

CATALOGUE

2015



HIGH PRESSURE PUMPS

H-SERIES



## TECHNICAL DETAILS



GENERAL NOTE: All specifications are not binding.  
The Company reserves the right to change technical and aesthetics specifications without notice.



# H-Series

## *High pressure pumps new series*



HPP is a Comet SpA brand specialized in the design and construction of plunger pumps for water, strengthened by its technological know-how which is backed up by the most modern technology. This means the company is able to offer a wide range of products to meet requirements that go from 50 to 400 kW with pressures up to 2800 bar.



HPP pumps are manufactured using the most modern technologies both as regards the materials used and mechanical operations and heat treatments. Comet is also able to provide a wide range of accessories, suitable for the specific needs of the single user. Professionalism and research make it a dynamic modern company intent on tackling and resolving the problems of a fast-evolving market.

## APPLICATIONS



### PETROCHEMICAL INDUSTRY

Cleaning of Heat Exchangers  
Cleaning of pipelines  
Cutting of refractories  
Preparation of surfaces inside tanks  
Boiler cleaning  
Cold metal cutting



### CONSTRUCTION

Hydro-demolition  
Concrete chipping  
Surface preparation  
Concrete cleaning



### OIL PLATFORMS

Preparation of surfaces on structures  
Internal Cleaning of Drilling Riser  
Removing barnacles  
Preparation of surfaces inside tanks  
Cleaning of heat exchangers and boilers  
Underwater cleaning



### MINING

Ore Cutting  
General maintenance



### AUTOMOTIVE INDUSTRY

Removing paints in:  
Assembly Skids  
Cabin grating  
Hook tool



### SANITATION

Unclogging of sewer pipes and extensions  
Cleaning of inlets



### AIRPORT INDUSTRY

Removal of road booting  
Removing of strips  
Removal of aircraft paintings  
Turbine cleaning  
Cleaning of stormwater pipes and channels



### SUGAR-ETHANOL INDUSTRY

Internal cleaning of:  
Pre-evaporators  
Evaporators  
Heaters  
Boilers  
Transfession lines



### ARMS INDUSTRY

Paint removal  
Hydrostatic testing  
Destruction of Explosives  
General maintenance



### SHIPBUILDING INDUSTRY

Surface preparation  
Epoxy paint removal  
Cleaning of pipelines  
Boiler cleaning  
Removal of barnacles



### CEMENT INDUSTRY

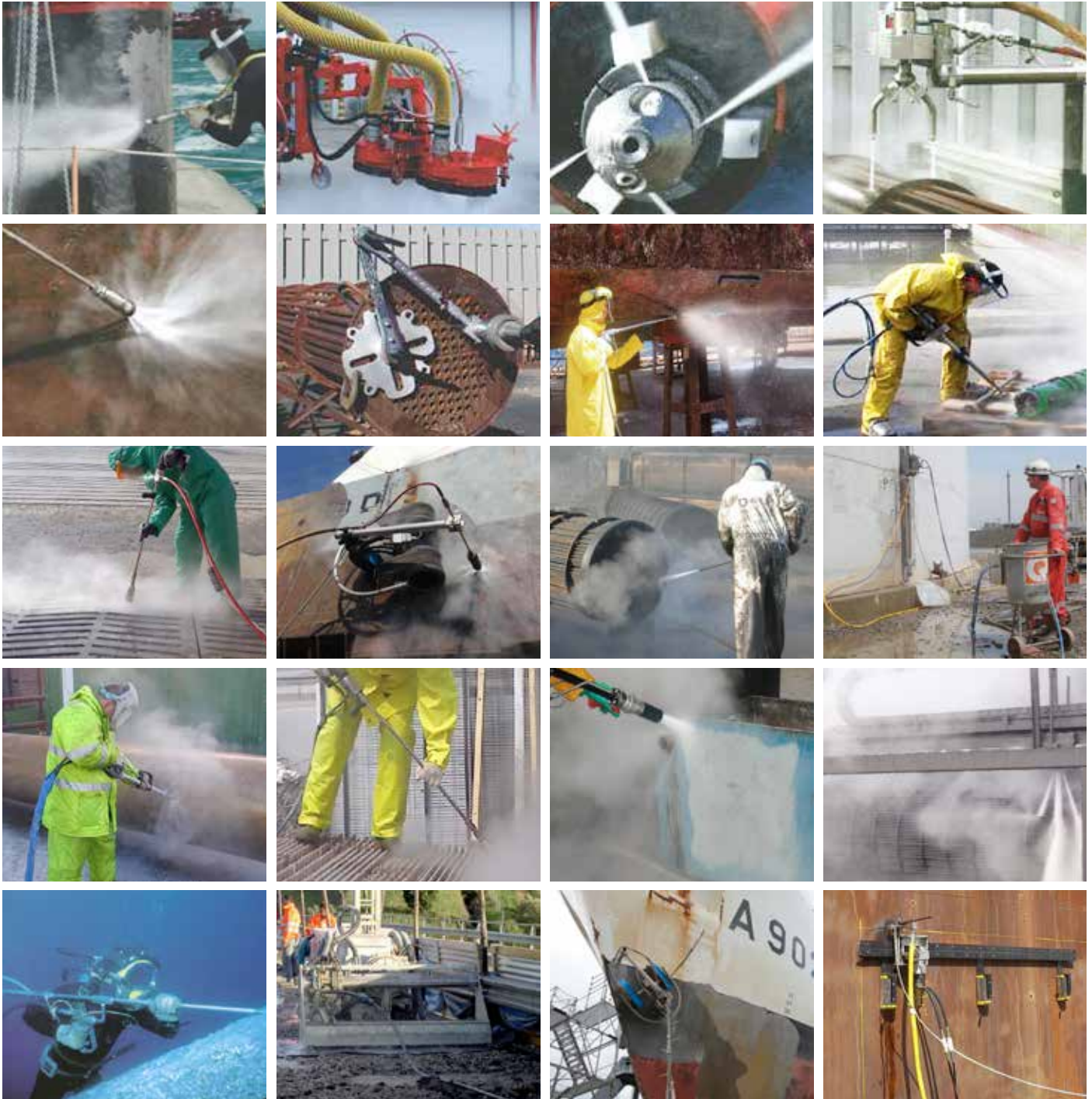
Clearing of blast furnaces  
Cleaning of pipelines  
Cutting of refractories  
Cleaning of cyclone towers



### WATER JET CUTTING


Cold cutting metal plates  
Semi-automatic system  
Maximum operator safety  
Will not change the properties of materials











 With tungsten carbide plunger







 With forced lubrication and heat exchanger







 Vertical assembling







 Horizontal assembling

Also available with internal gear-box at 50 Hz










H-120/2 MAP		 Pump		Motor Engine	Crankshaft		51 kW - 68 HP		59 kW - 80 HP		75 kW - 100 HP		90 kW - 120 HP				
			Ø mm	rpm	rpm	l/min	USgpm	bar	psi	bar	psi	bar	psi	bar	psi	kg	lb
		H-120/2 MAP	45	1800	500	190	50,20	140	2030	170	2465	215	3120	255	3700	400	882
		H-120/2 MAP	50	1800	500	235	62,00	120	1740	135	1960	170	2465	200	2900	400	882
		H-120/2 MAP	55	1800	500	285	75,30	100	1450	110	1595	140	2030	170	2465	400	882
		H-120/2 MAP	60	1800	500	340	89,80	80	1160	90	1305	120	1740	140	2030	400	882












H-100/2 SAP			 Pump		Motor Engine	Crankshaft		50 kW - 67 HP		60 kW - 80 HP		75 kW - 100 HP				
				Ø mm	rpm	rpm	l/min	USgpm	bar	psi	bar	psi	bar	psi	kg	lb
			H-100/2 SAP	18	1800	500	30	7,9	920	13340	1000	14500	1400	20300	400	882
			H-100/2 SAP	20	1800	500	38	10,0	750	10875	850	12325	1000	14500	400	882
			H-100/2 SAP	22	1800	500	46	12,1	610	8845	700	10150	900	13050	400	882
			H-100/2 SAP	24	1800	500	54	14,2	510	7395	600	8700	750	10875	400	882
			H-100/2 SAP	26	1800	500	63	16,6	430	6235	500	7250	650	9425	400	882
			H-100/2 SAP	28	1800	500	74	19,6	400	5800	460	6670	600	8700	400	882
			H-100/2 SAP	30	1800	500	83	21,9	330	4785	370	5365	500	7250	400	882
			H-100/2 SAP	32	1800	500	96	25,3	290	4205	330	4785	420	6090	400	882
H-100/2 SAP	35	1800	500	109	28,8	240	3480	275	3990	330	4785	400	882			
H-100/2 SAP	40	1800	500	150	39,6	180	2610	215	3120	270	3915	400	882			
H-100/2 SAP	45	1800	500	190	50,2	150	2175	170	2465	215	3120	400	882			






H-150/3 SAP	 	 Pump		Motor Engine	Crankshaft		75 kW - 100 HP		90 kW - 120 HP		113 kW - 151 HP				
			Ø mm	rpm	rpm	l/min	USgpm	bar	psi	bar	psi	bar	psi	kg	lb
		H-150/3 SAP	20	1800	500	38	10,0	930	13485	1400	20300	-	-	400	882
		H-150/3 SAP	22	1800	500	46	12,1	880	12760	1000	14500	1400	20300	400	882
		H-150/3 SAP	24	1800	500	54	14,2	750	10875	900	13050	1200	17400	400	882
		H-150/3 SAP	26	1800	500	63	16,6	650	9425	800	11600	1000	14500	400	882
		H-150/3 SAP	28	1800	500	74	19,6	590	8555	700	10150	830	12035	400	882
		H-150/3 SAP	30	1800	500	83	21,9	410	5945	600	8700	750	10875	400	882
		H-150/3 SAP	32	1800	500	96	25,3	420	6090	510	7395	640	9280	400	882
		H-150/3 SAP	35	1800	500	109	28,8	330	4785	430	6235	560	8120	400	882
H-150/3 SAP	40	1800	500	150	39,6	270	3915	330	4785	400	5800	400	882		
H-150/3 SAP	45	1800	500	190	50,2	215	3120	255	3700	320	4640	400	882		









H-200/4 SAP	 	 Pump		Motor Engine	Crankshaft		112 kW - 150 HP		135 kW - 181 HP		150 kW - 201 HP				
		Ø mm	rpm	rpm	l/min	USgpm	bar	psi	bar	psi	bar	psi	kg	lb	
		H-200/4 SAP	20	1800	480	45	11,9	1400	20300	-	-	-	-	500	1103
		H-200/4 SAP	22	1800	480	55	14,5	1200	17400	1400	20300	1470	21315	500	1103
		H-200/4 SAP	24	1800	480	65	17,2	940	13630	1200	17400	1300	18850	500	1103
		H-200/4 SAP	26	1800	480	76	20	820	11890	1030	14935	1200	17400	500	1103
		H-200/4 SAP	28	1800	480	88	23	730	10585	920	13340	1000	14500	500	1103
		H-200/4 SAP	30	1800	480	101	26,7	610	8845	750	10875	800	11600	500	1103
		H-200/4 SAP	32	1800	480	115	30,4	560	8120	650	9425	700	10150	500	1103
		H-200/4 SAP	35	1800	480	138	36,5	450	6525	540	7830	600	8700	500	1103
H-200/4 SAP	40	1800	480	180	47,6	340	4930	400	5800	450	6525	500	1103		
H-200/4 SAP	45	1800	480	228	60,2	270	3915	320	4640	355	5148	500	1103		



















										168 kW - 225 HP		187 kW - 251 HP		225 kW - 302 HP		250 kW - 335 HP	
H-300/4 SAP				Motor Engine	Crankshaft												
			Ø mm	rpm	rpm	l/min	USgpm	bar	psi	bar	psi	bar	psi	bar	psi	kg	lb
		H-300/4 SAP	26	1800	480	76	20	1193	17300	1290	18705	-	-	-	-	700	1544
		H-300/4 SAP	28	1800	480	88	23,25	1030	14935	1150	16675	1470	21315	-	-	700	1544
		H-300/4 SAP	30	1800	480	101	26,70	900	13050	972	14094	1280	18560	1400	20300	700	1544
		H-300/4 SAP	32	1800	480	115	30,40	790	11455	855	12400	1030	14935	1200	17400	700	1544
		H-300/4 SAP	35	1800	480	138	36,50	657	9527	730	10585	860	12470	1000	14500	700	1544
		H-300/4 SAP	40	1800	480	180	47,60	500	7250	560	8120	650	9425	750	10875	700	1544
		H-300/4 SAP	45	1800	480	228	60,20	400	5800	442	6409	530	7685	600	8700	700	1544

H-550/4 SAP			 			Motor Engine	Crankshaft		263 kW - 353 HP		300 kW - 402 HP		377 kW - 505 HP		412 kW - 552 HP				
																			
									bar	psi	bar	psi	bar	psi	bar	psi			
				Pump	Ø mm	rpm	rpm	l/min	USgpm	bar	psi	bar	psi	bar	psi	kg	lb		
				H-550/4 SAP	30	1800	450	100	26,40	1420	20590	1500	21750	-	-	-	-	1500	3307
				H-550/4 SAP	32	1800	450	114	30,10	1250	18125	1150	16675	1500	21750	-	-	1500	3307
				H-550/4 SAP	35	1800	450	136	35,90	1050	15225	1200	17400	1390	20155	1500	21750	1500	3307
				H-550/4 SAP	40	1800	450	178	47,00	800	11600	910	13195	1020	14790	1250	18125	1500	3307
				H-550/4 SAP	45	1800	450	225	59,40	630	9135	720	10440	810	11745	1000	14500	1500	3307
				H-550/4 SAP	50	1800	450	278	73,40	510	7395	580	8410	650	9425	800	11600	1500	3307
				H-550/4 SAP	55	1800	450	336	88,80	420	6090	480	6960	540	7830	660	9570	1500	3307
				H-550/4 SAP	60	1800	450	400	105,7	350	5075	400	5800	450	6525	556	8062	1500	3307

H-100/2 UAP		 Pump		Motor Engine	Crankshaft			75 kW - 100 HP			
			Ø mm	rpm	rpm	l/min	USgpm	bar	psi	kg	lb
		H-100/2 UAP	12	1800	500	12,2	3,22	2800	40000	400	882
		H-100/2 UAP	14	1800	500	16,7	4,40	2500	36000	400	882
		H-100/2 UAP	16	1800	500	22	5,81	2000	30000	400	882
		H-100/2 UAP	18	1800	500	27,5	7,26	1400	20000	400	882
		H-100/2 UAP	20	1800	500	34	9,00	1000	15000	400	882

								113 kW - 151 HP			
H-150/3 UAP	  	 Pump		Motor Engine	Crankshaft						
			Ø mm	rpm	rpm	l/min	USgpm	bar	psi	kg	lb
		H-150/3 UAP	16	1800	500	22	5,81	2800	40000	400	882
		H-150/3 UAP	18	1800	500	27,4	7,25	2200	32000	400	882
		H-150/3 UAP	20	1800	500	34	8.98	1800	26100	400	882

							150 kW - 201 HP				
H-200/4 UAP	  	 Pump		Motor Engine	Crankshaft						
		Ø mm	rpm	rpm	l/min	USgpm	bar	psi	kg	lb	
		H-200/4 UAP	16	1800	480	26	7	2800	40000	500	1103
		H-200/4 UAP	18	1800	480	33	9	2500	36000	500	1103
		H-200/4 UAP	20	1800	480	40	11	2000	30000	500	1103

H-300/4 UAP								210 kW - 282 HP			
	  	 Pump		Motor Engine	Crankshaft						
			Ø mm	rpm	rpm	l/min	USgpm	bar	psi	kg	lb
		H-300/4 UAP	20	1800	480	40.7	10.75	2800	40000	700	1544



# APPLICATIONS

Application	Bar (Psi)
<b>ALLUMINIUM AND STEEL MILLS</b> Hardened bauxite dust on mills, filters, floors, tanks, sumps and sewers; water scale, coke, ore and lime in heat exchangers, flues, boilers, open hearths, furnaces, chutes and hoppers, descaling billets and water hydraulics; mill scale, tight rust and weld slag from vessels, tanks and pipes.	<b>200 - 2.800</b> <b>(3.000 - 40.000)</b>



Application	Bar (Psi)
<b>AUTOMOTIVE</b> Paint from booths, machinery, gratings, conveyers, dollies and skids.	<b>700 - 2.800</b> <b>(10.000 - 40.000)</b>

Application	Bar (Psi)
<b>AVIATION</b> Expansion joints, grease, rubber and hydraulic fluids on airport runways.	<b>700 - 1.400</b> <b>(10.000 - 20.000)</b>

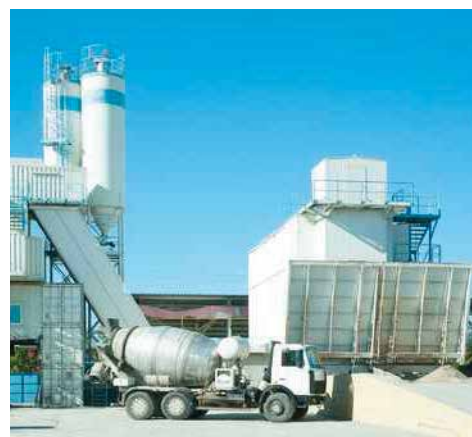


Application	Bar (Psi)
<b>BREWERIES AND DISTILLERIES</b> Yeast, sediments and fermentation residues on vats, pipes and facilities; cleaning of boilers tubes, vats and pipe lines.	<b>200 - 1.500</b> <b>(3.000 - 22.000)</b>



# APPLICATIONS

Application	Bar (Psi)
<b>CEMENT PLANTS</b> external piping, bins, walls, hopper cars and handling equipment; cooler hearths and pre-heater columns, bins, hopper cars, floors, rotary kilns and walls.	<b>200 - 1.000</b> <b>(3.000 - 15.000)</b>




Application	Bar (Psi)
<b>CHEMICAL PROCESSING</b> Chemicals from boiler tubes, tanks, valves, evaporators, heat exchangers, tube bundles, pipes, vessels, reactors and facilities.	<b>350 - 2.800</b> <b>(5.000 - 40.000)</b>


Application	Bar (Psi)
<b>CONSTRUCTION AND RENOVATION</b> Asphalt distributors, mixers, tar cookers and pavers; asphalt, dirt, concrete, mortar, tar, grease, mastic and clay on vehicles, mixer trucks and machinery; canals, lifts, dams and runways; cleaning of natural stone walling, removal of joint materials, coats, damaged or corroded coatings from walls and floors, roughening of concrete and stone surfaces.	<b>200 - 2.800</b> <b>(3.000 - 40.000)</b>





Application	Bar (Psi)
<b>FOOD AND BEVERAGES PROCESSING</b> Fats, oils, dirt and dough, food residues from vats, ovens, mixers, conveyors and facilities; cleaning of cold storage facilities, slaughter-houses, fish and meat butchers, sugar processing plants, bottling plants, food cutting, evaporators, milk tanks, centralised dairy systems, ultra-filtration by reverse osmosis; water jet cutting.	<b>200 - 1.000</b> <b>(3.000 - 15.000)</b>

# APPLICATIONS


Application	Bar (Psi)	
<b>FOUNDRIES</b> Removal of deposits, metal oxidation, ceramic and sand core materials from castings, furnaces and paddles.	<b>100 - 700</b> <b>(1.500 - 10.000)</b>	

Application	Bar (Psi)	
	<b>HYDRODEMOLITION</b> Concrete cement cutting, reclamation and wet sandblasting of tunnels also using special robots; concrete surface hydro-ripping for large infrastructure, dams, viaducts, homes and offices; surface preparation.	<b>1.000 - 2.800</b> <b>(15.000 - 40.000)</b>


Application	Bar (Psi)	
<b>MARINE</b> Removal of marine growth, barnacles, loose paint and rust on ship hulls, docks, ballasts, platforms, condensers, floating drydocks, anchor chains, storage tanks and boilers; underwater cleaning of pipes and drilling platforms, of barnacles and marine growth to 'white metal'; coatings removal prior to repainting; draining of sludge and sediments from cargo holds, ballast tanks and double bottoms; surface preparation.	<b>350 - 2.800</b> <b>(5.000 - 40.000)</b>	


Application	Bar (Psi)	
	<b>MILITARY</b> Airport cleaning, nuclear decontamination, cleaning navy applications, wheel and tracked vehicles, rehabilitation and/or decommissioning of concrete installations, cold cutting of ammunition and armoured tanks in decommissioned sites.	<b>700 - 2.800</b> <b>(10.000 - 40.000)</b>

# APPLICATIONS

Application	Bar (Psi)	
<b>MINING</b> Pre-maintenance cleaning of dumpers, drag lines, underground haulage lines and shafts; aids in the recovery of ore; unclog plant machinery due to deposits of coal, rock dust, mud or oils.	<b>100 - 500 (1.500 - 7.000)</b>	

Application	Bar (Psi)	
<b>MUNICIPALITIES</b> Reservoirs and containers, sewers and drain pipes, sanitation equipment and refuse vehicles; insulators, boiler tubes, vehicles and machinery; surface preparation.	<b>200 - 500 (3.000 - 7.000)</b>	

Application	Bar (Psi)	
<b>OILFIELDS</b> Paraffin and crude residues from platforms and storage tanks; removal of drilling mud and cement from drill pipes; "cold" cutting.	<b>200 - 2.800 (3.000 - 40.000)</b>	

Application	Bar (Psi)	
<b>PETROCHEMICAL PROCESSING AND REFINERIES</b> Algae, carbon, scum, soft polymers and asbestos, wax, paraffin, grease and crude residues, water scale, calcium sulphate, chlorides, hard polymers, iron oxide, coke, hard carbon, PVC and PVA in heat exchangers, re-boilers, tanks, reactors, pipes, cooling towers and facilities; "cold" cutting.	<b>350 - 2.800 (5.000 - 40.000)</b>	



# APPLICATIONS

Application	Bar (Psi)
<b>PHARMACEUTICAL</b> Cleaning of chemicals (liquid and solid) from pipes, kettles, mixers, tubes, heat exchangers, reactors, filters and evaporators.	<b>500 - 2.800</b> <b>(7.000 - 40.000)</b>



Application	Bar (Psi)
<b>PIPES (INDUSTRIAL)</b> Removal of rust and varnish prior to recoating, dope and oil from pipe threads for inspection, drilling mud and debris in various kinds of pipes (internal); manual or fully automatic test units equipped with plunger pumps for filling and test processes.	<b>100 - 700</b> <b>(1.500 - 10.000)</b>

Application	Bar (Psi)
<b>POWER STATIONS</b> Nuclear decontamination of fuel capsules, 'U' tube exchangers, flash from pre-heater tubes, hand tools and equipment.	<b>700 - 2.800</b> <b>(10.000 - 40.000)</b>



Application	Bar (Psi)
<b>PRESSURE TESTING</b> Manual or fully automatic test benches up to 7.000 bar used for pressure testing of valves, tubings, hoses, fittings and complete systems.	<b>400 - 7.000</b> <b>(6.000 - 100.000)</b>



# APPLICATIONS

Application	Bar (Psi)
<b>PULP &amp; PAPER</b> Cleaning of grease, oil, pitch, dirt and wood pulp from heat exchangers, tubes, foundries, press sections of paper machines, suction rolls, stock chests and lines; water jet cutting.	<b>350 - 700 (5.000 - 10.000)</b>



Application	Bar (Psi)
<b>RAILWAYS</b> Gypsum, potash, cement, lime in hopper cars; removing grease, dirt and deposits from trucks, undercarriages and tank cars; removal of leaf mulch from railway lines.	<b>350 - 2.800 (5.000 - 40.000)</b>

Application	Bar (Psi)
<b>RUBBER PROCESSING</b> Latex, SBR and water scale in reactors, storage tanks, heat exchangers, tubing, pipes and facilities.	<b>600 - 2.800 (9.000 - 40.000)</b>

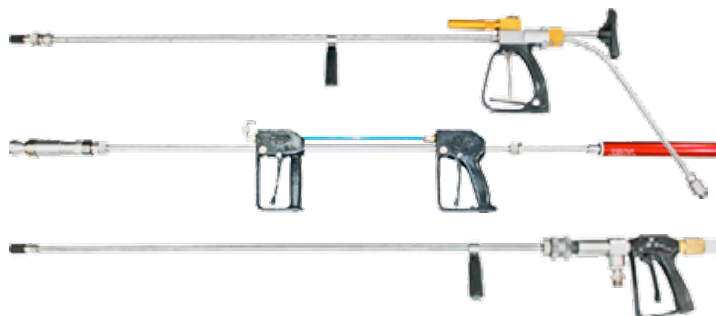


Application	Bar (Psi)
<b>TRAFFIC AND TRANSPORTS</b> Removal of road markings, cleaning of railway carriages and buses, renovation of concrete surfaces; cleaning of grease, vegetation, mud, tar, cement or asphalt on vehicles and machinery; graffiti, stains, tar and mastics on concrete bridges and overpasses, removal of expansion joints and paint strips; unblock culverts on bridges and clean up overspill.	<b>350 - 1.000 (5.000 - 15.000)</b>

## ACCESSORIES

### HIGH PRESSURE GUNS

One- or Two-Trigger guns suitable for surface preparation.



### POWER BOX

3/2" Ultra High Pressure control valve to control the gun's water flow and/or operate with a multi-gun system.



### STRAIGHT NOZZLES AND FANS

Straight nozzles and fans for water jetting with guns or devices up to 2800 bar (40K psi).



### BARRACUDA

Self propelling rotating nozzle for preparation of surfaces up to 2800 bar (40K psi). Compressed air not required.



### MULTI-JET

Multi-purpose surface. Preparation system for floors and hulls. 2800 bar (40K psi).



### HOSES

Rubber or polyamide hoses with attached terminals for pressure up to 3200 bar (46K psi).



### SPINNING NOZZLES

Suitable for cleaning pipes internally. Self-propelled rotation. Pressure up to 1000 bar (15K psi).



### BADGER NOZZLES

Special nozzles for transfer lines ranging from 2" to 20" with up to three 90° elbows. Available with diameter 2" / 4" and 6". Maximum pressure 2800 bar (40K psi).



### TUBOJET

Maximum safety. Waterjetting device. Indicated for cleaning evaporators or pipes in the upright position.





Follow us on



**Comet Spa** Via Dorso, 4 42124 Reggio Emilia Italy phone +39 0522 386111  
fax +39 0522 386286 › [www.comet-spa.com](http://www.comet-spa.com) › [export@comet.re.it](mailto:export@comet.re.it)

