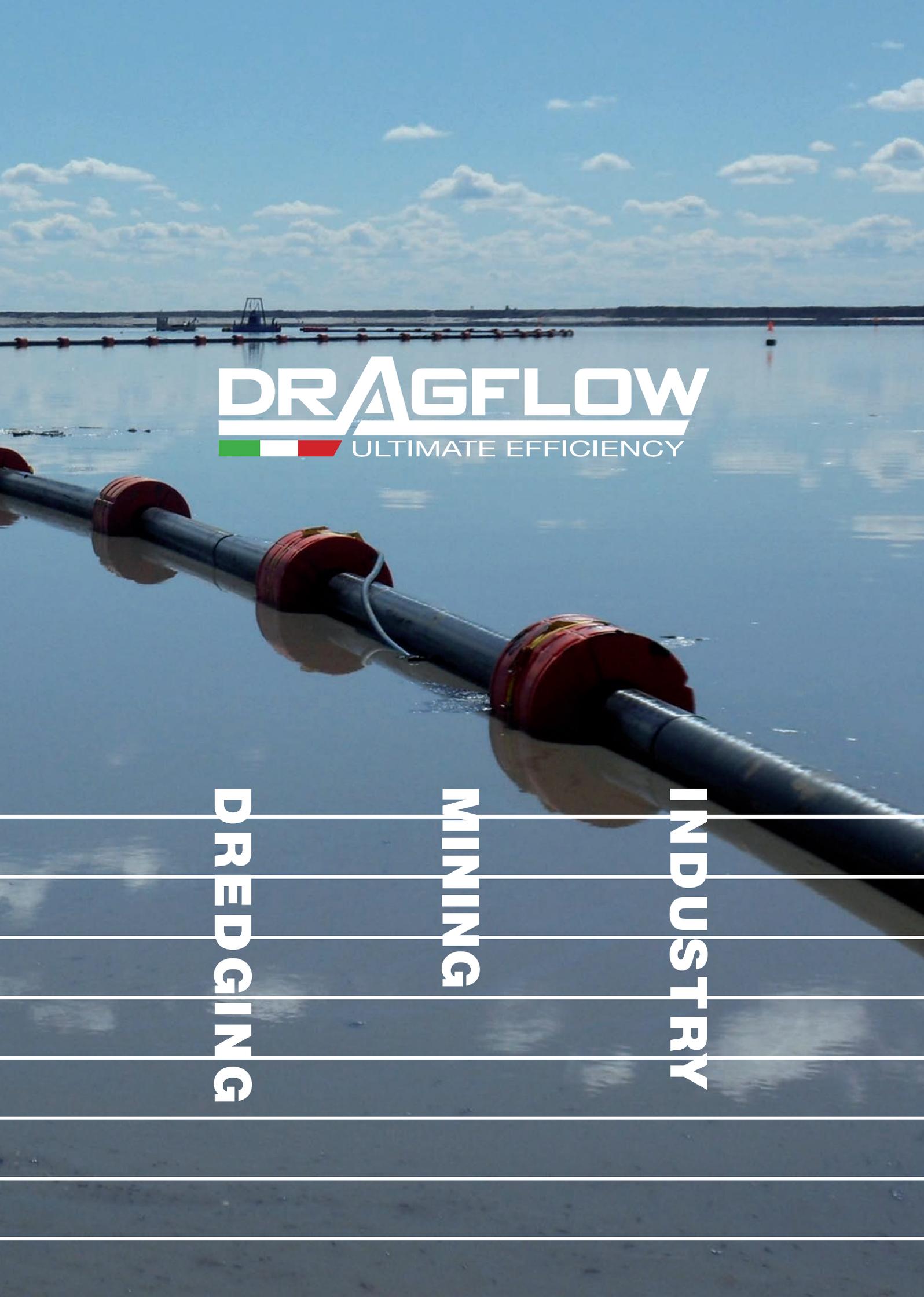




**WE HAVE A DEEP ATTITUDE**





# DRAGFLOW

ULTIMATE EFFICIENCY

**INDUSTRY**

**MINING**

**DREDGING**



### **About Dragflow**

Dragflow was born at the end of the 1980's as a manufacturer of heavy duty submersible agitator pumps specifically designed for handling slurries with a high content of abrasive solids.

Thanks to the passion and brilliance of its team of technicians and engineers, Dragflow has proven to be not just a simple alternative for handling solids with conventional products and systems, but provides solutions for those clients operating in specialized sectors who must face extreme conditions and solve very difficult applications. Many successful cases and customer satisfaction have encouraged us to continue with the research and further development of our products.

WE HAVE A DEEP ATTITUDE



## Technology

As a recognized leader in the production and marketing of submersible dredge pumps, Dragflow has gained over the years remarkable international experience and first rate reputation in the production of dredges, for marine and energy sectors as well as in mining for minerals and other materials.

Thanks to the experience in leading technology projects, Dragflow continuously enhances its ability to deliver high-quality products.

## People

The Dragflow team constantly works not only to find new technological solutions that improve the performance of its products, but also to design specific solutions for contractors and end users, optimizing sustainable operations with energy savings and reducing the environmental impact and overall costs.

## Quality and Service

Dragflow products are made with an exceptional structural quality to achieve low maintenance and service costs as well as long life of components and wear parts.

Dragflow invested in ISO9001 Quality Certification and in its information systems, because it believes in the importance of business process management, not only for improving efficiency but also to provide excellent service to Customers.

With its distribution network around the world, Dragflow is able to give consultancy, service and assistance worldwide.

## Proven Worldwide - Global Sales And Service Presence

Dragflow pumps are being used in the world's harshest environments. Our global sales and service network ensures that we provide the highest level of sales and after-sales service.



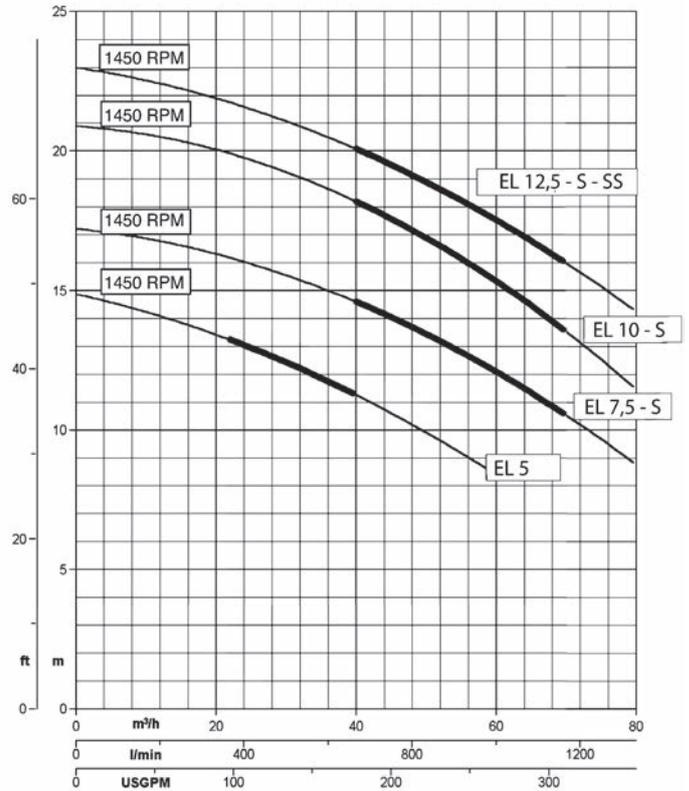
# HEAVY DUTY ELECTRIC PUMPS

Submersible heavy duty agitator pumps.

## Main features:

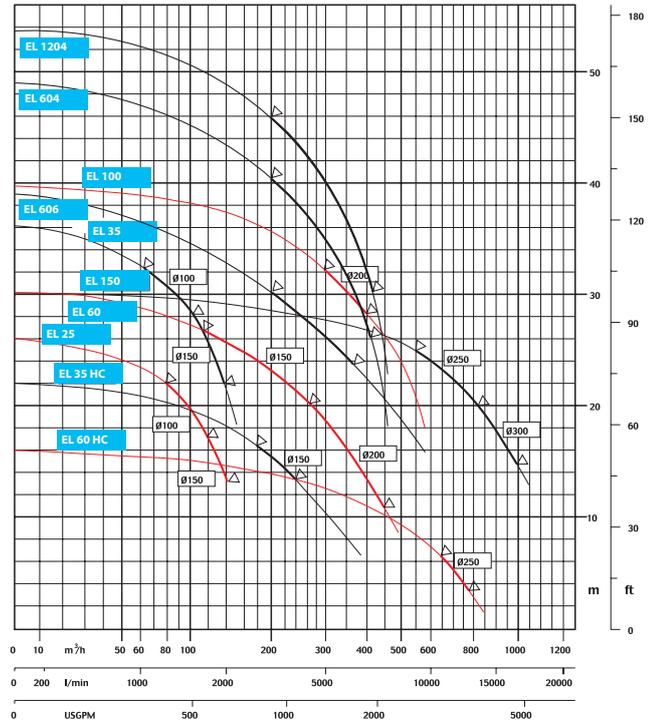
- ▼ All Pumps have standard high efficiency agitator to lift settled solids.
- ▼ High abrasion resistance with high chrome wear parts.
- ▼ Low rotation speed to reduce wear effect.
- ▼ Able to handle up to 70% solids by weight.
- ▼ All electric motors are class H with high service factor.

Electric pumps are available in 50Hz and 60Hz versions.  
Certification CE/UL/CSA.



## HEAVY DUTY EL5 - EL12,5

Pump Model	Delivery		Capacity		Head		Power	R.P.M. (50/60Hz)	Solid Handling		Weight	
	mm	inch	m³/h	gpm	m	ft	HP/kW		mm	inch	kg	Lbs
EL5	80	3	30	132	12	39	5 / 3,7	1450 / 1750	20	0,8	185	410
EL7,5	100	4	60	264	12	39	7,5 / 5,5	1450 / 1750	25	1,0	250	550
EL7,5S	100	4	60	264	12	39	10 / 7,5	1450 / 1750	25	1,0	260	575
EL10	100	4	60	264	15	49	10 / 7,5	1450 / 1750	25	1,0	260	575
EL10S	100	4	60	264	15	49	12,5 / 9	1450 / 1750	25	1,0	270	595
EL12,5	100	4	60	264	19	62	12,5 / 9	1450 / 1750	25	1,0	270	595
EL12,5S	100	4	60	264	19	62	15 / 11	1450 / 1750	25	1,0	270	595



**HEAVY DUTY EL25 - EL60 / EL110 - EL200**

Pump Model	Delivery		Capacity		Head		Power HP/kW	R.P.M. (50/60Hz)	Solid Handling		Weight	
	mm	inch	m³/h	gpm	m	ft			mm	inch	kg	Lbs
EL25A	100	4	100	440	21	69	25 / 18	980 / 1180	35	1,4	680	1500
EL25B	150	6	140	616	17	56	25 / 18	980 / 1180	35	1,4	695	1530
EL35A	100	4	90	396	31	102	35 / 26	980 / 1180	35	1,4	860	1895
EL35B	150	6	140	616	27	89	35 / 26	980 / 1180	35	1,4	870	1920
EL35HC	150	6	210	925	15	49	35 / 26	980 / 1180	35	1,4	750	1655
EL60A	150	6	200	881	26	85	60 / 44	980 / 1180	60	2,4	1005	2215
EL60B	200	8	350	1541	20	66	60 / 44	980 / 1180	60	2,4	1025	2260
EL60HC	250	10	720	3170	5	16	60 / 44	980 / 1180	90	3,5	1300	2865
EL606A	150	6	240	1057	38	125	80 / 60	NA / 1180	60	2,4	1200	2645
EL606B	200	8	420	1849	30	98	80 / 60	NA / 1180	60	2,4	1220	2690
EL604A	150	6	200	881	42	138	100 / 75	1450 / 1750	60	2,4	1070	2360
EL604B	200	8	400	1761	27	89	100 / 75	1450 / 1750	60	2,4	1085	2390
EL1204A	150	6	200	881	47	154	120 / 90	1450 / 1750	60	2,4	1200	2645
EL1204B	200	8	400	1761	37	121	120 / 90	1450 / 1750	60	2,4	1220	2690
EL1204HC	250	10	720	3170	16	52	120 / 90	1450 / NA	90	3,5	1400	3085

Pump Model	Delivery		Capacity		Head		Power HP/kW	R.P.M. (50/60Hz)	Solid Handling		Weight	
	mm	inch	m³/h	gpm	m	ft			mm	inch	kg	Lbs
EL110A	200	8	350	1541	30	98	110 / 80	750 / 900	60	2,4	2750	6065
EL110B	250	10	450	1981	27	89	110 / 80	750 / 900	60	2,4	2800	6175
EL180A	200	8	350	1541	40	131	176 / 130	980 / 1180	60	2,4	2750	6065
EL180B	250	10	450	1981	36	118	176 / 130	980 / 1180	60	2,4	2800	6175
EL200A	200	8	350	1541	48	157	200 / 150	980 / 1180	60	2,4	2900	6395
EL200B	250	10	450	1981	44	144	200 / 150	980 / 1180	60	2,4	2900	6395
EL150A	250	10	720	3170	22	72	150 / 110	600 / 720	120	4,7	4520	9944
EL150B	300	12	900	3963	18	59	150 / 110	600 / 720	120	4,7	4570	10075

# SUPER DUTY AND HIGH HEAD ELECTRIC PUMPS

## SUPER DUTY

Dragflow has developed a unique range of pumps for extreme heavy duty applications. Pumps in this range are designed with oversized motor and exceptional structural quality to work in applications where all other pumps fail.

- ▼ Slurries up to 1,7 ton/m<sup>3</sup>.
- ▼ Low operating RPM to reduce wear effect.
- ▼ Unique lip seal system with front deflector to prevent fine materia to penetrate into seals.
- ▼ Electric motor in class H with high service factor.

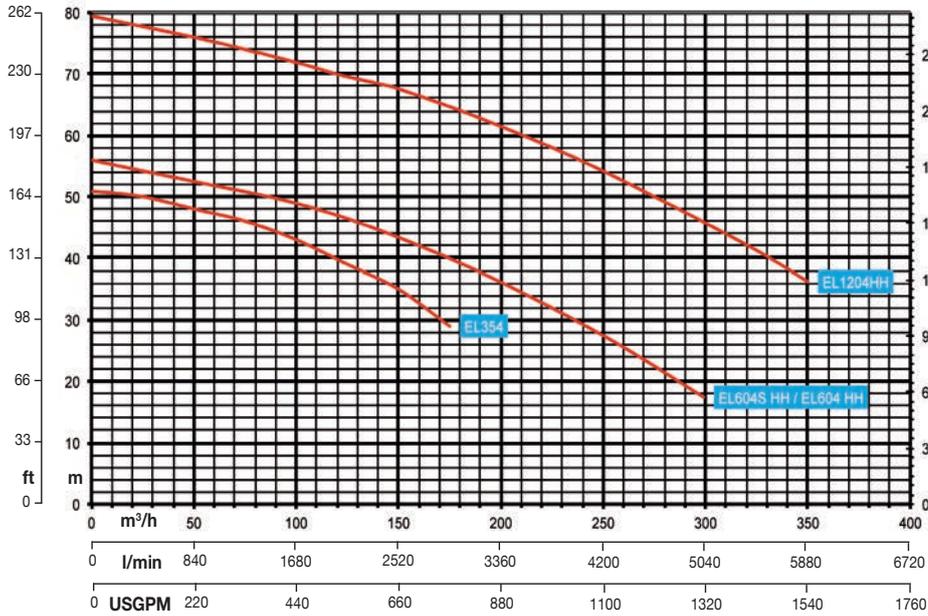


## SUPER DUTY PUMPS

Pump Model	Delivery		Capacity		Head		Power HP/kW	R.P.M. (50/60Hz)	Solid Handling		Weight	
	mm	inch	m <sup>3</sup> /h	gpm	m	ft			mm	inch	kg	Lbs
EL7,5SS	100	4	60	264	12	39	12,5 / 9	1450 / 1750	25	1,0	260	575
EL10SS	100	4	60	264	15	49	15 / 11	1450 / 1750	25	1,0	260	575
EL12,5SS	100	4	60	264	17	56	18 / 13	1450 / 1750	25	1,0	290	640
EL25SA	100	4	100	440	21	69	35 / 26	980 / 1180	35	1,4	960	2115
EL25SB	150	6	140	616	17	56	35 / 26	980 / 1180	35	1,4	970	2140
EL35SA	100	4	90	396	31	102	60 / 44	980 / 1180	35	1,4	950	2095
EL35SB	150	6	140	616	27	89	60 / 44	980 / 1180	35	1,4	960	2115
EL354SA	100	4	60	264	46	151	60 / 44	1450 / 1750	35	1,4	1040	2295
EL354SB	150	6	120	528	39	128	60 / 44	1450 / 1750	35	1,4	1070	2360
EL60SA	150	6	200	881	26	85	80 / 60	980 / 1180	60	2,4	1200	2645
EL60SB	200	8	350	1541	20	66	80 / 60	980 / 1180	60	2,4	1220	2690
EL60SHC	250	10	720	3170	5	16	80 / 60	980 / 1180	90	3,5	1300	2865
EL604SA	150	6	200	881	42	138	120 / 90	1450 / 1750	60	2,4	1200	2645
EL604SB	200	8	400	1761	28	92	120 / 90	1450 / 1750	60	2,4	1220	2690

## HIGH HEAD HEAVY DUTY

High Head pumps are the ultimate innovation in heavy duty pumps. These pumps are designed to handle everything, from dirty water to the heaviest slurries, to a higher level than before.



**SUPER DUTY AND HIGH HEAD ELECTRIC PUMPS**

## HIGH HEAD - HEAVY DUTY PUMPS

Pump Model	Delivery		Capacity		Head		Power HP/kW	R.P.M. (50/60Hz)	Solid Handling		Weight	
	mm	inch	m³/h	gpm	m	ft			mm	inch	kg	Lbs
EL354A	100	4	60	264	46	151	50 / 37	1450 / 1750	35	1,4	750	1655
EL354B	150	6	120	528	39	128	50 / 37	1450 / 1750	35	1,4	765	1685
EL604HH-A	100	4	100	440	49	161	100 / 75	1450 / 1750	35	1,4	1070	2360
EL604HH-B	150	6	200	881	35	115	100 / 75	1450 / 1750	35	1,4	1070	2360
EL604HH-C	200	8	250	1101	27	89	100 / 75	1450 / 1750	35	1,4	1070	2360
EL604S HH-A	100	4	100	440	50	164	120 / 90	1450 / 1750	35	1,4	1085	2390
EL604S HH-B	150	6	200	881	38	125	120 / 90	1450 / 1750	35	1,4	1085	2390
EL604S HH-C	200	8	250	1101	28	92	120 / 90	1450 / 1750	35	1,4	1085	2390
EL1204HH-A	100	4	100	440	72	236	120 / 90	1450 / 1750	35	1,4	1095	2415
EL1204HH-B	150	6	200	881	60	197	120 / 90	1450 / 1750	35	1,4	1095	2415
EL1204HH-C	200	8	300	1321	42	138	120 / 90	1450 / 1750	35	1,4	1095	2415

# ADVANCED CONTROL PANELS

Monitor and protect your equipment in a new dimension.

**Dragflow advanced control panel allows to:**

- ▼ Monitor your pumps and dredges directly from your office.
- ▼ Inspect how pump has been used during rental project.
- ▼ Monitor efficiency of your operators at the end of the work-shift.
- ▼ Save on trips, time and warranty issues.

Dragflow panels have a smart-phone style touch screen with intuitive navigation, storage of main equipment's parameters to inspect working history, wireless modules to allow remote connection to the control panel software and remote control of the equipment.



## ADVANCED MONITORING - ELECTRIC CONTROL PANEL

Remote monitoring of working paraments - Storage of parametrs history

Model	Power kW - (HP)	Type	Current (A)
DCP18	18 - (25)	Reactor/Soft Start	5 - 40
DCP26	26 - (35)	Reactor/Soft Start	5 - 60
DCP37	37 - (50)	Reactor/Soft Start	20 - 80
DCP44	44 - (60)	Soft Start	40 - 90
DCP60	60 - (80)	Soft Start	50 - 130
DCP75	75 - (100)	Soft Start	70 - 150
DCP90	90 - (120)	Soft Start	95 - 196
DCP110	110 - (150)	Soft Start	105 - 231

**Features for Basic Version**

- Reactor Start and Soft Start Control Panel.
- Best in Class Electric and Electronic Components.
- Ammeter and Voltmeter.
- Input: 380V-50Hz or 460-575V-60Hz.
- Designed, built and tested by Dragflow.
- High Quality Enclosure or Stainless Steel Enclosure on demand.
- Emergency stop button.
- All panels are CE certified. UL/CSA certified control panel on demand.

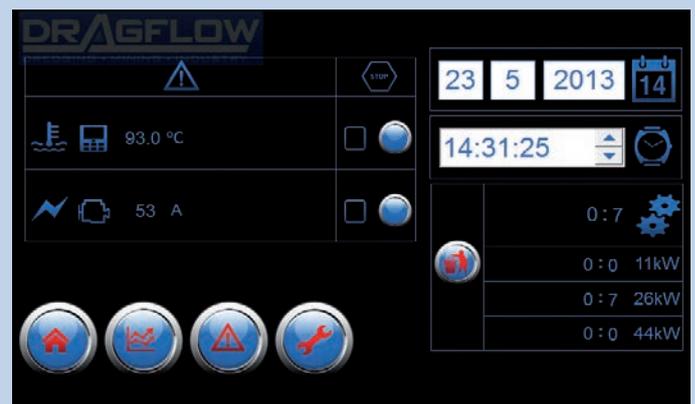
**Plus Version**

- High-performance internal touchscreen HMI's.
- Display 4,3" TFT 16:9 for setting and immediate parameters inspection.
- Storage of pump's working parameter on USB memory (Voltage, Current, Temperature).
- Excel Data Analysis on working parameters history.

**Full-Control Version**

- High-performance touchscreen HMI's - Ideal for marine and mining applications.
- Display 7" TFT 16:9 for setting and immediate parameters inspection.
- USB and SD storage of working parameters.
- Excel data analysis to inspect equipment working condition and history.
- Worldwide 3G/3G+ networks and Ethernet connection for real-time remote monitoring and control.
- Full Internet access to machine parameters and history.

**Advanced control Panel are available also for Dredge and Power Pack control and monitoring.**

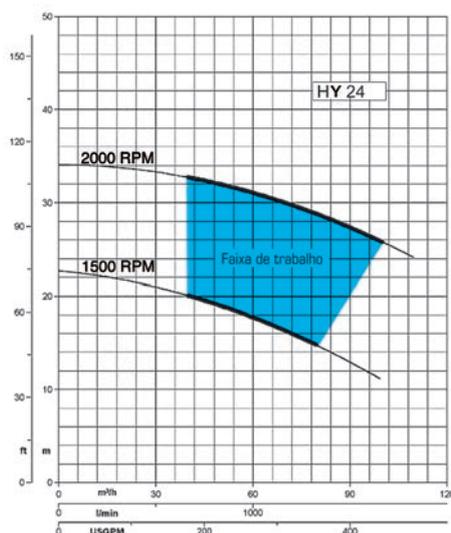


# HYDRAULIC DREDGE PUMPS

Submersible heavy duty agitator pumps. Hydraulically driven with variable RPM.

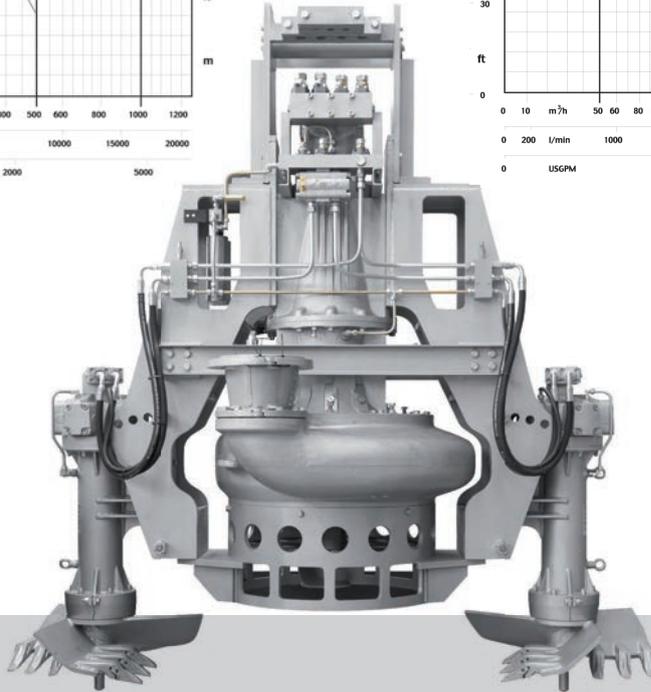
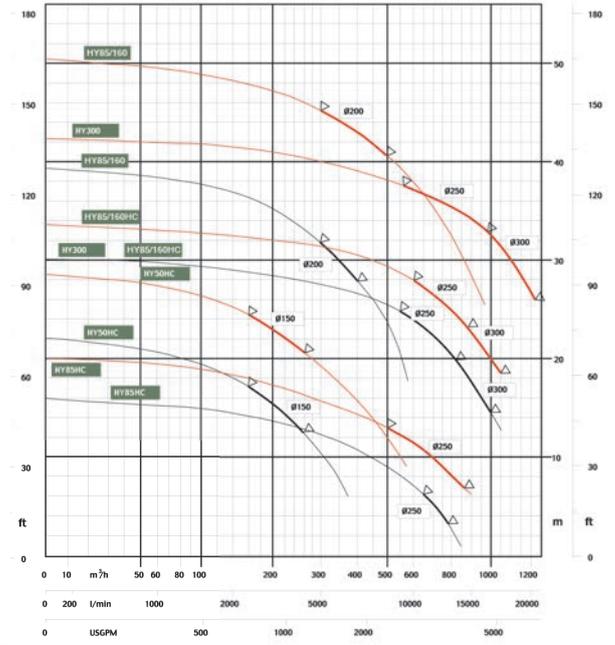
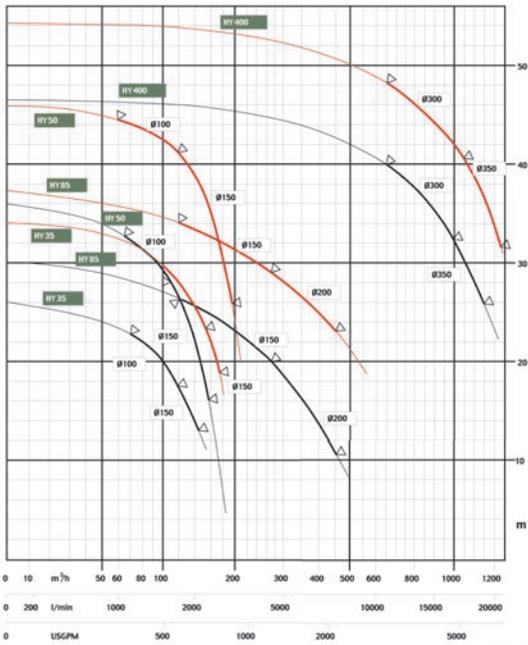
## Main features:

- ▼ All Pumps have standard high efficiency agitator to lift settled solids.
- ▼ High abrasion resistance with high chrome wear parts.
- ▼ Low rotation speed to reduce wear effect.
- ▼ Able to handle up to 70% solids by weight.
- ▼ Easy installation on the boom of hydraulic excavators.



## HEAVY DUTY - HY24 - HY85

Pump Model	Delivery		Capacity		Head		HP/kW		R.P.M.	Solid Handling		Weight	
	mm	inch	m³/h	gpm	m	ft	HP	kW		mm	inch	kg	Lbs
HY24	100	4	80	352	37	121	32	24	2000	25	1,0	200	440
HY35A	100	4	120	528	30	98	45	33	1180	35	1,4	500	1100
HY35B	150	6	170	749	24	79	45	33	1180	35	1,4	510	1125
HY50A	100	4	110	484	44	144	60	45	1180	35	1,4	600	1325
HY50B	150	6	170	749	38	125	60	45	1180	35	1,4	610	1345
HY50HC	150	6	250	1101	22	72	60	45	1180	60	2,4	700	1545
HY50/108A	100	4	100	440	70	230	110	80	1450	35	1,4	600	1325
HY50/108B	150	6	200	881	58	190	110	80	1450	35	1,4	620	1365
HY85A	150	6	240	1057	37	121	90	65	1180	60	2,4	700	1545
HY85B	200	8	360	1585	33	108	90	65	1180	60	2,4	730	1610
HY85HC	250	10	620	2730	16	52	90	65	1180	90	3,5	1030	2270
HY85/160A	200	8	250	1101	56	184	165	120	1450	60	2,4	820	1810
HY85/160B	250	10	460	2025	48	157	165	120	1450	60	2,4	840	1850
HY85/160HC	250/300	10/12	650	2862	27,5	90	165	120	1450	90	3,5	1100	2425



**HEAVY DUTY - HY300 - HY400**

Pump Model	Delivery		Capacity		Head		HP/kW		R.P.M.	Solid Handling		Weight	
	mm	inch	m³/h	gpm	m	ft	HP	kW		mm	inch	kg	Lbs
HY300A	250	10	900	3963	34	112	292	214	750	120	4,7	3500	7715
HY300B	300	12	1200	5284	26	85	292	214	750	120	4,7	3550	7825
HY400A	300	12	1020	4491	44	144	400	295	850	120	4,7	3550	7825
HY400B	350	14	1150	5063	41	135	400	295	850	120	4,7	3600	7935
HY400C	400	16	1275	5614	36	118	400	295	850	120	4,7	3600	7935

# SIDE CUTTERS, WATER JET RING AND CUTTER HEAD

## SIDE CUTTERS

### Hydraulic

Model	Power (kW/HP)	Speed (RPM)	oil flow (l/min)	Pressure (bar)
EXHY20	15/20	50	35	250
EXHY20S	25/34	50	60	250
EXHY35	25/34	50	60	250

### Electric

Model	Power (kW/HP)	Speed (RPM)	Voltage/Frequency (V/Hz)	Amperage
EXEL20	9/12,5	25	400-50/460-60	18,8-16,4

## CUTTER HEAD

Model	Power (kW/HP)	Speed (RPM)	oil flow (l/min)	Pressure (bar)
DTM85	17/23	30	40	250
DTM400	52/71	50	125	250



Hydraulic, Electric  
Side Cutter



Water jet



Cutter head



**Mechanical seal.** Dragflow standard sealing system is its superb lip seals combination. A double silicon carbide mechanical seal in combination with a front deflector is available as an option for very abrasive applications.

**Cooling Jacket.** Dragflow pumps from 3,7 to 13 kW come with top discharge that creates a natural cooling jacket for the pump. This allows the pump to work even if not completely submerged. An external cooling jacket can be available also for pumps bigger than 18,5 kW and up to 150 kW thus allowing all the range to work also in semi-submerged conditions.

**Acid application package.** In cases of high or low pH pump strainer and lifting plates can be supplied in stainless steel (316SS). This choice together with Teflon layers in the seal zone makes Dragflow pumps suitable for environments with pH from 2 to 10.

**Automatic greasing system.** Pumps installed in semifixed position, or in a “not easy-to-reach” installation, can be equipped with an automatic greasing system that provides fresh grease to the seals on a regular basis. This operation not only increases the overall sealing system life but also allows the operators to dramatically reduce maintenance and checks on the pump.

**Extra coating and Hardened Casing.** The quality and type of casting used in Dragflow pumps are designed to face the most difficult and abrasive applications. For some specific applications an extra hardened coating layer can be applied inside the pump casing or pump can be supplied with an hardened casing to ensure extreme long life to this wear part.

**Lower Membrane protection.** Often the bottom of mine ponds is covered with a water-proof plastic lining. Action of the pump during dredging operation could damage this lining. With Dragflow you have the option to add a protective ring to the pump strainer in order to prevent any damage.

**Weed cutter-knife.** When the slurry is covered by a layer of vegetation, grass or seaweed Dragflow cutter-knife, together with a modified strainer, will help the pump to perform the task without clogging.

**Anti turbidity bell.** The sea sediments can be polluted by metals, hydrocarbons, bacteria, chemical substances which in most cases are toxic, resilient and accumulate as debris. A digging operation without turbidity limitation of the surrounding waters could cause serious damage to the marine ecosystem. This problem has been solved by Dragflow through the addition of a bell to capture the sediments and prevent water turbidity.

**Sensors.** Temperature sensor, embedded in the motor, and Moisture sensor, in the oil chamber, are available options to protect the pump in the most demanding application.

**Pumps frames.** Dragflow pumps are used in the most diversified industrial sectors. Custom frames can be supplied to for specific application such as high depth project, piling project or bentonite slurry wall.



## PUMP OPTIONS

- Double mechanical seal
- Cooling Jacket -cooling ring
- Acid slurry package
- Automatic Greasing system
- Rubber and Ceramic coating
- Lower membrane protection
- Cutter-knife for vegetation/organics
- Horizontal Auger
- Pressure compensator for high working depth

- Anty turbidity bell
- Temperature Control
- Moisture sensor
- Frame for Excavators
- Flexible heavy duty hoses
- HDPE Pipes
- Frames for high depth projects
- Frames for piling projects
- Hardened Casing

# POWER PACK AND BOOSTERS

Hydraulic power pack are specifically designed for use with Dragflow equipment. The power packs are based on diesel engines, that complies with latest emission requirements, or electric motors and are built with high quality components. The hydraulic system is based on close loop design therefore maximum oil flow can be controlled without varying diesel engine/ electric motor speed.

**Every Power Pack can be adapted to better fit customer needs with:**

- ▼ Additional oil source to drive ancillary equipments (such a winches or water pumps).
- ▼ Wireless remote controls and advanced control panel for power-pack monitoring from remote locations.
- ▼ Operator cabin and sound proof enclosure for more comfort.
- ▼ Container style design.

All Power Packs are manufactured and tested by Dragflow and are supplied with training and supervision of an experienced technician.



## VARIABLE FLOW HYDRAULIC POWER PACKS

Model	Power	kW - HP	Max Oil Flow		Second Pump Max Oil Flow		Max Operating Pressure (bar - psi)
			l/min	gpm	l/min	gpm	
DP/EP24	Diesel / Electric	30 - 40	40	10,5	On demand	On demand	300 - 4350
DP/EP35	Diesel / Electric	33 - 45	65	17	On demand	On demand	300 - 4350
DP/EP50	Diesel / Electric	66 - 89	90	24	On demand	On demand	300 - 4350
DP/EP85	Diesel / Electric	93 - 126	130	34,5	On demand	On demand	300 - 4350
DP/EP85E22	Diesel / Electric	129 - 175	130	34,5	70	18,5	300 - 4350
DP/EP85/160	Diesel / Electric	175 - 238	240	63,5	On demand	On demand	300 - 4350
DP/EP85/160E22	Diesel / Electric	260 - 353	240	63,5	70	18,5	300 - 4350
DP/EP300	Diesel / Electric	315 - 428	375	99	On demand	On demand	350 - 5000
DP/EP300E23	Diesel / Electric	375 - 510	375	99	110	29	350 - 5000
DP/EP400	Diesel / Electric	375 - 510	610	161	On demand	On demand	350 - 5000
DP/EP400E23	Diesel / Electric	470 - 638	610	161	110	29	350 - 5000

### Main features

IVECO or CATERPILLER Diesel Engine (other brand available on request).  
 Hydraulic circuit based on Oil Piston Pumps.  
 CE certified (UL and CSA Certification available on demand).  
 No risk of oil leakage through leakproof closed bottom plate.  
 Separate oil circuit for pump and cutters.  
 4 Top lifting points.

### Options

Sound Proof Canpoy.  
 Operator Cabin (Plung & Play Dredge System for floating platform).  
 Container Style for Off-Shore condition.  
 Wireless remote control.  
 Remote monitoring of power pack working parameters.  
 Possibility of drive hoist, winches and auxiliariy equipment.

Dragflow heavy duty booster pump stations are designed and built with high efficient Dragflow pumps and can work in a wide range of dredging conditions with minimum risk of cavitation. Booster station adds extra pressure to the pumping system so the dredge can maintain optimum production at longer pipeline distances.

Boosters are available with either diesel or electric drives and are typically skid mounted for land-based applications but floating booster are also available on demand.



## BOOSTER

Model	Inlet		Outlet		Pump	Power	kW - HP	Wear Parts	Distance	Capacity	
	mm	inch	mm	inch						m <sup>3</sup> /h	gpm
BOHY50/108	150	6	150	6	Dragflow	Diesel / Electric	93 -126	High Chrome	Up to 1,5 km	Up to 180	Up to 790
BOHY85/160	250	10	250	10	Dragflow	Diesel / Electric	175 - 238	High Chrome	Up to 1,5 km	Up to 500	Up to 2200
BOHY300	250	10	300	12	Dragflow	Diesel / Electric	260 - 353	High Chrome	Up to 1,5 km	Up to 1000	Up to 4400

### Main features

- IVECO or CATERPILLER Diesel Engine (other brand available on request).
- CE certified (UL and CSA Certification on demand).
- No risk of oil leakage through leakproof closed bottom plate.
- Self detection of incoming flow.
- Skid mounted or floating.

### Options

- Sound Proof Canpoy.
- Wireless remote control.
- Remote monitoring of booster working parameters.

# DREDGES

**EASY AND QUICK ASSEMBLY:** Dragflow dredges are specifically designed and manufactured for easy assembly, both on the ground or in the water, and in arduous conditions.

**EASY TRANSPORTATION:** Modular hulls permit easy transport with trucks or containers.

**EASY TO HANDLE:** our dredges are designed to be handled by an operator with a minimum experience of naval equipment.

**HIGH WORKING DEPTH WITH SMALL FLOATING DIMENSIONS:** Depth up to 100m.



## DRH - DREDGE WITH STEEL CABLE

Model	Pump Type	Cutter Head	High Pressure Water System	Delivery		Nominal Capacity	
				mm	inch	m <sup>3</sup> /h	gpm
DRH085E22	Dragflow 8"-10" High Chrome	2 Cutters	Available	200 - 250	8 - 10	350 - 800	1540 - 3520
DRH085/160E22	Dragflow 10" High Chrome	2 Cutters	Available	250	10	450 - 800	1980 - 3520
DRH300E23	Dragflow 12" High Chrome	2 Cutters	Available	300	12	900 - 1100	3960 - 4850
DRH400E23	Dragflow 14"-16" High Chrome	2 Cutters	Available	350	14	1000 - 1300	4400 - 5725

## DRT - DREDGE WITH TELESCOPIC BOOM

Model	Pump Type	Cutter Head	High Pressure Water System	Delivery		Nominal Capacity	
				mm	inch	m <sup>3</sup> /h	gpm
DRT085E22	Dragflow 8"-10" High Chrome	2 Cutters	Available	200 - 250	8 - 10	350 - 800	1540 - 3520
DRT085/160E22	Dragflow 10" High Chrome	2 Cutters	Available	250	10	450 - 800	1980 - 3520
DRT300E23	Dragflow 12" High Chrome	2 Cutters	Available	300	12	900 - 1100	3960 - 4850
DRT400E23	Dragflow 14"-16" High Chrome	2 Cutters	Available	350	14	1000 - 1300	4400 - 5725

## DRS - DREDGE WITH LADDER

Model	Pump Type	Cutter Head	High Pressure Water System	Delivery		Nominal Capacity	
				mm	inch	m <sup>3</sup> /h	gpm
DRS085E22	Dragflow 8"-10" High Chrome	2 Cutters	Available	200 - 250	8 - 10	350 - 800	1540 - 3520
DRS085/160E22	Dragflow 10" High Chrome	2 Cutters	Available	250	10	450 - 800	1980 - 3520
DRS300E23	Dragflow 12" High Chrome	2 Cutters	Available	300	12	900 - 1100	3960 - 4850
DRS400E23	Dragflow 14"-16" High Chrome	2 Cutters	Available	350	14	1000 - 1300	4400 - 5725

### Main features

Portable dredges with modular design - Easy to use.

High durability and easy maintenance.

High working depth with no additional costs.

High Efficiency - higher solid content and up to 30% less fuel consumption than a similar Cutter Suction Dredge.

Great possibility to customize and to integrate dredging system with existing equipment.

**LIMITED DRAUGHT:** our dredges have a limited draught, also suitable to work in shallow water conditions.

**NAVAL REGISTER CERTIFICATIONS:** our dredges are built according to the RINA regulations.

**SHORT DELIVERY TIME:** the standard delivery time is from 10 to 14 weeks.

**HIGH PRODUCTIVITY:** Dragflow technology allows high solid concentration thus making Dragflow dredge one with the lowest operating cost on the market.



Max distance		Working depth		Total Power	Propulsion (optional)	Transportation
m	ft	m	ft			
500	1640	Up to 100m	Up to 330 ft	130 kW	Self-Propelled	3 Containers 40'
1000	3281	Up to 100m	Up to 330 ft	230 kW	Self-Propelled	3 Containers 40'
1200	3937	Up to 100m	Up to 330 ft	310 kW	Self-Propelled	5 Containers 40'
1500	4921	Up to 100m	Up to 330 ft	470 kW	Self-Propelled	5 Containers 40'

Max distance		Working depth		Total Power	Propulsion (optional)	Transportation
m	ft	m	ft			
500	1640	Up to 10m	Up to 30 ft	130 kW	Self-Propelled	3 Containers 40'
1000	3281	Up to 10m	Up to 30 ft	230 kW	Self-Propelled	3 Containers 40'
1200	3937	Up to 10m	Up to 30 ft	310 kW	Self-Propelled	6 Containers 40'
1500	4921	Up to 10m	Up to 30 ft	470 kW	Self-Propelled	6 Containers 40'

Max distance		Working depth		Total Power	Propulsion (optional)	Transportation
m	ft	m	ft			
500	1640	Up to 10m	Up to 30 ft	130 kW	Self-Propelled	3 Containers 40'
1000	3281	Up to 10m	Up to 30 ft	230 kW	Self-Propelled	3 Containers 40'
1200	3937	Up to 10m	Up to 30 ft	310 kW	Self-Propelled	6 Containers 40'
1500	4921	Up to 10m	Up to 30 ft	470 kW	Self-Propelled	6 Containers 40'

**Options**

- Azimuthal Stern Thruster.
- Longer winches.
- Dredging monitoring system with integrated GPS.
- Stabilizes piles.
- Rear kicking spud for dredge positioning and advancement.

- Remote monitoring of dredge working parameters and operational efficiency.
- Training for operators.

# REMOTE CONTROLLED DREDGES

Remote controlled dredge is the ultimate technology in the dredging sector. Cleaning ponds or extract sand and gravel from a basin has never been so easy and efficient: the new electric dredge is designed to fit in 20 feet container, it is ready to use and allows to reach many objectives: it requires less man power that means lower costs and it's safer, because no humans are needed onto the barge.

Instant view of working depth and pump load on the remote control unit allow an excellent management of dredging activities. Dragflow's innovative automated dredge is perfect for high solid content, up to 70% concentration by weight, and it guarantees



## DRP - ELECTRIC REMOTE CONTROLLED CABLE DREDGES

Model	Pump Type	Pumps	High Pressure Water System	Delivery		Max Capacity	
				mm	inch	m³/h	gpm
DRP18	Dragflow 3" - 4" High Chrome	EL5 - EL12,5SS	Not Available	80 - 100	3 - 4	80	350
DRP60	Dragflow 4" - 6" High Chrome	EL25 - EL35 - EL60	Available	100 - 150	4 - 6	180	795
DRP120	Dragflow 6" - 8" High Chrome	EL604 - EL1204	Available	150 - 200	6 - 8	450	1980
DRP150	Dragflow 10" - 12" High Chrome	EL150	Available	250 - 300	10 - 12	1000	4405

## DRPL - ELECTRIC REMOTE CONTROLLED LADDER DREDGES

Model	Pump Type	Pumps	High Pressure Water System	Delivery		Max Capacity	
				mm	inch	m³/h	gpm
DRPL60	Dragflow 4" - 6" High Chrome	EL25 - EL35 - EL60	Available	100 - 150	4 - 6	180	795
DRPL120	Dragflow 6" - 8" High Chrome	EL604 - EL1204	Available	150 - 200	6 - 8	450	1980

### Main features

Wireless remote control  
Safer - No operators on board

Display with working depth and pump amperage  
Ready to go and easy to use

### Options

Full Stainless Steel hull AISI 304 or AISI 316  
Extended winches to 75 and 100m

## DRPH - HYDRAULIC REMOTE CONTROLLED CABLE DREDGES

Model	Pump Type	Pumps	High Pressure Water System	Delivery		Max Capacity	
				mm	inch	m³/h	gpm
DRPH50	Dragflow 4" - 6" High Chrome	HY50 - HY50/108	Available	100 - 150	4 - 6	220	970
DRPH85	Dragflow 4" - 6" High Chrome	HY85	Available	100 - 150	4 - 6	400	1760
DRPH85/160	Dragflow 8" - 10" High Chrome	HY85/160	Available	150 - 200	8 - 10	600	2640

## DRPHL - HYDRAULIC REMOTE CONTROLLED LADDER DREDGES

Model	Pump Type	Pumps	High Pressure Water System	Delivery		Max Capacity	
				mm	inch	m³/h	gpm
DRPHL50	Dragflow 4" - 6" High Chrome	HY50 - HY50/108	Available	100 - 150	4 - 6	220	970
DRPHL85	Dragflow 4" - 6" High Chrome	HY85	Available	100 - 150	4 - 6	400	1760
DRPHL85/160	Dragflow 8" - 10" High Chrome	HY85/160	Available	150 - 200	8 - 10	600	2640

### Main features

Wireless remote control  
Screen with working depth and pressure

Ready to go and easy to use  
Safer - No operators on board

### Options

Full Stainless steel hull AISI 304 or AISI 316  
Extended winches to 75 and 100m

**REMOTE  
CONTROLLED  
DREDGES**

a production up to 1000m<sup>3</sup> per hour. The new system can reach a max discharge distance of 1km from the dredging point and it's designed for a working depth up to 50 meters below the waterline, with a power from 5 to 150 HP.

Dragflow gives also the possibility to integrate the product with GPS, in order to keep track of working activities and with advanced control panel to register the history of dredge pump operations.



Max distance		Max Working depth		Max Power	Moving and Positioning	Transportation
m	ft	m	ft	kW - (HP)		
400	1310	Up to 50m	Up to 160 ft	13 - (18)	2 winches	1 Container 20'
600	1970	Up to 50m	Up to 160 ft	44 - (60)	2/4 winches	1 Container 40'
1000	3280	Up to 50m	Up to 160 ft	90 - (120)	2/4 winches	1 Container 40'
1000	3280	Up to 50m	Up to 160 ft	110 - (150)	2/4 winches	2 Containers 40'

Max distance		Max Working depth		Max Power	Moving and Positioning	Transportation
m	ft	m	ft	kW - (HP)		
600	1970	Up to 10m	Up to 33 ft	44 - (60)	2/4 winches	2 Containers 40'
1000	3280	Up to 10m	Up to 33 ft	90 - (120)	2/4 winches	2 Containers 40'

Jet Ring System  
Protection for lower membrane

Truck/Trailer Easy Transport Design  
Dredging monitoring system with integrated GPS

Advanced control panel for remote monitoring of dredge parameters and operational efficiency

Max distance		Max Working depth		Max Power	Moving and Positioning	Transportation
m	ft	m	ft	kW - (HP)		
1000	3280	Up to 50m	Up to 160 ft	62 - (85)	2/4 winches	1 Container 40'
700	2300	Up to 50m	Up to 160 ft	62 - (85)	2/4 winches	1 Container 40'
1200	3940	Up to 50m	Up to 160 ft	115 - (160)	2/4 winches	1 Container 40'

Max distance		Max Working depth		Max Power	Moving and Positioning	Transportation
m	ft	m	ft	kW - (HP)		
1000	3280	Up to 10m	Up to 33 ft	62 - (85)	2/4 winches	2 Containers 40'
700	2300	Up to 10m	Up to 33 ft	62 - (85)	2/4 winches	2 Containers 40'
1200	3940	Up to 10m	Up to 33 ft	115 - (160)	2/4 winches	2 Containers 40'

Jet Ring System  
Protection for lower membrane

Truck/Trailer Easy Transport  
Dredging monitoring system with integrated GPS

Advanced control panel for remote monitoring of dredge parameters and operational efficiency

# AMPHIBIOUS MULTIPURPOSE DREDGE

The Dragflow DRM (Multi-Purpose Dredge) series represents a step up on the approach of dredging technique. The extreme mobility in any kind of swamp and the full floatability, allow this dredge to reach most remote locations otherwise impossible to get with any other equipment.

Now to move your dredge from one pond to another will no longer require dismounting and re-mounting the equipment.

Pumping capacity up to 1000 cu.m/h with delivery distance up to 1km can make possible to perform works with the highest productivity ever.



## DRM - AMPHIBIOUS MULTIPURPOSE DREDGE

Model	Pump Type		Cutter Head	Delivery		Nominal Capacity	
	mm	inch		m <sup>3</sup> /h	gpm		
DRM085E22	Dragflow 8"-10" High Chrome		2 Cutters	200 - 250	8 - 10	350 - 800	1540 - 3520
DRM085/160E22	Dragflow 10" High Chrome		2 Cutters	250	10	450 - 800	1980 - 3520

Model	Max distance		Working depth		Total Power	Propulsion	Transportation
	m	ft	m	ft			
DRM085E22	500	1640	Up to 10m	Up to 30 ft	130 kW	Tracked wheels	3 Containers 40'
DRM085/160E22	1000	3281	Up to 10m	Up to 30 ft	230 kW	Tracked wheels	3 Containers 40'

### Main features

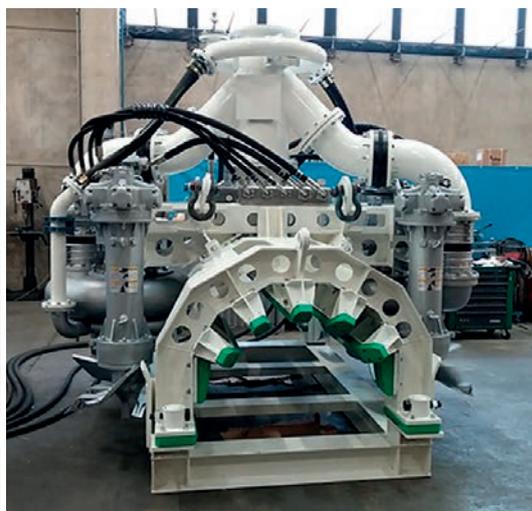
- Portable dredges with modular design - Easy to use.
- High durability and easy maintenance.
- High working depth with no additional costs.
- High Efficiency - higher solid content.

Deep sea and high depth dredging: this is the new emerging trend in the dredging market and Dragflow is a world leader in this field with proven projects up to 250 meters of working depth.

## Product range:

- ▼ High depth pump and excavators.
- ▼ Umbilical oil hoses line.
- ▼ Careful consideration is given to provide the umbilical with the necessary inherent strength, fatigue resistance and robustness to offer long term service life.
- ▼ Oil hoses reels.

Deep sea exploration represents a huge technical challenge, where critical hyperbaric conditions, and maintenance needs play an important role on the overall success of a project. The new products have been completely designed, manufactured and tested by Dragflow's technicians and engineers, that use their consolidated know-how gained in 25 years of dredge equipment manufacturing, in order to assure the reliability and functionality of the products.



## UMBILICAL / SPOOLERS / ROV

### UMBILICAL

Umbilical oil hoses line with 3 to 7 hoses.

Length up to 250m (more on demand).

Inner rope for umbilical reinforcement (resistance to traction).

Outer plastic cover for extra protection.

Tested at 250m of working depth in combination with Dragflow Hydraulic Compensated Pumps.

### SPOOLERS

Spoolers for oil hoses and for electric cables.

Design available up to 250m (820 ft) of hoses length.

Automatic or Hydraulically driven.

Integration with Dragflow hydraulic power-pack.

Release function for high usability and fast roll-out.

Safety enclosure for moving parts.

180° of rotation to follow pump movements.

Custom base frame to adapt the spooler to working context.

### ROV

Custom designed remote under-water operated dredge system.

# ENGINEERED AND CUSTOM PRODUCTS

Over the years Dragflow has been developing a deep know-how in dredging and mining application, based on innovation and ability to create customized solutions according to customer needs.

Dragflow delivers original systems that provide technical and commercial advantages; we work in close contact with customers on projects ranging from complex mine pumping stations to off-shore dredging projects.

Dragflow provides efficient dredging solutions and turnkey equipments for mine tailing ponds, offshore renewable, oil and gas, harbor industries.

Our philosophy is to give not only a high quality product but a full solution to the problem; we support our customer with passion and expertise in concept development, 2D/3D modeling, product delivery and start-up operations.





## DREDGING

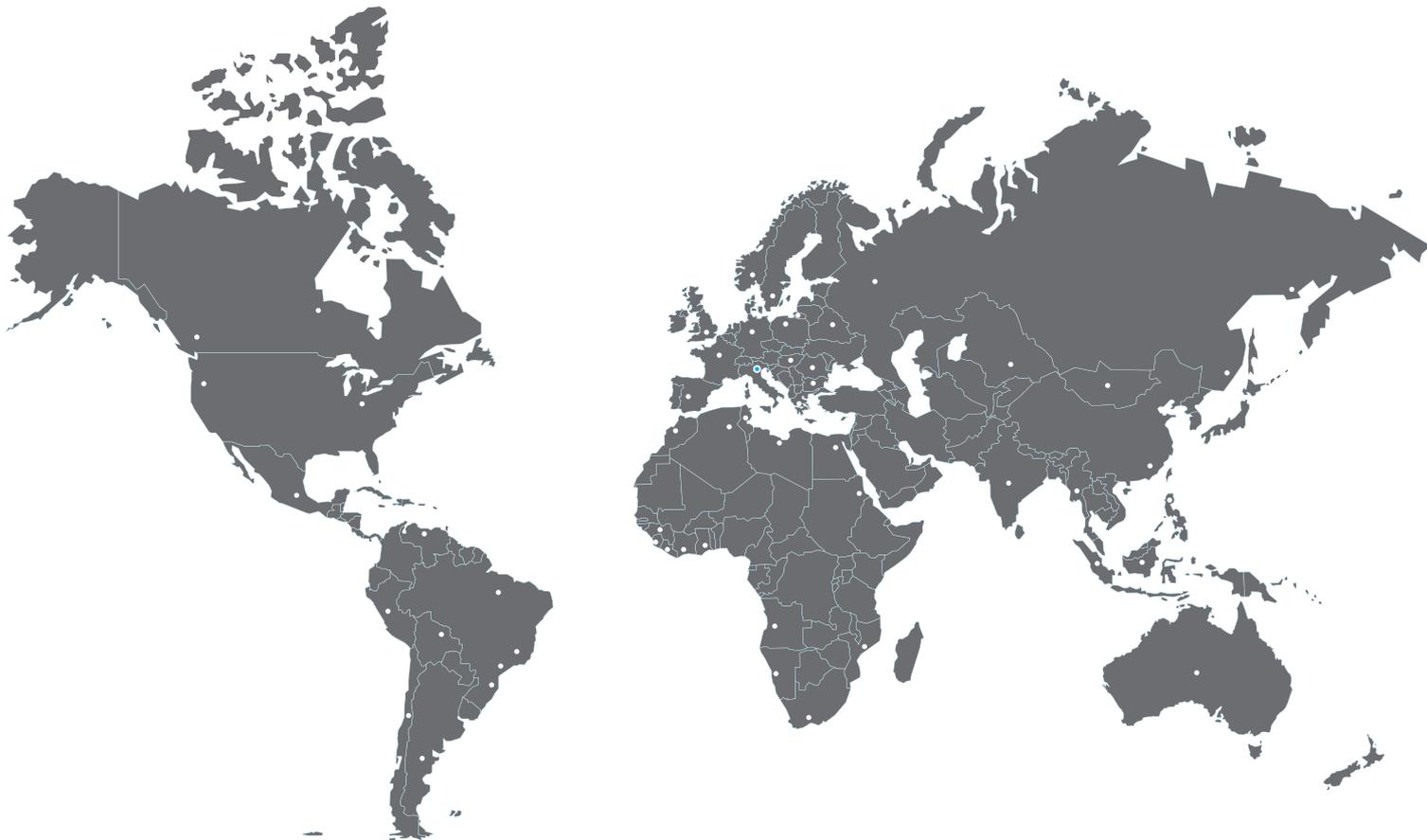
# APPLICATIONS



MINING



# INDUSTRY



**WHERE  
WE  
ARE**

**Dragflow S.r.l.**

**Head Office**

Via Paesa

46048 Roverbella (MN) - Italy

tel. +39 0376 1685400

fax +39 0376 1685499

info@dragflow.it

www.dragflow.it