

MULTIPLY YOUR BOLTING MUSCLE

Torque Multipliers from



The Hydratight Sweeney Solution...

Better Multiplication

When the accurate make-up or break-out of a stubborn fastener requires a high level of torque, Hydratight Sweeney Torque Multipliers improve the job. These easy-to-use Torque Multipliers enable small amounts of input torque to produce large amounts of output torque... efficiently, and safely.



Multiple Applications

- Power Generation Plants
- Refineries
- Railroad Locomotives
- Chemical Plants
- Tower Cranes
- Shipyards
- Mines
- Trucks
- Off-Road Equipment
- Amusement Park Rides and Equipment

Multiple Features

- Low input torque to achieve high output torque
- Overload protection - protects tool from internal damage
- Anti-backlash device
- High efficiency using planetary gear sets
- Accurate
- Durable
- Input/output torque charts
- Reversible
- Angle of turn protractor
- Multiple styles of reaction
- Customer reaction anchors (available upon request)
- Application Support

When selecting a torque multiplier, sufficient torque should be allowed to break out the bolts. We suggest 2x the tightening torque.



Hydratight Sweeney Reaction Bar Torque Multipliers offer torque ratios from 3.3:1 to 20.25:1, with output capacities from 600 lbf-ft (814 N•m) to 3200 lbf-ft (4339 N•m).

Hydratight Sweeney Reaction Bar Torque Multipliers

	290 Plus	291	292	391	392	393
Output Capacity lbf-ft [Nm]	750 [1017]	1000 [1356]	2000 [2700]	1200 [1627]	2200 [2983]	3200 [4339]
Input Capacity lbf-ft [Nm]	227 [303]	303 [411]	571 [771]	200 [271]	162 [220]	173 [235]
Torque Ratio	3.3:1	3.3:1	3.5:1	6:1	13.6:1	18.5:1
Input Square Size	1/2"	1/2"	3/4"	1/2"	1/2"	1/2"
Output Square Size	3/4"	3/4"	1"	3/4"	1"	1"
Accuracy	±5%	±5%		±5%	±5%	±5%
Overload Protection	No	No	No	Yes	Yes	Yes
Anti-Backlash	No	No	No	No	Yes	Yes
Head Diameter in. [mm]	2.8 [71]	2.8 [71]	3.8 [97]	3.94 [100]	4.06 [103]	4.06 [103]
Height in. [mm]	3.3 [84]	3.3 [84]	4.5 [114]	4 [102]	5.75 [146]	6.5 [165]
Length in. [mm]	8.6 [218]	17.4 [442]	19.5 [495]	19.6 [498]	19.6 [498]	19.6 [498]
Weight lb. [kg]	4 [1.8]	5.5 [2.5]	12 [5.5]	9.1 [4.1]	15.2 [6.9]	18.3 [8.3]

Specifications subject to change without notice.

Hydratight Sweeney Plate Reaction Torque Multipliers offer torque ratios from 5.1:1 to 70.0:1, with output capacities from 1000 lbf-ft (1356 N•m) to 12000 lbf-ft (16270 N•m). Standard reaction plate included. Custom designs available.



Hydratight Sweeney Reaction Plate Torque Multipliers

	491	492	493	394	395	396
Output Capacity lbf-ft [Nm]	1000 [1356]	2200 [2983]	3200 [4339]	5000 [6779]	8000 [10846]	12000 [16270]
Input Capacity lbf-ft [Nm]	196 [266]	162 [220]	173 [235]	189 [256]	154 [209]	171 [232]
Torque Ratio	5.1:1	13.6:1	18.5:1	26.5:1	52:1	70:1
Input Square Size	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Output Square Size	3/4"	1"	1"	1-1/2"	1-1/2"	2-1/2"
Accuracy	±5%	±5%	±5%	±5%	±5%	±5%
Overload Protection	Yes	Yes	Yes	Yes	Yes	Yes
Anti-Backlash	Yes	Yes	Yes	Yes	Yes	Yes
Head Diameter in. [mm]	4.38" [111]	4.88" [124]	4.88" [124]	5.62" [143]	5.81" [148]	7.69" [195]
Height in. [mm]	4.5" [114]	5.5" [140]	6.41" [163]	8.75" [222]	10.75" [273]	12.38" [314]
Length in. [mm]	13.5" [343]	14.0" [356]	14.0" [356]	14.9" [378]	15.2" [387]	19.8" [504]
Weight lb. [kg]	10.5 [4.8]	17.2 [7.8]	19.5 [8.9]	34.0 [15.4]	50.3 [22.8]	74.0 [33.6]

Specifications subject to change without notice.



Hydratight Sweeney Reaction Foot Torque Multipliers

	TM 12 TK RS*/K RS*	TM 30 TK RS/K RS	TM 70 TK RS/K RS	TM 100 TK RS/K RS	TM 150 TK RS/K RS
Output Capacity lbf-ft [Nm]					
- Continuous	735 [1000]	1845 [2500]	4425 [6000]	6635 [9000]	10325 [14000]
- Peak	885 [1200]	2200 [3000]	5175 [7000]	7375 [10000]	11050 [15000]
Torque Ratio	3.4:1	10.5:1	33:1	42:1	51:1
Input Square Size	1/2"	1/2"	1/2"	1/2"	1/2"
Output Square Size	3/4"	1"	1-1/2"	1-1/2"	2-1/2"
Accuracy	±5%	±5%	±5%	±5%	±5%
Overload Protection	Add "U" to model	Add "U" to model	Add "U" to model	Add "U" to model	Add "U" to model
Anti-Backlash	No	Yes	Yes	Yes	Yes
Head Diameter in. (mm)	3.4 [86]	3.4 [86]	4.5 [114]	6.3 [160]	8.9 [228]
Height in. (mm) ³	7.3 [186]	8.7 [221]	10.6 [270]	11.3 [287]	13.5 [343]
Weight lb. (kg) ²	7.5 [3.4]	9.9 [4.5]	22 [10]	40.56 [18.4]	105.82 [48]

TK RS refers to the standard model.

K RS refers to low height model.

Overload protection is available when order specify model "U"

1 - POWERLOCK (RS) is standard on all tools unless denoted by *

2 - If overload protection is specified (U) increase weight by 2.21 lbs (1kg)

3 - If overload protection is specified (U) increase height by 1.2" (30mm)

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Hydratight x Sweeney = Advantage Multiplied



Hydratight Sweeney began in 1901 as the BK Sweeney Company. Since 1949, the company has led in the design, development, and manufacture of specialized tools, including Torque Multipliers and accessories. The recent combination of Hydratight and Sweeney ensures unrivaled strength and depth for bolting customers worldwide. A division of Waukesha Bearings, which is part of the \$5 billion Dover Corporation, Hydratight Sweeney offers small-company responsiveness backed by the resources of a large, diversified, international corporation. Hydratight Sweeney includes a worldwide engineering and sales staff to assist customers with their standard and custom maintenance tool needs.

Hydratight Sweeney is recognized as the leader in professional tooling systems, custom design and production capabilities to meet customers' needs. The Hydratight Sweeney design philosophy is simple: emphasize quality, operating efficiency, and long-term reliability. All tools undergo a rigorous inspection and testing process before shipment.

Hydratight Sweeney's customers rely on our rapid response through extensive computer-aided design, engineering, and manufacturing capabilities. Whether a customer requires a specific tool, or the custom design and manufacture of an entire

tool system, Hydratight Sweeney can address virtually any torque tooling requirement. Hydratight Sweeney manufactures a range of other bolting products, systems and accessories, from hydraulic wrenches and nuts to specialized tooling for locomotive and aircraft engines.

The Hydratight Sweeney sales philosophy is equally simple. Our skilled engineers maintain a good working knowledge of a vast range of mechanical systems and maintenance problems. When required, Hydratight Sweeney's experts consult with you prior to manufacturing tools or equipment to design and build exactly what you need. Our knowledgeable engineering and sales staff always remain available for service after the sale.



Hydratight Sweeney USA

12508 E. Briarwood Ave., Unit 1A, Englewood, Colorado 80112
Telephone: 303-749-6000 Fax: 303-749-6001 www.teamswweeney.com

Hydratight Sweeney UK

Bentley Road South, Darlaston, West Midland, WS10 8LQ England
Telephone: 0121 5050 600 Fax: 0121 5050 800 www.hydratight.com