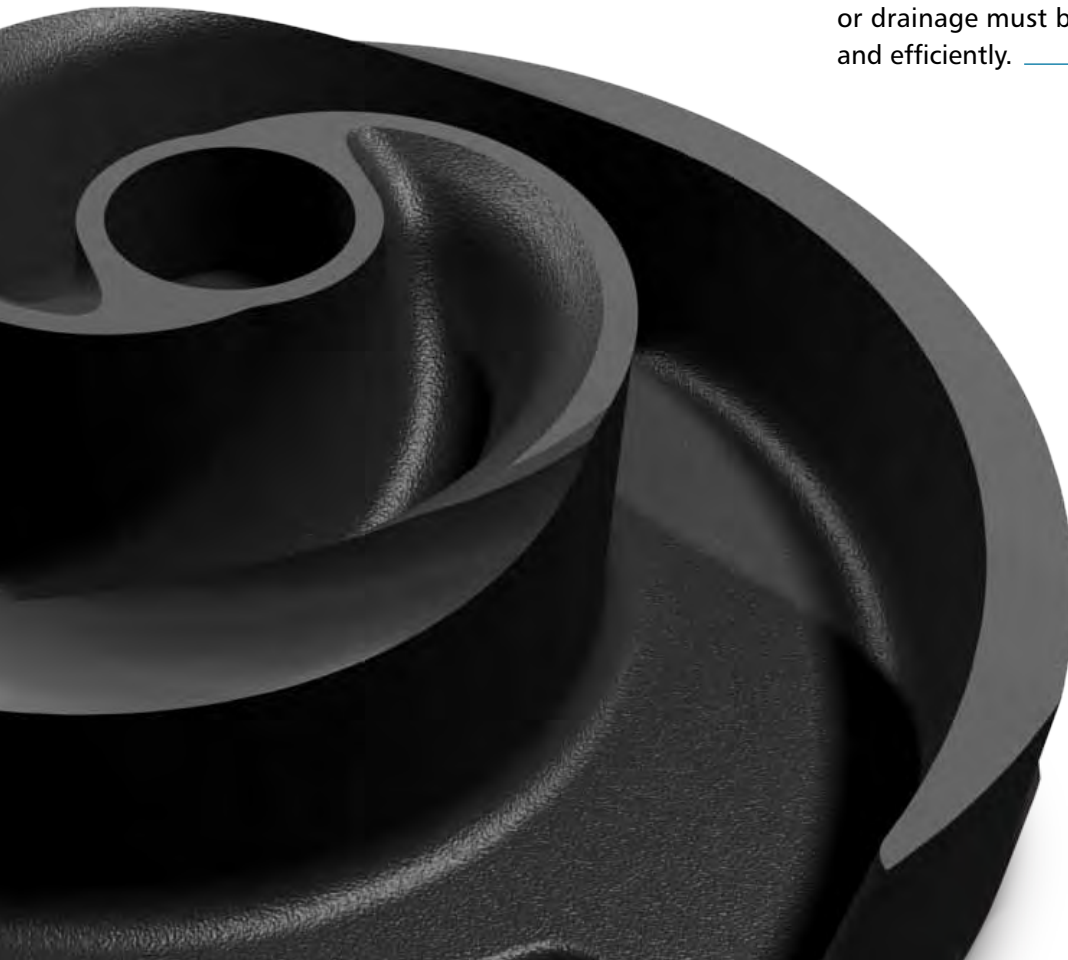
Better processing of solids means less clogging, reducing costly maintenance activities. Minimized costly downtime allows for better use of your maintenance resources.

## **Greater durability for lower operating costs.**

The air-filled motor, dual mechanical seal and specially designed seal chamber improve overall pump efficiency and durability. This means less wear over longer periods of time, reducing overall energy costs. The seals also last longer, with better leak detection, and hard faces that endure abrasive conditions found in wastewater applications.

Impact Pumps are designed for use anywhere waste or drainage must be disposed of quickly, quietly and efficiently.

- Commercial/building services applications
- Sewage systems
- Dewatering/effluent
- Water transfer
- Light industrial and agriculture applications



# wastewater pumps.

## 1 Air filled motor

- Efficient dissipation of heat
- Improves overall pump efficiency

## 2 Seal protection chamber

- Specially designed seal chamber protects outer mechanical seal from debris and abrasives

## 3 Self-cleaning non-clog Impact impeller

- Clog resistance without need of large through let with the benefit of high hydraulic efficiency
- Highest efficiency available to the market

## 4 Special relief groove

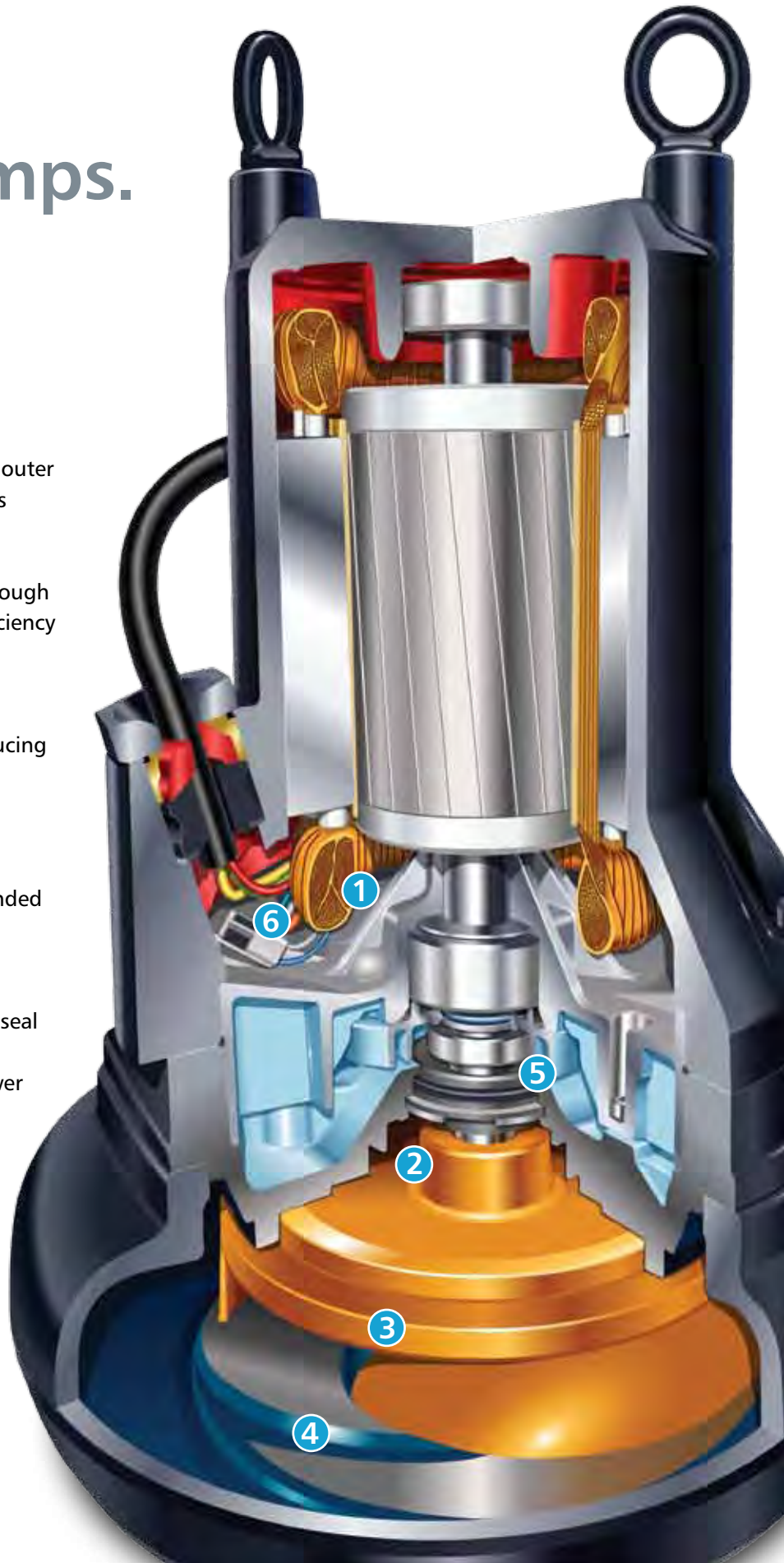
- Provides self cleaning flow path,thus reducing the risk of clogging

## 5 Seals

- Dual mechanical seal
- Outer seal with hard faces results in extended mechanical seal life

## 6 Seal failure detection

- Unique float in motor chamber to detect seal failure without false alarms
- If pumpage should begin to leak past lower seal, it indicates to pump control panel a fault has occurred.





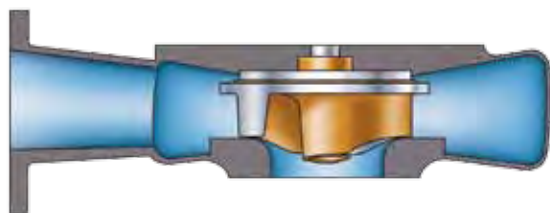
## The Impact impeller reduces clogging, eliminating build-up and efficiency loss.

The leading edge on most impellers is axial, the ideal shape for wastewater containing debris and other long stringy material to wrap around. The Impact impeller maintains pumping efficiency over longer periods of time due to its unique swept-back leading edge design and relief groove in the volute.



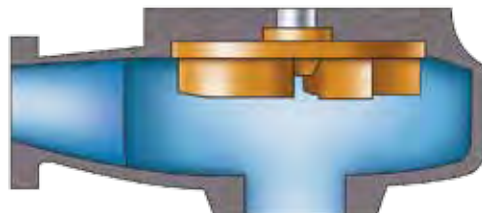
The volute design includes a relief groove that helps material pass through. Debris gets fed into the relief groove as the impeller turns, pulling them from the impeller and forcing them into the volute where they get pumped away.

This new pump design has undergone extensive testing, showing considerably lower energy consumption, fewer running problems and operating at efficiencies which exceed market standards by 10-15%.



### **MK self-cleaning hydraulics**

Self-cleaning maintains a high level of efficiency, even in fluids with a high solids and fibrous content.

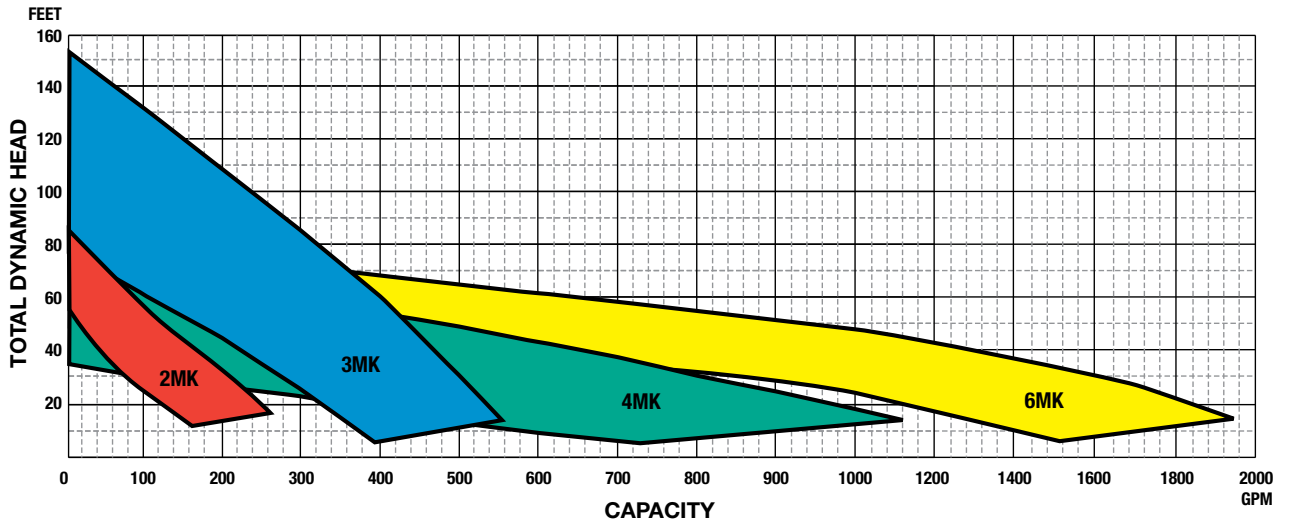


### **MV Vortex hydraulics self-cleaning hydraulics**

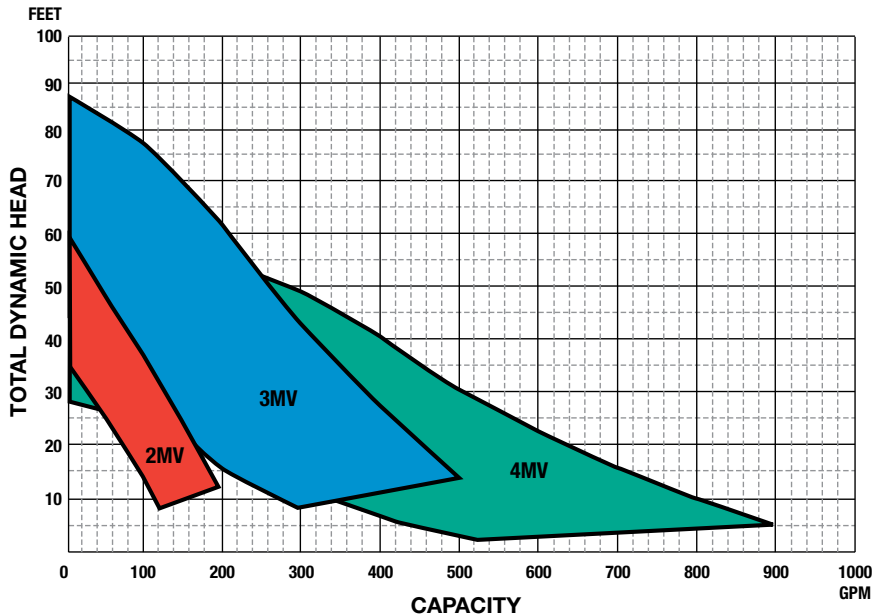
In low volume a vortex impeller is the better choice. A vortex impeller is also suitable in media which contain sand and other abrasive solids.

# Performance ranges

**MK**



**MV**



**6MK**

Capacities: up to 2200 GPM  
Total heads: up to 90' TDH  
Discharge size: 6" Flange



**4MK/MV**

Capacities: up to 1100 GPM  
Total heads: up to 75' TDH  
Discharge size: 4" ANSI Flange



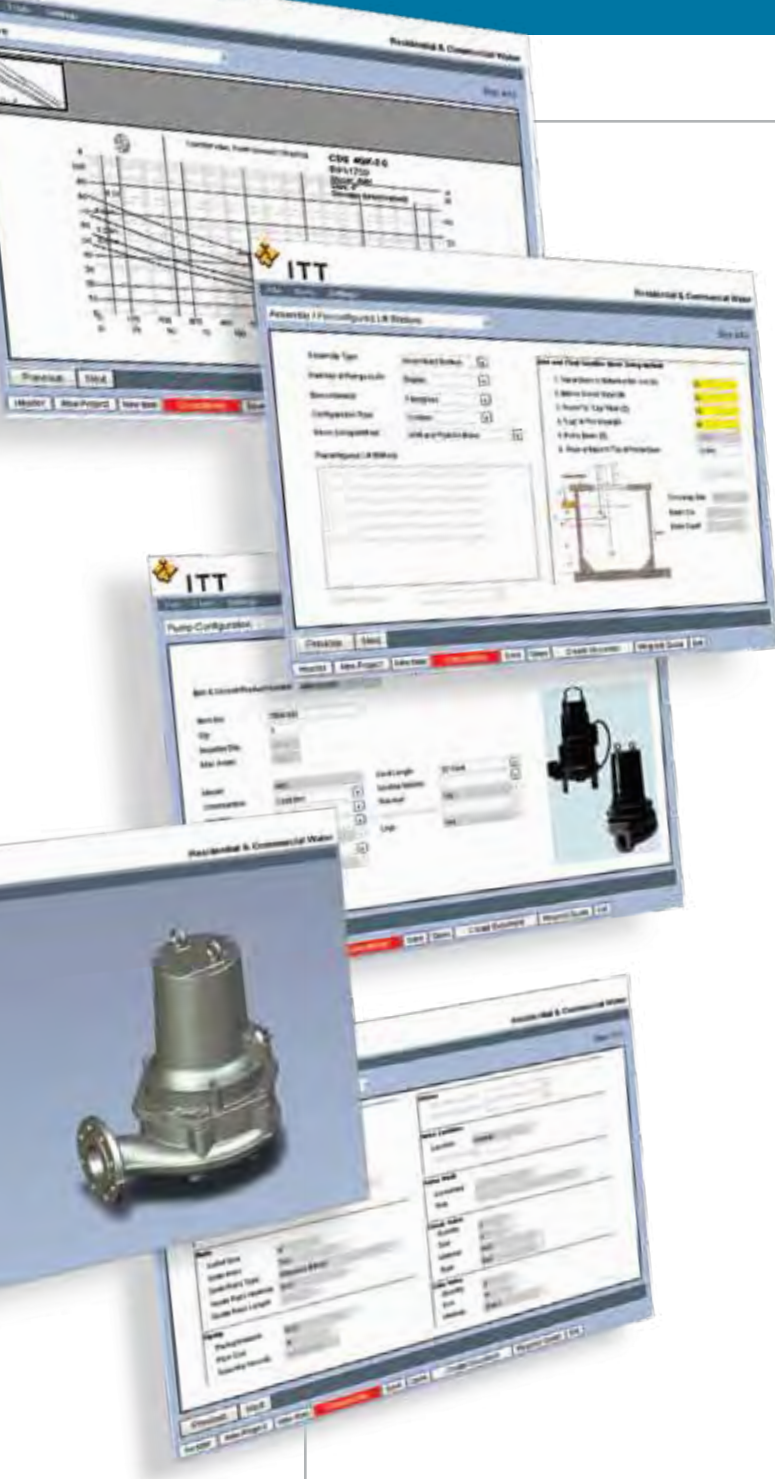
**3MK/MV**

Capacities: up to 575 GPM  
Total heads: up to 152' TDH  
Discharge size: 3" ANSI Flange



**2MK/MV**

Capacities: up to 275 GPM  
Total heads: up to 82' TDH  
Discharge size: 2" NPT



## New ESP-Design PLUS system selection software for wastewater products.

The only comprehensive selection software program available in the market. Easily determine the correct flow for every area of a building to make sizing and selection as simple as possible.

### **Reduce complexity and increase accuracy.**

ITT's ESP-Design-PLUS system selection software lets you quickly produce accurate, comprehensive specs, schematics and drawings that meet the needs of your building project, cutting the approval process time in half and protecting your job deadlines.

### **Easily obtain accurate, up-to-date technical documentation**

With ITT's easy-to-navigate web site and proprietary software, you'll get fast answers, accurate information, and up to date documentation so that you can easily size and spec your project and then download the information straight into your submittal package. You'll be able to share a fuller picture of your entire system with other team members, so you can collaborate more efficiently and complete your project more quickly.

ITT's proprietary ESP-Design PLUS system software helps you determine the correct flow for every fixture and every area of a building. The software includes pump sizing, and pump and package selection tools, as well as complete system design/sizing tools allowing you to customize the pump system to exactly match the building's environment and accessories.

Commercial kitchen area – sinks, dishwashers, faucets, ice makers



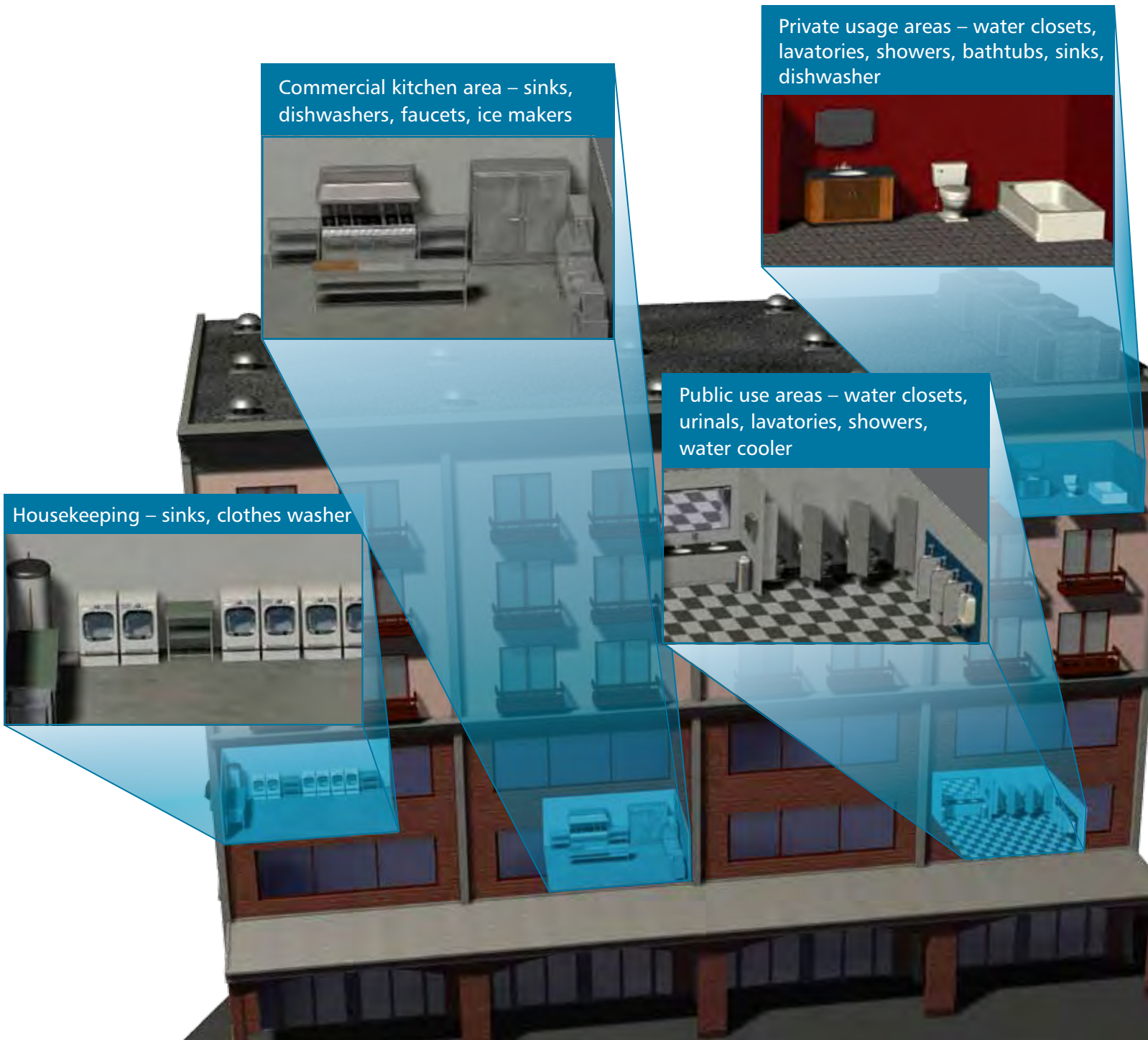
Private usage areas – water closets, lavatories, showers, bathtubs, sinks, dishwasher



Public use areas – water closets, urinals, lavatories, showers, water cooler



Housekeeping – sinks, clothes washer







## Trust the name that set the standard in the industry – ITT Bell & Gossett.

By choosing ITT as your single-source provider for all your pumps and pumping system needs, you'll have the tools and resources you need to select the most efficient, high-performing system for your project. With more than 90 years of pump, HVAC and plumbing systems experience, Bell & Gossett delivers the knowledge you need to design a complete system that fits your application. And because we're part of ITT, the largest pump manufacturer in the world, you can feel confident you'll get tough, high performing products you can depend on.

Your local Bell & Gossett Representative is an experienced professional with a wealth of technical expertise. Because they know systems from design to operation, they can give you the advice and support you need to successfully install, operate and maintain your systems.

## Unparalleled training and product support.

The famous Bell & Gossett Little Red Schoolhouse® opened in 1954 as a dedicated facility for training. Over the past 56 years we have trained more than 55,000 engineers, contractors and installers in the proper design, installation and maintenance of HVAC systems. Our fully equipped learning center is the only facility of its kind, and Bell & Gossett is proud to set the standard for professional education and HVAC and pump system innovation.



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