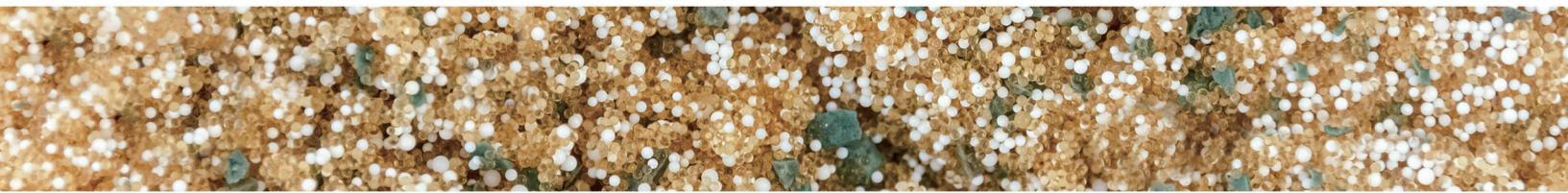


HYPERMIX®

MEDIA INNOVATION FOR WATER FILTER



THE BEST SOLUTION FOR 5+1 WATER PROBLEMS

- ★ Water Hardness
- ★ Iron, ferrous form and organic form
- ★ Manganese
- ★ Natural organic matter, including Tannins
- ★ Ammonium
- ★ Heavy metals



Lanlang® HYPERMIX® is a proprietary composite media designed to solve the water problems. Combined with 5 premium-grade materials, HYPERMIX works effectively in well water and municipal water within the allowable concentrations of hardness, iron, manganese, ammonium and natural organic matter. Also HYPERMIX can be easily regenerated as the same steps as water softener.



Hypermix® Eco: For well or tap water with Low Organic Matter.

Hypermix® Universal: For well or tap water with Moderate Organic Matter.

Hypermix® Plus: For well or tap water with High Organic Matter.

Hypermix® Special: For well or tap water with High Iron & Manganese Matter.

Hypermix® Special Plus: For well or tap water with Very High Iron & Manganese Matter.

RAW WATER QUALITY REQUIREMENT AND PURIFICATION EFFICIENCY

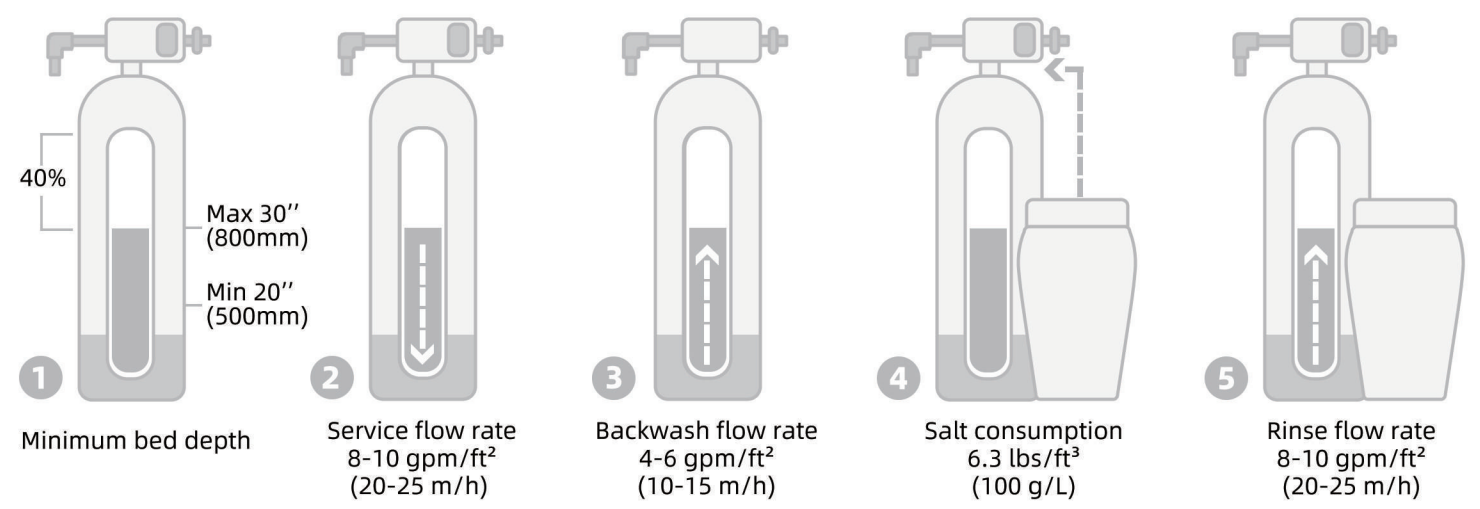
RAW WATER LIMITATIONS					
HYPERMIX	Eco	Universal	Plus	Special	Special Plus
Hardness(as CaCO ₃), ppm	750	750	750	750	750
Iron, ppm	15	15	15	20	30
Manganese, ppm	3	3	3	8	8
Oxidation(as O ₂), ppm	5	20 (Reduces by 50%)	20 (Reduces by 85%)	3	3
Ammonium, ppm	4	4	4	4	4

- * HYPERMIX is not designed for the treatment of surface water (lakes, ponds, rivers, swamps etc).
- * HYPERMIX can not treat microbiologically unsafe water.
- * HYPERMIX is recommended be used after sediment pre-filter.
- * HYPERMIX is not recommended be used with resin cleaner and chemicals.

SUGGESTED OPERATING CONDITIONS

No.	ITEM	SPEC (US Units)	SPEC (Metric Units)
1	Max operating temperature	40 °C	40 °C
2	PH range	5-10	5-10
3	Minimum bed depth	20 inches	500 mm
4	Optimum bed depth	30 inches	800 mm
5	Service flow rate	8 - 10 gpm/ft ²	20 - 25 m/h
6	Backwash flow rate	4 - 6 gpm/ft ²	10 - 15 m/h
7	Regeneration flow rate	1.2 - 2 gpm/ft ²	3 - 5 m/h
8	Rinse flow rate	8 - 10 gpm/ft ²	20 - 25 m/h
9	Free bed volume	≥ 40%	≥ 40%
10	Salt consumption	6.3 lbs/ft ³	100 g/L
11	Brine concentration	8 - 10%	8 - 10%
12	Water consumption per regeneration	≤ 75 gallon/ft ³	≤ 10L/L
13	Active chlorine	< 0.1 ppm	< 0.1 ppm
14	TDS	≤ 4000 ppm	≤ 4000 ppm

TECHNICAL SPECIFICATION



COMMONLY USED VESSELS

Vessel		1035	1054	1252	1354	1465	1665	2162
HYPERMIX volume (bags*)		1.0	1.5	2.0	2.5	3.0	4.0	6.0
US Units	Service flow rate (gpm)	5.7	5.7	8.0	10.0	11.0	14.5	24.3
	Backwash flow rate (gpm)	11500	17200	23000	28500	34500	46000	69000
	Salt per regeneration (lbs)	5.5	8.4	11.0	13.7	16.5	22.0	33.0
	System capacity (grains)	2.7	2.7	4.2	4.2	6.5	7.5	11.3
Metric Units	Service flow rate (m ³ /h)	1.3	1.3	1.8	2.2	2.5	3.3	5.5
	System capacity (kg CaCO ₃)	0.7	1.2	1.5	1.9	2.3	3.0	4.5
	Salt per regeneration (kg)	2.5	3.8	5.0	6.2	7.5	10.0	15.0
	Backwash flow rate (m ³ /h)	0.6	0.6	0.9	0.9	1.2	1.6	2.7

* Bag - 25L (0.88 cu.ft), 48 bags with one pallet, 20 pallets in 1x20FCL container, Total: 24M³ / 1x20FCL



WITH LESS AREA AND LESS WATER DISCHARGE

3 TIMES
SMALLER AREA

2 TIMES
LESS COST

3 TIMES
LESS VALVE
MAINTENANCE

30%
LESS SALT
CONSUMPTION

2 TIMES
REDUCES OPERATING
WATER COSTS

2 TIMES
LESS MAINTENANCE
SPENDING

HYPERMIX® VS OTHERS



	HYPERMIX® water system	Water softening system	Multi stage filtration system
Hardness	✓	✓	✓
Iron	✓	✓ (After each regeneration the filter capacity decreases by 0.7-1.5%. If the iron content is high, the filtration rate must be reduced.)	✓
Manganese	✓	✓ (There may be emissions of manganese in treated water.)	✓
Ammonium	✓	X	✓
Organic	✓	X	✓
Service life	5 years	5 years	5 years
Regeneration method	Salt	Salt	X (Multiple chemicals)
Water consumption per regeneration per liter	2.11-2.64 Gallon (8-10 L)	2.64-3.43 Gallon (10-13 L)	6.60-7.92 Gallon (25-30 L)
Salt dose	6.24 lb/ft³ (100 g/L)	8.74-9.98 lb/ft³ (140-160 g/L)	8.74-9.98 lb/ft³ (140-160 g/L)

