



Drip Systems For Heap Leach Mining

PRODUCT CATALOG



Less Plugging
More Production
with the Max-Emitter

WWW.ORE-MAX.COM

What **Ore-Max** Can Do For You

How much profit is lost due to plugged emitters?

The answer is, a great deal of production can be lost due to plugged emitters. That's why your profitability can be significantly increased by ensuring the correct output from every emitter in your leach system.

A plugged emitter can lead to big costs in terms of a mine's lost production. With the maximum plug resistance of the Max-Emitter, you'll achieve your desired leach flow, and profit from greater hours of performance and increased production. Time and again mines have increased their extraction by converting to the Max-Emitter to reduce plugging which increases production. Ore-Max designed the Max-Emitter specifically for the difficult conditions of heap leach mining applications.

Not only do you get the most production with Ore-Max but it is the least expensive emitter line you can purchase based on the cost per leach cycle. The typical Ore-Max emitterline will last 2-4 leach cycles so amortizing the purchase price over 2 or more cycles makes it the lowest price and best value purchase of emitterline for your mine.

Ore-Max offers not only reduced plugging but also a complete surface leaching system from the pump output to the last dripper. Each step of the way Ore-Max is there

to ensure that your leach system will operate successfully by providing everything from design to final start-up of the system and after sales service. We have the most experienced design team in the industry with over 25 years of designing and applying leaching systems. Each

component in the leach system has been carefully selected for long life, low cost operation, reliability and superior performance on the pad. It is a system in which the components are designed to work together over many years to provide maximum results for you.

Also all Ore-Max systems are designed so the output of every emitter is per the system design. With other emitter brands, small fluctuations in pressure can cause big variations in both solution application and extraction recovery. The right emitter output will keep your results closer to the theoretical maximum extraction for the mine.

Ore-Max is dedicated to providing you optimum results at a competitive price. Our staff of experienced engineers and technical experts are easily reached to give advice for your system. Call us at **503-692-5353** or email us at sales@ore-max.com for a design or quotation for your mine.

***"With the ...Max-Emitter,
you'll achieve your
desired leach flow, and
profit from greater hours
of performance and
increased production"***

THE ORE-MAX TEAM

Company Contact Information

Mailing Address:

Ore-Max, Division of Wade Rain Inc.
P.O. Box 23666
Portland, Oregon 97281 USA

Street Address:

Wade Rain Inc.
9995 SW Avery St
Tualatin, Oregon 97062 USA

Tel: 503-692-5353

Fax: 503-692-5358

Web: www.ore-max.com

Email: sales@ore-max.com

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The Ore-Max

1 Less Plugging, More Production

The overall design and selection of components in the Ore-Max system results in the maximum extraction of minerals from your heap leach mine. Often heap leach systems perform substantially below design criteria. The Ore-Max system almost always results in increased production, bringing total extraction closer to the theoretical mine performance. The key is the Max-Emitter which has maximum plug resistance. By reducing plugging, the system operates properly and the leaching process performs closer to design. Often just a 1% increase in the ore production will more than pay for the entire heap leach system every 90 days.



2 Lowest Cost System per Heap Leach Cycle

Not only do you obtain maximum extraction using the Ore-Max system with the Max-Emitter, but you also have the lowest cost system per leach cycle. When you consider the life of the Max-Emitterline, which can usually be applied for two or three cycles, as compared to one cycle for the competition, the cost per heap leach cycle is substantially lower with Ore-Max.

You get the advantage of both the maximum ore extraction and the lowest cost system.

3 Balanced Hydraulics for Maximum System Performance

One of the keys to the top performing leach system is to have a well designed, hydraulically balanced system. Since the operating pressure is normally 15 PSI for the emitters, a small variation in system pressure can dramatically change emitterline flow, thereby affecting results. Ore-Max systems are designed for hydraulic balance and to ensure proper pressure, the Max-Emitter pressure regulators are provided to ensure that every line has the correct design pressure. This results in the proper application of flow from every emitter, every time.



Advantage



4 System Components with Minimum Down Time, Maintenance, & Long Service Life

The system components used on the Ore-Max leaching system are all designed to work together and have been fully field tested and proved to have low maintenance and long life. These are the highest quality components that are available for leach mining systems and have been applied for many years. By purchasing all of the components from Ore-Max you are assured of overall system performance without having a weak link in the system.

5 Free System Design

Ore-Max has an engineering staff with over 25 years of experience in design and application of leach systems on all types of minerals. Our design team can economically provide a complete leach system design—including detailed CAD drawings—at no cost if components are purchased from Ore-Max. By combining design responsibility with the system components appropriate for the application, the mine is assured of a well performing system from Ore-Max.



6 Lowest Operating Cost For Your Leach System

Ore-Max components are designed to provide ease of portability, and repeat use. The Sun-Flow Lay Flat lateral lines can be easily rolled up and moved to new locations and re-used many times. Fitting installation is easy on the lay flat and other Ore-Max components are chosen with the ease of installation in mind.

7 The Most Experienced Technical & Service Team in the Industry

The Ore-Max team's years of experience in the mining industry are incorporated into technical assistance with the leach system design and troubleshooting.



The Max-Emitter

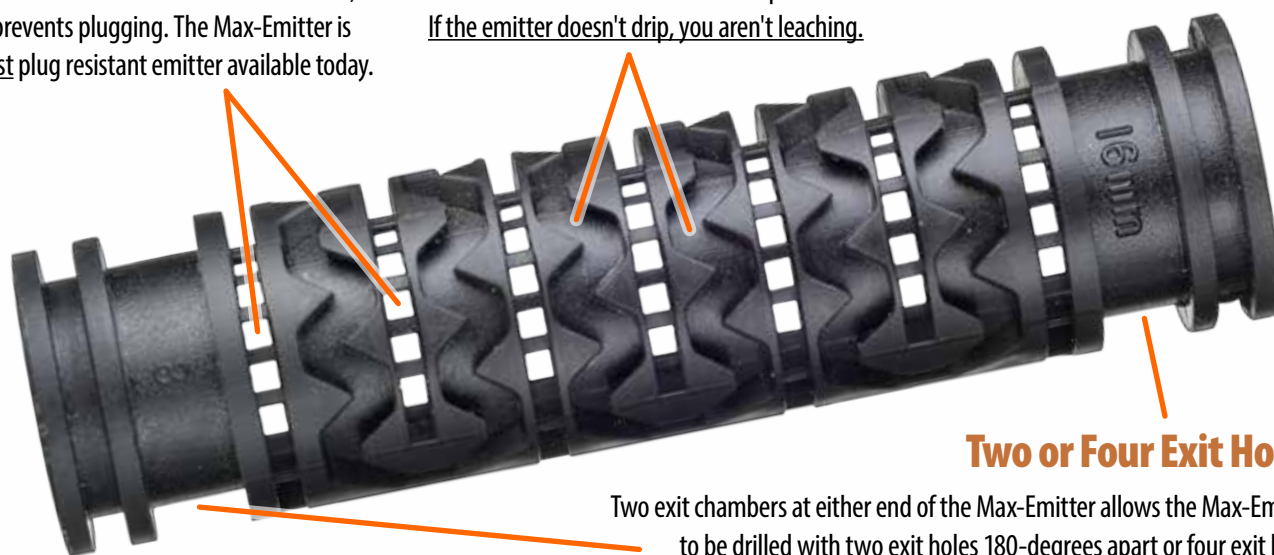
Maximize Your Production

Hundreds of Screens

The Max-Emitter design incorporates hundreds of screen inlets 330° around the Max-Emitter, which prevents plugging. The Max-Emitter is the most plug resistant emitter available today.

Largest Flow Path

The large flow path has proven in mine after mine that the Max-Emitter can increase metal production.
If the emitter doesn't drip, you aren't leaching.



Two or Four Exit Holes

Two exit chambers at either end of the Max-Emitter allows the Max-Emitter to be drilled with two exit holes 180-degrees apart or four exit holes 90-degrees apart for extra protection against plugging.

What These Features Mean to You

• Less Plugging More Production

Almost every mine that has converted to the Max-Emitter has experienced a significant increase in metal production because more emitters are working and not plugged. Even a small increase in production will result in enormous revenue increases far in excess of the entire cost of the emitterline.

• Longer Product Life Means Lower Product Cost

Typically the Max-Emitter drip line will last two, three or four times longer than the competition before plugging. So you can divide the initial purchase price of the Max-Emitterline by 2 or 3 to get real emitterline per cycle cost.

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Improved Solution Management

Solution management is the key to improved metal extraction and profitability. All of the Ore-Max features listed contribute directly to improved solution management - a better operating system which is not available with any other supplier.

Highest Quality Product Specifications

Ore-Max uses the highest quality resin and carbon black in their emitter and tubing construction. Manufacturing quality control ensures continuous product quality - translating into consistent emitter flow with every delivery.



Largest and Most Screens



Largest Flow Path Volume



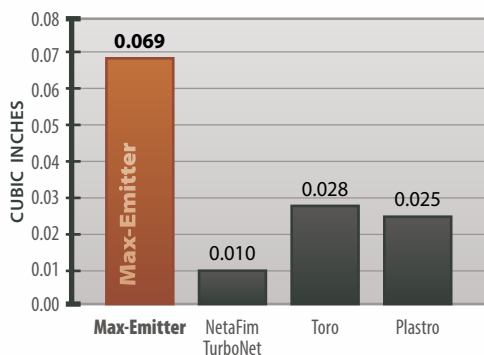
Two Exit Holes 180° Apart

Optional: Four Exit Holes Approximately 90° Apart

Ore-Max Max-Emitter is the first emitter designed specifically for the mining industry and offers improved technological advantages.

Max-Emitter vs. The Competition

Total Volume of Flow Path

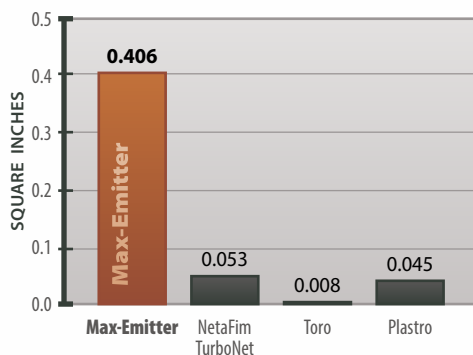


BENEFIT OF THE

Larger-Volume Flow Path:

A large flow path volume prevents plugging by allowing particulates to pass through the emitter.

Total Screen Area

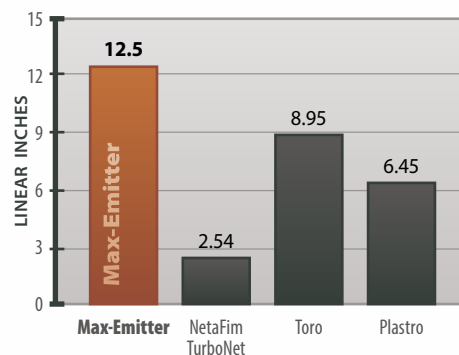


BENEFIT OF THE

Larger Screen Area:

At a full 330°, the Max-Emitter™ offers the largest inlet screen area available. More screens mean less plugging and higher production.

Total Length of Flow Path



BENEFIT OF THE

Long-Length Flow Path:

When the flow path is longer, you'll have smaller flow variations as a result of pressure changes. This means more consistent emitter to emitter output.

Drip Systems For Heap Leach Mining

16MM
1.5 LPH
(0.375 GPH)

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 1.5 LPH (0.375 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 1.5 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL151614MX	0.035"	0.89 mm	14"	35 cm	33.7 lbs	15.3 kg	15,160 lbs	6,877 kg	20,214 lbs	9,169 kg
OL151616MX			16"	40 cm	32.7 lbs	14.9 kg	14,734 lbs	6,683 kg	19,645 lbs	8,911 kg
OL151618MX			18"	45 cm	32.0 lbs	14.5 kg	14,402 lbs	6,532 kg	19,202 lbs	8,710 kg
OL151620MX			20"	50 cm	31.4 lbs	14.2 kg	14,136 lbs	6,412 kg	18,848 lbs	8,549 kg
OL151622MX			22"	55 cm	30.9 lbs	14.0 kg	13,919 lbs	6,314 kg	18,559 lbs	8,418 kg
OL151624MX			24"	60 cm	30.5 lbs	13.8 kg	13,738 lbs	6,231 kg	18,317 lbs	8,309 kg
OL151614MY	0.040"	1.02 mm	14"	35 cm	37.7 lbs	17.1 kg	16,953 lbs	7,690 kg	22,605 lbs	10,253 kg
OL151616MY			16"	40 cm	36.7 lbs	16.7 kg	16,527 lbs	7,496 kg	22,036 lbs	9,995 kg
OL151618MY			18"	45 cm	36.0 lbs	16.3 kg	16,195 lbs	7,346 kg	21,593 lbs	9,795 kg
OL151620MY			20"	50 cm	35.4 lbs	16.1 kg	15,929 lbs	7,225 kg	21,239 lbs	9,634 kg
OL151622MY			22"	55 cm	34.9 lbs	15.8 kg	15,712 lbs	7,127 kg	20,950 lbs	9,503 kg
OL151624MY			24"	60 cm	34.5 lbs	15.7 kg	15,531 lbs	7,045 kg	20,708 lbs	9,393 kg
OL151614M	0.045"	1.14 mm	14"	35 cm	41.7 lbs	18.9 kg	18,776 lbs	8,516 kg	25,034 lbs	11,355 kg
OL151616M			16"	40 cm	40.8 lbs	18.5 kg	18,349 lbs	8,323 kg	24,465 lbs	11,097 kg
OL151618M			18"	45 cm	40.0 lbs	18.2 kg	18,017 lbs	8,172 kg	24,023 lbs	10,896 kg
OL151620M			20"	50 cm	39.4 lbs	17.9 kg	17,751 lbs	8,052 kg	23,669 lbs	10,736 kg
OL151622M			22"	55 cm	39.0 lbs	17.7 kg	17,534 lbs	7,953 kg	23,379 lbs	10,605 kg
OL151624M			24"	60 cm	38.6 lbs	17.5 kg	17,353 lbs	7,871 kg	23,138 lbs	10,495 kg
OL151614MH	0.050"	1.27 mm	14"	35 cm	45.8 lbs	20.8 kg	20,626 lbs	9,356 kg	27,502 lbs	12,475 kg
OL151616MH			16"	40 cm	44.9 lbs	20.4 kg	20,200 lbs	9,162 kg	26,933 lbs	12,217 kg
OL151618MH			18"	45 cm	44.2 lbs	20.0 kg	19,868 lbs	9,012 kg	26,490 lbs	12,016 kg
OL151620MH			20"	50 cm	43.6 lbs	19.8 kg	19,602 lbs	8,891 kg	26,136 lbs	11,855 kg
OL151622MH			22"	55 cm	43.1 lbs	19.5 kg	19,385 lbs	8,793 kg	25,847 lbs	11,724 kg
OL151624MH			24"	60 cm	42.7 lbs	19.4 kg	19,204 lbs	8,711 kg	25,605 lbs	11,614 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 16MM 1.5 LPH (0.375 GPH):

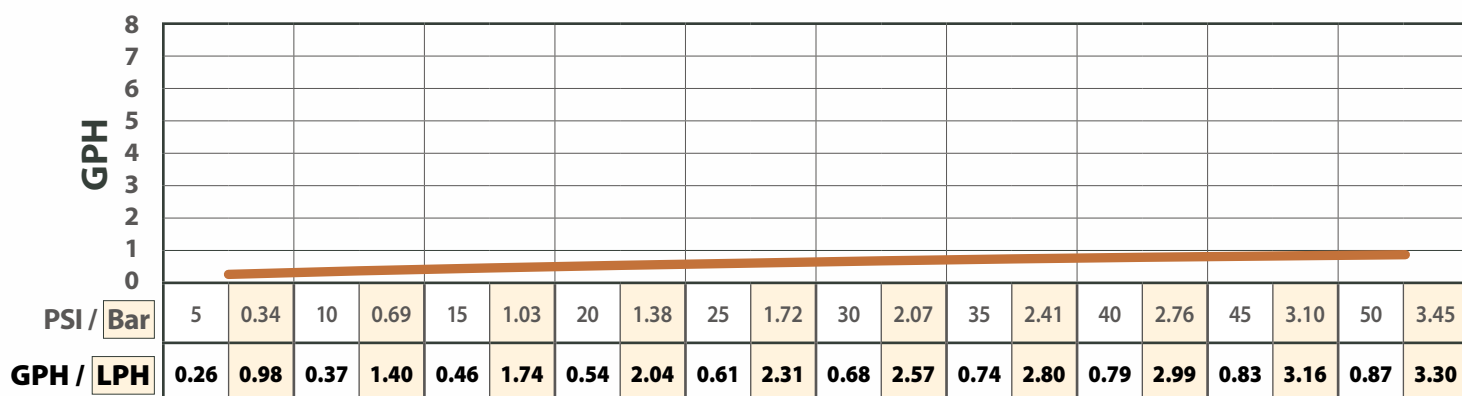
Part No.	Description
OL151624MY	OL15 = 1.5 LPH Max-Emitter, 16 = 16mm tubing, 24 = 24" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

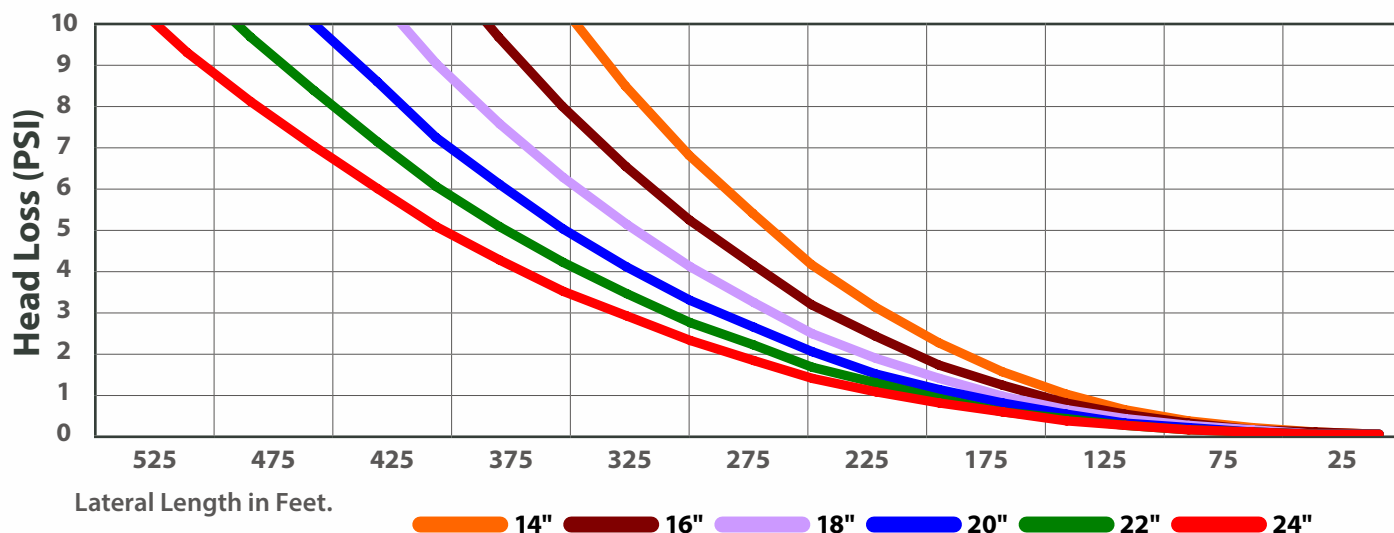
Example:

Material	I.D.		O.D.		Wall	
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.548"	14mm	.628"	16mm	.040	1.02mm

Flow Curve



Friction Loss Curve



Drip Systems For Heap Leach Mining

16MM
2 LPH
(0.5 GPH)

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 2 LPH (0.5 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 2 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL21614MX	0.035"	0.89 mm	14"	35 cm	33.7 lbs	15.3 kg	15,160 lbs	6,877 kg	20,214 lbs	9,169 kg
OL21616MX			16"	40 cm	32.7 lbs	14.9 kg	14,734 lbs	6,683 kg	19,645 lbs	8,911 kg
OL21618MX			18"	45 cm	32.0 lbs	14.5 kg	14,402 lbs	6,532 kg	19,202 lbs	8,710 kg
OL21620MX			20"	50 cm	31.4 lbs	14.2 kg	14,136 lbs	6,412 kg	18,848 lbs	8,549 kg
OL21622MX			22"	55 cm	30.9 lbs	14.0 kg	13,919 lbs	6,314 kg	18,559 lbs	8,418 kg
OL21624MX			24"	60 cm	30.5 lbs	13.8 kg	13,738 lbs	6,231 kg	18,317 lbs	8,309 kg
OL21614MY	0.040"	1.02 mm	14"	35 cm	37.7 lbs	17.1 kg	16,953 lbs	7,690 kg	22,605 lbs	10,253 kg
OL21616MY			16"	40 cm	36.7 lbs	16.7 kg	16,527 lbs	7,496 kg	22,036 lbs	9,995 kg
OL21618MY			18"	45 cm	36.0 lbs	16.3 kg	16,195 lbs	7,346 kg	21,593 lbs	9,795 kg
OL21620MY			20"	50 cm	35.4 lbs	16.1 kg	15,929 lbs	7,225 kg	21,239 lbs	9,634 kg
OL21622MY			22"	55 cm	34.9 lbs	15.8 kg	15,712 lbs	7,127 kg	20,950 lbs	9,503 kg
OL21624MY			24"	60 cm	34.5 lbs	15.7 kg	15,531 lbs	7,045 kg	20,708 lbs	9,393 kg
OL21614M	0.045"	1.14 mm	14"	35 cm	41.7 lbs	18.9 kg	18,776 lbs	8,516 kg	25,034 lbs	11,355 kg
OL21616M			16"	40 cm	40.8 lbs	18.5 kg	18,349 lbs	8,323 kg	24,465 lbs	11,097 kg
OL21618M			18"	45 cm	40.0 lbs	18.2 kg	18,017 lbs	8,172 kg	24,023 lbs	10,896 kg
OL21620M			20"	50 cm	39.4 lbs	17.9 kg	17,751 lbs	8,052 kg	23,669 lbs	10,736 kg
OL21622M			22"	55 cm	39.0 lbs	17.7 kg	17,534 lbs	7,953 kg	23,379 lbs	10,605 kg
OL21624M			24"	60 cm	38.6 lbs	17.5 kg	17,353 lbs	7,871 kg	23,138 lbs	10,495 kg
OL21614MH	0.050"	1.27 mm	14"	35 cm	45.8 lbs	20.8 kg	20,626 lbs	9,356 kg	27,502 lbs	12,475 kg
OL21616MH			16"	40 cm	44.9 lbs	20.4 kg	20,200 lbs	9,162 kg	26,933 lbs	12,217 kg
OL21618MH			18"	45 cm	44.2 lbs	20.0 kg	19,868 lbs	9,012 kg	26,490 lbs	12,016 kg
OL21620MH			20"	50 cm	43.6 lbs	19.8 kg	19,602 lbs	8,891 kg	26,136 lbs	11,855 kg
OL21622MH			22"	55 cm	43.1 lbs	19.5 kg	19,385 lbs	8,793 kg	25,847 lbs	11,724 kg
OL21624MH			24"	60 cm	42.7 lbs	19.4 kg	19,204 lbs	8,711 kg	25,605 lbs	11,614 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 16MM 2 LPH (0.5 GPH):

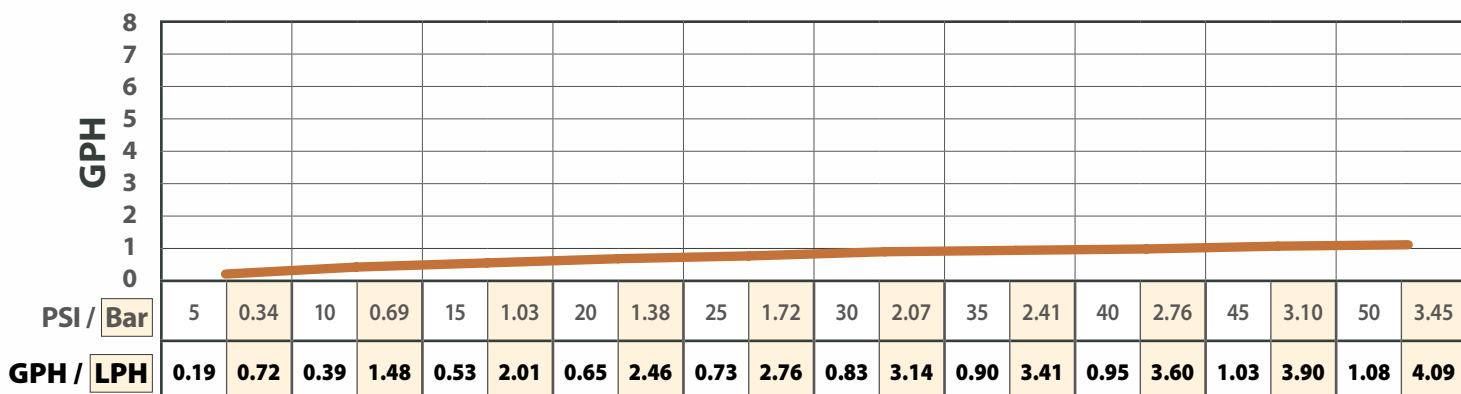
Part No.	Description
OL21624MY	OL2 = 2 LPH Max-Emitter, 16 = 16mm tubing, 24 = 24" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

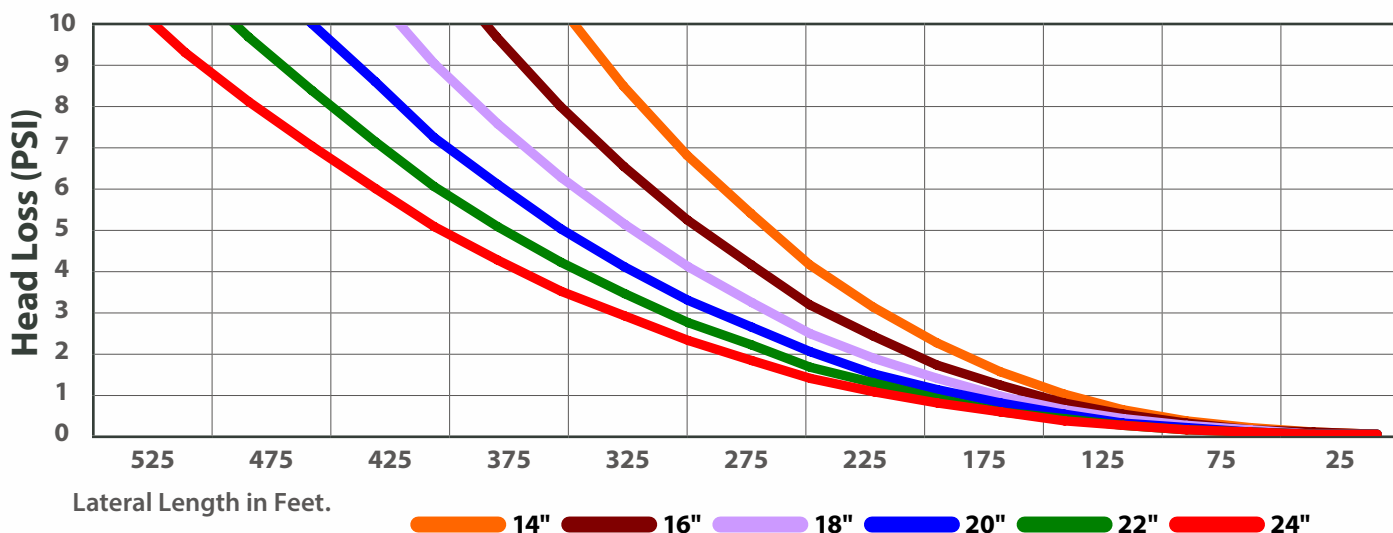
Example:

Material	I.D.		O.D.		Wall	
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.548"	14mm	.628"	16mm	.040	1.02mm

Flow Curve



Friction Loss Curve



Drip Systems For Heap Leach Mining

**16MM
4 LPH
(1 GPH)**

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 4 LPH (1 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 4 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL41620MX	0.035"	0.89 mm	20"	50 cm	31.4 lbs	14.2 kg	14,136 lbs	6,412 kg	18,848 lbs	8,549 kg
OL41622MX			22"	55 cm	30.9 lbs	14.0 kg	13,919 lbs	6,314 kg	18,559 lbs	8,418 kg
OL41624MX			24"	60 cm	30.5 lbs	13.8 kg	13,738 lbs	6,231 kg	18,317 lbs	8,309 kg
OL41626MX			26"	65 cm	30.2 lbs	13.7 kg	13,585 lbs	6,162 kg	18,113 lbs	8,216 kg
OL41628MX			28"	70 cm	29.9 lbs	13.6 kg	13,454 lbs	6,102 kg	17,938 lbs	8,137 kg
OL41632MX			32"	80 cm	29.4 lbs	13.3 kg	13,240 lbs	6,006 kg	17,654 lbs	8,008 kg
OL41620MY	0.040"	1.02 mm	20"	50 cm	35.4 lbs	16.1 kg	15,929 lbs	7,225 kg	21,239 lbs	9,634 kg
OL41622MY			22"	55 cm	34.9 lbs	15.8 kg	15,712 lbs	7,127 kg	20,950 lbs	9,503 kg
OL41624MY			24"	60 cm	34.5 lbs	15.7 kg	15,531 lbs	7,045 kg	20,708 lbs	9,393 kg
OL41626MY			26"	65 cm	34.2 lbs	15.5 kg	15,378 lbs	6,975 kg	20,504 lbs	9,300 kg
OL41628MY			28"	70 cm	33.9 lbs	15.4 kg	15,247 lbs	6,916 kg	20,329 lbs	9,221 kg
OL41632MY			32"	80 cm	33.4 lbs	15.2 kg	15,033 lbs	6,819 kg	20,045 lbs	9,092 kg
OL41620M	0.045"	1.14 mm	20"	50 cm	39.4 lbs	17.9 kg	17,751 lbs	8,052 kg	23,669 lbs	10,736 kg
OL41622M			22"	55 cm	39.0 lbs	17.7 kg	17,534 lbs	7,953 kg	23,379 lbs	10,605 kg
OL41624M			24"	60 cm	38.6 lbs	17.5 kg	17,353 lbs	7,871 kg	23,138 lbs	10,495 kg
OL41626M			26"	65 cm	38.2 lbs	17.3 kg	17,200 lbs	7,802 kg	22,933 lbs	10,402 kg
OL41628M			28"	70 cm	37.9 lbs	17.2 kg	17,069 lbs	7,742 kg	22,758 lbs	10,323 kg
OL41632M			32"	80 cm	37.5 lbs	17.0 kg	16,855 lbs	7,646 kg	22,474 lbs	10,194 kg
OL41620MH	0.050"	1.27 mm	20"	50 cm	43.6 lbs	19.8 kg	19,602 lbs	8,891 kg	26,136 lbs	11,855 kg
OL41622MH			22"	55 cm	43.1 lbs	19.5 kg	19,385 lbs	8,793 kg	25,847 lbs	11,724 kg
OL41624MH			24"	60 cm	42.7 lbs	19.4 kg	19,204 lbs	8,711 kg	25,605 lbs	11,614 kg
OL41626MH			26"	65 cm	42.3 lbs	19.2 kg	19,051 lbs	8,641 kg	25,401 lbs	11,522 kg
OL41628MH			28"	70 cm	42.0 lbs	19.1 kg	18,920 lbs	8,582 kg	25,226 lbs	11,442 kg
OL41632MH			32"	80 cm	41.6 lbs	18.9 kg	18,706 lbs	8,485 kg	24,942 lbs	11,313 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 16MM 4 LPH (1 GPH):

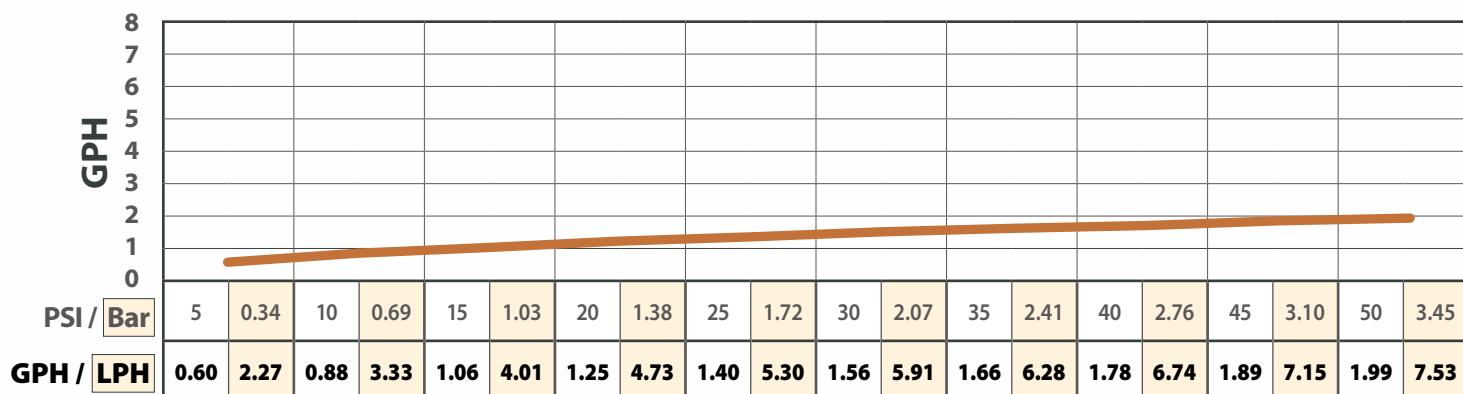
Part No.	Description
OL41624MY	OL4 = 4 LPH Max-Emitter, 16 = 16mm tubing, 24 = 24" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

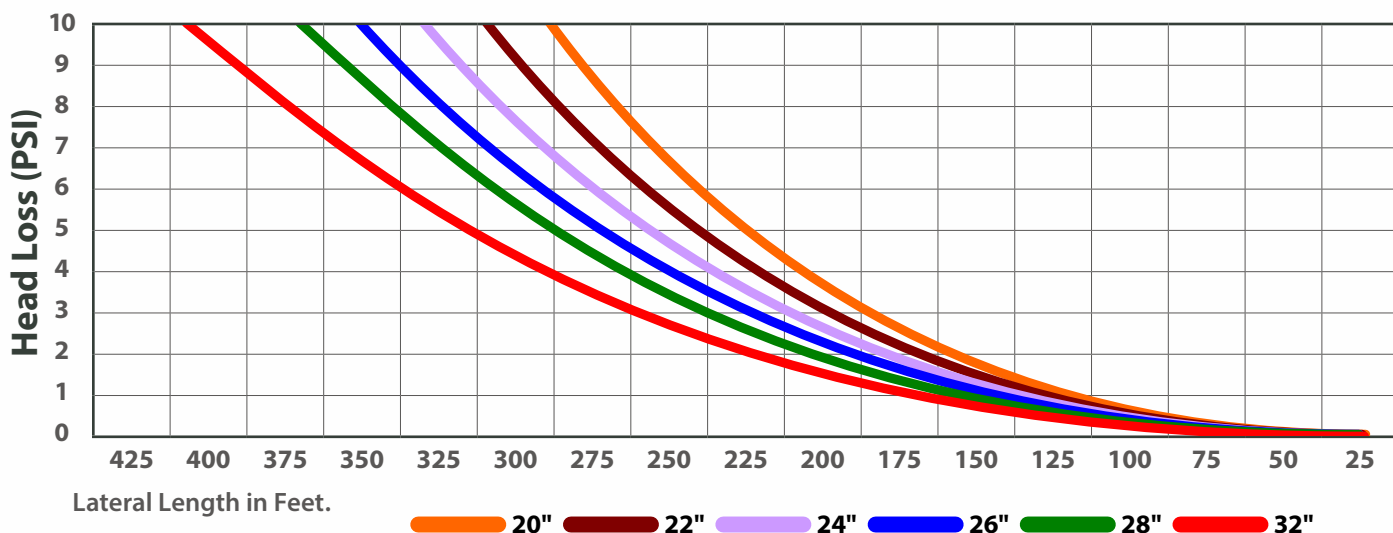
Example:

Material	I.D.		O.D.		Wall	
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.548"	14mm	.628"	16mm	.040	1.02mm

Flow Curve



Friction Loss Curve



**16MM
8 LPH
(2 GPH)**

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 8 LPH (2 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 8 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL81628MX	0.035"	0.89 mm	28"	70 cm	29.9 lbs	13.6 kg	13,454 lbs	6,102 kg	17,938 lbs	8,137 kg
OL81630MX			30"	75 cm	29.6 lbs	13.4 kg	13,340 lbs	6,051 kg	17,786 lbs	8,068 kg
OL81632MX			32"	80 cm	29.4 lbs	13.3 kg	13,240 lbs	6,006 kg	17,654 lbs	8,008 kg
OL81634MX			34"	85 cm	29.2 lbs	13.3 kg	13,152 lbs	5,966 kg	17,536 lbs	7,954 kg
OL81636MX			36"	90 cm	29.1 lbs	13.2 kg	13,074 lbs	5,930 kg	17,432 lbs	7,907 kg
OL81638MX			38"	95 cm	28.9 lbs	13.1 kg	13,004 lbs	5,899 kg	17,339 lbs	7,865 kg
OL81628MY	0.040"	1.02 mm	28"	70 cm	33.9 lbs	15.4 kg	15,247 lbs	6,916 kg	20,329 lbs	9,221 kg
OL81630MY			30"	75 cm	33.6 lbs	15.3 kg	15,133 lbs	6,864 kg	20,177 lbs	9,152 kg
OL81632MY			32"	80 cm	33.4 lbs	15.2 kg	15,033 lbs	6,819 kg	20,045 lbs	9,092 kg
OL81634MY			34"	85 cm	33.2 lbs	15.1 kg	14,946 lbs	6,779 kg	19,927 lbs	9,039 kg
OL81636MY			36"	90 cm	33.0 lbs	15.0 kg	14,867 lbs	6,744 kg	19,823 lbs	8,992 kg
OL81638MY			38"	95 cm	32.9 lbs	14.9 kg	14,798 lbs	6,712 kg	19,730 lbs	8,949 kg
OL81628M	0.045"	1.14 mm	28"	70 cm	37.9 lbs	17.2 kg	17,069 lbs	7,742 kg	22,758 lbs	10,323 kg
OL81630M			30"	75 cm	37.7 lbs	17.1 kg	16,955 lbs	7,691 kg	22,607 lbs	10,254 kg
OL81632M			32"	80 cm	37.5 lbs	17.0 kg	16,855 lbs	7,646 kg	22,474 lbs	10,194 kg
OL81634M			34"	85 cm	37.3 lbs	16.9 kg	16,768 lbs	7,606 kg	22,357 lbs	10,141 kg
OL81636M			36"	90 cm	37.1 lbs	16.8 kg	16,690 lbs	7,570 kg	22,253 lbs	10,094 kg
OL81638M			38"	95 cm	36.9 lbs	16.8 kg	16,620 lbs	7,539 kg	22,160 lbs	10,051 kg
OL81628MH	0.050"	1.27 mm	28"	70 cm	42.0 lbs	19.1 kg	18,920 lbs	8,582 kg	25,226 lbs	11,442 kg
OL81630MH			30"	75 cm	41.8 lbs	19.0 kg	18,806 lbs	8,530 kg	25,074 lbs	11,374 kg
OL81632MH			32"	80 cm	41.6 lbs	18.9 kg	18,706 lbs	8,485 kg	24,942 lbs	11,313 kg
OL81634MH			34"	85 cm	41.4 lbs	18.8 kg	18,618 lbs	8,445 kg	24,825 lbs	11,260 kg
OL81636MH			36"	90 cm	41.2 lbs	18.7 kg	18,540 lbs	8,410 kg	24,721 lbs	11,213 kg
OL81638MH			38"	95 cm	41.0 lbs	18.6 kg	18,471 lbs	8,378 kg	24,627 lbs	11,171 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 16MM 8 LPH (2 GPH):

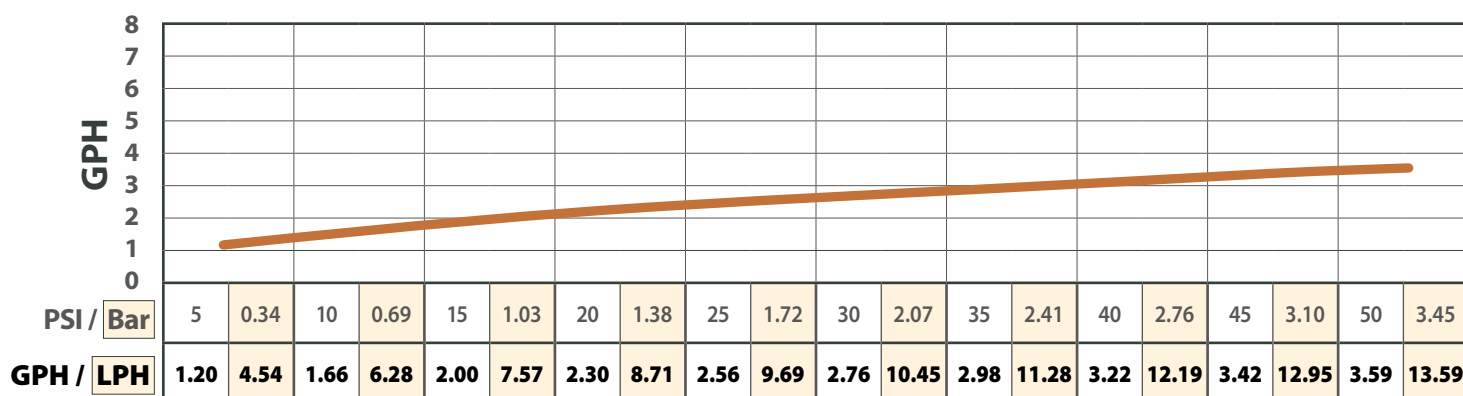
Part No.	Description
OL81632MY	OL8 = 8 LPH Max-Emitter, 16 = 16mm tubing, 32 = 32" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

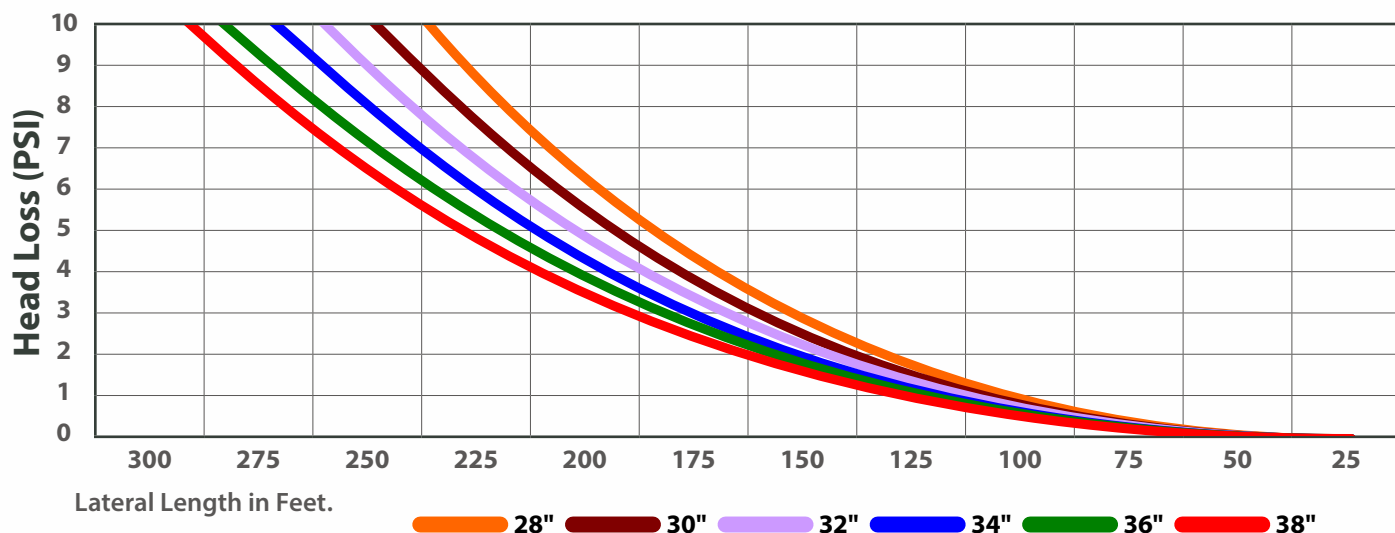
Example:

Material	I.D.		O.D.		Wall	
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.548"	14mm	.628"	16mm	.040	1.02mm

Flow Curve



Friction Loss Curve



Drip Systems For Heap Leach Mining

20MM
2 LPH
(0.5 GPH)

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 2 LPH (0.5 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 2 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL22014MX	0.035"	0.89 mm	14"	35 cm	39.3 lbs	17.8 kg	17,678 lbs	8,019 kg	23,571 lbs	10,692 kg
OL22016MX			16"	40 cm	38.3 lbs	17.4 kg	17,252 lbs	7,825 kg	23,002 lbs	10,434 kg
OL22018MX			18"	45 cm	37.6 lbs	17.1 kg	16,920 lbs	7,675 kg	22,560 lbs	10,233 kg
OL22020MX			20"	50 cm	37.0 lbs	16.8 kg	16,654 lbs	7,554 kg	22,206 lbs	10,072 kg
OL22022MX			22"	55 cm	36.5 lbs	16.6 kg	16,437 lbs	7,456 kg	21,916 lbs	9,941 kg
OL22024MX			24"	60 cm	36.1 lbs	16.4 kg	16,256 lbs	7,374 kg	21,675 lbs	9,832 kg
OL22014MY	0.040"	1.02 mm	14"	35 cm	44.2 lbs	20.0 kg	19,879 lbs	9,017 kg	26,505 lbs	12,023 kg
OL22016MY			16"	40 cm	43.2 lbs	19.6 kg	19,452 lbs	8,823 kg	25,936 lbs	11,765 kg
OL22018MY			18"	45 cm	42.5 lbs	19.3 kg	19,120 lbs	8,673 kg	25,494 lbs	11,564 kg
OL22020MY			20"	50 cm	41.9 lbs	19.0 kg	18,855 lbs	8,552 kg	25,140 lbs	11,403 kg
OL22022MY			22"	55 cm	41.4 lbs	18.8 kg	18,638 lbs	8,454 kg	24,850 lbs	11,272 kg
OL22024MY			24"	60 cm	41.0 lbs	18.6 kg	18,457 lbs	8,372 kg	24,609 lbs	11,162 kg
OL22014M	0.045"	1.14 mm	14"	35 cm	49.0 lbs	22.2 kg	22,066 lbs	10,009 kg	29,421 lbs	13,345 kg
OL22016M			16"	40 cm	48.1 lbs	21.8 kg	21,639 lbs	9,815 kg	28,852 lbs	13,087 kg
OL22018M			18"	45 cm	47.3 lbs	21.5 kg	21,307 lbs	9,665 kg	28,410 lbs	12,886 kg
OL22020M			20"	50 cm	46.8 lbs	21.2 kg	21,042 lbs	9,544 kg	28,056 lbs	12,726 kg
OL22022M			22"	55 cm	46.3 lbs	21.0 kg	20,825 lbs	9,446 kg	27,766 lbs	12,595 kg
OL22024M			24"	60 cm	45.9 lbs	20.8 kg	20,644 lbs	9,364 kg	27,525 lbs	12,485 kg
OL22014MH	0.050"	1.27 mm	14"	35 cm	54.0 lbs	24.5 kg	24,280 lbs	11,013 kg	32,373 lbs	14,684 kg
OL22016MH			16"	40 cm	53.0 lbs	24.0 kg	23,853 lbs	10,820 kg	31,804 lbs	14,426 kg
OL22018MH			18"	45 cm	52.3 lbs	23.7 kg	23,521 lbs	10,669 kg	31,362 lbs	14,225 kg
OL22020MH			20"	50 cm	51.7 lbs	23.4 kg	23,256 lbs	10,549 kg	31,008 lbs	14,065 kg
OL22022MH			22"	55 cm	51.2 lbs	23.2 kg	23,039 lbs	10,450 kg	30,718 lbs	13,934 kg
OL22024MH			24"	60 cm	50.8 lbs	23.0 kg	22,858 lbs	10,368 kg	30,477 lbs	13,824 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 20MM 2 LPH (0.5 GPH):

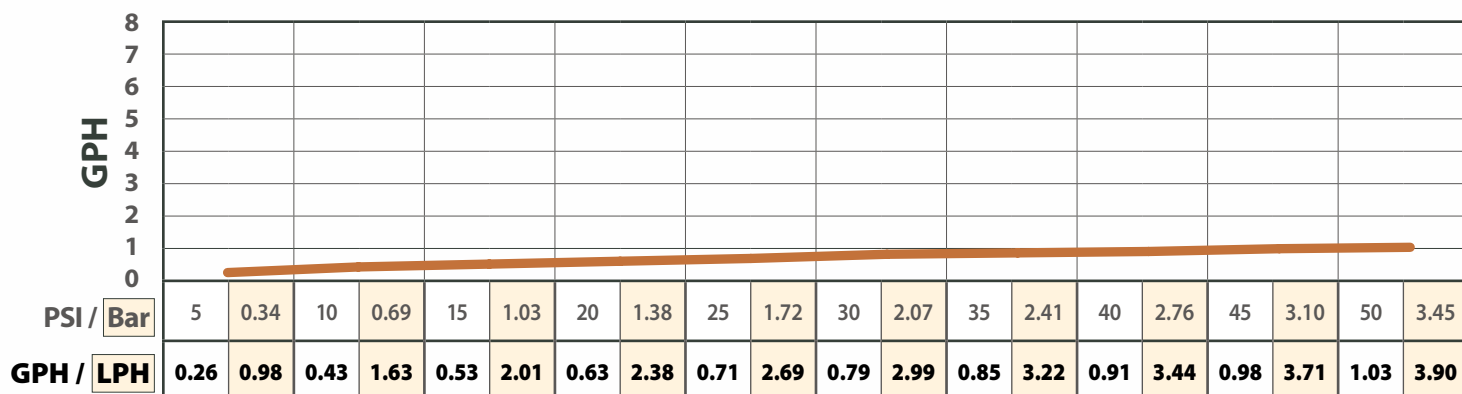
Part No.	Description
OL22024MY	OL2 = 2 LPH Max-Emitter, 20 = 20mm tubing, 24 = 24" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

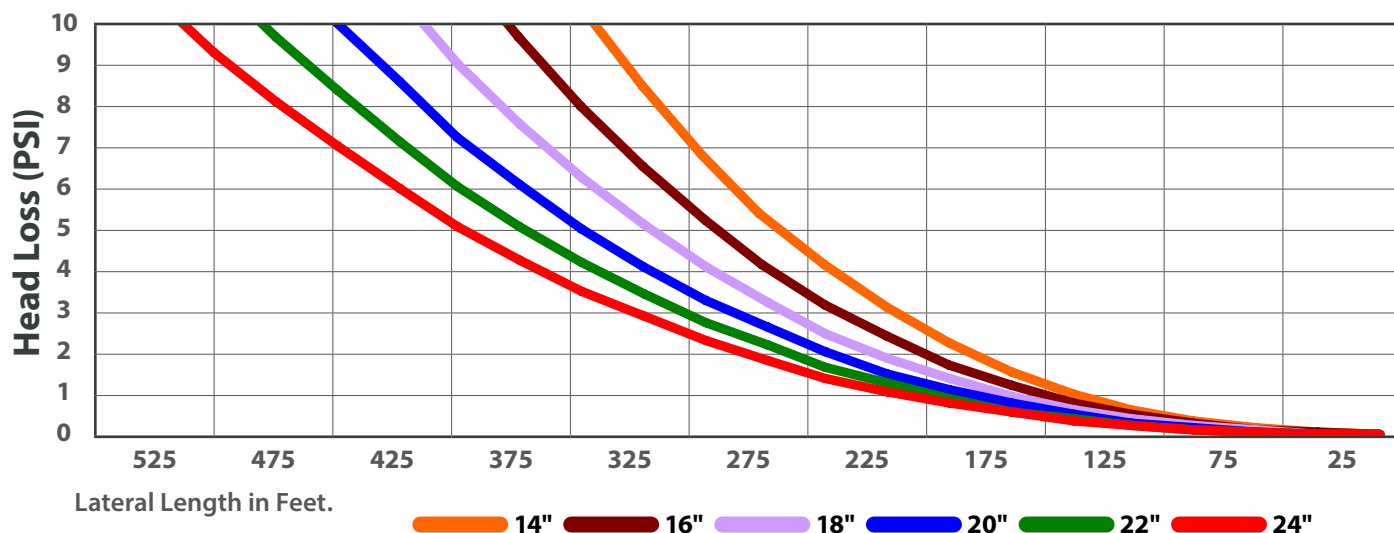
Example:

Material	I.D.		O.D.		Wall	
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.685"	18mm	.765"	20mm	.040	1.02mm

Flow Curve



Friction Loss Curve



Drip Systems For Heap Leach Mining

**20MM
4 LPH
(1 GPH)**

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 4 LPH (1 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 4 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL42020MX	0.035"	0.89 mm	20"	50 cm	37.0 lbs	16.8 kg	16,654 lbs	7,554 kg	22,206 lbs	10,072 kg
OL42022MX			22"	55 cm	36.5 lbs	16.6 kg	16,437 lbs	7,456 kg	21,916 lbs	9,941 kg
OL42024MX			24"	60 cm	36.1 lbs	16.4 kg	16,256 lbs	7,374 kg	21,675 lbs	9,832 kg
OL42026MX			26"	65 cm	35.8 lbs	16.2 kg	16,103 lbs	7,304 kg	21,471 lbs	9,739 kg
OL42028MX			28"	70 cm	35.5 lbs	16.1 kg	15,972 lbs	7,245 kg	21,296 lbs	9,660 kg
OL42032MX			32"	80 cm	35.0 lbs	15.9 kg	15,758 lbs	7,148 kg	21,011 lbs	9,530 kg
OL42020MY	0.040"	1.02 mm	20"	50 cm	41.9 lbs	19.0 kg	18,855 lbs	8,552 kg	25,140 lbs	11,403 kg
OL42022MY			22"	55 cm	41.4 lbs	18.8 kg	18,638 lbs	8,454 kg	24,850 lbs	11,272 kg
OL42024MY			24"	60 cm	41.0 lbs	18.6 kg	18,457 lbs	8,372 kg	24,609 lbs	11,162 kg
OL42026MY			26"	65 cm	40.7 lbs	18.4 kg	18,303 lbs	8,302 kg	24,405 lbs	11,070 kg
OL42028MY			28"	70 cm	40.4 lbs	18.3 kg	18,172 lbs	8,243 kg	24,230 lbs	10,990 kg
OL42032MY			32"	80 cm	39.9 lbs	18.1 kg	17,959 lbs	8,146 kg	23,945 lbs	10,861 kg
OL42020M	0.045"	1.14 mm	20"	50 cm	46.8 lbs	21.2 kg	21,042 lbs	9,544 kg	28,056 lbs	12,726 kg
OL42022M			22"	55 cm	46.3 lbs	21.0 kg	20,825 lbs	9,446 kg	27,766 lbs	12,595 kg
OL42024M			24"	60 cm	45.9 lbs	20.8 kg	20,644 lbs	9,364 kg	27,525 lbs	12,485 kg
OL42026M			26"	65 cm	45.5 lbs	20.7 kg	20,490 lbs	9,294 kg	27,321 lbs	12,392 kg
OL42028M			28"	70 cm	45.2 lbs	20.5 kg	20,359 lbs	9,235 kg	27,146 lbs	12,313 kg
OL42032M			32"	80 cm	44.8 lbs	20.3 kg	20,146 lbs	9,138 kg	26,861 lbs	12,184 kg
OL42020MH	0.050"	1.27 mm	20"	50 cm	51.7 lbs	23.4 kg	23,256 lbs	10,549 kg	31,008 lbs	14,065 kg
OL42022MH			22"	55 cm	51.2 lbs	23.2 kg	23,039 lbs	10,450 kg	30,718 lbs	13,934 kg
OL42024MH			24"	60 cm	50.8 lbs	23.0 kg	22,858 lbs	10,368 kg	30,477 lbs	13,824 kg
OL42026MH			26"	65 cm	50.5 lbs	22.9 kg	22,704 lbs	10,299 kg	30,273 lbs	13,731 kg
OL42028MH			28"	70 cm	50.2 lbs	22.8 kg	22,573 lbs	10,239 kg	30,098 lbs	13,652 kg
OL42032MH			32"	80 cm	49.7 lbs	22.5 kg	22,360 lbs	10,142 kg	29,813 lbs	13,523 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 20MM 4 LPH (1 GPH):

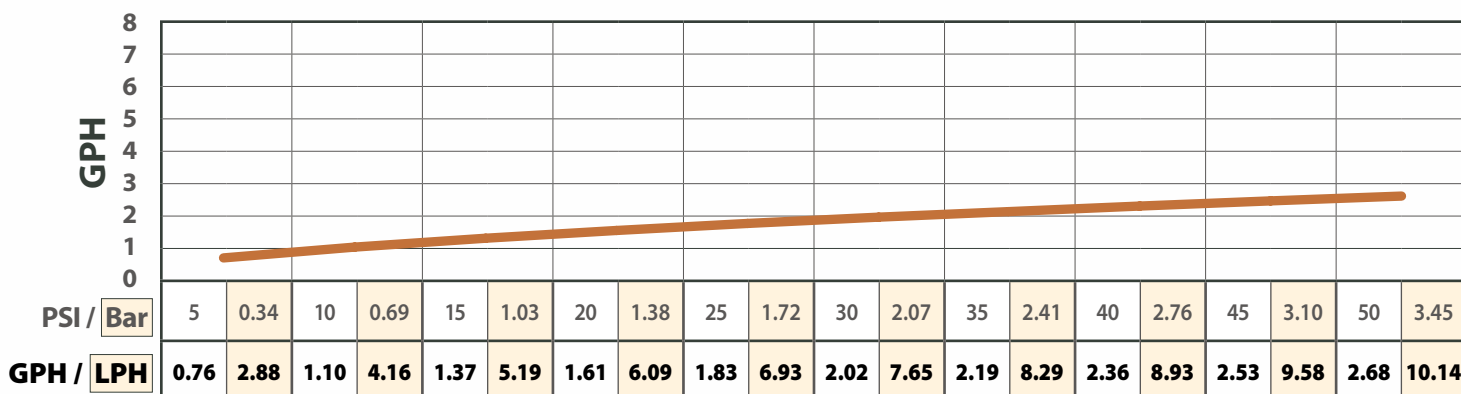
Part No.	Description
OL42024MY	OL4 = 4 LPH Max-Emitter, 20 = 20mm tubing, 24 = 24" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

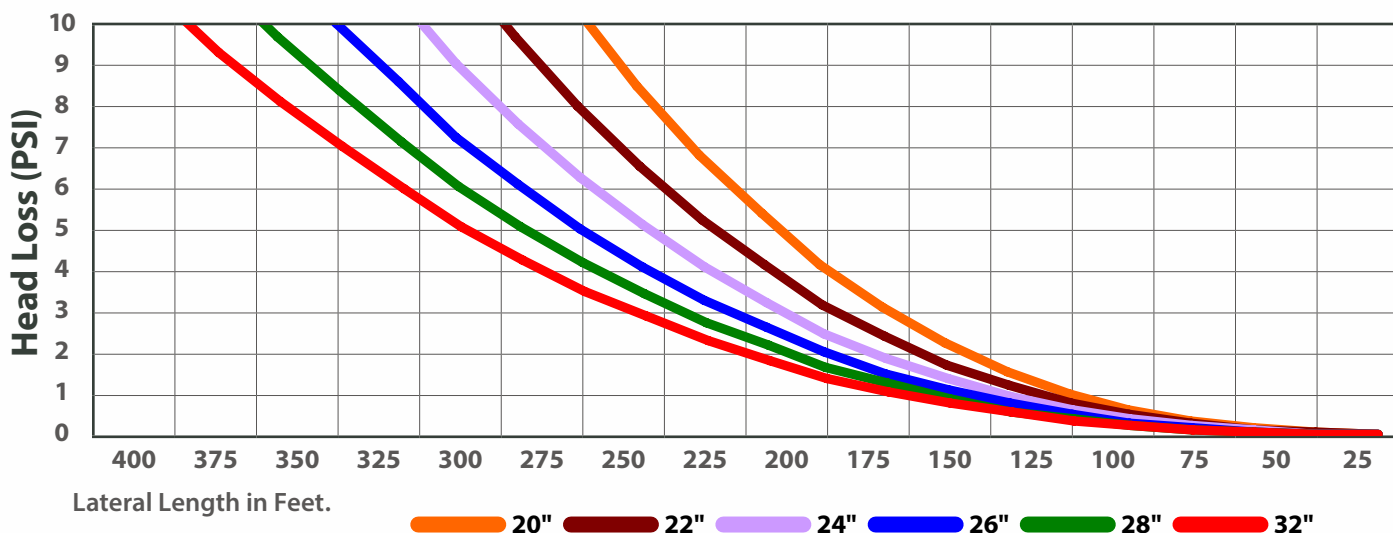
Example:

Material	I.D.	O.D.	Wall
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.685"	.765"	.040"
	18mm	20mm	1.02mm

Flow Curve



Friction Loss Curve



Drip Systems For Heap Leach Mining

20MM
8 LPH
(2 GPH)

Wall: .035"
.040"
.045"
.050"

Max-Emitterline

Ore-Max Max-Emitterline 8 LPH (2 GPH) is continuous tubing with Max-Emitters internally welded to the inside of the tubing. Standard features such as 330° turbulent flow, hundreds of 330° screened inlets and dual outlets drilled 180° apart make the Max-Emitterline the performance choice for leaching systems. Four outlets at 90° is optional.



Part No. 8 LPH	Wall Thickness		Max-Emitter Spacing		Roll Weight (1000' / 305 m)		Container Weight (450 rolls)		Truck Load Weight (600 rolls)	
OL82028MX	0.035"	0.89 mm	28"	70 cm	35.5 lbs	16.1 kg	15,972 lbs	7,245 kg	21,296 lbs	9,660 kg
OL82030MX			30"	75 cm	35.2 lbs	16.0 kg	15,858 lbs	7,193 kg	21,144 lbs	9,591 kg
OL82032MX			32"	80 cm	35.0 lbs	15.9 kg	15,758 lbs	7,148 kg	21,011 lbs	9,530 kg
OL82034MX			34"	85 cm	34.8 lbs	15.8 kg	15,671 lbs	7,108 kg	20,894 lbs	9,477 kg
OL82036MX			36"	90 cm	34.6 lbs	15.7 kg	15,592 lbs	7,073 kg	20,790 lbs	9,430 kg
OL82038MX			38"	95 cm	34.5 lbs	15.6 kg	15,523 lbs	7,041 kg	20,697 lbs	9,388 kg
OL82028MY	0.040"	1.02 mm	28"	70 cm	40.4 lbs	18.3 kg	18,172 lbs	8,243 kg	24,230 lbs	10,990 kg
OL82030MY			30"	75 cm	40.1 lbs	18.2 kg	18,058 lbs	8,191 kg	24,078 lbs	10,922 kg
OL82032MY			32"	80 cm	39.9 lbs	18.1 kg	17,959 lbs	8,146 kg	23,945 lbs	10,861 kg
OL82034MY			34"	85 cm	39.7 lbs	18.0 kg	17,871 lbs	8,106 kg	23,828 lbs	10,808 kg
OL82036MY			36"	90 cm	39.5 lbs	17.9 kg	17,793 lbs	8,071 kg	23,724 lbs	10,761 kg
OL82038MY			38"	95 cm	39.4 lbs	17.9 kg	17,723 lbs	8,039 kg	23,631 lbs	10,719 kg
OL82028M	0.045"	1.14 mm	28"	70 cm	45.2 lbs	20.5 kg	20,359 lbs	9,235 kg	27,146 lbs	12,313 kg
OL82030M			30"	75 cm	45.0 lbs	20.4 kg	20,245 lbs	9,183 kg	26,994 lbs	12,244 kg
OL82032M			32"	80 cm	44.8 lbs	20.3 kg	20,146 lbs	9,138 kg	26,861 lbs	12,184 kg
OL82034M			34"	85 cm	44.6 lbs	20.2 kg	20,058 lbs	9,098 kg	26,744 lbs	12,131 kg
OL82036M			36"	90 cm	44.4 lbs	20.1 kg	19,980 lbs	9,063 kg	26,640 lbs	12,084 kg
OL82038M			38"	95 cm	44.2 lbs	20.1 kg	19,910 lbs	9,031 kg	26,547 lbs	12,041 kg
OL82028MH	0.050"	1.27 mm	28"	70 cm	50.2 lbs	22.8 kg	22,573 lbs	10,239 kg	30,098 lbs	13,652 kg
OL82030MH			30"	75 cm	49.9 lbs	22.6 kg	22,459 lbs	10,187 kg	29,946 lbs	13,583 kg
OL82032MH			32"	80 cm	49.7 lbs	22.5 kg	22,360 lbs	10,142 kg	29,813 lbs	13,523 kg
OL82034MH			34"	85 cm	49.5 lbs	22.4 kg	22,272 lbs	10,102 kg	29,696 lbs	13,470 kg
OL82036MH			36"	90 cm	49.3 lbs	22.4 kg	22,194 lbs	10,067 kg	29,592 lbs	13,423 kg
OL82038MH			38"	95 cm	49.2 lbs	22.3 kg	22,124 lbs	10,035 kg	29,499 lbs	13,380 kg

Covered by U.S. Patent No. 6,817,548 and foreign patents.

Product Specifications

Max-Emitterline 20MM 8 LPH (2 GPH):

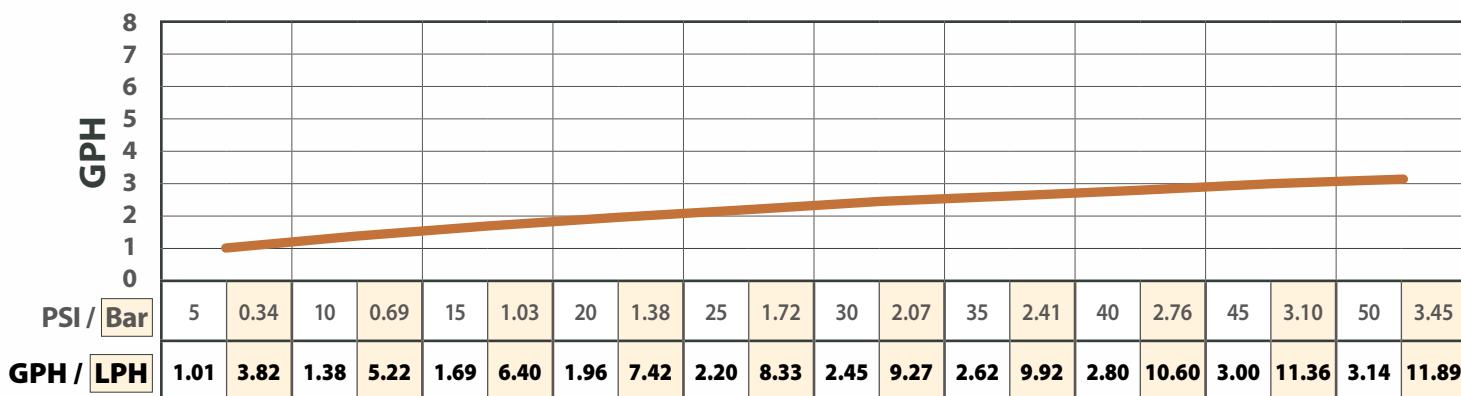
Part No.	Description
OL82032MY	OL8 = 8 LPH Max-Emitter, 20 = 20mm tubing, 32 = 32" emitter spacing, MY = 0.040" wall.

How to Specify the Max-Emitter: Emitters with 330° screening around the ID of the emitter to the inlet of the 330° flow path with two or four emission holes drilled at 180° apart. Minimum 125 inlet screens.

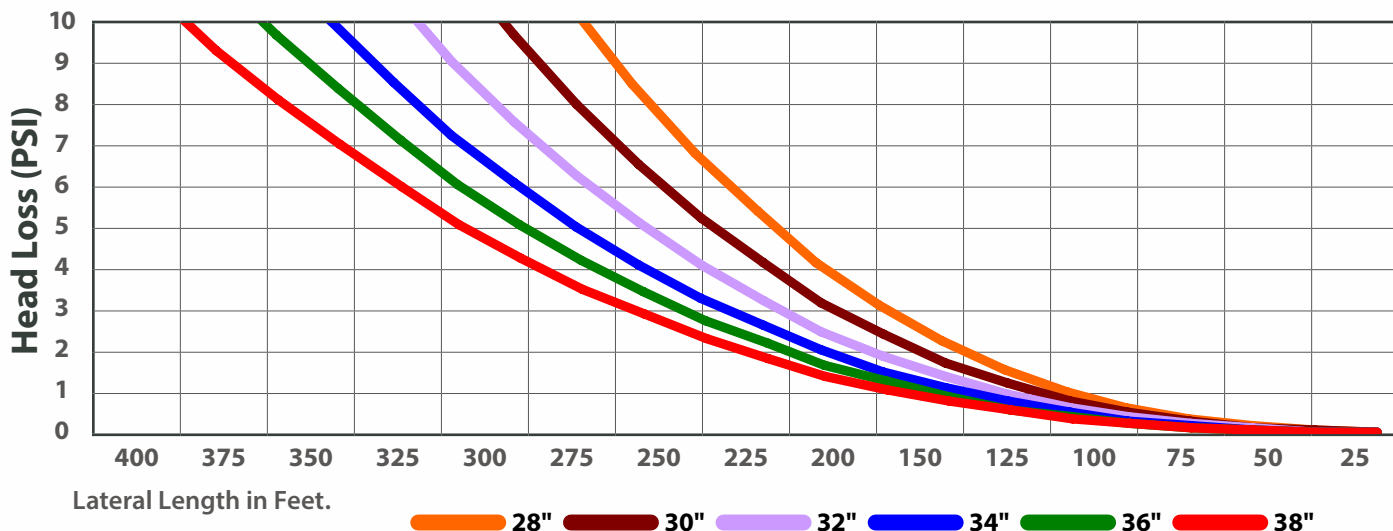
Example:

Material	I.D.		O.D.		Wall	
Superior grade flexible Linear Low Density Polyethylene (LLPE) formulated for chemical resistance and exterior use. Resistant to environmental stress cracking and 2.5% carbon black added to resist UV degradation.	.685"	18mm	.765"	20mm	.040	1.02mm

Flow Curve



Friction Loss Curve



THIN-WALLED DRIPLINE

Ore-Max Slimline

Features:

- Seamless drip tape with drippers permanently fixed inside. Seamless construction improves ability to withstand pressure fluctuations.
- Marked with two parallel yellow stripes 'Twin-Line®'. Symbol of quality. It also helps to ensure upright positioning of the dripper.
- Manufactured from special grade, virgin polymer ensuring close dimensional tolerance and higher strength even at lower wall thickness.
- Manufactured with the most modern, state-of-the-art equipment. Its computerized continuous online quality control ensures reliable quality and consistent performance.
- Hydraulically designed turbulent flow path dripper with wide cross sectional area and precision inlet filter that makes it a truly clog resistant drip tape.



(1250 m / 4100' per roll)



*Slimline uses a flat labyrinth type emitter.

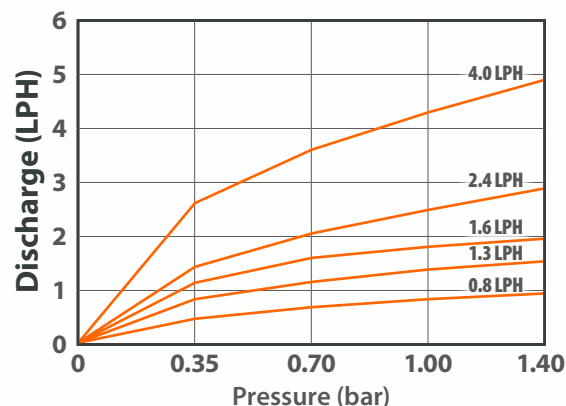
***Ore-Max Slimline does not use the Max-Emitter.**

How to order Ore-Max Slimline:

Use "OSL" + Flow Rate + Diameter + Spacing. **Example:** "OSL21630" is 2 LPH, 16mm, 30cm spacing.
(LPH) (mm) (cm)

Part No.	Dripper Flow Rate (LPH)		Dripper Exponent	Flow Coefficient	Coeff. of mfg. Variation	Flow Path Dimension (mm)		
	0.7 bar	1.0 bar				Length	Width	Depth
OSL6	0.6	0.8	0.49	0.8	4.0	58	0.5	0.60
OSL1	1.1	1.3	0.54	1.3	4.5	58	0.7	0.60
OSL15	1.4	1.6	0.54	1.5	3.0	58	0.7	0.65
OSL2	2.0	2.4	0.50	2.4	3.5	58	0.8	0.80
OSL35	3.5	4.0	0.50	4.0	2.0	58	1.0	0.90

Flow equation $q = kH^x$, q = discharge, L/h, H = Pressure head, kg/cm², x = Dripper exponent



MAX-EMITTERLINE CONNECTORS

Part No.	Description	Bag Qty	Box Qty	Box Weight	
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1/2" MPT Adapter x Hose Connector

O505S12MA	1/2" MPT x 16mm Locking Cap	100	1000	38 lbs	17.2 kg
O685S12MA	1/2" MPT x 20mm Locking Cap	100	1000	48 lbs	21.8 kg



3/4" FPT Adapter x Hose Connector

O505S34FA	3/4" FPT x 16mm Locking Cap	100	1000	38 lbs	17.2 kg
O685S34FA	3/4" FPT x 20mm Locking Cap	100	1000	-	-



3/4" MPT Adapter x Hose Connector

O505S34MA	3/4" MPT x 16mm Locking Cap	100	1000	42 lbs	19.1 kg
O685S34MA	3/4" MPT x 20mm Locking Cap	100	800	38 lbs	17.2 kg



Lay Flat x Hose Connector

O505KMA	Lay Flat x 16mm Locking Cap	100	1000	42 lbs	19.1 kg
O685KMA	Lay Flat x 20mm Locking Cap	50	800	40 lbs	18.1 kg



Secondary Lay Flat x Hose Connector

O505KMB	Secondary Lay Flat x 16mm Locking Cap	100	1000	38 lbs	17.2 kg
O685KMB	Secondary Lay Flat x 20mm Locking Cap	100	1000	42 lbs	19.1 kg



Lay Flat x 3/4" MPT Adapter

O505K34	Lay Flat x 3/4" MPT Adapter	100	1000	42 lbs	19.1 kg
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Hose Connector x Hose Connector

O505SC	16mm x 16mm with Locking Cap	100	800	48 lbs	21.8 kg
O685SC	20mm x 20mm with Locking Cap	50	500	38 lbs	17.2 kg

MAX-EMITTERLINE CONNECTORS

Part No.	Description	Bag Qty	Box Qty	Box Weight
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Safety Coupling

O505	16mm Safety Coupling	100	4200	35 lbs	15.9 kg
O685	20mm Safety Coupling	100	2000	21 lbs	9.5 kg

Mini-Valve 16mm Hose x Hose Connector

O505MV	16mm Mini-valve Locking Caps	50	600	32 lbs	14.5 kg
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Mini-Valve 3/4" MPT Adaptor x 16mm Hose Connector

O505MVT	Mini-valve 3/4" MPT x 16mm Hose	50	550	32 lbs	14.5 kg
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Hose Reducing Coupling

O565505RC	18mm x 16mm Reducing Coupler	50	600	32 lbs	14.5 kg
O685505RC	20mm x 16mm Reducing Coupler	50	600	36 lbs	16.3 kg

Starter Connector with Grommet

OGR505	Grommet x 16mm Locking Cap	100	1000	36 lbs	16.3 kg
OGR685	Grommet x 20mm Locking Cap	100	1000	38 lbs	17.2 kg

Grommet for OGR505

O505GR	700 Grommet x 4mm 13/16" hole	100	900	36 lbs	16.3 kg
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1/2" Tubing Drip Deflector

OW-16	1/2" Tubing Drip Deflector	600	2500	25 lbs	11.3 kg
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MAX-EMITTERLINE CONNECTORS

Part No.	Description	Bag Qty	Box Qty	Box Weight
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Hose x Hose Ell Connector

O505L	16mm Ell with Locking Caps	100	800	36 lbs	16.3 kg
O685L	20mm Ell with Locking Caps	50	500	40 lbs	18.1 kg



Hose x Hose x Hose Tee Connector

O505T	16mm 3-Way Tee w/Locking Caps	50	450	36 lbs	16.3 kg
O685T	20mm 3-Way Tee w/Locking Caps	25	300	40 lbs	18.1 kg



Automatic Hose Flushing End Valve

O505LFV	16mm Low Pressure Flush Valve	100	500	36 lbs	16.3 kg
O505HFV	16mm High Pressure Flush Valve	100	500	36 lbs	16.3 kg
O685LFV	20mm Low Pressure Flush Valve	100	500	40 lbs	18.1 kg



Figure 8 End Closure

OF8600	16mm Figure 8 End Closure	400	4000	42 lbs	19.1 kg
OF8900	20mm Figure 8 End Closure	200	2000	44 lbs	20.0 kg

LAY FLAT - SF-50 HOSE

Lay Flat Hose for Mining Lateral & Mainlines

- Light weight and easy to assemble hose
- Proven in mining applications over many years
- Recommended for on-off leach pads
- Easy to install or move from location to location
- Long life
- Saves labor and the hard work to move PVC or HDPE pipe

**High Pressure
Hose for Mining
Solution**

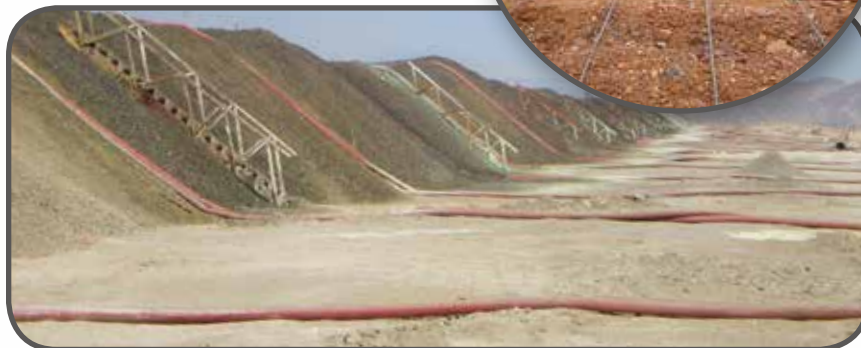
Construction

3-Ply Polyester Yarns. Both tube and cover are extruded simultaneously to obtain maximum bonding.

Standard Length: 300 ft/bale

Temp. Range: -5° to 170° F

Caution: Working pressure drops above 120° F.
Contact factory for safety factor.



Lay flat hose does not require fittings for side slopes.

SF-50 Lay Flat Hose

Model No.	Nominal Size		I.D.		Wall		Max Work Pres. @ 70° F	Burst Pressure	Weight (300 ft)	
SF5015	1.5"	4 cm	1.61"	4.1 cm	0.079"	2 mm	150 PSI	450 PSI	64 lbs	29 kg
SF502	2"	5 cm	2.09"	5.3 cm	0.087"	2.2 mm	150 PSI	450 PSI	85 lbs	39 kg
SF5025	2.5"	6 cm	2.56"	6.5 cm	0.091"	2.3 mm	150 PSI	450 PSI	119 lbs	54 kg
SF503	3"	8 cm	3.07"	7.8 cm	0.095"	2.4 mm	150 PSI	450 PSI	158 lbs	72 kg
SF504	4"	10 cm	4.13"	10.5 cm	0.102"	2.6 mm	150 PSI	450 PSI	225 lbs	102 kg
SF506	6"	15 cm	6.18"	15.7 cm	0.119"	3 mm	150 PSI	450 PSI	375 lbs	170 kg
SF508	8"	20 cm	8.19"	20.8 cm	0.134"	3.4 mm	115 PSI	350 PSI	566 lbs	257 kg

LAY FLAT - SF-10 HOSE



**Low Pressure
Hose for Water**

Lay Flat Hose for Water and Dewatering

- Light weight and easy to assemble hose
- Proven in mining applications over many years
- Recommended for water at low pressure
- Easy to install or move from location to location
- Long life
- For water use only – not to be used for solution distribution

Construction

3-Ply Polyester Yarns. Both tube and cover are extruded simultaneously to obtain maximum bonding.

Standard Length: 300 ft/bale

Temp. Range: -5° to 170° F

Caution: Working pressure drops above 120° F. Contact factory for safety factor.

SF-10 Lay Flat Hose

Model No.	Nominal Size		I.D.		Wall		Max Work Pres. @ 70° F	Burst Pressure	Weight (300 ft)	
SF1015	1.5"	4 cm	1.61"	4.1 cm	0.059"	1.5 mm	80 PSI	240 PSI	56 lbs	25 kg
SF102	2"	5 cm	2.09"	5.3 cm	0.059"	1.5 mm	80 PSI	240 PSI	73 lbs	33 kg
SF1025	2.5"	6 cm	2.56"	6.5 cm	0.059"	1.5 mm	65 PSI	200 PSI	90 lbs	41 kg
SF103	3"	8 cm	3.07"	7.8 cm	0.063"	1.6 mm	80 PSI	240 PSI	108 lbs	49 kg
SF104	4"	10 cm	4.13"	10.5 cm	0.067"	1.7 mm	70 PSI	210 PSI	158 lbs	72 kg
SF106	6"	15 cm	6.16"	15.6 cm	0.075"	1.9 mm	60 PSI	200 PSI	259 lbs	117 kg
SF108	8"	20 cm	8.15"	20.7 cm	0.087"	2.2 mm	35 PSI	100 PSI	390 lbs	177 kg

LAY FLAT – FITTINGS & CLAMPS



T-Bolt Clamps — 316 Series Stainless Steel

Part No.	Size	Description	Min. Dia.	Max. Dia.
LFSS212316	2"	2" 316 SS T-Bolt Clamp	2 1/4"	2 9/16"
LFSS325316	3"	3" 316 SS T-Bolt Clamp	3 1/4"	3 9/16"
LFSS425316	4"	4" 316 SS T-Bolt Clamp	4 1/4"	4 9/16"
LFSS625316	6"	6" 316 SS T-Bolt Clamp	6 1/4"	6 9/16"
LFSS825316	8"	8" 316 SS T-Bolt Clamp	8 2/5"	8 7/8"

Part No.	Size	Description	Weight
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Fittings shown are schedule 80 PVC. Schedule 40 PVC available.

Insert Female Threaded Adapters

LF2FAIX	2"	2" Insert Female Threaded Adapter	0.50 lbs	0.23 kg
LF25FAIX	2 1/2"	2 1/2" Insert Female Threaded Adapter	0.85 lbs	0.39 kg
LF3FAIX	3"	3" Insert Female Threaded Adapter	1.36 lbs	0.62 kg
LF4FAIX	4"	4" Insert Female Threaded Adapter	1.80 lbs	0.82 kg
LF6FAIX	6"	6" Insert Female Threaded Adapter	4.30 lbs	1.95 kg
LF8FAIX	8"	8" Insert Female Threaded Adapter	7.80 lbs	3.54 kg

Insert Male Threaded Adapters

LF2MAIX	2"	2" Insert Male Threaded Adapter	0.28 lbs	0.13 kg
LF25MAIX	2 1/2"	2 1/2" Insert Male Threaded Adapter	0.42 lbs	0.19 kg
LF3MAIX	3"	3" Insert Male Threaded Adapter	0.56 lbs	0.25 kg
LF4MAIX	4"	4" Insert Male Threaded Adapter	0.83 lbs	0.38 kg
LF6MAIX	6"	6" Insert Male Threaded Adapter	2.08 lbs	0.94 kg
LF8MAIX	8"	8" Insert Male Threaded Adapter	9.00 lbs	4.08 kg

Insert Elbow

LF2LX	2"	2" x 2" x 2" Insert Elbow	0.55 lbs	0.25 kg
LF25LX	2 1/2"	2 1/2" x 2 1/2" x 2 1/2" Insert Elbow	0.75 lbs	0.34 kg
LF3LX	3"	3" x 3" x 3" Insert Elbow	2.80 lbs	1.27 kg
LF4LX	4"	4" x 4" x 4" Insert Elbow	3.26 lbs	1.48 kg
LF6LX	6"	6" x 6" x 6" Insert Elbow	12.8 lbs	5.81 kg
LF8LX	8"	8" x 8" x 8" Insert Elbow	17.3 lbs	7.85 kg

Insert Tees

LF2TX	2"	2" x 2" x 2" Insert Tee	1.35 lbs	0.61 kg
LF25TX	2 1/2"	2 1/2" x 2 1/2" x 2 1/2" Insert Tee	2.25 lbs	1.02 kg
LF3TX	3"	3" x 3" x 3" Insert Tee	3.66 lbs	1.66 kg
LF4TX	4"	4" x 4" x 4" Insert Tee	4.87 lbs	2.21 kg
LF6TX	6"	6" x 6" x 6" Insert Tee	17.0 lbs	7.71 kg
LF8TX	8"	8" x 8" x 8" Insert Tee	24.5 lbs	11.1 kg



LAY FLAT – FITTINGS & CLAMPS

Part No.	Size	Description	Weight	
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Fittings shown are schedule 80 PVC. Schedule 40 PVC available.

Insert Couplings



LF2ICX	2"	2" Insert Coupling	0.20 lbs	0.09 kg
LF25ICX	2 ½"	2 ½" Insert Coupling	0.32 lbs	0.15 kg
LF3ICX	3"	3" Insert Coupling	0.51 lbs	0.23 kg
LF4ICX	4"	4" Insert Coupling	0.83 lbs	0.38 kg
LF6ICX	6"	6" Insert Coupling	2.00 lbs	0.91 kg
LF8ICX	8"	8" Insert Coupling	5.25 lbs	2.38 kg

Insert Plugs



LF2IPX	2"	2" HD Insert Plug	0.50 lbs	0.23 kg
LF25IPX	2 ½"	2 ½" HD Insert Plug	0.81 lbs	0.37 kg
LF3IPX	3"	3" HD Insert Plug	1.27 lbs	0.58 kg
LF4IPX	4"	4" HD Insert Plug	1.88 lbs	0.85 kg
LF6IPX	6"	6" HD Insert Plug	4.94 lbs	2.24 kg
LF8IPX	8"	8" HD Insert Plug	9.02 lbs	4.09 kg

Insert Reducers



LF252IRX	2 ½" x 2"	2 ½" x 2" Insert Reducer	0.55 lbs	0.25 kg
LF32IRX	3" x 2"	3" x 2" Insert Reducer	0.66 lbs	0.30 kg
LF325IRX	3" x 2 ½"	3" x 2 ½" Insert Reducer	0.58 lbs	0.26 kg
LF42IRX	4" x 2"	4" x 2" Insert Reducer	1.60 lbs	0.73 kg
LF43IRX	4" x 3"	4" x 3" Insert Reducer	0.68 lbs	0.31 kg
LF64IRX	6" x 4"	6" x 4" Insert Reducer	4.50 lbs	2.04 kg
LF84IRX	8" x 4"	8" x 4" Insert Reducer	8.25 lbs	3.74 kg
LF86IRX	8" x 6"	8" x 6" Insert Reducer	8.25 lbs	3.74 kg

Insert Flange Adapters



LF2IFX	2"	2" Insert Flange Adapter	1.17 lbs	0.53 kg
LF25IFX	2 ½"	2 ½" Insert Flange Adapter	1.17 lbs	0.53 kg
LF3IFX	3"	3" Insert Flange Adapter	2.49 lbs	1.13 kg
LF4IFX	4"	4" Insert Flange Adapter	3.80 lbs	1.72 kg
LF6IFX	6"	6" Insert Flange Adapter	6.16 lbs	2.79 kg
LF8IFX	8"	8" Insert Flange Adapter	11.5 lbs	5.22 kg

* Custom fittings available, such as: Victaulic fittings, yellowmine-style, or anything not shown above. Call for quote.

LAY FLAT — ACCESSORIES

Part No.	Description	Bag Qty	Box Qty	Box Weight
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Lay Flat Hole Cutter

LFP-1	Lay Flat Hose Cutter - 14 mm holes	1	-	5 lbs	2.3 kg
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Tee Handle Installation Tools for Lay Flat Fittings

LFTH-10	Long handle Installation tool for O505KMA fittings	1	-	1 lbs	0.45 kg
LFTH-8	Short handle Installation tool for O505KMA fittings	1	-	0.2 lbs	0.09 kg

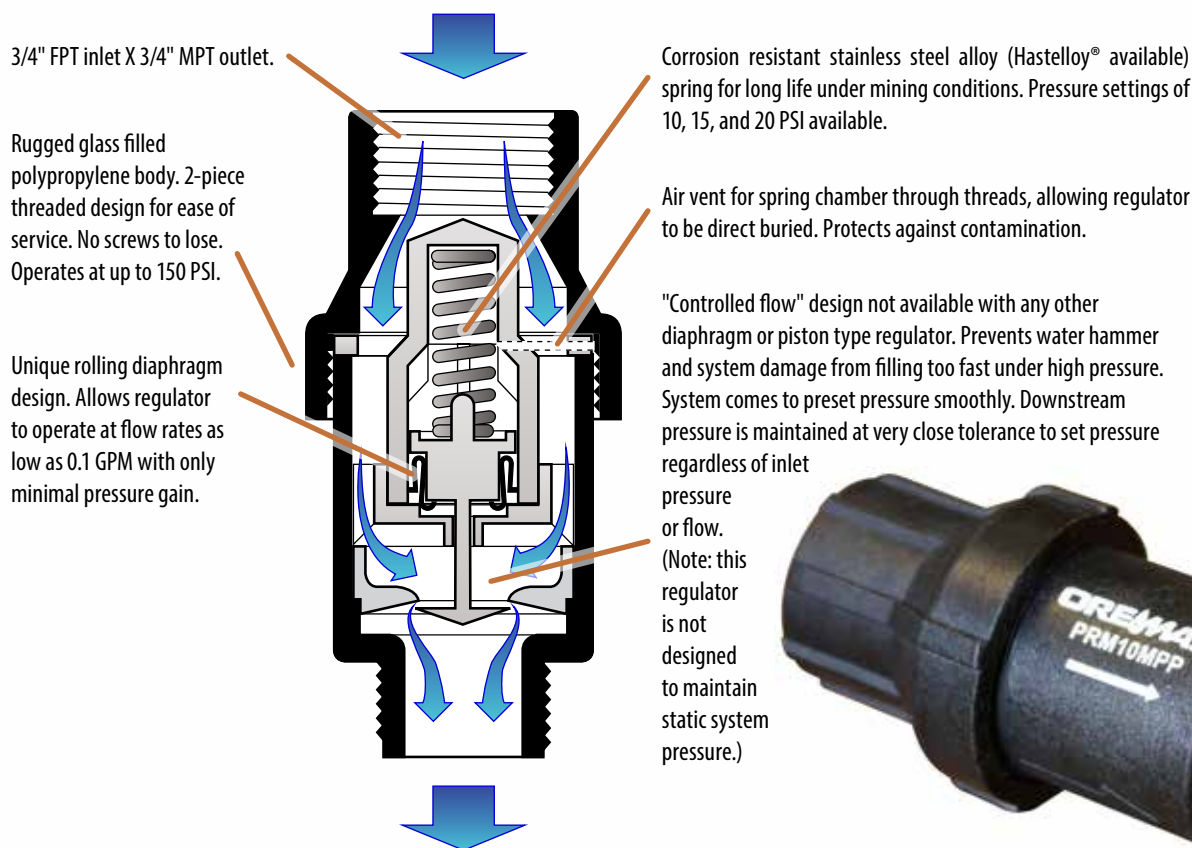


Pressure Gauge

OPG100SS	Pressure Gauge 0-100 PSI, 1/4" NPT	1	72	33 lbs	15 kg
OPG60SS	Pressure Gauge 0-60 PSI, 1/4" NPT	1	72	33 lbs	15 kg
OPG30SS	Pressure Gauge 0-30 PSI, 1/4" NPT	1	72	33 lbs	15 kg
OPG50SS	Pressure Gauge 1-5 Bar, 1/4" NPT	1	72	33 lbs	15 kg

PRESSURE REGULATORS

Ore-Max pressure regulators give you equal pressure and solution application rate on every emitter.



Pressure regulator (no fittings)

PRESSURE REGULATORS

Ore-Max Pressure Regulators Only (no fittings)

Part No.	Description	Bag Qty	Box Qty	Box Weight	
OLPRM10	10 PSI Pressure Regulator	50	400	50 lbs	22.7 kg
OLPRM15	15 PSI Pressure Regulator	50	400	50 lbs	22.7 kg
OLPRM20	20 PSI Pressure Regulator	50	400	50 lbs	22.7 kg

*Other pressures available by special order.

PRESSURE REGULATORS

Ore-Max Pressure Regulators

Distribute flow and solution over the leach pad more evenly with Ore-Max Pressure Regulators installed at the beginning of each Max-Emitterline. Can be purchased with fittings or plain.

Features

Consistent, reliable performance in the field, coupled with rugged, corrosion resistant construction for long life, makes the Ore-Max Pressure Regulator the best economic choice for heap leach operations.

Product Specifications:

Inlet Size:	¾" Female Pipe Thread (FPT)
Outlet Size:	¾" Male Pipe Thread (MPT)
Flow Range:	0.1 GPM - 15 GPM
Pressures Available (PSI):	10, 15, 20
Max Operating Pressure:	50 PSI

**For Hose x
Hose Sideslope
Connection**



**For Lay Flat
Connection**

Ore-Max Pressure Regulators *with Fittings*

Part No. - 16mm	Part No. - 20mm	Description	Bag Qty	Box Qty	Box Weight	
OLPRH1016	OLPRH1020	10 PSI Pressure Regulator - Hose x Hose	-	200	64 lbs	29 kg
OLPRH1516	OLPRH1520	15 PSI Pressure Regulator - Hose x Hose	-	200	64 lbs	29 kg
OLPRH2016	OLPRH2020	20 PSI Pressure Regulator - Hose x Hose	-	200	64 lbs	29 kg
OLPRM1016	OLPRM1020	10 PSI Pressure Regulator - Lay Flat x Hose	-	200	64 lbs	29 kg
OLPRM1516	OLPRM1520	15 PSI Pressure Regulator - Lay Flat x Hose	-	200	64 lbs	29 kg
OLPRM2016	OLPRM2020	20 PSI Pressure Regulator - Lay Flat x Hose	-	200	64 lbs	29 kg

**Other pressures available by special order.*

The Max-Spinner

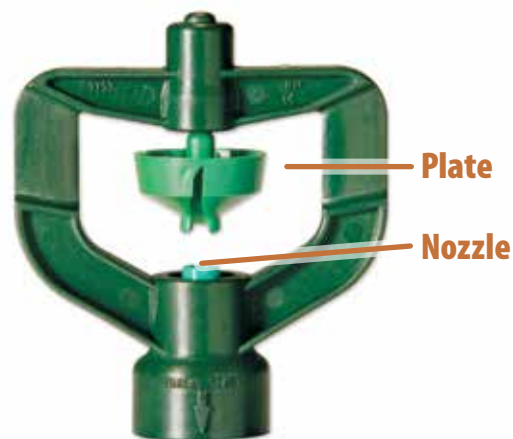
When Uniformity & Reliability Really Count.

The **Max-Spinner** is a unique micro sprinkler that evenly distributes a wide range of flow like a gentle rain. Its high-flow capacity, high uniformity, and large radius make it the ideal choice for heap leach mining. Used for side slope and dual leaching systems. Pressure regulators recommended for maximum performance (not included in the assembly).

Features:

- Proven in Mining Applications
- Durable & Reliable
- High Uniformity
- Low & High-flow Capacity
- Easy-clean, Quick-change Nozzles
- Chemical Resistance

Max-Spinner



Stake Adapter



PVC Adapter



Threaded Adapter



Feedtube – 36"

Fiberglass Stake – 24"

Connection Barb

Max-Spinner (Complete Assembly)

Model No.	Description	Bag Qty	Box Qty	Box Weight	
SPNSIASN18	Max-Spinner assembly with 24" fiberglass stake, 36" feedtube & spinner. <i>Ready to use.</i>	-	50	50 lbs	23 kg
SPNSIACN14	Max-Spinner assembly with 24" PVC stake, 36" feedtube & spinner. <i>Ready to use.</i>	-	50	50 lbs	23 kg
SPNSIN18	Max-Spinner Only	100	800	36 lbs	16 kg

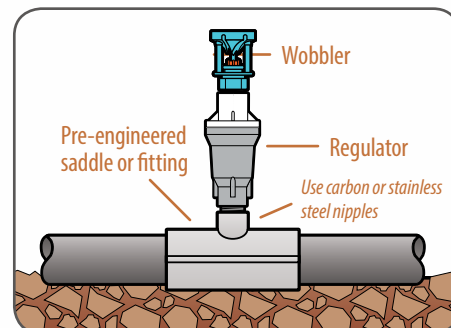
WOBBLERS

Wobblers

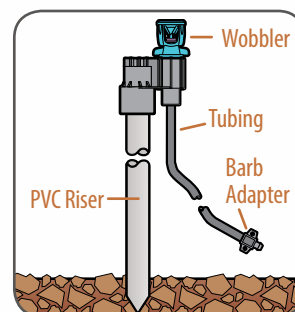
Wobblers have a unique off-center rotary-action. This design provides extremely uniform coverage over a large diameter at low pressures.

Features:

- Only one moving part for longer life
- Built for strength and durability using high-impact engineering-grade thermoplastics, no metal parts
- Low evaporative loss
- One-year warranty on materials, workmanship AND performance



The Wobbler can be mounted directly into a pressure regulator. A nipple connects it to the lateral.



The Wobbler or mini-Wobbler can also be mounted to a PVC stake.

Standard Wobbler



Copper Mining

SPSW34N10SAC



Copper Mining

SPSW34N10LAC



Gold Mining

SPSW34N09SAG



Gold Mining

SPSW34N09LAG

Part No.	Nozzle Size	Angle	Flow (GPM) / Diameter (in feet at 0.5 ft height)								Flow (L/s) / Diameter (in meters at 15 cm height)							
			10 PSI		15 PSI		20 PSI		25 PSI		0.75 bar		1.0 bar		1.5 bar		2.0 bar	
SPSW34N10SAC	#10 5/32" (3.97mm)	Standard	2.22	42.2	2.72	46.7	3.14	48.7	3.51	49.3	0.15	13.1	0.17	14.1	0.21	14.9	0.24	15.1
SPSW34N10LAC		Low		33.5		35.5		37.4		38.4		10.3		10.7		11.5		11.9
SPSW34N09SAG	#9 9/64" (3.57mm)	Standard	1.80	41.4	2.20	46.1	2.54	48.1	2.84	48.7	0.12	12.9	0.14	13.9	0.17	14.8	0.19	14.9
SPSW34N09LAG		Low		32.5		34.5		36.7		37.5		10.0		10.4		11.3		11.6

3/4" base shown. 1/2" base and various nozzle sizes also available.

WOBBLERS

Xcel-Wobbler

Xcel-Wobblers utilize a unique off-center rotary-action to provide extremely uniform coverage at low pressures with very low evaporative losses.



Part No.	Nozzle Size	Angle	Flow (GPM) / Diameter (in feet at 1.5 ft height)								Flow (L/s) / Diameter (in meters at 46 cm height)					
			10 PSI		15 PSI		20 PSI		25 PSI		0.75 bar		1.0 bar		1.5 bar	
SPSWXN10HA	#10	High	2.22	38.0	2.72	43.5	3.14	46.0	3.51	47.5	0.15	11.9	0.17	13.1	0.21	14.2
SPSWXN10MAC	5/32" (3.97mm)	Mid		36.0		41.0		44.5		45.5		11.2		12.3		13.7
SPSWXN09HAG	#9	High	1.80	37.0	2.20	42.5	2.54	45.0	2.84	46.5	0.12	11.6	0.14	12.8	0.17	13.9
SPSWXN09MAG	9/64" (3.57mm)	Mid		35.5		40.5		44.0		45.0		11.1		12.2		13.5

3/4" base shown. 1/2" base and various nozzle sizes also available.

mini-Wobbler

The mini-Wobbler employs the same unique off-center rotary-action as the Wobbler. It provides extremely uniform coverage over a large diameter at low pressures. It produces a gentle application of solutions.



Part No.	Nozzle Size	Flow (GPM) / Diameter (in feet at 1.5 ft height)												Flow (L/s) / Diameter (in meters at 46 cm height)					
		15 PSI		20 PSI		25 PSI		30 PSI		35 PSI		40 PSI		1.0 bar		1.5 bar		2.0 bar	
SPSMW12N06C	#6 3/32" (2.38mm)	0.95	33.2	1.10	36.0	1.25	36.8	1.36	37.2	1.47	37.6	1.58	38.0	0.06	10.0	0.07	11.1	0.08	11.3
SPSMW12N09G	#9 9/64" (3.57mm)	2.04	36.4	2.36	39.2	2.66	40.0	2.93	40.4	3.17	40.8	3.40	41.2	0.13	11.0	0.16	12.0	0.18	12.3

Comes with 1/2" base.

Wobbler Components

Part No.		Description
Wobbler/Xcel	mini-Wobbler	
WOBR	WOBRMINR	PVC Riser - 36"
WOBRA	WOBRMINRA	Riser Adapter
WOBT	WOBRMINT	Tubing - 1000' Roll
WOBP	WOBRMINP	Tubing Punch Tool
WOBB	WOBRMINB	Barb Adapter



DRAINAGE PIPE

Corrugated Perforated Drainage Pipe

These HDPE Raw Material based pipes will not pit or deteriorate due to Corrosive gases or liquids.

Maximum Crush Resistance

HDPE is the most chemically inert of all plastics, thus making our corrugated pipe systems corrosion resistant. HDPE can be safely used with solutions with a PH range of 1.5 to 14. Available in single wall or double wall smooth core models. Perforated and non-perforated options. Complete range of fittings available including; elbows, tees, reducing tees, wyes, split and snap couplers, reducers, and custom fittings.



Drainage Pipe

Part No.		Nominal Pipe Size	
Single Wall	Double Wall		
CPP03SW	CPP03N10	3"	75 mm
CPP04SW	CPP04N10	4"	100 mm
CPP05SW	CPP05N10	5"	125 mm
CPP06SW	CPP06N10	6"	150 mm
CPP08SW	CPP08N10	8"	200 mm
CPP10SW	CPP10N10	10"	250 mm
CPP12SW	CPP12N10	12"	300 mm
CPP15SW	CPP15N10	15"	375 mm
CPP18SW	CPP18N10	18"	450 mm
CPP24SW	CPP24N10	24"	600 mm

HDPE PIPE

High-Density Polyethylene Pipe

Ore-Max offers a complete line of HDPE pipe and fittings for the mining industry, with a wide range of sizes and SDRs suited for your specific application.

Although Chevron Phillips can provide a wide variety of resins for their HDPE pipe products, unless something else is specifically requested, Ore-Max is specifying the new high performance, high density bimodal resin, PE 4710 resin, for all mining applications.

Features:

- Economical
- Flexible and Coilable
- Corrosion Resistant
- Heat Fused
- Zero Leak-Rate
- Mechanically Joined (As Needed)
- Hydraulically Smooth
- Strong and Ductile
- Fatigue and Surge Resistant
- Weather Resistant
- Long Design Life
- Impact Resistant
- Tappable
- Freeze Resistant
- Chemically Resistant
- Durable
- Easily Installed
- Abrasion Resistant
- Small to Large Diameters
- Non-Toxic, Non-Tasting
- Self Restrained Pipe (Monolithic)
- Lightweight
- Listed and Approved
- Reliable



Pipe dimensions and manufacturing requirements:

ASTM F 714-05 — Standard Specification for Polyethylene (PE) Pipe (SDR-PR) Based on Outside Diameter. This standard is used for most large diameter HDPE pipe (4" to 63") applications other than gas pipe.

PE 4710 — All HDPE pipe made of 4710 resin.

BUTTERFLY VALVES

Butterfly Valves

Wafer & Lug Type

Ore-Max's standard offering for butterfly valves is polyester coated cast iron with stainless steel stem and either Nylon 11 or stainless steel disc. Seals are EPDM. Available in lever-operated or gear drive models upon request.

**316 stainless steel valves are available with Viton seals.*



Lever Operated



Gear Operated



Butterfly Valves (2"-20")

Part No.		Valve Size		Operation	Mounting Flange Drig.			Lug Bolting Data			Weight (lbs/kg)			
Wafer	Lug				BC	Holes	Hole Dia.	BC	Holes	Threads UNC-2B	Wafer		Lug	
BLO2W	BLO2L	2"	50 mm	Lever	2.76	4	0.39	4.75	4	5/8-11	5.5	2.5	7.0	3.2
BLO25W	BLO25L	2 1/2"	65 mm	Lever	2.76	4	0.39	5.50	4	5/8-11	6.5	2.9	9.0	4.1
BLO3W	BLO3L	3"	80 mm	Lever	2.76	4	0.39	6.00	4	5/8-11	7.0	3.2	9.5	4.3
BLO4W	BLO4L	4"	100 mm	Lever	2.76	4	0.39	7.50	8	5/8-11	11.0	5	16.0	7.3
BLO5W	BLO5L	5"	125 mm	Lever	2.76	4	0.39	8.50	8	3/4-10	14.0	6.4	22.0	10
BLO6W	BLO6L	6"	150 mm	Lever	2.76	4	0.39	9.50	8	3/4-10	17.0	7.7	25.0	11.3
BGO6W	BGO6L	6"	150 mm	Gear	2.76	4	0.39	9.50	8	3/4-10	17.0	7.7	25.0	11.3
BGO8W	BGO8L	8"	200 mm	Gear	4.92	4	0.57	11.75	8	3/4-10	32.0	14.5	45.0	20.4
BGO10W	BGO10L	10"	250 mm	Gear	4.92	4	0.57	14.25	12	7/8-9	47.0	21.3	66.0	29.9
BGO12W	BGO12L	12"	300 mm	Gear	4.92	4	0.57	17.00	12	7/8-9	68.0	30.8	102	46.3
BGO14W	BGO14L	14"	350 mm	Gear	4.92	4	0.57	18.75	12	1-8	96.5	43.8	120	54.4
BGO16W	BGO16L	16"	400 mm	Gear	4.92	4	0.57	21.25	16	1-8	134	60.8	172	78
BGO18W	BGO18L	18"	450 mm	Gear	6.50	4	0.81	22.75	16	1 1/8-7	203	92.1	236	107
BGO20W	BGO20L	20"	500 mm	Gear	6.50	4	0.81	25.00	20	1 1/8-7	264	119	312	141

BUTTERFLY VALVES

PVC & PVDF Butterfly Valves



PVC/Polypropylene Valve

This valve has a molded PVC body and a Polypropylene opening disc with an encapsulated metal insert. The disc is seated in a flexible EPDM or Viton liner that serves as the flange gasket. The shaft is made of 403 stainless steel. This valve may be used in applications up to 180°F at 75 psi.

PVDF/Viton Valve

This valve has a molded PVDF body and disc for severe applications. The liner is made of Viton and the stem is 403 stainless steel. PVDF has a useful range for many applications—from -80 to +300°F at reduced pressures. It has outstanding chemical and wear resistance, tensile and impact strength, and it surpasses other plastics in resistance to strong acids, organic solvents and halogens such as chlorine and bromine.

Part No.	Description
5438 - (Size No.)	PVC/Polypropylene with EPDM Liner
5439 - (Size No.)	PVC/Polypropylene with Viton Liner
5442 - (Size No.)	PVDF/Viton

Size No.	Valve Size		Operation	PSI @ 70° F	
				PVC	PVDF
015	1 ½"	38 mm	Lever	150	150
020	2"	50 mm	Lever	150	150
025	2 ½"	65 mm	Lever	150	150
030	3"	80 mm	Lever	150	150
040	4"	100 mm	Lever	150	150
060	6"	150 mm	Lever	150	150
080	8"	200 mm	Gear	150	150
100	10"	250 mm	Gear	150	150
120	12"	300 mm	Gear	100	100

PVC Ball Valves

Schedule 80 PVC

True Union

Valves are repairable with spare parts including ball, stem, and handle.



True Union

Compact

Not repairable but more economical.



Compact

Part No.		Nominal Pipe Size	
True Union	Compact		
BTU013	BVC013	½"	13 mm
BTU025	BVC025	1"	25 mm
BTU050	BVC050	2"	50 mm
BTU080	BVC080	3"	80 mm
BTU100	BVC100	4"	100 mm

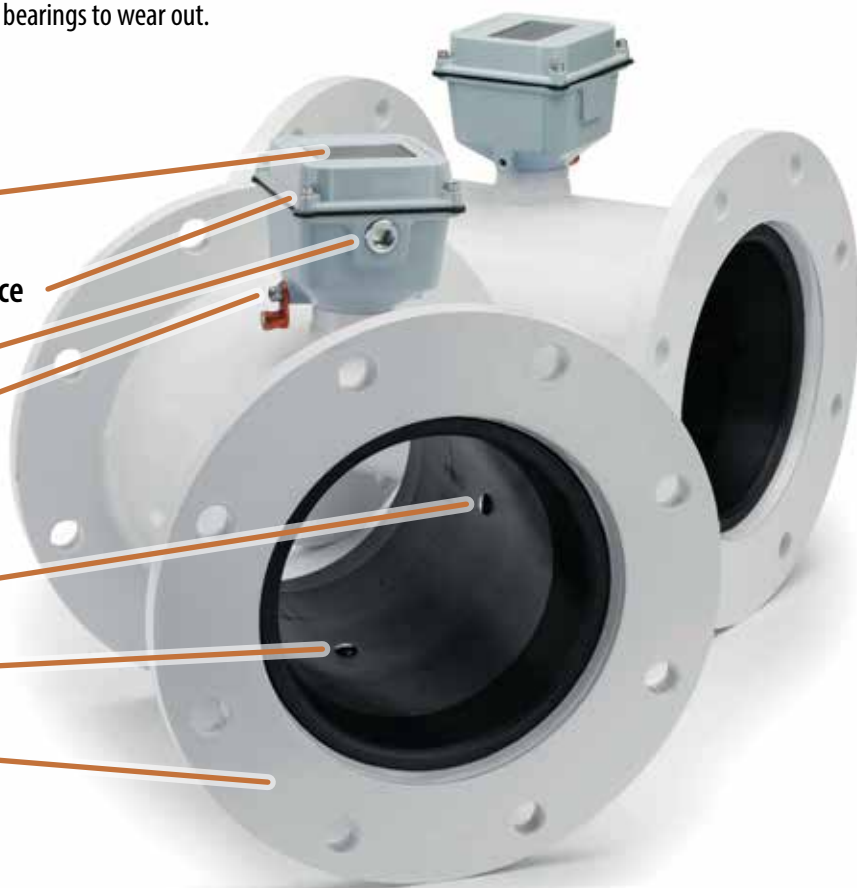
FLOW METERS

Magnetic Flow Meter

Because it has no moving parts and has electrodes designed to discourage fouling, this flow meter performs well and requires much less frequent maintenance in applications where debris would impede propeller meters. There is no rotor to stop turning or bearings to wear out.

Features:

- Rate & Total Indicator
- Cross-Drilled Screws for tamper evidence
- Power/Output Cable Port Access (tamper sealed)
- Equalization Lug (with flange plates attached)
- Measurement Electrodes
- Grounding Electrodes
- Flanges, ANSI 150 lb. Drilling



Magnetic Flow Meters

Model No.	Description	Minimum Flow		Maximum Flow		Weight	
WMX104-400-127	4" Flanged Magnetic Meter	12 GPM	.75 L/s	500 GPM	31.5 L/s	32 lbs	14.5 kg
WMX104-600-127	6" Flanged Magnetic Meter	32 GPM	2 L/s	1,200 GPM	75.7 L/s	47 lbs	21.3 kg
WMX104-800-127	8" Flanged Magnetic Meter	60 GPM	3.8 L/s	2,200 GPM	138.8 L/s	71 lbs	32.2 kg
WMX104-1000-127	10" Flanged Magnetic Meter	95 GPM	6 L/s	3,500 GPM	220.8 L/s	95 lbs	43.1 kg

ORE-MAX FILTERS

Ore-Max 900 Series Tornado Filter

The Ore-Max 900 Series Tornado Filter, for gold mines, is an inline, self-cleaning water filter, designed for Well Water and Surface Water Filtration applications. The key to the Tornado Filters success is the combination of an Entrance Nozzle Plate, Velocity Tube and Reduced Flow Velocity through the Tornado Filter Screen. These three concepts work together to optimize the cleaning efficiency of the Tornado Filters. The Entrance Nozzle plate increases the velocity of solution entering the filter and forces it in a downward, rotational pattern. The Velocity Tube keeps the solution moving at an optimal velocity down the entire length of the filter screen.



Body:

- Tornado Filters are constructed from 304/304L Stainless Steel Pipe meeting ASTM A778 specifications.
- 304 Stainless Steel Flanges meet ASME/ANSI Drilling for Class 150.
- Threaded Outlets are 304 Stainless Steel with threads to ANSI B1.20.1
- All Standard Gaskets and Nozzle Plugs are EPDM Material.
- Standard Ball valves included with Tornado Filters are Forged Brass w/ PTFE packing.

Screen:

- Perforated Screen is 304 Stainless Steel.
- Mesh Screen Material is 316 Stainless Steel.

Standard Fittings Supplied:

- Two - 2 1/2" Liquid Filled Pressure Gauges 0-100 PSI
- One - 2" Air/Vacuum Release Valve
- Two Flush Ball Valves (3/4" Standard all Units), (1", 1 1/2" or 2" dependent on unit size)
- One Flush Tee (Dependent on Unit Size)
- Nozzle Plug quantities are sent specific to your project.

Features:

- 150 psi Pressure Rating
- Minimum Operating Pressure 15-35 PSI
- 304/304L Stainless Steel Body Construction
- 304/316 Stainless Steel Mesh Sintered Screen
- Simple Ready to Install Bolt-Up Design
- Low Maintenance
- No Moving Parts
- No Downtime Due to Back-Washing

Ore-Max 900 Series Tornado Filters

Model No.	Nolle Plate Full Open		One Hole Plugged		Two Holes Plugged		Three Holes Plugged	
	GPM	M ³ /hr	GPM	M ³ /hr	GPM	M ³ /hr	GPM	M ³ /hr
OR902SW	79-105	18-24	65-85	15-19	51-68	12-15	40-51	9-12
OR903SW	117-155	27-35	104-138	23-31	91-121	21-27	78-104	18-24
OR904SWS	160-210	36-48	141-185	32-42	123-160	28-36	104-135	24-31
OR904SW	248-310	56-71	217-270	49-61	186-230	42-52	155-190	35-43
OR906SWS	381-485	87-110	327-415	74-94	274-345	62-78	220-275	50-62
OR906SW	490-630	111-143	435-568	99-129	381-485	87-110	327-415	74-94
OR908SWS	685-840	156-191	591-720	134-164	497-600	112-136	403-480	92-110
OR908SW	966-1235	219-281	872-1115	198-253	778-995	177-226	684-875	156-199
OR910SW	1260-1590	286-361	1060-1340	241-305	860-1090	196-248	660-840	150-191



Limited Warranty

1. Ore-Max manufactures and supplies polyethylene tubing, emitters, fittings, valves, pipe and certain other leach mining components. Any part sold by Ore-Max which is proven defective as to material or workmanship within one year from date of invoice by Ore-Max will be replaced free of charge, FOB Fresno, CA, upon return of such defective part to Ore-Max, transportation prepaid. No parts, however, shall be returned without the expressed written authority of Ore-Max. Ore-Max makes no warranty of merchantability or implied warranty of fitness as to its products or system designs.
2. Under no circumstances shall Ore-Max be liable for any consequential or other damages, losses, or expenses which may arise from the installation or use of the equipment regardless of advice, system designs or recommendations that may have been made by any agent or employee of Ore-Max or its distributors/dealers.
3. The distributor and/or dealer is not authorized to make any warranty of performance or efficiency or other operating guaranty on any Ore-Max system or any of its components other than set forth herein.

MATERIALS SHIPPING UNDERSTANDING:

Ore-Max shall not be responsible for any delay in shipping of merchandise resulting from destruction of offices, warehouses, factories, or other facilities, strikes, lockouts, shortage of merchandise, production problems, Acts of God, or any other unforeseen delays beyond its control.

RESERVATIONS AND RIGHTS FOR IMPROVEMENTS:

Ore-Max reserves the right to make changes in design and changes or improvements upon its products without assuming any obligation to change products theretofore manufactured in the same manner.

Parts of Ore-Max system manufactured by others than Ore-Max may carry manufacturer's guaranty and are not guaranteed by Ore-Max.

CONDITIONS OF USAGE:

This warranty is not valid if the system and/or its components are subjected or exposed to any of the following:

- a. Greater than 40 PSI operating pressure.
- b. Water which has not been filtered or treated to the level specified for individual components by Ore-Max.
- c. Chemical concentrates (internally or externally), mechanical abuse, or any other foreign material which are harmful to the performance of individual components.

DISCLAIMER: This warranty is exclusive and is in lieu of all other warranties expressed or implied, including warranties of merchantability and warranties of fitness of particular purpose.



Drip Systems For Heap Leach Mining

LESS PLUGGING
MORE PRODUCTION

www.ORE-MAX.com