KMT Aqua-Dyne

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Your Innovative Partner for all Your High Pressure Cleaning and Surface Preparation Needs www.aqua-dyne.com

sales@aqua-dyne.com

3,000 to 40,000 PSI

- Pump Units
- Pump Systems
- Waterblast Guns
- Accessories
- Spare Parts









Table of Contents

This catalog covers our full range of Pump Systems, Pumps Units. Parts and Accessories. If you do not see something you need, please call our customer service department at 713-864-6929 or e-mail sales@aqua-dyne.com.

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KMT Aqua-Dyne



Aqua-Dy ne was acquired by KMT Waterjet in 2006 and is now known as KMT Aqua-Dy ne. Our website address has not changed: www.aqua-dy ne.com.

Aqua-Dy ne has over 37 years experience in the waterblasting industry and as KMT Aqua-Dy ne we plan to continue with this experience and offer the most efficient and safe pumps and accessories for our customers.

KMT Aqua-Dy ne provides a complete range of high quality, reliable high pressure cleaning and surface preparation systems, pumps and accessories.

KMT Aqua-Dyne's modern plant is equipped with state of the art CNC machine tools, fabrication, quality and test facilities and fully complete customer training and demonstration facility.



KMT Aqua-Dyne has over 37 years experience developing, designing, testing and manufacturing high pressure cleaning and surface preparation equipment.



KMT Aqua-Dyne Pumps

The key to KMT Aqua-Dyne's long pump life and hundreds of hours of trouble-free operation are low load packing, special filtration and a closed loop non-drip cooling and water lubrication system for alumina ceramic or tungsten carbide plungers.

The individual lightweight suction and discharge manifolds are easily removed for routine maintenance, and field changing the packing or plungers takes five minutes with no special tools required.

The unique Valve-In-Line fluid end design provides higher volumetric efficiency, lower maintenance, quick packing changes and low initial cost over conventional fluid ends available.

C Series

- 300 to 500 HP
- 5 20,000PSI

EK Series

- 5 to 25 HP
- 5 40,000PSI

BLASTMAX

GA Series

- 100 to 250 HP
- 5 40,000 PSI



C 500 DS Skid Mounted







GA 200 DT Trailer Mounted

Engine and Motor Options

Diesel: Several brand options
Electric: EFC or explosion proof with

v oltage options

Frame Options

Skid: With sev eral mounting options
Frame: Single or multiple lifting bails
Trailer: Single/Dual axle with several

hook-up options

Cart: EK series only



C Series Pump Unit

The C series is our largest capacity pump for when high flow applications are necessary.



C 450 DS Skid Mounted

Pump Performance Range								
Pressure PSI [Bar]		Flow Rate GPM [LPM]						
Model No./HP	C 300	C 400	C 500					
20,000 [1379]	25.71 [97.32]	34.28 [129.76]	42.85 [162.20]					
15,000 [1034]	34.27 [129.73]	45.70 [172.99]	57.12 [216.22]					
10,000 [689]	51.42 [194.68]	68.56 [259.53]	85.70 [324.41]					
5,000 [345]	102.84 [389.21]	137.12 [519.06]	171.40 [648.82]					

Flow rates are theoretical based on 100% volumetric and mechanical efficiency

Standard Features

• Pump:

Horizontal, valve-in-line plungers

• Power transmission:

Kev lar reinforced synchronous drive system with safety belt guide.

• Discharge plumbing:

Discharge manifold with interchangeable high pressure discharge connections, stainless steel glycerinfilled pressure gauge and relief valve or rupture disc.

• Suction plumbing:

Washable strainer and large capacity stainless steel bag typefilter





C Series Pump Unit

Pump Specifications

Power End

Power Frame:

Iron alloy casting with sturdily ribbed wall sections.

Crankshaft:

High strength ductile iron, may extend from either side. Rifle drilledforforced oil lubrication of connecting rods.

Crankshaft Bearings:

Heavy duty taper roller bearings.

Crossheads:

Cy lindrical type nodular iron. Wrist Pin is Case hardened and ground steel with double Needle Roller Bearings. Extension Rods are burnished stainless steel.

Lubrication:

Power End parts are lubricated by forced feed oil. Cooled and filtered oil circulation is standard.

Connecting Rods:

High strength, ribbed section, Ductile iron.

Oil Wiper Seals:

Easily replaceable, double lip.





Fluid End

Fluid Cylinders:

Proprietarily treated stainless steel Which eliminates breakage. Other materials available to Suit the application.

Valves and Seats:

Heat treated stainless steel enhances the In-Line Valve life. All valves may be reconditioned by surface grinding.

Plungers:

Non-scoring solid Alumina Ceramic. Optional: Colmonoy or Tungsten Carbide coated steel.

Packing:

V-rings of advanced polymer material are self-adjusting.

Lubrication:

Plungers and Packing are non-drip, Closed loop pressure lubricated by fluid from Suction Manifold. No external lubrication is necessary.

Manifolds:

Individual lightweight Suction Discharge Manifolds are easily removed for simple maintenance. Different materials are available to suit applications.



EK Series Pump Unit

The EK series is an excellent pump for applications that require high pressure at lower flow rates with a compact mobile design. Very popular for Hydrostatic testing applications.

Pump Performance Range								
Pressure PSI [Bar]	Flow Rate GPM [LPM]							
Model No. /HP	EK 5	EK 10	EK 20	EK 25				
40,000 [2758]	For details on 40,000 psi call sales							
20,000 [1379]	.43 [1.63]	.85 [3.22]	1.71 [6.47]	2.14 [8. 10]				
15,000 [1034]	.57 [2.16]	1.14 [4.32]	2.29 [8.67]	2.85 [10.79]				
10,000 [689]	.85 [3.21]	1.71 [6.47]	3.43 [12.98]	4.29 [16.24]				
5,000 [345]	1.17 [4.43]	3.43 [12.98]	6.85 [25.93]	8.57 [32.44]				

Flow rates are theoretical based on 100% volumetric and mechanical efficiency

Standard Features

Pump

Horizontal, valve-in-line triplex plungers with 1.57 in.(40 MM) stroke

• Power transmission

Kev lar reinforced synchronous drive system with safety belt guide.

• Discharge plumbing

Manifold with interchangeable high pressure discharge connections, stainless steel glycerin filled pressure gauge and relief valve or rupture disc.

• Suction plumbing

Filtration down to 1 micron



EK 20 ES Skid Mounted



Frame Mounted



EK Series Pump Unit

Pump Specifications

Power End

Power Frame:

Cast iron casing with drive system components. Includes sight glass for checking oil level.

Crankshaft^{*}

Gas-nitrided, hardened and tempered alloy steel extending from both sides. Crankshaft is centered between two main roller bearings.

Crankshaft Bearings:

Heavy duty roller bearings with roller rim.

Crossheads:

Cylindrical type nodular iron. Wrist Pin is Case hardened and ground steel.

Lubrication:

Power ends parts are splash oil lubricated.

Connecting Rods:

High strength, forged steel with special anti-friction brass bearings.

Oil Wiper Seals:

Easily replaceable, double lip U-Cup.





Fluid End

Fluid Cylinders:

Proprietarily treated stainless steel which eliminates breakage. Other materials available to Suit the application.

Valves and Seats:

Proprietarily treated stainless Steel enhances the Valve-in-Line life and eliminates Breakage. All valves may be reconditioned by field lapping or surface grinding.

Plungers:

Non-scoring solid Alumina Ceramic for up To 20,000 psi. Solid carbide or ceramic for up to 40,000 psi.

Packing:

Self-adjusting advanced polymer material for up to 22,500 psi.

Lubrication:

Plungers and Packing are non-drip, Closed loop pressure lubricated by fluid from Suction Manifold. No external lubrication is necessary.

Manifolds:

Individual lightweight Suction Discharge Manifolds are easily removed for simple maintenance. Different materials are available to suit applications.



BLASTMAX GA Series Pump Unit

BLASTMAX

The BLASTMAX GA series pump is our most popular and versatile pump. Available in several models for industrial cleaning, surface preparation or Hydrostatic Testing applications.



Pump Performance Range									
Pressure PSI [Bar]	Flow Rate GPM [LPM]								
Model No./HP	GA 75	GA 100	GA 150	GA 200	GA 250				
40,000 [2758]	3.21 [12.15]	4.28 [16.20]	6.43 [24.34]	8.57 [32.44]	10.71 [40.54]				
20,000 [1379]	6.43 [24.34]	8.57 [32.44]	12.86 [48.68]	17.14 [64.88]	21.43 [81.12]				
15,000 [1034]	8.57 [32.44]	11.43 [43.27]	17.14 [64.88	22.85 [86.50]	28.57 [108.15]				
10,000 [689]	12.86 [48.68]	17.14 [64.88]	25.71 [97.32]	34.28 [129.76]	42.85 [162.20]				
5,000 [345]	25.71 [97.32]	34.28 [129.76]	51.42 [194.64]	68.56 [259.52]	85.70 [324.41]				

Flow rates are theoretical based on 100% volumetric and mechanical efficiency

Standard Features

- Pump:
 - Horizontal, valve-in-line plungers
- Water tank:
 - 50 gallon water tank standard
- Charge Pump:
 - Heavy duty cycle charge pump standard.
- Suction plumbing:

Washable strainer and large capacity stainless steel bag type filterfor up to 20,000 psi. 40,000 psi units equipped with 1 and 5 micronfilters and charge pump.

• Power transmission:

Kev lar reinforced synchronous drive system with safety belt guide.

• Discharge plumbing:

Discharge manifold with interchangeable high pressure discharge connections, stainless steel glycerinfilled pressure gauge and relief valve or rupture disc.



BLASTMAX GA 200 ES Skid Mounted



GA Series Pump Unit

Pump Specifications

Power End

Power End:

Power Frame- Iron alloy with sturdily ribbed Wall sections

Crankshaft:

Aircraft quality alloy steel induction hardened Journals, may extend from either side.

Crankshaft Bearings:

Heavy duty high speed journal Bearings (non-Babbitt).

Crossheads:

Cylindrical type nodular iron. Wrist Pin is Case hardened and ground steel with double Needle Roller Bearings. Extension Rods are burnished stainless steel.

Lubrication:

Power ends parts are splash oil lubricated. Cooling and filtering oil circulation system optional for higher Horsepower's.

Connecting Rods:

High strength, ribbed section, Ductile iron.

Oil Wiper Seals:

Easily replaceable, double lip.





Fluid End

Fluid Cylinders:

Proprietarily treated stainless steel which eliminates breakage. Other materials available to Suit the application.

Valves and Seats:

Proprietarily treated stainless Steel enhances the Valve-in-Line life and eliminates Breakage. All valves may be reconditioned by field lapping Or surface grinding.

Plungers:

Non-scoring solid Alumina Ceramic for up To 20,000 psi. Solid carbide or ceramic for up to 40,000 psi.

Packing

Self-adjusting advanced polymer material for up to 20,000 psi. New low load design for up to 40,000 psi.

Lubrication:

Plungers and Packing are non-drip, Closed loop pressure lubricated by fluid from Suction Manifold. No external lubrication is necessary.

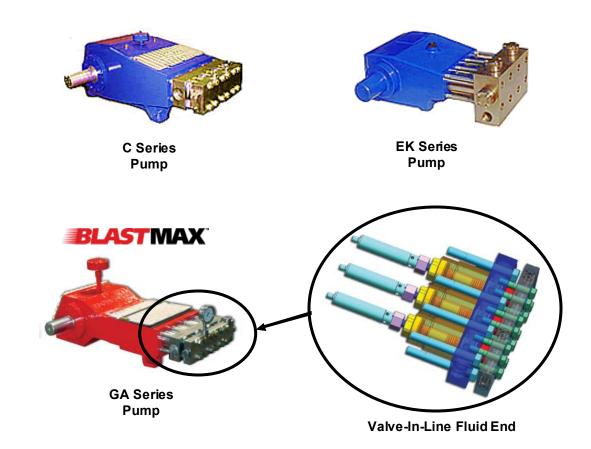
Manifolds

Individual lightweight Suction Discharge Manifolds are easily removed for simple maintenance. Different materials are available to suit applications.



Bare Shaft Pumps

The unique Valve-In-Line Fluid End design provides higher volumetric efficiency, lower maintenance, quick packing changes and lower operating cost over conventional fluid ends available.



Pump Performance Range							
Pressure PSI [Bar]	Flow Rate GPM [LPM]						
Model No.	EK	GA	С				
HP Coverage	5-25	50-250	300-500				
Pressure Coverage	Up to 20,000	20,000 [50-200 hp] 40,000 [250hp]	Up to 20,000				



Hydrostatic Test Pump Units

KMT Aqua-Dyne offers a wide range of standard to custom test pump units.



The Roughneck HTC is designed for hy drostatic pressure testing and high pressure cleaning



C 300 ET Hydro static T est Unit

Large volume Trailer mounted systems

Features and Options

- Designed for the rugged industrial and off shore markets
- Allows compliance to API 6A and API 16A specifications for pressure testing
- From 5 to 500 HP flow requirements
- From 5,000 to 40,000 PSI pressure requirements
- Standard or custom designs



EK 25 EF Hydro static T est Unit



Water Jetting Guns

KMT Aqua-Dyne has a wide variety of dump and rotary water jetting guns for surface preparation and high pressure cleaning applications.



Zero Thrust DYNA-GUN (Sub-Sea Gun)

The Zero Thrust Gun is used for underwater cleaning of barnacles and marine growth, paint scale and rust from ships, offshore structures and a variety of other underwater cleaning applications.



- Working Pressures- up to 20,000 psi
- Equipped with quick change piston, seat and seal assembly
- Pistol style grip with trigger guard and safety shroud to prevent accidental engagement of the trigger
- 3,000 RPM durable air motor
- Incorporates a baffled covered reverse thrust with an adjustable balancing device that will offset the forward thrust and balance the jet thrust when the gun is in use.



DUMP GUNS

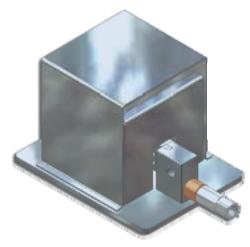
- Working Pressures at 15,000 & 20,000 psi
- Most widely used style of water blasting gun in the industry
- Pistol grip style gun with the trigger guard and safety trigger lock to prevent accidental engagement of the trigger.
- Fore grip and shoulder stock can be adjusted for safety and comfort.
- Lightweight for ease of use.
- Equipped with quick change cartridge assembly for easy field maintenance, one minute in most cases!

ROTARY GUNS

- Working Pressures up to 40,000 psi
- · Long life quick change high pressure seal
- Pistol style grip with trigger guard and safety shroud
- Lowest air consumption
- 3,000 RPM durable air motor



Foot Operated DYNA-GUN





Cut-away View

- The foot style DYNA-GUN is designed and manufactured to provide long lasting performance in the most rugged and demanding environments.
- The operator's foot controls the pressure leaving both hands free to feed and return flex lances, hoses, etc.
- Weight of the gun is approx. 14 lbs; approx. ov erall dimensions 14" x 12" x 8"



- · Working Pressures- up to 20,000 psi
- Equipped with quick change piston, seat and seal assembly
- Most widely used style of water jetting gun in the industry for surface cleaning applications
- Pistol grip style gun with the trigger guard and safety trigger lock to prevent accidental engagement of the trigger.
- Fore grip and shoulder stock can be adjusted for safety and comfort



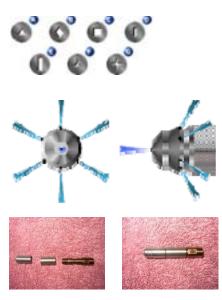
Water Jetting Nozzles

KMT Aqua-Dyne provides a full line of nozzles for almost any application including; surface preparation, industrial cleaning, pipe cleaning, hydro-demolition and much more!

Increase the power of your water jetting machine by up to 40% by simply replacing the nozzle. Of all the components of water jetting the nozzle is the forgotten accessory, yet the nozzle is what creates the pressure and does the cutting or cleaning. What type of spray your nozzle produces directly effects the efficiency of your operation.

- Shape Jet Nozzles
- Flex Lance Nozzles
- Spinners
- Conventional Tip orifices
- Nozzle Holders

We also offer a variety of nozzles for Tank cleaning, Pipe cleaning, Self rotating lance heads, Line mole nozzles and Rotating jet moles. Call customer Service at for options and Availability.











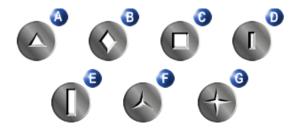


Shape Jet Nozzles

KMT Aqua-Dyne Shape Jet Nozzles Shaping the Future of Water Jetting Nozzles

Shape Jet nozzles are designed to have more surface area in the spray pattern than conventional round nozzles giving a more efficient cleaning pattern.

Compared to conventional nozzles customers have seen increased removal rates in removing thick coatings, shot gunning clogged heat exchanges tubes and cleaning waste gas fans in the mining industry.



The **Shape Jet** Is designed to give you the most cohesive and compact jet on the market today. And that means **more power**... 15-20% more production.

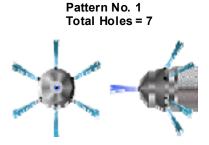
Part #	Maximum Working Pressure	Description
<u>rail#</u>	WOINING Fressure	Description
A10421-XX	20,000 PSI (1379 bar)	Triangle long
A10431-XX	20,000 PSI (1379 bar)	Triangle Short
A10427-XX	20,000 PSI (1379 bar)	Four point star-long
A10437-XX	20,000 PSI (1379 bar)	Four point star-short



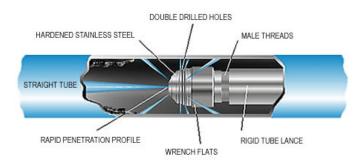
Flex Lance Nozzles

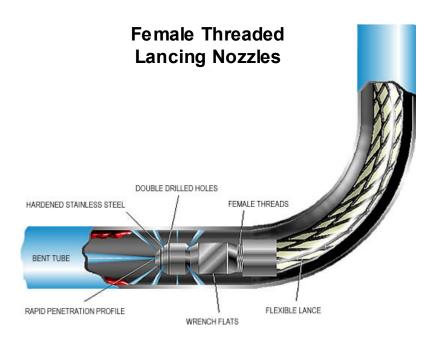
Lancing nozzles are available in virtually almost any size and pattern

to meet your needs.



Male Threaded **Lancing Nozzles**



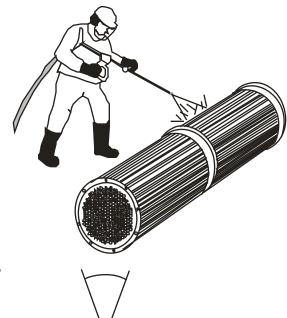


Call Customer Service at 713-864-6929 for sizing and ordering information



Conventional and Fan Tip Nozzles

For high-pressure applications, our conventional tip nozzles provide superior, high-impact performance. Pressures range up to 15,000 psi. These nozzles are suitable for use with a wide range of flow rates and operating conditions. This nozzles are machined from stainless steel and hardened for longer service life. The design of this nozzles includes an internal guide vane stabilizes turbulence to provide maximum spray impact.











These nozzles are designed primarily for use with KMT Aqua-Dy ne up to 15,000 psi Hand Held Dump Guns for general surface cleaning applications. They are available in 15, 25 and 40 degrees fan angles. These nozzles are made from hardened stainless steel.



Nozzle Rating Flow Chart

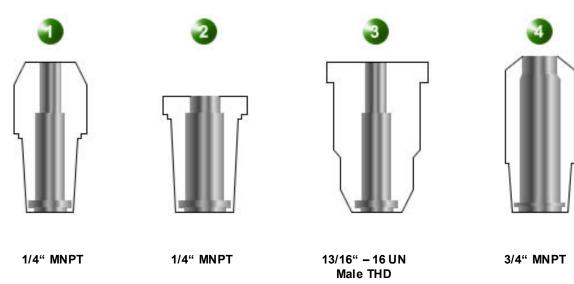
N	O R		NOZZLE RATING NUMBER SELECTOR							O R	N						
0	ì									ì	0						
z	F		CALCULATED ACTUAL NOZZLE PRESSURE (PSI)							F	z						
z	i							1	1	1	2	2	3	3	4	i	z
L	c	4	5	6	7	8	9	0	2	5	0	5	0	5	0	c	L
Ē	E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	E	E
-	DIA.	0	0	ō	0	0	0	ō	ō	ō	0	0	0	ō	ō	DIA.	_
NO.	(IN.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(MM)	NO.
0.1	0.008	0.100	0.112	0.122	0.132	0.141	0.150	0.158	0.173	0.194	0.224	0.250	0.274	0.296	0.316	0.207	0.1
0.2	0.012	0.200	0.224	0.245	0.265	0.283	0.300	0.316	0.346	0.387	0.447	0.500	0.548	0.592	0.632	0.293	0.2
0.3	0.014	0.300	0.335	0.367	0.397	0.424	0.450	0.474	0.520	0.581	0.671	0.750	0.822	0.887	0.949	0.358	0.3
0.4	0.016	0.400	0.447	0.490	0.529	0.566	0.600	0.632	0.693	0.775	0.894	1.000	1.095	1.183	1.265	0.414	0.4
0.5	0.018	0.500	0.559	0.612	0.661	0.707	0.750	0.791	0.866	0.968	1.118	1.250	1.369	1.479	1.581	0.463	0.5
0.6	0.020	0.600	0.671	0.735	0.794	0.849	0.900	0.949	1.039	1.162	1.342	1.500	1.643	1.775	1.897	0.507	0.6
0.7	0.022	0.700	0.783	0.857	0.926	0.990	1.050	1.107	1.212	1.356	1.565	1.750	1.917	2.071	2.214	0.547	0.7
8.0	0.023	0.800	0.894	0.980	1.058	1.131	1.200	1.265	1.386	1.549	1.789	2.000	2.191	2.366	2.530	0.585	0.8
0.9	0.024	0.900	1.006	1.102	1.191	1.273	1.350	1.423	1.559	1.743	2.012	2.250	2.465	2.662	2.846	0.621	0.9
1.0	0.026	1.000	1.118	1.225	1.323	1.414	1.500	1.581	1.732	1.936	2.236	2.500	2.739	2.958	3.162	0.654	1.0
1.1	0.027	1.100	1.230	1.347	1.455	1.556	1.650	1.739	1.905	2.130	2.460	2.750	3.012	3.254	3.479	0.686	1.1
1.2	0.028	1.200	1.342	1.470	1.587	1.697	1.800	1.897	2.078	2.324	2.683	3.000	3.286	3.550	3.795	0.717	1.2
1.3	0.029	1.300	1.453	1.592	1.720	1.838	1.950	2.055	2.252	2.517	2.907	3.250	3.560	3.845	4.111	0.746	1.3
1.4	0.030	1.400	1.565	1.715	1.852	1.980	2.100	2.214	2.425	2.711	3.131	3.500	3.834	4.141	4.427	0.774	1.4
1.5	0.032	1.500	1.677	1.837	1.984	2.121	2.250	2.372	2.598	2.905	3.354	3.750	4.108	4.437	4.743	0.801	1.5
1.6	0.033	1.600	1.789	1.960	2.117	2.263	2.400	2.530	2.771	3.098	3.578	4.000	4.382	4.733	5.060	0.827	1.6
1.7	0.034	1.700	1.901	2.082	2.249	2.404	2.550	2.688	2.944	3.292	3.801	4.250	4.656	5.029	5.376	0.853	1.7
1.8	0.035	1.800	2.012	2.205	2.381	2.546	2.700	2.846	3.118	3.486	4.025	4.500	4.930	5.324	5.692	0.878	1.8
1.9	0.035	1.900	2.124	2.327	2.513	2.687	2.850	3.004	3.291	3.679	4.249	4.750	5.203	5.620	6.008	0.902	1.9
2.0	0.036	2.000	2.236	2.449	2.646	2.828	3.000	3.162	3.464	3.873	4.472	5.000	5.477	5.916	6.325	0.925	2.0
2.5	0.041	2.500	2.795	3.062	3.307	3.536	3.750	3.953	4.330	4.841	5.590	6.250	6.847	7.395	7.906	1.034	2.5
3.0	0.045	3.000	3.354	3.674	3.969	4.243	4.500	4.743	5.196	5.809	6.708	7.500	8.216	8.874	9.487	1.133	3.0
3.5	0.048	3.500	3.913	4.287	4.630	4.950	5.250	5.534	6.062	6.778	7.826	8.750	9.585	10.353	11.068	1.224	3.5
4.0	0.052	4.000	4.472	4.899	5.292	5.657	6.000	6.325	6.928	7.746	8.944	10.000	10.954	11.832	12.649	1.308	4.0
4.5	0.055	4.500	5.031	5.511	5.953	6.364	6.750	7.115	7.794	8.714	10.062	11.250	12.324	13.311	14.230	1.388	4.5
5.0	0.058	5.000	5.590	6.124	6.614	7.071	7.500	7.906	8.660	9.682	11.180	12.500	13.693	14.790	15.811	1.463	5.0
5.5	0.060	5.500	6.149	6.736	7.276	7.778	8.250	8.696	9.526	10.651	12.298	13.750	15.062	16.269	17.393	1.534	5.5
6.0	0.063	6.000	6.708	7.348	7.937	8.485	9.000	9.487	10.392	11.619	13.416	15.000	16.432	17.748	18.974	1.602	6.0
6.5	0.066	6.500	7.267	7.961	8.599	9.192	9.750	10.277	11.258	12.587	14.534	16.250	17.801	19.227	20.555	1.668	6.5
7.0	0.068	7.000	7.826	8.573	9.260	9.900	10.500	11.068	12.124	13.555	15.653	17.500	19.170	20.706	22.136	1.731	7.0
7.5	0.071	7.500	8.385	9.186	9.922	10.607	11.250	11.859	12.990	14.524	16.771	18.750	20.540	22.185	23.717	1.791	7.5
8.0	0.073	8.000	8.944	9.798	10.583	11.314	12.000	12.649	13.856	15.492	17.889	20.000	21.909	23.664	25.298	1.850	8.0
8.5	0.075	8.500	9.503	10.410	11.244	12.021	12.750	13.440	14.722	16.460	19.007	21.250	23.278	25.143	26.879	1.907	8.5
9.0	0.077	9.000	10.062	11.023	11.906	12.728	13.500	14.230	15.589	17.428	20.125	22.500	24.648	26.622	28.461	1.962	9.0
9.5	0.079	9.500	10.621	11.635	12.567	13.435	14.250	15.021	16.455	18.397	21.243	23.750	26.017	28.101	30.042	2.016	9.5
10.0	0.081	10.000	11.180	12.247	13.229	14.142	15.000	15.811	17.321	19.365	22.361	25.000	27.386	29.580	31.623	2.069	10.0
11.0	0.085	11.000	12.298	13.472	14.552	15.556	16.500	17.393	19.053	21.301	24.597	27.500	30.125	32.539	34.785	2.170	11.0
12.0	0.089	12.000	13.416	14.697	15.875	16.971	18.000	18.974	20.785	23.238	26.833	30.000	32.863	35.497	37.947	2.266	12.0
12.5	0.091	12.500	13.975	15.309	16.536	17.678	18.750	19.764	21.651	24.206	27.951	31.250	34.233	36.976	39.529	2.313	12.5
13.0	0.093	13.000	14.534	15.922	17.197	18.385	19.500	20.555	22.517	25.174	29.069	32.500	35.602	38.455	41.110	2.359	13.0
14.0 15.0	0.096	14.000	15.653 16.771	17.146 18.371	18.520 19.843	19.799 21.213	21.000	22.136 23.717	24.249 25.981	27.111 29.047	31.305 33.541	35.000 37.500	38.341 41.079	41.413	44.272 47.434	2.448	14.0 15.0
15.0	0.100	15.000	10.771	10.3/1									41.079	44.371	47.434	2.555	15.0
Each square is actual flow in US gallons/min thru the nozzle. (GPM)																	



Nozzle Holders

Nozzle holders are available for both the SHAPE JET and conventional nozzles. Call our customer service department for details.

Nozzle Holders





Rubber Waterblast Hoses



I.D. (in)	O.D. (in)	End Connector (in)	Min. Bend Radius	Weight (Lbs/ft)
.17	.31	1/8" NPT	3.0	.43
.20	.42	1'8" NPT	3.5	.49
.25	.50	1⁄4" NPT	3.5	.58
.32	.56	3/8" NPT	3.5	.85
.50	1.0	½" NPT	8.0	1.28
.75	1.41	3⁄4" NPT	11.0	1.4
1.0	1.56	1" NPT	14.0	1.71



Thermoplastic Hoses



Hose I.D. (in)	Hose O.D. (in)	End Connector (in)	Min. Bend Radius	End Fitting (in)
.17	.31	1/8" NPT	3.0	.43
.20	.42	1'8" NPT	3.5	.49
.25	.50	1⁄4" NPT	3.5	.58
.32	.56	3/8" NPT	3.5	.85
.50	1.0	½" NPT	8.0	1.28
.75	1.41	¾" NPT	11.0	1.4
1.0	1.56	1" NPT	14.0	1.71





RIGID LANCES

Hose I.D. (in)	Hose O.D. (in)	End Connector (in)	Min. Bend Radius	End Fitting (in)
.33	.61	9/16" M.P.	7.0	.95
.50	.88	9/16" M.P	8.0	1.13
.80	1.3	1" M.P	15	1.69



40,000 PSI HOSES

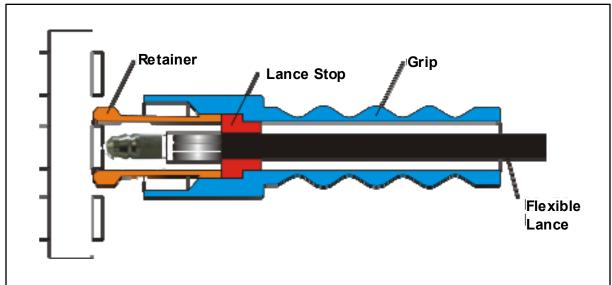
Hose I.D. (in)	Hose O.D. (in)	End Connector (in)	Min. Bend Radius	End Fitting (in)
.20	.50	3/8" HP	6.0	.68
.20	.50	3/8" HP	6.0	.85
.20	.50	3/8" HP	6.0	.85
.20	.50	3/8" HP	6.0	.85



Flexible Lance Guard

KMT Aqua-Dyne **Flexible Lance Guard** reduces the exposure from a pressurized nozzle while it is being inserted or withdrawn from a tube sheet. This minimizes the risk of operator injury resulting from a pressurized nozzle exiting a tube unexpectedly. The nozzle cannot be pulled out of the Flexible Lance Guard thereby protecting the operator from high pressure spray. Lance Guard assembly is provided with three lance stop sizes.



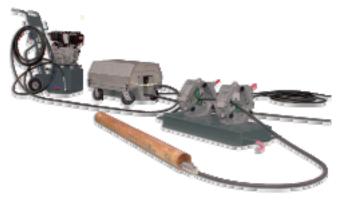




Water Jetting Accessories

KMT Aqua-Dy ne offers a full range of high pressure surface preparation and surface cleaning tools to help you get the job done faster and more efficient. For paint removal, coating removal, blast brushing, cleaning of walls, girders, vessels, storage tanks, pipes, steel structures and masonry structures.











Multi-Gun Flow Splitter

KMT Aqua-Dyne's Multi-Gun Flow Splitters are designed for simultaneous multi dump gun applications from one pump or water source. The Flow Splitters allow independent gun operation while maintaining a consistent pump working pressure. Stainless steel construction provides excellent corrosion resistance and minimal internal valve and seat movement helps to ensure long, dependable service.

Other features include a quick change sapphire orifice for various pressure and flow requirements and easily replaceable 9/16" AE and 1/2" FNPT adapters for pressure changes in the field. Also the Flow Splitter's compact design simplifies the connection of additional hand and foot guns on the job site.



(2-Gun shown)

- Working Pressures- up to 20,000 psi at 100gpm
- Designed for simultaneous multi dump gun applications from one pump or water source.
- Allow independent gun operation while maintaining a consistent pump working pressure.
- Quick change sapphire orifice for various pressure and flow requirements
- · Minimal pressure drop for efficient cleaning
- 2, 3 and 4 splitter options

Aqua-Dyne's Multi-Gun Flow Splitter may be used with all manufacturers' waterjetting equipment.

Options Available

- 2 Gun operations 15,000 PSI, ½" NPT (F)
- 2 Gun operations 20,000 PSI, 9/16" MP (F)
- 3 Gun operations 15,000 PSI, 1/2" NPT (F)
- 3 Gun operations 20,000 PSI, 9/16" MP (F)
- 4 Gun operations 15,000 PSI, ½" NPT (F)
- 4 Gun operations 20,000 PSI, 9/16" MP (F)



Diverter Valve

KMT Aqua-Dyne's Diverter Valve allows two operators to run independently of each other from one pump source.



Release time of the gun trigger to quick pressure dumping at the gun is important for operator safety. The Diverter Valve decreases reaction time by quickly bringing pressure to atmosphere.

The Diverter Valve maintains a constant pressure and flow rate to each gun regardless if one or two are operating at the same time.

Features

- Simultaneous multi-gun operation
- Mulit-user operation independent of each other
- Compact lightweight design
 - 25 lbs
 - Dimensions: Width 12" Height 10-3/4" Length 25-1/2"
- Simple construction and cartridge seal assembly for easy set-up, maintenance and use ...no adjustments needed
- Quick change sapphire orifice
- Long life stainless steel construction
- Minimal wear on internal valves and seats
- Working pressures- up to 40,000 psi
- Minimal pressure drop for more efficient cleaning
- Easily replaceable adapters for pressure changes

Connections

<u>Description</u>	<u>Inlet</u> Outlet	
Diverter Valve-Electric unit	9/16" AE HP (F)	3/8" HP (F)
Div erter Valv e-Diesel unit	9/16" AE HP (F)	3/8" HP(F)



Mini Scrubber

Designed with 6 nozzle spray bars, the Mini Scrubber's 6" cleaning head easily outperforms conventional hand held water jetting guns for most flat surface cleaning. The dual triggered Mini Scrubber comes equipped with adjustable wheels and a vacuum attachment engineered for 100% removal and containment of blasted coatings and water resulting in a cleaner work area. It is lightweight, produces a consistent finish, reduces operator fatigue and allows for closer blasting to surface edges.



- Working Pressures- up to 40,000 psi
- Lightweight and produces a consistent finish while reducing operator fatigue
- Allows for close work positioning to edges

<u>Options</u>	Max. Pressure
Mini Scrubber 20	20,000 PSI
Mini Scrubber 40	40,000 PSI

Applications include paint removal, coating removal and cleaning of:

- •Ship Hulls
- Girders
- Vessels
- •Storage Tanks
- •Steel Structures
- •Masonry Structures



Dyna Mo Rotary Surface Cleaner

A compact, safe and lightweight tool designed for the toughest surface preparation problems on most horizontal surfaces including floors, decks, grates, roads and concrete pavements in the marine, offshore, refinery, petro-chemical, transportation and other industries. With working pressures to 40,000psi, the DYNA MO is perfectly sized for the tightest restricted spaces and confined areas. Coupled with KMT Aqua-Dyne's pumps, the Floor cleaner offers the most efficient and productive surface cleaning system in the industry.





Benefits:

- Faster cleaning
- Compact design
- Lightweight
- Low maintenance
- 3,000 rpm air motor
- Adjustable nozzle height

- Built-in safety shroud Pressures- up to 40,000 psi
- Convenient nozzle height adjustment-5/8" to 1-1/8"
- Compact, lightweight low maintenance design
- Up to 6" cleaning area with 6 nozzles
- Deadman valve for safety shutoff

Options	Max. Pressure
Dy na Mo IV	20,000 PSI
Dyna Mo V	40 000 PSI



Rotating Hose Device (RHD)

Aqua-Dy ne's R.H.D. System is a revolutionary, internal pipe cleaning system with specially designed cleaning nozzles. The hose is rotated as it passes through the pipe while the cleaning nozzle remains forced against the pipe wall to improve cleaning compared to other pipe cleaning techniques. Tough enough include cleaning of solidly blocked or scaled tubes.



Applications:

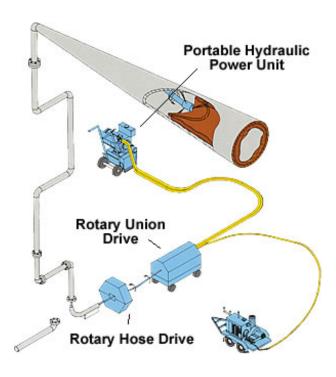
- The removal of many tough, hard or brittle deposits from the inside of tubular products with comparatively high cleaning rates.
- The cleaning of tubular products that are solidly plugged with a wide variety of deposits.
- The removal of many products from concrete, PVC, steel and any other pipe materials with minimal damage to the pipe.
- The cleaning of heat exchanger tubes in areas with limited access.

Features:

- Working Pressures- up to 40,000 psi
- Single best accepted pipe cleaning tool for contractors
- Cleaning operation is automatic and thereby Reduces the cleaning time compared to most manual techniques
- Device can negotiate bends in piping systems up to 1,500 feet in length
- · Lightweight portable system
- · Deadman valve for safety shutoff



Rotating Hose Device (RHD)



Features:

- Rotating Hose Device
- Maximum working pressure 40,000 psi.
- Maximum range- 200 gpm up to 12,000 psi; available in 8 gpm @ 40,000 psi.
- Maximum cleaning distance 1500 feet in length.
- The unit can normally negotiate bends in piping systems.
- The machine is comparatively light and portable permitting its use in many small or elevated work areas.
- Rotational speed, rotational direction, pressure and flow are all remotely and independently controllable.

Advantages:

- Cleaning operation is automatic and thereby reduces the cleaning time compared to most manual cleaning techniques.
- Since forward speed and rotational speeds are independently set, the size of particles removed can be controlled more easily as compared to other cleaning techniques.
- Due to the fact that the operator is not in close proximity to the water jet, the system is safer than most manual high pressure water cleaning techniques.
- Being hy draulically powered it can be used in certain explosive type environments where many engine powered machines could not safely operate.
- The rotary action of the R.H.D. can greatly reduce the amount of streaking as compared to the more traditional manual line mole cleaning techniques.



Rotary Grit Nozzle

Designed to be used with Aqua-Dyne's 40,000 psi Rotary Gun, the Rotary Grit Nozzle Assembly (Part No. B40509-28) combines water and an abrasive substance into the jet stream to produce a more efficient and powerful surface preparation tool. The Rotary Gun creates a compact vortex in the Rotary Grit Nozzle for effective delivery of the abrasive grit to the surface to be cleaned. Its rigid design uses aircraft style aluminum and carbide materials for long life and durability.



Combines water and an abrasive substance into the jet stream to produce a more efficient and powerful surface preparation tool.

Ridged design of aircraft aluminum and carbide materials for durability and long life.

Features

- Max. working pressure 40,000 psi
- Max. flow 8.57 gpm@40,000psi
- Max. horsepower 200 hp
- Weight 2 lbs
- Grit inlet port 3/8" ID
- Dimensions 12 1/4" I x 2 1/2" diam.

Benefits:

- Allows profiling to white metal (if desired)
- Quick add-on accessory to Aqua-Dy ne's Rotary Gun
- Lightweight
- Low maintenance
- Faster cleaning
- Compact design



Dyna-Vac Vacuum Pump

Aqua-Dy ne's Dyna Vac does the same work as a big vacuum truck at a fraction of the cost. Applications include sump and sewer pumping, underwater dredging and silt removal as well as general clean up. Attached to a rotary floor cleaner the Dyna Vac sucks up debris and water for recy cling and disposal.



Discharge from the Dyna Vac depends on the length, diameter and interior surface condition of the suction and discharge lines. Density, debris size, viscosity and temperature all react to influence the amount which can be transported by the Dyna Vac. Made from stainless steel and outfitted with sapphire nozzles, the Dyna Vac's low cost and maintenancefree operation make it a cost effective Water Energy™ work tool.

Connection Options

2" NPT 3" NPT 1" NPT

- For sump & sewer pumping, underwater dredging & silt removal
- Allows up to 3" solids. Suction lifts pumped up to 20 feet & discharge heights up to 40 feet.
 Can be used in tandem for additional distances depending on the fluid density and viscosity
- No moving parts or replaceable nozzles
- Maximum flow rate is 8.57 gpm at 40,000 psi

Compact: 9" L and 5 1/2" WLightweight: Approx. 9 lbs

Rotary Unions

- Designed for pressure up to 20,000 psi and flow rates to 200 gpm
- Suitable for a wide variety of high pressure fluids at temperatures up to 250 degrees.
- Power driv en "In-Line Flow Swiv els" reduce pressure drop to a minimum while maximizing thru-put
- Polymer seals and triple heavy duty sealed radial and thrust load: bearings ensure long trouble free operation



Rotar y Union 200 gpm at 12,000psi Rotar y Union 75 gpm at 15,000psi Rotar y Union 75 gpm at 20,000psi Rotar y Union 75 gpm at 15,000psi



In & Out Ports

1" NPT (F) x 1" NPT 500 rpm 3/4" NPT (F) x 3/4" NPT 500 rpm 1" MP (F) x 1-5/16" Type M 500 rpm 3/4" NPT (F) x 1/2" NPT (F) 400 rpm



Heat Exchanger Lancing Machine

Single or dual rotary lance with adjustable centerlines Stationary guides (no sliding guide assemblies)

- 2000RPM capable (depending on flow)
- 50k @6 gpm/20k@12gpm
- Single rotary swivel
- Pneumatic Power
- Independent gearbox reduces swivelfatigue
- Simple cable drive Up to 60 feet / minute linear travel (unless otherwise specified)
- Low profile box tubing design
- Two (2) Stands manual X and Y-axis movement (power movement optional)
- Standard equipped for 20 foot bundles with unlimited length capabilities
- Aluminum construction
- Free- standing control station with removable pendant and harness for operator mobility
- Pressure activated "peek cycle" to help prevent lance breakage





Options

Unlimited length extensions

- 10k swivel and guides
- 20k swivel's) and guides
- 40k swiv el's) and guides
- 50k swiv el's) and guides
- 10k, 20k, or 60k lance
- RSV-60 remote water on/off valve
- hy draulic power
- full/partial automation per application
- custom stand sizes
- third stand
- specialty nozzles
- v ertical hanger
- power synchronized stand movement



Parts

KMT Aqua-Dyne stocks a full range of wear parts and replacement parts to keep your waterblasting/waterjetting equipment running efficiently and productive.

Please call customer service for availability and part numbers.





Safety equipment is available in a variety of types and protection levels.

Sales Areas & Contacts

We have available fully trained customer service and service technicians to help you on the phone or on site.

KMT Aqua-Dyne Inc. 3620 W. 11th Street Houston,,Texas 77008

Phone: (713) 864-6929 Fax: (713) 864-0313

Email: <u>sales@aqua-dyne.com</u> Website: www.aqua-dyne.com

