ChargerPro™ Series

CHARGER
Water Treatment Products

Why **SOFT** WATER?

Hard Water Produces Scale

Stains or buildup on your sinks and bathtubs, using large amounts of soap to clean dishes or wash your hair, or odd tasting or smelling water, are all results of hard water. If left untreated, the minerals in hard water will cause white stains on plumbing fixtures and be deposited as scale, eventually clogging plumbing and shortening the life of appliances like washing machines, water heaters, and dishwashers.

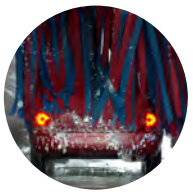
How the ChargerPro Thoroughbred System Softens Water

Hard water passes through the media tank that contains resin beads coated with sodium ions. The calcium and magnesium ions are exchanged for sodium (or potassium) ions, thus 'softening' the water. When the beads have trapped the hardness and need to be regenerated, the control valve charges them with the brine from the brine tank.

As regeneration occurs, calcium and magnesium (hardness) ions are freed from the beads, replaced with sodium or potassium ions, and the system is ready to soften water again.

ChargerPro Thoroughbred Systems eliminate the effects of hard water. They "soften" the water by removing the calcium and magnesium, extending the useful life of water heaters, boilers, commercial laundry, as well as many other items that water passes through by as much as 30%.

Why Water Treatment Matters in Light Commercial Uses



Car Washes

Quality equipment and water quality are an important, essential ingredient for a successful car wash. Applying the right water treatment equipment is critical. At Charger we will help to assure you have the proper water treatment equipment required for your car wash design.

Hospitals

The system quickly begins paying for itself by reducing water related energy consumption, extending the life of water using appliances, reduced cleaning product costs and reducing plumbing repairs. Water heaters, boilers and steam handling equipment will have longer service lives.

Restaurants



Charger's full range of water softeners, reverse osmosis systems and water filters help your restaurant to run more smoothly, deliver great tasting drinking water and improve the flavor of the food you serve. You will also enjoy spot-free glassware, reduce detergent costs, reduce energy consumption and reduce maintenance costs while extending the life of your water using equipment.

Laundromats



By using softened water your customers clothes will be softer, cleaner, whiter, brighter and last longer. You will enjoy longer service life from your machines and lower plumbing repair costs.

Why Choose the **ChargerPro™ Thoroughbred Light Commercial** SYSTEM?



Duplex shown

- **Efficient Water Softening:** The ChargerPro Thoroughbred Light Commercial System saves water and up to 40% in salt usage.
- **Durability and Reliability:** Known for its longevity and minimal maintenance requirements.
- **Consistent Water Quality**
- **Environmentally Friendly:** Efficient use of salt helps to reduce the environmental impact.
- **Customizable Settings:** Your water treatment professional can customize the system to meet your specific water usage needs.
- **Advanced Technology:** The control valve design provides optimum service and backwash rates.

Thoroughbred
1.25" Progressive Flow

Light Commercial Series Water Softening Systems

Delivering Cleaner, Healthier Water Across America

www.chargerwater.com

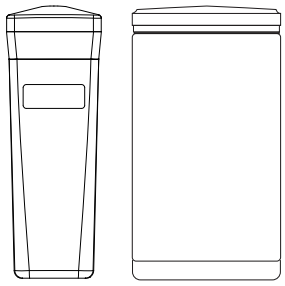
ChargerPro™ *Series*

Thoroughbred 1.25" Progressive Flow

Light Commercial Series Water Softening Systems

Model	Grains Capacity		Service Flow Rates Per Tank		Backwash Flow Rates	Resin Load	Tank Sizes		Salt Storage Capacity	Dimensions in inches, approx (for duplex system)		
	@ 9 lbs per cu ft	@ 15 lbs per cu ft	Continuous @15 gpm sq	Peak @20 gpm sq	GPM @5 gpm sq	cu ft	Resin Tank	Brine Tank	lbs	L	W	H
CDS12548PF	36,000	45,000	8.3	11	2.7	1.5	10x54	18x40	400	28	12	65
CDS12564PF	48,000	60,000	11.9	15.8	3.2	2	12x52	18x40	400	32	14	63
CDS12580PF	60,000	75,000	13.8	18.4	4.2	2.5	13x54	18x40	400	34	16	65
CDS12596PF	72,000	90,000	16.1	21.4	5.3	3	14x65	24x41	700	36	18	75
CDS125128PF	96,000	120,000	21	28	6.5	4	16x65	24x41	700	38	19	75
CDS125150PF	120,000	150,000	27	34	9.0	5	18x65	24x41	700	46	24	73
CDS125210PF	168,000	210,000	34	34	12.0	7	21x62	24x50	900	53	24	84

These specs can be used in systems consisting of 2, 3, or 4 units (duplex, triplex, or quadplex).



MINERAL TANK AVAILABLE COLORS:
Black or Natural
Mineral tank jackets are available upon request.
Optional outdoor weather covers.

BRINE TANK AVAILABLE COLORS:
Black, Almond, Blue, Platinum

BRINE TANK AVAILABLE SIZES:
Square/Rectangular: 15x15
Round: 18x40, 24x41, 24x50



Grid Plate
Plastic brine grid
with PVC legs

Options Available



1" & 1.25" NHWBP Valve
CWV3070FM

- Hydraulically balanced piston valve
- Allows for our 1" & 1.25" valves to be used in multi-tank systems
- Full 1.25" ports with minimal pressure loss
- Provides for no raw water bypass during regeneration
- Provides choices of treated or non-treated water regeneration for our 1" & 1.25" valves
- Proven and reliable AC drive assembly
- Low voltage drive assembly controlled by valve's circuit board
- Flow from Port A to Port B has a CV factor of 15.5 (3.7 psi drop at 30 gpm)
- Flow from Port B to Port A has a CV factor of 15.9 (3.6 psi drop at 30 gpm)

ChargerPro Thoroughbred 1.25" Valve Benefits

- Solid state microprocessor with easy access front panel settings
- Front panel display for time of day, current flow rate, totalizer, and volume/days until regeneration
- Four methods to initiate regeneration; meter immediate, meter delayed, time clock delayed or pressure differential
- Optional double backwash feature offers optimum regeneration, cleaning ability and efficiency
- Fully programmable cycle sequences (maximum 9)
- Fully programmable regeneration cycles
- Capacitor back-up with up to 24 hour carry over

ChargerPro Thoroughbred 1.25" Valve Specifications

Inlet/Outlet (1) ..... 1.25" NPT Adapter
Cycles ..... up to 9
Valve Material ..... Lead Free Brass
Regeneration ..... Downflow
Operating Pressures
Minimum/Maximum ..... 20 psi - 125 psi
Operating Temperatures
Minimum/Maximum ..... 40° - 110°F

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