

# High Pressure internal/external manual cleaning pumps

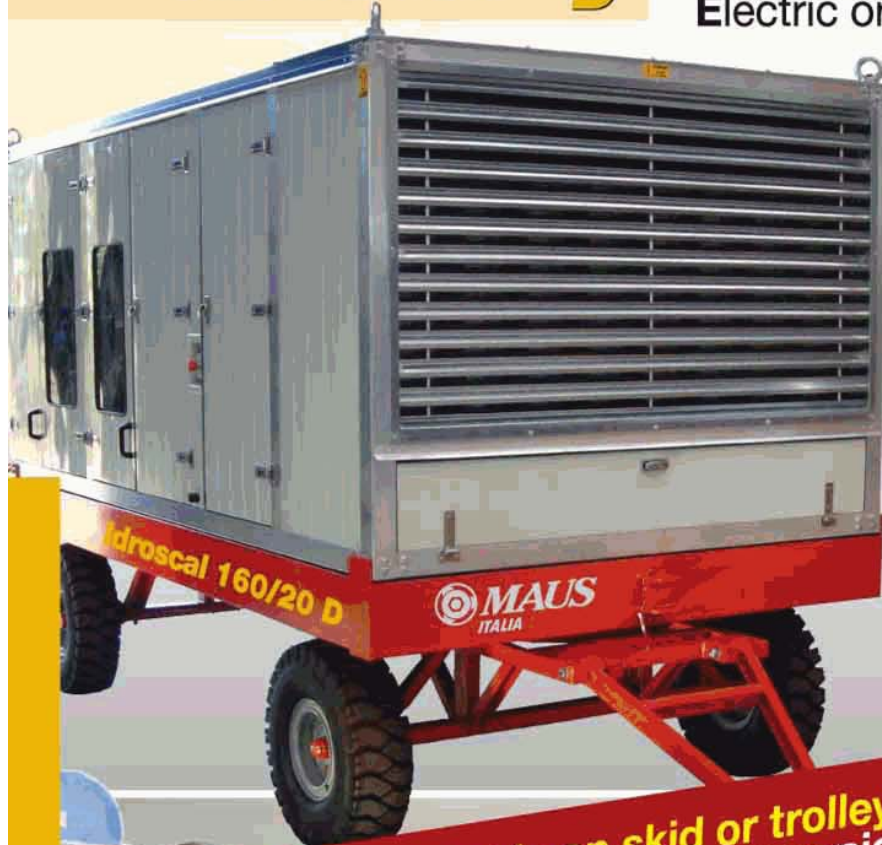
**Idroscal NAVY**

Idroscal pumps can be supplied on request in **NAVY** version with suitable motors for hazardous classified working area (complete with **Atex conformity** declaration)



**Idroscal** <math>\begin{matrix} E \\ D \end{matrix}</math>

Hydrodynamic pump descalers for heat-exchangers, with Electric or Diesel motor.



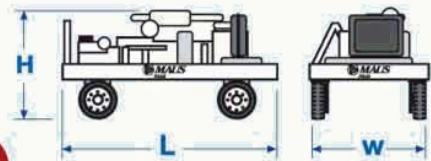
**Hydrodynamic descalers for heat exchangers** are an indispensable supplement to our already wide range of machines for working in the chemical industry, refineries and petrochemical plants.

Our units are supplied completely skid assembled (on-wheels on request) and are including the necessary safety devices and controls (on request) to guarantee the perfect running for a long working life.

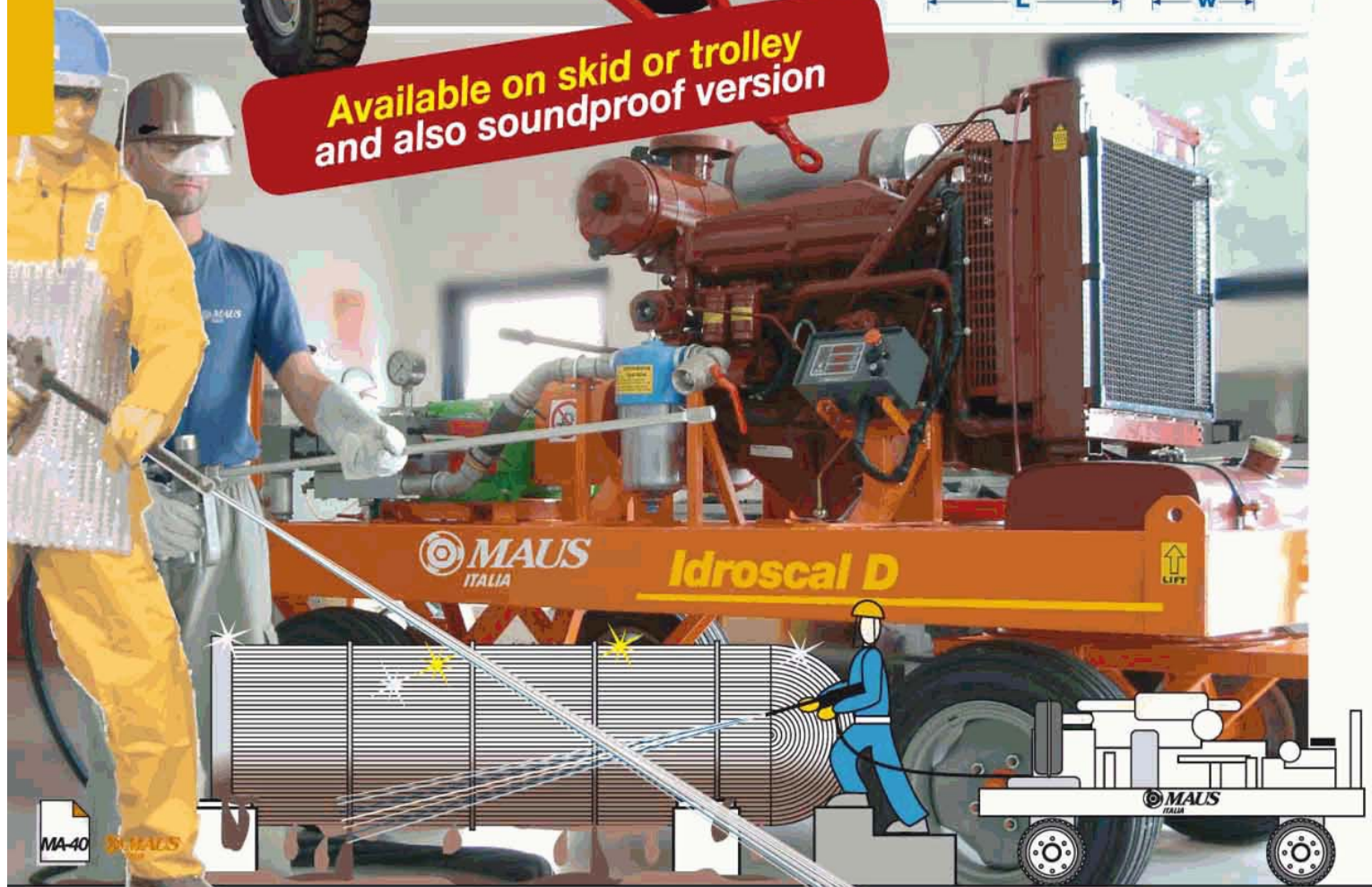
The hydrodynamic units are basically including a reciprocating triplex plunger pump c/w piping and fittings, manometer, mechanical pressure gauge and safety valve; the assembling pumps-driving units is made with flexible joint adequately protected.

**Speed reducer incorporated**

**Stainless steel head**



**Available on skid or trolley  
and also soundproof version**





# Working accessories

## External tube cleaning

## Internal tube cleaning



### H.P. hose



Available in pieces of 20 mt (65.6 Ft). F/F joined 9,5 mm (3/8"), 22x1.5 mm (0.87"x 0.06), 19,0mm (3/4") with 2, 4 and 6 reinforcement braids in steel wire. In accordance with SAE and DIN standards.

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### High pressure gun



With automatic valve and safety block in accordance with German standards. 1000 bar (14500 psi).

### Foot valve



In INOX steel. It's necessary to the operator handling the lances for internal tubes cleaning.

### Nozzle for high pressure gun



Made in INOX steel and in different shapes according to the job and the kind of scaling (Flat or round).

### Flexible lances for tubes



Available size from O.D. 9,5mm (0.37"), up to O.D. 18mm (0.71"). Max. working pressure over 4350 bar (63000 psi).

### Spare parts service



The piston pumps have a high performance and reliability, but need expert maintenance and original spare parts.

### Nozzle for flexible lances



In INOX steel with rear jets. Position and number of jets upon request. Available sizes from O.D. 100mm (3.93").

### Other nozzles

#### Rotating nozzle



Nozzle with frontal rotating jet and protective cover. Max. pressure 500/1000 bar (7250/14500 psi)

#### Revolving nozzle "gir-o-jet"



Self-blocking jets also with sapphire insert and jets in semi-radial position or combi.

#### Nozzle with cutter



Available in various diameters for combining a mechanical effect with the hydrodynamic action.



# High Pressure internal and external manual cleaning pumps



## Idroscal

## Pumps main features and model choice examples

### Pump model selection

The selections of the right pump size is obtained by consulting the below table, where looking for the needed combinations of performance (capacity and pressure) is obtained the pump plungers diameter and the pump power; these to data define the selected pump as per given examples.

Examples

- The model of one pump given 97 Lt/min (25.6 US.Gal/min) capacity with a pressure of 810 Bar (11750 psi) will be:

**Idroscal 160/28**

**E** Electric

**D** Diesel

- Operating manual pistol for external washing requires 54 Lt/min (14.3 US.Gal/min) with a pressure of 785 Bar (11385 psi); the selected model will be:

**Idroscal 90/24**

**E** Electric

**D** Diesel

## For BLC

Pumps



Cod.	mm	45 Kw		90 Kw		110 Kw		130 Kw		160 Kw		350 Kw		400 Kw	
		Lt/min	Bar	Lt/min	Bar	Lt/min	Bar	Lt/min	Bar	Lt/min	Bar	Lt/min	Bar	Lt/min	Bar
14	14	15	1530	18	2300	-	-	-	-	-	-	-	-	-	-
16	16	20	1170	24	2000	-	-	-	-	-	-	-	-	-	-
18	18	25	940	30	1395	35	1630	38	1750	40	2000	-	-	-	-
20	20	31	760	37	1130	43	1305	47	1430	49	1600	-	-	-	-
22	22	37	630	45	930	52	1075	57	1180	59	1300	-	-	-	-
24	24	44	530	54	785	62	905	68	995	71	1100	-	-	-	-
26	26	52	450	63	665	73	770	79	845	83	950	98	1880	98	2000
28	28	60	390	73	575	84	665	92	730	97	810	114	1620	114	1820
30	30	69	340	84	500	97	560	106	635	111	710	131	1440	131	1580
32	32	78	295	96	440	110	505	120	560	126	620	149	1265	149	1400
36	36	99	235	121	345	139	400	152	440	160	490	188	1000	188	1100
40	40	122	190	150	4061	172	325	188	355	197	400	232	810	232	900
45	45	155	150	190	280	218	255	238	280	250	315	294	640	294	705
50	50	191	120	234	180	269	205	294	225	309	255	363	505	363	560
55	55	232	100	283	150	326	170	355	185	374	210	439	420	439	465
60	60	-	-	-	-	387	145	423	155	445	180	523	350	523	390
65	65	-	-	-	-	-	-	-	-	-	-	613	300	613	330
70	70	-	-	-	-	-	-	-	-	-	-	711	260	711	285
75	75	-	-	-	-	-	-	-	-	-	-	816	225	816	250
85	85	-	-	-	-	-	-	-	-	-	-	1049	175	1049	195
95	95	-	-	-	-	-	-	-	-	-	-	1310	140	1310	155

Unit

**Idroscal 45 Kw**  
Skid mounted

**90 Kw**

**110 Kw**

**130 Kw**

**160 Kw**

**350 Kw**

**400 Kw**

	R.p.m.	650	530	435	475	500	440	440
Electric	Dim (LxwxA) mm	2100x3000x1100	2000x1300x1100	2200x1300x1200	2200x1300x1200	2200x1300x1200	-	-
	Peso Kg	700	1000	1400	1400	1700	-	-
Diesel	Dim (LxwxA) mm	2300x1400x1100	3000x1500x1500	3000x1500x1500	3000x1500x1500	3000x1500x1500	4000x2000x2000	4000x2000x2000
	Weight Kg	1100	1400	1500	1600	1500	3500	3500
	Lubrication	Oil bath	Forced circulation	Oil bath	Forced circulation	Forced circulation	Forced circulation	Forced circulation

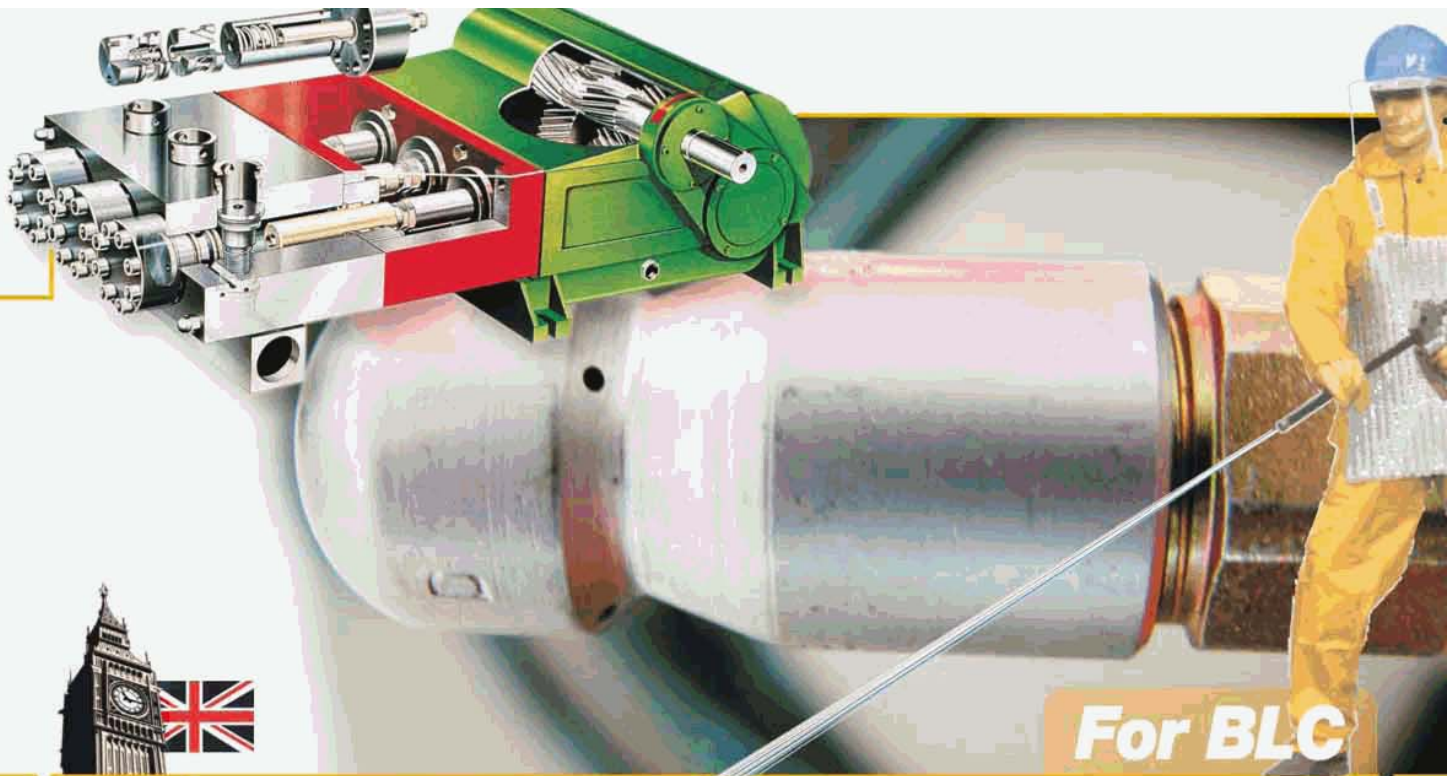


**On request:**

- Higher power pumps
- On trolley with sound proof version
- NAVY Version







**For BLC**

Pumps	Cod.	inches	45 Kw		90 Kw		110 Kw		130 Kw		160 Kw		350 Kw		400 Kw	
			Debit	Pressure	Debit	Pressure	Debit	Pressure	Debit	Pressure	Debit	Pressure	Debit	Pressure	Debit	Pressure
	US gpm	Psi	US gpm	Psi	US gpm	Psi	US gpm	Psi	US gpm	Psi	US gpm	Psi	US gpm	Psi	US gpm	Psi
14	0.55	3.96	22191	4.76	33359	-	-	-	-	-	-	-	-	-	-	-
16	0.63	5.28	16969	6.34	29007	-	-	-	-	-	-	-	-	-	-	-
18	0.71	6.60	13633	7.92	20233	9.25	23641	10.04	25381	10.57	29007	-	-	-	-	-
20	0.79	8.19	11023	9.77	16389	11.36	18927	12.42	20740	12.94	23206	-	-	-	-	-
22	0.87	9.77	9137	11.89	13488	13.74	15592	15.06	17114	15.59	18855	-	-	-	-	-
24	0.94	11.62	7687	14.27	11385	16.38	13126	17.96	14431	18.76	15954	-	-	-	-	-
26	1.02	13.74	6526	16.64	9645	19.28	11168	20.87	12256	21.93	13779	25.89	27267	25.89	29007	-
28	1.10	15.85	5656	19.28	8340	22.19	9645	24.30	10588	25.62	11748	30.12	24496	30.12	26397	-
30	1.18	18.23	4931	22.19	7252	25.62	8412	28.00	9210	29.32	10298	34.61	20885	34.61	22916	-
32	1.26	20.60	4279	25.36	6382	29.06	7324	31.70	8122	33.29	8992	39.37	18347	39.37	20305	-
36	1.42	26.15	3408	31.96	5004	36.72	5802	40.15	6382	42.27	7107	49.67	14504	49.67	15954	-
40	1.57	32.23	2756	39.63	4061	45.44	4714	49.66	5149	52.04	5802	61.29	11748	61.29	13053	-
45	1.77	40.95	2176	50.19	3191	57.59	3698	62.87	4061	66.04	4569	77.67	9282	77.67	10225	-
50	1.97	50.46	1740	61.82	2611	71.06	2973	77.67	3263	81.63	3698	95.89	7324	95.89	8122	-
55	2.17	61.29	1450	74.76	2176	86.12	2466	93.78	2683	98.80	3046	115.97	6091	115.97	6744	-
60	2.36	-	-	-	-	102.23	2103	111.74	2248	117.56	2611	138.16	5076	138.16	5656	-
65	2.56	-	-	-	-	-	-	-	-	-	-	161.94	4351	161.94	4786	-
70	2.76	-	-	-	-	-	-	-	-	-	-	187.83	3771	187.83	4134	-
75	2.95	-	-	-	-	-	-	-	-	-	-	215.56	3263	215.56	3626	-
85	3.35	-	-	-	-	-	-	-	-	-	-	277.12	2538	277.12	2828	-
95	3.74	-	-	-	-	-	-	-	-	-	-	346.06	2030	346.06	2248	-

Unit	Idroscal 45 Kw	90 Kw	110 Kw	130 Kw	160 Kw	350 Kw	400 Kw
	<i>Skid mounted</i>						
	R.p.m.	650	530	435	475	500	440
Electric	Dim (LxwxA) Ft	6.89 x 9.94 x 3.61	6.56 x 4.26 x 3.61	7.22 x 4.26 x 3.94	7.22 x 4.26 x 3.94	7.22 x 4.26 x 3.94	-
	Peso Lb	1540	2200	3080	3080	3740	-
Diesel	Dim (LxwxA) Ft	7.55 x 4.59 x 3.61	9.84 x 4.92 x 4.92	9.84 x 4.92 x 4.92	9.84 x 4.92 x 4.92	9.84 x 4.92 x 4.92	13.12 x 6.56 x 6.56
	Weight Lb	2420	3080	3300	3520	3300	7720
	Lubrication	Oil bath	Forced circulation	Oil bath	Forced circulation	Forced circulation	Forced circulation

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