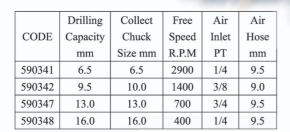
Pneumatic-Impact Wrenches

CODE	Saare	Drive	Nom. Bolt	Free Speed	Air Inlet	Air Hose
0022	mm	inch	Diam mm	R. P. M	PT	Size
590101	12.7	1/2	13.0	6,500	1/4	9.5
590105	19	3/4	22.0	4,000	3/8	12.7
590106	25.4	1	32	3,500	1/2	12.7

Pneumatic-Hand Drills





	Drilling	Free	Air	Air
CODE	Capacity	Speed	Inlet	Hose
	mm	R.P.M	PT	mm
590351	22.0	600	3/8	12.7
590352	32.0	380	1/2	12.7
590353	50.0	160	1/2	19.0

Pneumatic-Straight-Grinder



Pneumatic Angle Grinders



CODE	Wheel Size mm	Free Speed R.P.M.	Air Hose mm
590301	100	13600	9.5
590302	180	7500	12.7
590303	230	5900	12.7

Pneumatic-Chipping Hammers

Powerful hammers for billet chipping, general chipping and removal of calking weld flux..paint and rust in limited space.





CODE	Type of	Blow per	Piston	Air Inlet	Air Hose
	Shank	MInute	Dia mm	PT	mm
590361	Round	2600	19.0	3/8	9.5
590362	Hexagon	2300	18.0	1/4	9.5

Pneumatic-Scaling Hammers

Suitable for the removal of old paint and rust.





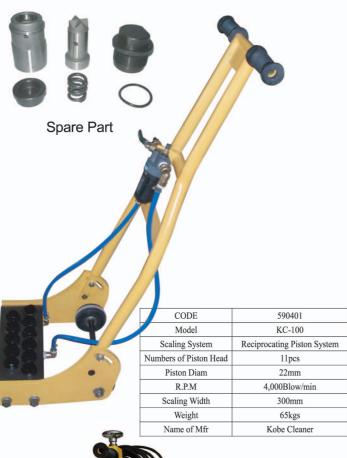
	0.00
CODE	Model
590381	SC-1
590382	SC-2
590383	MS-3NV
Spare har	nmer head
590386	SC-1
590387	SC-1
590388	MS-3NV



Deck-Scaler Pneumatic Powered

For use in removing scales and surface paint from the ships deck.

The scaler hasa handle, allowing the operator to stand during use, reliving fatigue and protecting the eyes from dust and chipped metal or scale Required air pressure is 0.59Mpa (6kgf/cm²).





CODE	description
590409	Deck scaler

Liberty Marine & Industrial Supplies

Pneumatic JET Chisels

For chiseling or smoothing welds, castings and other materials.

Jet chisel needles adjust to the contour of any surface automatically.



JC-16:For light duty	JEX-24:For all purpose
JT-20:For general duty	JEX-66:For heavy duty

CODE	Model	O.A.Length	Air	WT.kg
		mm	Inlet	
590461	JC-16	270	3/8"	1.4
590462	JT-20	345	3/8"	2.4
590463	JEX-24	348	3/8"	2.7
590464	JEX-66	360	3/8"	3.5

CODE	Size	Model
590471	2	JC-16
590472	2	JT-20
590473	2	JEX-24
590474	2	JEX-66
590475	3	JT-20
590476	3	JEX-24
590477	3	JEX-66
590478	4	JEX-66



Spare Needles for Jet Chisel

CODE	Needle Diam×Lgth mm	CODE	Needle Diam×Lgth mm
590466	2 ⊄ ×150	590468	3 ⊄×180
590467	2⊄×180	590469	4⊄×180

Pneumatic-Hand-Scaler

Lightweight and ideal for removing rust, mill scale, old paint.



WIOGCI	IC-20			
Free Speed	5,000			
No Load Air	0.7m ³ /min.			
Consumption				
Air Hose Size	12.7mm			
Air Pressure	6kgf/cm ²			
Overall Length	400mm			
Weight	5kgs			
For Model KC-20				

CODE

Model

No.	CODE	DESCRIPTION
1	590521	Wire wheel brush
2	590522	LG tool assembly
3	590523	HD tool assembly
4	590524	Hammer head
5	590525	Grind stone

Pneumatic-Flux-Chippers

For scaling and chipping rust and cleaning metal surface.



CODE	Model	Standard Accessories	Weight
		1 pc Bent flat chisel,	
590531	CH-24	1 pc Reducer PT3/8"×NPT3/8"	2 kg
		1 pc Hose nipple PT3/8" ×3/8"	

Pneumatic-Needle-Scalers-

Unique needle scaler with integrated anti-vibration system in order to protect the operators hands and arms but not the rust.



⊄3mm×19 pcs ⊄4mm×10pcs

2.2kgs

Pneumatic-Hacksaws

Light duty air operated hand hacksaw. Maximum cutting capacity is up to 3mm thickness of steel



Pneumatic-Driven Winches

Y	Weight	Air Hose	Rope	Wire	Lifting	Lifting	
	kg	Diam.	Length	Diam.	Speed	Capacity	CODE
	4	mm	mm	mm	(Mtr/Min)	kg	
	47	15	33	3	35	50	590601
	50	15	33	3	35	75	590602
	70	15	33	4	30	100	590603
	75	19	33	6	25	150	590604
	75	12	40	5	30	200	590605
	120	25	33	6	20	250	590606
	80_	12	40	5	30	300	590607

Neoprene-Rubber-Buckets-

made of hard neoprene, specially developed spark proof buckets use when cleaning tanks with chemical or petrpleum cargo.

CODE	Capacity	Dimension	ns mm
	Ltr	Upper Diam	Height
590611	10	260	335
590612	20	360	350

-Pneumatic-Vacuum-Cleaner



CODE	Type	Hose	Air consumption	Vacuum
			at 5kgf/cm ²	
590721	V-300	⊄25mm×2m(oil	240 Ltr/min	3000mm
		resistant)		
590722	V-500	⊄32mm×2m(oil	400 Ltr/min	3000mm
		resistant)		

Needle

Weight

Tank Cleaning Machines

Equipped with a unique, self start, hydraulic turbine which cleans effectively using the least amount of water.



			7		
CODE	590651	590652	590653	590656	590657
Nozzle Diam	11 mm	12 mm	13 mm	6-10 mm	8-15 mm
Water Consumption	29m³/Hr	34m³/Hr	39m³/Hr	4-25m ³ /Hr	7-48m ³ /Hr
Jet Length	11.5 mtr	12.5 mtr	14.5 mtr	15-31 mtr	22-36 mtr
Washing Cycle min./ cycle		3.7		4-15	3-12
Working Pressure		10 kgf/cm ²		2-12	bar

-Hold-Cleaning Guns

For Cleaning of bulk carrier holds by a high pressure water stream. A strong stream of water can be projected a distance of over 20 mtrs for the removal of any loose rust, flaking paint.



300 gal/min

instantaneous

3/4"

15kgs

Liberty Marine





Tank Cleaning Hose Accessories / Saddles



CODE		Size		Material	Weight
590671	ASA 2	-1/2" 7.5	thread	Cast Bronze	3.3 kg
590672	ASA 2	-1/2" 7.5	thread	Cast Bronze	4.9 kg
590673	ASA 2	-1/2" 7.5	thread	Cast Bronze	1.3 kg
590674	ASA 2	-1/2" 7.5	thread	Cast Alum-Bronze	0.9 kg
590675	ASA 2	-1/2" 7.5	thread	Cast Alum-Bronze	0.8 kg
590676	O.D.	I.D.	t	Neoprene	
	73	51	6		
590677	78	62	4	Neoprene	

-High-Pressure Cleaners

a compact, handy, highly efficient unit suitable for a wide variety of cleaning jubs with a small amount of water at high pressure Standard accessories:

10m high pressure hose One jet spray lance Trigger gun Dirt Blaster



Voltage	Frequency	Working Pressure	Power
440V	60 HZ	200 Bar	8.6 Kw
380V	50 HZ	200 Bar	8.6 Kw

590742

28 ton/hour

50 mm or 65 mm

Nakajima type

15 mm Gun :4.7 kgs

Stand:18 kgs

Water Consumption Water Hose

Hose Coupling

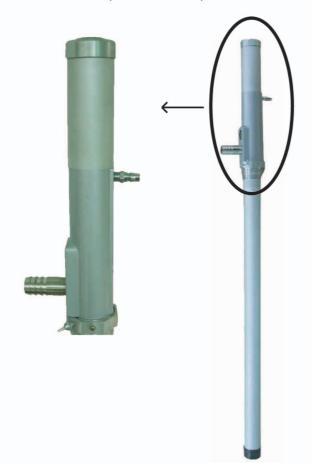
Air Hose

Weight

Pneumatic-Piston-Pump

Air piston pump adopts the theory that "pressure" applying force on various areas and can produce various "acting force", the pumb takes the origin that the compressed air is compressed energy and transforms the pressure of compressed air into more fluid pressure, pressing fluid move in order to achieve the aim of high viscosity and ultra - viscosity fluid.

When pump is applied force downward and moves the lower check valve is closed, the fluid in the pump is extruded and charges upward out of upper check valve, then flows into upper pump champer, because that the piston has volume, some fluid flow out of outlet due to the reduce of spatial fluid volume in upper pump chamber. When piston pump is applied force upward and moves, the lower check valve is opened, the fluid of upper pump chamber flows out of outlet when piston runs upward.



Discharge	Max Pressure	Working Pressure	Outlet	Net weight
>50L/min	0.7MPa	0.3-0.5MPa	3/4"	5kg

591661

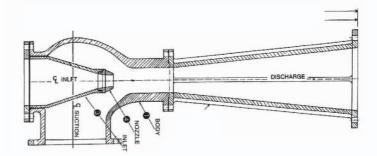
Pneumatic piston pump complete with drum joint & pipe for drum can

Portable Ejectors



Used for indispensable on bulk carriers, lube - oil tankers and chemical carriers where it is essential to empty tanks completely.

Also are useful on mopping up the last few barrels of liquid from tanks, holds cofferdams or other compartments.



CODE	Туре	Hose connections			Dim	ension
		A	В	С	L	Н
591676	1×1×1-1/2	1"	1"	1-1/2"	47cm	10cm
591677	1-1/4×1-1/4×2	1-1/4"	1-1/4"	2"	55cm	12cm
591678	1-1/2×1-1/2×2-1/2	1-1/2"	1-1/2"	2-1/2"	70cm	14cm

Cordless-Drill-Drivers

Designed for continuous use and easy service. Compact and lightweight for increased maneuverability



Cordless Impact-Wrenches

For fast tightening or loosening of bolts.Compact and well-balanced design for positive control



Electric-Bench-Grinders

For sharpening tools and other appliances. according to safety measures, the grinding must be fitted with a wheel cover and must be firmly secured to a bench sand



AC 110	OV Single Phase	AC 22	0V Single Phase
CODE	For Wheel Diam	CODE	For Wheel Diam
591051	150mm	591056	150mm
591052	205mm	591057	205mm

Liberty Marine & Industrial Supplies

Portable electric drills

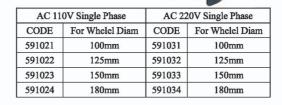


Designed for precision and reliability for marine and industrial use. To be used for all conventional drilling of steel or wood.

AC 11OV Single Phase		AC 220	V Single Phase
CODE	Drilling	CODE	Drilling
	Capacity mm		Capacity mm
591002	10.0	591012	10.0
591003	13.0	591013	13.0
591004	16.0	591014	16.0

-Electric-Angle-Grinders

Especially designed for continuous heavy duty work for all grinding applications



Electric Die Grinders

For precision grinder.



Electric Sheet Sanders

Ideal for direct material finishing or sanding painting surfaces.



AC 110V	Single Phase	AC 220V	Single Phase
CODE	Sanding	CODE	Sanding
	Area mm		Area mm
591081	114×280	591082	114×280

Electric-Circular-Saws-

Blade guard operates automatically in all positions.

Easily adjustable for depth cut and mitre.



AC 110V Single Phase		AC 220V Single Phase	
CODE	Blade Diam	CODE	Blade Diam
591141	160mm	591142	160mm
591144	185mm	591145	185mm

Electric-Sheet-Planers

For smoothing and planning wood surfaces.



AC 110V Single Phase		AC 220V Single Phase		
CODE	Planing Width	CODE	Planing Width	
591136	82 mm	591137	82 mm	

Electric-Jig-Saws

Used for sawing wood, plastic, mild steel plate, etc Able to cut either straight or curved lines without wraping the surface.



AC 1	0V Single Phase	AC 22	20V Single Phase
CODE	Cutting Capacity	CODE	Cutting Capacity
591171	60 mm	591172	60 mm

Electric-Rod-Cutters



AC 110	V Single Phase	AC 220V Single Phase		
CODE	CODE Wheel Diam		Wheel Diam	
591151	305 mm	591156	305 mm	
591152	405 mm	591157	405 mm	

-Electric-Blowers

Lightweight with high air pressure and displacement. Capable of vacuuming dust.



AC 110	V Single Phase	AC 220V Single Phase		
CODE	Air Volume	CODE	Air Volume	
591181	2.3 m ³ /min	591182	2.3 m ³ /min	

Electric-Scaling-Machines

A ugged but lightweight electric scaling machine for continuous heavy duty use. An ideal unit for derusting and descaling jobs. Portable, fitted with wheels.



Pneumatic-Scaling-Machines-

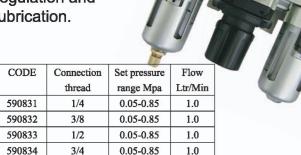
A light and easy to handle, but rigidly constructed tool for efficient heavy duty scaling. Required air pressure is 0.59Mpa (6kgf/cm²).



Air-Line-F.R.L. Combinations

For use in compressed air filtration, regulation and lubrication.

590835



Air-Line-Preassure-Regulators-

CODE	Connection	Set pressure	
	Thread	range Mpa	
590821	1/4	0.05-0.85	/
590822	3/8	0.05-0.85	
590823	1/2	0.05-0.85	1
590824	3/4	0.05-0.85	
590815	1	0.05-0.85	







Accessories-for-Scaling **Machines**

These accessories differ from manufacturer to manufacturer.





Air-Line-Lubricators

CODE	Connection	Min flow
	Thread	Ltr/min
590811	1/4	30
590812	3/8	40
590813	1/2	50
590814	3/4	190
590815	1	190



Air-Line-Filters

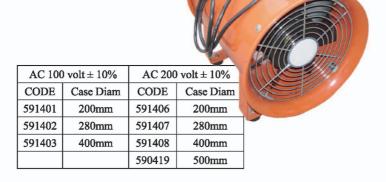


CODE	Connection	Pressure
	thread	
590801	PT 1/4	1.0Mpa
590802	PT 3/8	1.0Mpa
590803	PT 1/2	1.0Mpa
590804	PT 3/4	1.0Mpa
590805	PT 1	1.0Mpa

Electric-Portable Ventilation Fans

Highly efficient and portable. Used to ventilate hot air and harmful gases from a tank or work area, and supply fresh air and oxygen. The ideal bell-mouth type casing is highly efficient, creates Little noise and is easy to

install in an air duct.



Portable Ventilation Fans Explosion Proof

Lightweight and robust, non-sparking type electric driven fan. Equipped with an explosion proof switch and 5 meters of cabtyre.

CODE 591416 591417 591418 591419 Casing Diam 200 ¢ 282 ¢ Voltage AC-100V AC-200V AC-100V AC-200V Phase Single Single Single R.P.M 3000/3600 3000/3600 Air Volume 70M³/min Pressure 25mm/Aq 30mm/Aq Weight 14.5kgs 25kgs
Voltage AC-100V AC-200V AC-100V AC-200V Phase Single Single R.P.M 3000/3600 3000/3600 Air Volume 20M³/min 70M³/min Pressure 25mm/Aq 30mm/Aq
Phase Single Single R.P.M 3000/3600 3000/3600 Air Volume 20M³/min 70M³/min Pressure 25mm/Aq 30mm/Aq
R.P.M 3000/3600 3000/3600 Air Volume 20M³/min 70M³/min Pressure 25mm/Aq 30mm/Aq
Air Volume 20M³/min 70M³/min Pressure 25mm/Aq 30mm/Aq
Pressure 25mm/Aq 30mm/Aq
Weight 14.5kgs 25kgs



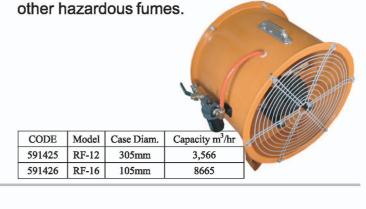
Ventilation Tubes for Explosion Proof Ventilation Fan

CODE	Size	Suitable Model
591421	200 ⊄ ×P150×5 mtr	200 mm Case Diam.
591422	250 ⊄ ×P150×5 mtr	250 mm Case Diam
591423	300 ⊄ ×P150×5 mtr	300 mm Case Diam
591424	400 ⊄×P150×5 mtr	400 mm Case Diam

Pneumatic-PortableVentilation Fans

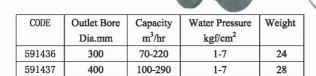
Compressed air driven ventilators that can be used with or without a duct in hazardous areas such as cooling tanks or hatches.

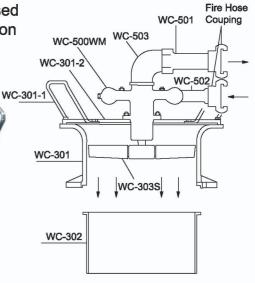
Provides ventilation of gas, paint fumes and



-Water-Driven-Turbine-Fans

Designed for high performance ventilation of gas from large enclosed areas or other tank openings, Works effectively providing penetration deep into the tank for complete ventilation ,Made of a non-spark construction with a line impeller and integral water motor that are coated against corrosion.





Pneumatic Diaphragm **Pumps**

An air operated diaphragm pump designed for simplicity in operation and maintenance. Safety for use in explosive environments



CODE		591601	591602	591603	591604	591606
Suction	Dry	17"	18"	21"	18"	12"
Lift	Wet	31"	28"	31"	31"	30"
Air Inlet	NPT	1/4"	1/2"	3/4"	3/4"	3/4"
	Inlet	1"	1-1/2"	2"	3"	4"
Waste	BSP/NPT	Female	flange			
	Outlet	3/4"	1-1/4"	2"	3"	4"
	BSP/NPT	Female				Flange
	Height	11"	16-7/8"	26-11/32"	32-3/8"	32-1/2"
Size	Width	10"	14-7/32"	15-29/32"	19-29/32"	37"
	Depth	7-1/4"	11-5/16"	13-1/2"	16-3/4"	13"

Pneumatic-Sump-Pump

Suitable to empty ballast tanks, bilge wells, etc. in emergency cases often used for draining cargo holds during and after the washing procedure. Required air pressure is 0.59 MPa.



CODE	Capacity		Max. Air	Water Hose	Air Hose			
	Total Head	Discharge	Consumption	Size	Size			
591635	15 mtr	22 m³/H	2.0 m ³ /min	63.5 mm	3/4			
591636	20 mtr	28 m³/H	3.4 m ³ /min	63.5 mm	3/4			
591637	25 mtr	38 m³/H	4.4 m ³ /min	63.5 mm	1			

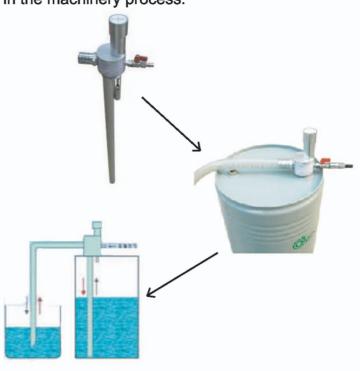
Liberty Marine

& Industrial Supplies



-Pneumatic-Drum-Pump

Capable of pumping and discharging water, Input the liquid in the reverse direction in the chemical production and change oil for the facility in the machinery process.



CODE	Application	Working	Hose	Capacity
	Suction & discharge	Pressure	Size	
591651	Suction	4kg/cm ²	32mm	100Ltr/min
	discharge	7kg/cm ²	32mm	130Ltr/min

Caution

- 1, When the liquid glutinosity more than 500cps, It's not workable
- 2. Air consumption mast be at least 0.5 m3/h. It match 0.4-0.7Mpa air compressor.
- 3, When finishing, Shutting the air supply valve, dragging for the pump, Let is pump discharge the leaving in the hose.
- 4, the liquid can't be inhale when sucking, that's means the drum fulling

Ventilation Tubes Air Ducts



CODE	Tube Diam. mm	Length mtr
591481	200	5
591482	200	10
591483	300	5
591484	300	10
591485	400	5
591486	400	10