

**hydratight®**

## Pipe Cutting and Beveling Clamshells



# Because ensuring a leak-free solution is critical. It has to be Hydratight.

For more than 100 years, Hydratight has provided world-class bolted joint solutions, assessing and managing joints to ensure leak-free start-ups. Today, we continue to set international standards in joint integrity—but we're so much more than just a bolting and on-site machining company.

Because even the tiniest leak can be costly and time consuming to repair, we manage every joint on a project for leak-free start-ups and production, which in turn removes the threat of environmental impact caused by unsafe joints. Safety continues to be the most important aspect of our business. We are a global organisation making a real difference to the industries and communities we work in, committed to improving safety, operational efficiency and uptime.

Because you require the support of an innovative partner committed to your success, we not only offer unrivalled service on a global scale, including customer training and software development; but also design and manufacture quality tools and equipment for bolted joint solutions to the highest standards. Our certified teams are dedicated to working closely with you, assessing and managing every joint on your project to prevent leaks from ever occurring, year in, year out.

Because you value safety and reliability, we work to ISO 9001, ISO 14001 and OHSAS 18001 standards in everything we produce from manufacturing torque and tension bolting equipment to mechanical connectors, from in-situ service to creating custom solutions in line with clients' specifications.

It means that whenever you need a complete joint integrity solution, whichever industry sector you're in, you can rely on us to get it 100% right first time, every time. **This is why it has to be Hydratight.**



## Engineering Driven Safety Focused Solutions



# Machining Solutions

Hydratight's portable machining solutions are ideally suited for applications within new construction, decommissioning, component replacement and refurbishment industries. Our patented tools are available through sales, rental or with on-site technical support; as well as custom fabrication. The machines are engineered to cut and bevel pipe, machine shafts, bore, grind, end-prep and more.

## Split Frame Clamshells

The Hydratight series of clamshells are highly portable split frame lathes ideally suited for machining applications within new construction, decommissioning, component replacement, fabrication and refurbishment industries.

The machines are engineered to cut, bevel, counter bore, single point and flange face on pipe and tubing ranging from: 0.84" (21.34mm) to 177" (4495.8mm) on all types of materials and wall thicknesses. With six distinct series of machines, an array of accessories and many drive options, there is an ideal configuration to meet most any on-site machining application.

Each machine within the Hydratight series of clamshells is engineered to operate safely and accurately even in the most demanding environments and critical applications. The rugged fixed base, steel pinion gear and high bearing count within each machine result in a rugged combination ready to perform when called upon.

## MM Clamshell Series

**MM180 Clamshell** 144" (3657.6mm) to 177" (4495.8mm) OD

**MM120 Clamshell** 85.9" (2181.9mm) to 121.5" (3086.1mm) OD

The MM series clamshells are ideally suited for cutting, beveling, facing and counter boring large diameter pipes, vessels and flanges

**HD Clamshell Series** 20" (508mm) to 86" (2184.4mm) OD

The robust design of the HD series (Heavy Duty) clamshells make them ideal for large diameter heavy wall pipe machining applications.

**MS Clamshell Series** 4.125" (104.8mm) to 48.25" (1225.6mm) OD

MS series (Mid-Size) clamshells weigh less than the HD machines but provide greater rigidity than the NB machines.

**NB Clamshell Series** 1.90" (48.3mm) to 36" (914.4mm) OD

The NB series (Narrow Body) clamshells are designed with a lower profile for reduced weight and increased functionality in confined work spaces.

**NB Subsea Clamshell Series** 4.5" (114.3mm) to 36" (914.4mm) OD

The Hydratight range of subsea clamshells offer the same reliable topside performance upgraded for demanding underwater applications.

**MC2A Clamshell** 0.84" (21.34mm) up to 2.375" (60.33mm) OD

The perfect choice for small diameter severing and beveling of pipe and tubing.



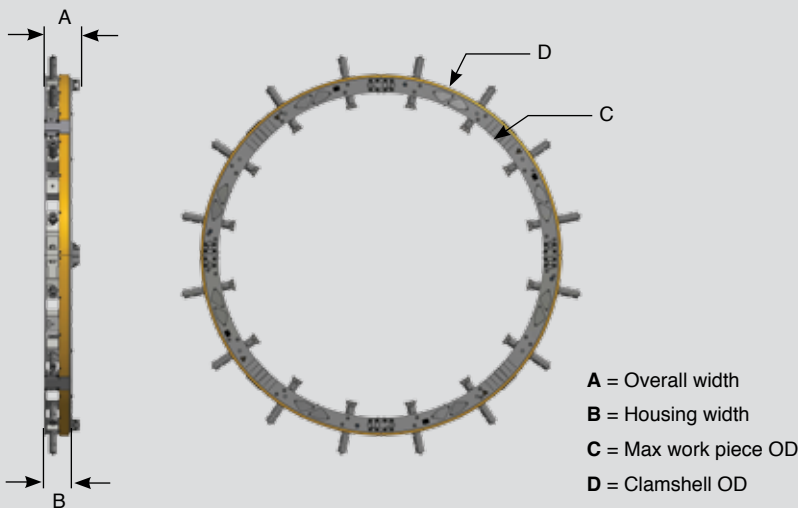
# MM Series Clamshell

The MM series clamshell lathes are designed for very large diameter applications. Using our patented, fully adjustable, heavy duty bearing design, these portable pipe-cutting machines are capable of cutting, beveling, facing, boring and OD turning on all types of wall thicknesses.



The MM style clamshells are the largest within the Hydratight portable clamshell offering.

The series utilizes a patented, fully adjustable bearing design for increased accuracy and performance, and is comprised of four parts making it ideally suited for deployment and installation. The stacked steel base design of the MM clamshells help maintain rigidity even under the most demanding applications, and its superior strength is unmatched for all on-site machining applications in new construction, decommissioning, component replacement and fabrication projects.



Model	Unit of Measure	Mounting Max	A	B	C	D	Machine Weight
MM120	Std-in.	121.5	13.6	10.6	122	137.3	6300 lbs
	Metric-mm	3086.1	346	269.2	3098	3497.6	2857 kg
MM180	Std-in.	177	18.6	15.1	177	195.5	10000 lbs
	Metric-mm	3086.1	472.4	383.5	4495.8	4965.7	4535.9 kg



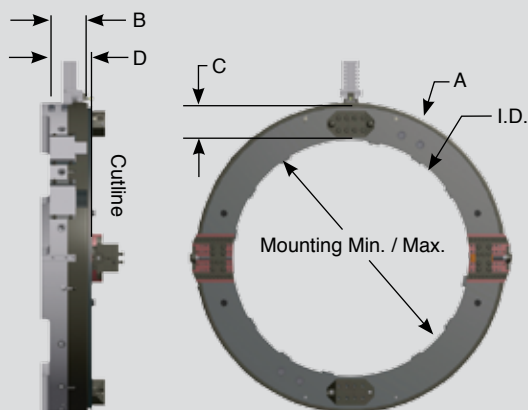
# HD Clamshell Series

These portable split frame machines are capable of pipe cutting, beveling, facing, ID boring and OD turning on a wide range of wall thicknesses. The robust design of the HD series (Heavy Duty) clamshells make them ideal for large diameter heavy wall pipe machining applications in new construction, decommissioning, component replacement and fabrication projects.



## Features:

- 16 standard models cover a range of 20" (508mm) to 86" (2184.4mm) pipe
- Pneumatic and hydraulic drive options provide increased versatility
- Fully adjustable heavy duty bearing design provides greater serviceability and increased life
- Stepped and keyed gear clamps equipped with a through bolt provide a positive fit at each assembly joint
- Several different drive options are available to best position the motor for a specific machining application
- HD series clamshells accept a wide range of accessories to increase performance and expand capabilities



B = 6.25" (158.8mm)

C = 4.689" (119.1mm)

D = 8.5" (215.9mm)

Model	Mounting Min Max	Machine ID	A	Machine Weight
HD32	20.0–32.0" (508.0–812.8mm)	33.0" (838.2mm)	42.4" (1076.3mm)	469.0 lbs (212.9 kg)
HD36	24.0–36.0" (609.6–914.4mm)	37.0" (939.8mm)	46.4" (1177.9mm)	509.0 lbs (231.1 kg)
HD39	27.0–39.0" (609.6–914.4mm)	40.0" (1016.0mm)	49.4" (1254.1mm)	538.0 lbs (244.3 kg)
HD43	31.0–43.0" (787.4–1092.2mm)	44.0" (1117.6mm)	53.4" (1355.7mm)	595.0 lbs (270.1 kg)
HD45	33.0–45.0" (838.2–1143.0mm)	46.0" (1168.4mm)	55.4" (1406.5mm)	614.0 lbs (278.8 kg)
HD48	36.0–48.0" (914.4–1219.2mm)	49.0" (1244.6mm)	58.4" (1482.7mm)	643.0 lbs (291.9 kg)
HD50	38.0–50.0" (965.2–1270.0mm)	51.0" (1295.4mm)	60.4" (1533.5mm)	663.0 lbs (301.0 kg)
HD53	41.0–53.0" (1041.4–1346.2mm)	54.0" (1371.6mm)	63.4" (1609.7mm)	692.0 lbs (314.2 kg)
HD54	42.0–54.0" (1041.4–1346.2mm)	55.0" (1397.0mm)	64.4" (1635.1mm)	702.0 lbs (318.8 kg)
HD55	43.0–55.0" (1092.2–1397.0mm)	56.0" (1422.4mm)	65.4" (1660.5mm)	716.0 lbs (325.1 kg)
HD57	45.0–57.0" (1092.2–1397.0mm)	58.0" (1473.2mm)	67.4" (1711.3mm)	735.0 lbs (333.7 kg)
HD60	48.0–60.0" (1219.2–1524.0mm)	61.0" (1549.4mm)	70.6" (1793.9mm)	831.0 lbs (377.3 kg)
HD66	54.0–66.0" (1371.6–1676.4mm)	67.0" (1701.8mm)	76.6" (1946.3mm)	891.0 lbs (404.5 kg)
HD72	60.0–72.0" (1524.0–1828.8mm)	73.0" (1854.2mm)	82.6" (2098.7mm)	952.0 lbs (432.2 kg)
HD80	68.0–80.0" (1727.2–2032.0mm)	81.0" (2057.4mm)	90.6" (2301.9mm)	1063.0 lbs (482.6 kg)
HD86	74.0–86.0" (1879.6–2184.4mm)	87.0" (2209.8mm)	96.6" (2454.3mm)	1115.0 lbs (506.2 kg)

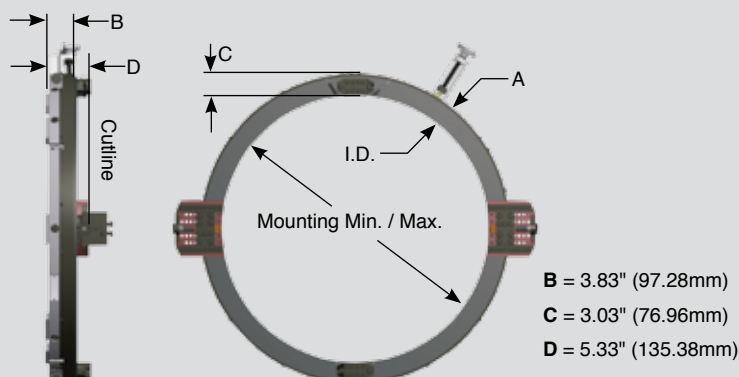
# MS Clamshell Series

The MS Series or mid-size portable clamshells weigh less than the HD machines but provide greater rigidity than the NB machines. The series is comprised of 12 standard models covering a range of 4.125" (104.8mm) to 48.25" (1225.6mm) OD. The machines within the MS series use a patented fully adjustable heavy duty bearing design which provides greater serviceability and increased life.



## Features:

- 12 models cover a range of 4.125" (104.8mm) to 48.25" (1225.6mm) OD
- Pneumatic and hydraulic drive options provide increased versatility
- Fully adjustable heavy duty bearing design provides greater serviceability
- Stepped and keyed gear clamps equipped with a through bolt provide a positive fit at each assembly joint
- Several different drive options are available to best position the motor for a specific machining application
- MS series clamshells accept a wide range of accessories to increase performance and expand capabilities
- Locator extensions are compatible with the NB series clamshells



Model	Mounting Min Max	Machine ID	A	Machine Weight
MS12	4.1–13.0" (104.8–330.2mm)	13.3" (336.6mm)	19.3" (490.5mm)	98.0 lbs (44.5 kg)
MS16	7.4–16.3" (187.3–412.8mm)	16.5" (419.1mm)	22.6" (573.1mm)	119.0 lbs (54.0 kg)
MS18	9.4–18.3" (238.1–463.6mm)	18.5" (469.9mm)	24.6" (623.9mm)	130.0 lbs (59.0 kg)
MS20	11.4–20.3" (288.9–514.4mm)	20.5" (520.7mm)	26.6" (674.7mm)	141.0 lbs (64.0 kg)
MS24	15.4–24.3" (390.5–616.0mm)	24.5" (622.3mm)	30.6" (776.3mm)	163.0 lbs (74.0 kg)
MS28	19.4–28.3" (492.1–717.6mm)	28.5" (723.9mm)	34.6" (877.9mm)	185.0 lbs (85.0 kg)
MS30	21.4–30.3" (542.9–768.4mm)	30.5" (774.7mm)	36.6" (928.7mm)	196.0 lbs (89.0 kg)
MS32	23.4–32.3" (593.7–819.2mm)	32.5" (825.5mm)	38.6" (979.5mm)	209.0 lbs (94.9 kg)
MS36	27.4–36.3" (695.3–920.8mm)	36.5" (927.1mm)	42.6" (1081.1mm)	231.0 lbs (104.9 kg)
MS36.5	27.9–36.8" (708.0–933.5mm)	37.0" (939.8mm)	43.1" (1093.8mm)	233.0 lbs (105.8 kg)
MS42	33.4–42.3" (847.7–1073.2mm)	42.5" (1079.5mm)	48.6" (1233.5mm)	264.0 lbs (119.9 kg)
MS48	39.4–48.3" (1000.1–1225.6mm)	48.5" (1231.9mm)	54.6" (1385.9mm)	296.0 lbs (134.4 kg)

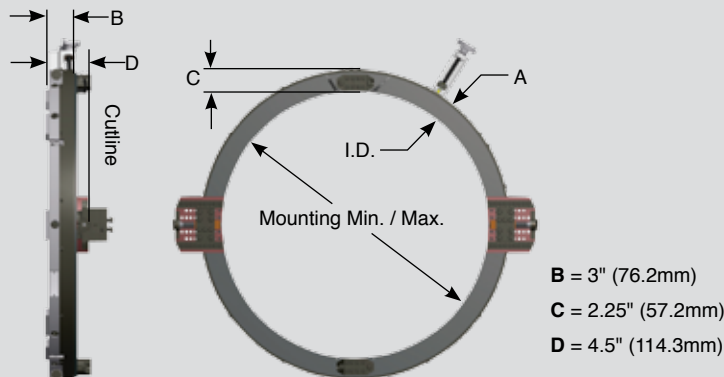
# NB Clamshell Series

Hydratight's NB (Narrow Body) portable clamshells are ideal when space is at a premium. Each of the machines within the NB series have a height of 3" (76.2mm) and a width of 2.25" (57.2mm). The resulting narrow body low profile design makes the NB series the perfect choice in tight spaces or if obstructions are present.



## Features:

- 15 models cover a range from 1.90" (48.3mm) to 36" (917.4mm) OD
- Pneumatic, hydraulic and electric drive options provide increased versatility
- Fully adjustable heavy duty bearing design provides greater serviceability
- Stepped and keyed gear clamps equipped with a through bolt provide a positive fit at each assembly joint
- Several different drive options are available to best position the motor for a specific machining application
- NB series clamshells accept a wide range of accessories to increase performance and expand capabilities
- Locator extensions are compatible with the MS series clamshells



Model	Mounting Min Max	Machine ID	A	Machine Weight
NB4	2.0–4.5" (50.8–114.0mm)	4.8" (120.7mm)	9.3" (235.0mm)	25.0 lbs (11.4 kg)
NB6	2.4–6.6" (60.3–168.3mm)	6.9" (174.6mm)	11.4" (288.9mm)	37.0 lbs (16.8 kg)
NB8	3.5–8.6" (88.9–219.1mm)	8.9" (225.4mm)	13.4" (339.7mm)	43.0 lbs (19.5 kg)
NB10	4.5–10.8" (114.3–273.1mm)	11.3" (285.8mm)	15.8" (400.1mm)	50.0 lbs (22.7 kg)
NB12	6.6–12.8" (168.3–323.9mm)	13.3" (336.6mm)	17.8" (450.9mm)	56.0 lbs (25.4 kg)
NB14	8.6–14.0" (219.1–355.6mm)	14.5" (368.3mm)	19.0" (482.6mm)	63.0 lbs (28.6 kg)
NB16	10.6–16.0" (219.1–406.4mm)	16.5" (419.1mm)	21.0" (533.4mm)	70.0 lbs (31.8 kg)
NB18	12.8–18.0" (323.9–457.2mm)	18.5" (469.9mm)	23.0" (584.2mm)	75.0 lbs (34.1 kg)
NB20	14.0–20.0" (355.6–508.0mm)	20.5" (520.7mm)	25.0" (635.0mm)	83.0 lbs (37.7 kg)
NB24	18.0–24.0" (457.2–609.6mm)	24.5" (622.3mm)	29.0" (736.6mm)	98.0 lbs (44.5 kg)
NB26	20.0–26.0" (508.0–660.4mm)	26.5" (673.1mm)	31.0" (787.4mm)	104.0 lbs (47.2 kg)
NB28	22.0–28.0" (558.8–711.2mm)	28.5" (723.9mm)	33.0" (838.2mm)	112.0 lbs (50.8 kg)
NB30	24.0–30.0" (609.6–762.0mm)	30.5" (774.7mm)	35.0" (889.0mm)	118.0 lbs (53.6 kg)
NB32	26.0–32.0" (660.4–812.8mm)	32.5" (825.5mm)	37.0" (939.8mm)	124.0 lbs (56.3 kg)
NB36	30.0–36.0" (762.0–914.4mm)	36.5" (927.1mm)	41.0" (1041.4mm)	135.0 lbs (61.3 kg)

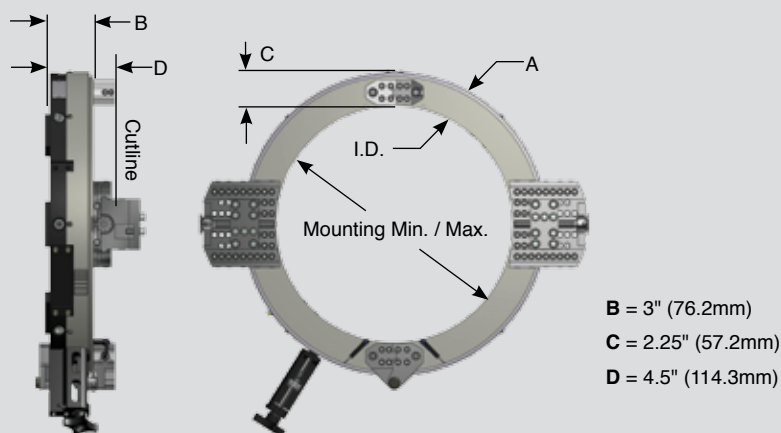
# NB Subsea Clamshell Series

Hydratight's range of subsea clamshells offer the same reliable topside performance upgraded for demanding underwater applications. The series is comprised of 5 standard models covering a range of 4.5" (114.3mm) up to 36" (914.4mm) OD, and are dimensioned off the NB low profile design, making them ideal for operation within tight spaces.



## Features:

- Come standard with steel shipping/storage crates
- Aluminum components are hard coat black anodized
- Steel components are coated with electroless nickel producing superior corrosion protection
- For ease of installation each machine is fitted with a hinge set at one of the split points
- Maintain the same dimensional measurements of the NB series making them ideal for tight spaces



Model	Mounting Min Max	Machine ID	A	Machine Weight
NB10SS	4.5–10.8" (114.3–273.1mm)	11.3" (285.8mm)	15.8" (400.1mm)	50.0 lbs (22.7 kg)
NB16SS	10.6–16.0" (219.1–406.4mm)	16.5" (419.1mm)	21.0" (533.4mm)	70.0 lbs (31.8 kg)
NB24SS	18.0–24.0" (457.2–609.6mm)	24.5" (622.3mm)	29.0" (736.6mm)	98.0 lbs (44.5 kg)
NB30SS	24.0–30.0" (609.6–762.0mm)	30.5" (774.7mm)	35.0" (889.0mm)	118.0 lbs (53.6 kg)
NB36SS	30.0–36.0" (762.0–914.4mm)	36.5" (927.1mm)	41.0" (1041.4mm)	135.0 lbs (61.3 kg)



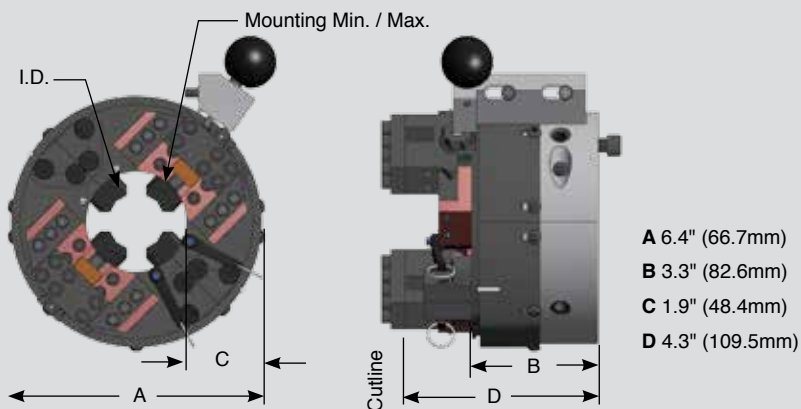
# MC2A Clamshell

Hydratight's portable MC2A clamshell is the perfect choice for small diameter severing and beveling of pipe and tubing.



## Features:

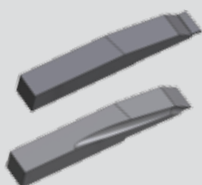
- Four locators securely mount the machine to the material
- Equipped with a right angle adjustable motor mount for increased versatility in tight spaces
- Optional axial cutter head available for removal of socket weld joints
- Specially designed tool block slides for optimal radial clearance
- High bearing count in a compact frame to maintain tolerance and increase the life of the machine



Model	Mounting Min Max	Machine ID	Machine Weight
MC2A	0.8–2.4" (21.–60.3mm)	2.6" (66.7mm)	45.2 lbs (20.5 kg)

# Clamshell Accessories

Hydratight offers a wide range of bolt-on accessories which expand the operational capabilities of any standard clamshell configuration. Each accessory is engineered and manufactured to the same exacting standards as the machines themselves. Accessories include counter bores, single points, drive options, motor mounts, an array of tool block slides, axial feed assemblies, as well as an extensive range of tooling to get the job done.



## Tooling Inserts

The Hydratight range of tooling inserts includes sever, bevel, double-bevel, compound bevel and counter bore bits as well as a chipless cutter insert. The bit assortment is available in different lengths and material types to precisely mate tooling with applications. We also offer custom designed tooling inserts for applications not covered by our standard listing.



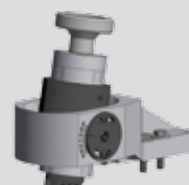
## Tool Block Slides

Tool block slides mount directly to the face of the clamshells and accept the full array of Hydratight bits. The assortment includes various length slides which, when matched with clamshells, address radial clearance issues and wall thickness prep requirements. Hydratight also offers application-specific tool blocks including out-of-round slides, for machining deformed pipe, and low-profile tool blocks.



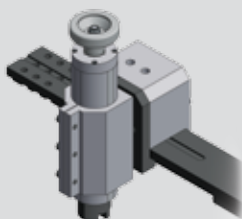
## Drive Motors & Mounts

Hydratight offers an assortment of drive options to align the operation of the machines with available on-site power sources. Drive motors are available in hydraulic, pneumatic and electric configurations. We also offer a range of mounts which attach the chosen drive option to the machine. They are available in straight back, right angle and front drive reversible options.



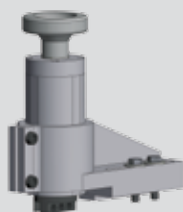
## Swivel Head

The swivel head attaches to all NB, MS and HD clamshells and provides angle cutting—with up to 60° of adjustability in the head. This bolt-on accessory attaches directly to the tool block slide to aid in positioning. The swivel head is available in 6" (152.4mm) (2.5" (63.5mm) of travel) and 10" (254mm) (6.5" (165.1mm) of travel) lengths and is ideally suited for facing, RTJ grooves, boring and angle boring.



## Single Point

The single point assembly is comprised of a single point facing head matched with a clamshell specific facing bar. The single point head attaches to the bar and is fed radially as the clamshell rotates. In a fixed position the head can be axially advanced manually. The single point is available in 6" (152.4mm) (2.5" (63.5mm) of travel) and 10" (254mm) (6.5" (165.1mm) of travel) lengths.



## Counter Bore

This bolt-on accessory attaches directly to the tool block slide to aid in positioning and can be installed immediately following sever/bevel applications. The counter bore is available in 6" (152.4mm) (2.5" (63.5mm) of travel) and 10" (254mm) (6.5" (165.1mm) of travel) lengths.



## Axial Feed Module

The axial feed is designed to remove material from the OD of a pipe. It is available in three standard ranges with maximum axial travel of 7.25" (184.1mm), 5.25" (133.3mm) and 2.25" (57.1mm). Combined with a clamshell, it is ideal for weld overlay removal and for journal turning applications where certain areas of the shaft are worn. An axial feed assembly for the MC2A is also available for the removal of socket weld joints.



## Overlay Sander

The overlay sander is designed to create a smooth surface on critical components. It is capable of removing weld material from stainless, carbon steel, Inconel and alloy 600. As more major components and piping systems are being repaired versus replaced, Hydratight's Overlay Sander is becoming a popular key accessory solution.

# Hydraulic Power Units

The Hydratight line of portable hydraulic power supplies incorporate robust engineering in a compact footprint. The range includes both electric and diesel drive options. Each unit is equipped with performance minded features, designed for safety and engineered to perform even in the harshest conditions.



## All Power Units Feature:

- An air-to-oil heat exchanger which maintains oil temperature during long cycles
- A variable frequency drive which maintains flow rates regardless of load changes; assuring constant machine speed during operation
- A NEMA 4 rated pendant with a 50' cord to provide full control
- High temperature and low oil level automatic shut-offs

		20HP Hydraulic Unit	10HP Hydraulic Unit
<b>Dimensions w/ Roller Base</b>	Length	34.0" (863.6mm)	28.0" (711.2mm)
	Width	25.0" (635.0mm)	20.5" (520.7mm)
	Height	50.8" (1289.1mm)	46.0" (1168.4mm)
<b>w/o Roller Base</b>	Height	45.0" (1143.0mm)	40.5" (1028.7mm)
<b>Hydraulic Flow Rate</b>		3–18 GPM (11.4–68.1 LPM)	3–9 GPM (11.4–34.1 LPM)
<b>Hydraulic Pressure</b>		1800 psi (124.1 bar)	1800 psi (124.1 bar)
<b>Oil Capacity</b>		30 gallons (113.6 liters)	15 gallons (56.8 liters)
<b>Volt/Phase/Hz</b>		380/3/50 and 480/3/60	380/3/50 and 480/3/60
<b>Current Draw</b>		26 (Amps)	20 (Amps)
<b>Weight w/ Oil</b>		850.0 lbs (385.6 kg)	605.0 lbs (274.4 kg)

26 HP Diesel Unit	Unit of Measurement
<b>Width</b>	25.0" (635.0 mm)
<b>Height</b>	47.0" (1194.0 mm)
<b>Length</b>	46.0" (1168.0 mm)
<b>Engine Type</b>	Kohler (Diesel)
<b>HP</b>	26.1 @ 3600 RPM
<b>Fuel Capacity</b>	7.7 gallons (29.0 liters)
<b>Noise Level</b>	77db no load @ 3600 RPM
<b>Spark Arrestor</b>	Yes
<b>Hydraulic Oil</b>	20.0 gallons (75.7 liters)
<b>Oil Cooler</b>	Air to Oil
<b>Port flow</b>	12.0 - 19.0 GPM (45.4 – 71.9 LPM)
<b>Port PSI</b>	1800 psi (124.1 bar)
<b>Weight (dry)</b>	895.0 lbs (406.0 kg)



Each unit comes with a remote electrical pendant equipped with hydraulic flow and direction controls as well as an automatic shut-off button.



Our global network means that you can rely on the right people, products, and services wherever you are in the world.

Email us at: [solutions@hydratight.com](mailto:solutions@hydratight.com)  
Or find your local representative at:  
[hydratight.com/contact](http://hydratight.com/contact)

Hydratight provides support through service centers (●) and authorized representatives (◆).

