

CASING SCRAPER

- M&M's Casing Scraper has been a core product—and a key to the company's success—since its development in 1947.
- Staggered blades provide 360-degree casing coverage.
- A large internal diameter and blade block placement allow circulation at high rates for maximum wellbore cleaning.
- The robust design of M&M's scraper withstands high-speed rotation and reciprocation in vertical, deviated, and horizontal wells.
- The high-strength mandrel is machined from heat-treated alloy steel bar stock—with no welds or castings.
- Spring-loaded blade blocks are positively retained in their pockets by solid machined shoulders, —no fasteners or loose parts.
- This design offers one of the largest casing working ranges in the industry.
- Heat-treated and carbonized blade blocks provide maximum strength and durability. Angled cutting edges of blocks and bevels on the body prevent the tool from hanging on casing connections or when entering downhole restrictions.
- Wear groove allows quick visual inspection of blades.
- Available in sizes for API and non-API tubing and casing—from 2 3/8" to 22" OD.





SPECIFICATIONS

Size	Extended	Collapsed	Casing Weight Range	Connections
2-3/8"	2.125"	1.775"	4.7 # - 5.95 #	1-13/16" WFJ
2-7/8"	2.750"	2.120"	6.5 # - 8.7 #	1-13/16" WFJ
3-1/2" (Short Blades)	3.160"	2.610"	9.3 # - 12.95 #	1-13/16" WFJ
4" (Tall Blades)	3.832"	3.200"	9.5 # - 14 #	1-13/16" WFJ
4-1/2" (3-1/4" Body)	4.075"	3.381"	12.6 # - 15.10 #	2-3/8" Regular (3-1/4" OD)
4-1/2" (3-1/2" Body)	4.250"	3.750"	9.5 # - 11.60 #	2-3/8" Regular (3-1/2" OD)
5"	4.660"	4.095"	11.5 # - 18 #	2-3/8" Regular
5-1/2" (4" Body)	4.780"	4.220"	23 # - 26 #	2-3/8" Regular
5-1/2" (4-1/2" Body)	5.125"	4.590"	13 # - 23 #	2-7/8" Regular
7"	6.740"	5.625"	17 # - 35 #	3-1/2" Regular
7-5/8"	7.450"	6.550"	20 # - 33.7 #	3-1/2" Regular
9-5/8"	9.102"	8.052"	29.3 # - 61.1 #	4-1/2" Regular
10-3/4"	10.650"	9.530"	40.5 # - 55.5 #	6-5/8" Regular
11-3/4"	11.420"	10.600"	38 # - 71 #	6-5/8" Regular
13-3/8"	12.750"	11.600"	48 # - 72 #	6-5/8" Regular
16"	15.420"	14.170"	55 # - 109 #	6-5/8" Regular
20"	19.200"	17.700"	94 # - 169 #	6-5/8" Regular
22"	20.600"	19.100"	142.8 # - 328.7 #	6-5/8" Regular





CASING BRUSH TOOL

- 360-degree contact does not require rotation, works while running in hole (RIH) and pulling out of hole (POH), and can reach corrosion pits and coupling recesses that casing scrapers cannot clean.
- 15-year track record of cleaning casing ID and dislodging hidden debris.
- A large internal diameter and precise brush placement withstand high-speed rotation and reciprocation in vertical, deviated, and horizontal wells.
- The mandrel is machined from high-strength, heat-treated alloy steel bar stock, with integral upper and lower tool joint connections.
- Brushes are securely retained in the retainer pockets by solid machined shoulders.
- Constructed with premium-grade stainless steel wire to avoid contaminating corrosion-resistant alloy (CRA) tubular goods.
- The brush bristle design delivers superior scrubbing action eliminating the need to run a magnet pickup tool to capture broken wires.
- Bevels on the upper and lower guide rings prevent the tool from hanging on casing connections or downhole restrictions.
- A large internal bore and external flow path allow high-rate circulation for maximum wellbore cleaning.
- Available in sizes for use in 4 ½" to 16" OD casing.



SPECIFICATIONS

Size	Casing Weight Range	Connections
4"	9.5 # - 11.6 #	2.375" WFJ
4-1/2"	9.5 # - 15.10 #	2.375" Regular
5"	11.5 # - 18 #	2-3/8" Regular
5-1/2" (4"" OD)	23 # - 26 #	2-3/8" Regular
5-1/2" (4-1/4" OD)	13 # - 20 #	2-7/8" Regular
6-5/8"	17 # - 32 #	3-1/2" Regular
7"	17 # - 35 #	3-1/2" Regular
7-5/8"	20 # - 33.7 #	3-1/2" Regular
9-5/8"	29.3 # - 53.5 #	4-1/2" Regular
16"	55 # - 109 #	6-5/8" Regular





INSIDE BLOW-OUT PREVENTER VALVE

- "Poppet-style" IBOP valves automatically stop uncontrolled flowback and protect the swivel, kelly hose, and surface pumping equipment from high-pressure kicks and potential blowouts.
- Valves can be installed anywhere in the drill string and automatically open to allow normal circulation.
- An optional release assembly allows the M&M IBOP to function as a stand-by surface safety valve—quickly stabbed into drill pipe, tubing, or casing at the rig floor if a kick is detected.
- Available in one- or two-piece construction.
- Mill certificates, test reports, and a Certificate of Conformance are provided with each valve.
- Each valve features a conical nose and metal-to-metal seat made from high-strength materials.
- The design of the poppet, seat, and bypass area minimizes erosion potential caused by long-term, high-rate circulation.



WELL CONTROL VALVES



- M&M Oil Tools' patented Ball Valves are used in Kelly Valves,
 Safety Valves, and Top Drive IBOPs.
- With thousands of valves operational around the world, M&M is a recognized market and technology leader.
- All valves are designed and built as H_2S trim, reducing the number of valves needed for offshore and onshore operations.
- M&M's PWC Cartridge Ball Valve design withstands challenging drilling conditions.
- Available in one- or two-piece construction.
- The PWC Cartridge Ball Valve features precision quarter-turn stops for the fully open and closed positions, preventing tool interference and fluid erosion seen in competing products.
 M&M's unique cartridge design allows pressure to equalize across the upper seal and ball, loading it against the downstream seal. This prevents pressure trapping across the ball and reduces the torque required to open the valve.
 - Mill certificates, test reports, and a Certificate of Conformance are provided with each valve.



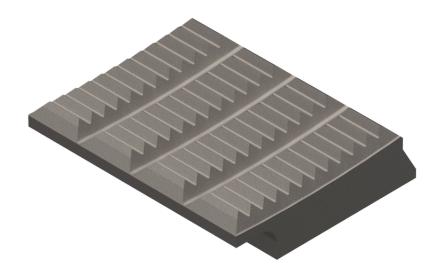






SPECIALTY DIES & INSERTS

- Custom-engineered solutions are a specialty M&M is proud to take on, and inquiries for specific applications are always welcome.
- All dies and inserts are available in grit configurations upon request, with many sizes already in stock.
- Custom lengths and thicknesses are available—even for standard dies and inserts.







STANDARD DIES & INSERTS

- M&M manufactures all standard dies and inserts for BJ/Varco,
 Forum, Baash Ross, and Woolley tools.
- Available in multiple tooth configurations, including coarse tooth, fine tooth, diamond, directional, non-directional, CRA Grip, and more.
- All dies are manufactured in the United States using highquality grade steel.
- M&M Oil Tools' API-licensed facility ensures consistent, industry-standard quality.
- M&M supplies dies and inserts to some of the most recognized names in the industry.
- With distributors and industry experts worldwide, M&M delivers the right die for your application—every time.





IRON ROUGHNECK DIES

- M&M Oil Tools has led innovation in die and insert manufacturing for over 30 years, developing new spins on traditional Iron Roughneck die designs.
- M&M offers ST80/ST100/ST120, TM80/TM100/TM120, IR3080, and FR120 dies for Iron Roughneck applications.
- M&M dies are engineered for longevity and gripping force, featuring a curved profile that increases surface contact with the tubular.
- Curved profiles are available in a range of sizes to better accommodate varied tubular diameters.
- Meticulous material selection and engineered heat-treatment specifications maximize footage tripped per set of dies.
- All dies are machined from solid bar stock—no castings—for maximum strength. Client feedback confirms M&M dies last up to four times longer than competing products.
- M&M also offers custom Iron Roughneck die solutions, including relief cuts to avoid biting on the hardband.
- With M&M's innovative design and industry-leading materials and heat treatment, the company offers reliable die solutions for today's demanding industry requirements.





WRAP AROUND INSERTS FOR POWER TONGS

- M&M manufactures wrap-around dies for all major power tong manufacturers, including McCoy, Eckel, and Starr.
- These dies are available in configurations such as coarse tooth, medium tooth, fine tooth, and grit.
- All dies are manufactured at M&M's facility in Breaux Bridge, Louisiana, USA.
- TRS companies use M&M dies on major oil and gas, and geothermal projects worldwide.
- Unlike power tong manufacturers, dies and inserts are M&M's core focus
 so trust the die and insert experts.
- M&M stocks many of these inserts in standard sizes for quick delivery.





REPLACEMENT DIE FOR DRILL PIPE WRENCHES

- Holds 4 1/2"–6 5/8" and 6 5/8"–8 1/2" pipe sizes, compared to older 18" models.
- Contoured to fit the most common pipe sizes.
- Heat-treated for increased hardness and contoured for enhanced core strength.
- Lasts more than four times longer between die changeouts.
- Increased tooth coverage improves gripping performance and holding capacity.

