

1074 Kenran Industrial Dr. St. Louis, MO 63137 Phone: 1-800-381-9968

# HUMCOSHAFT ACCESSORIES

### **Michigan Wheel Moderate Duty Propellers**



Photo courtesy of Sea Vee Corporation



Photo courtesy of Sport Craft Marine



Photo courtesy of Gibson Fiberglass Products, Inc.



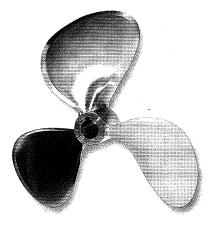
Photo courtesy of Custom Steel Yachts



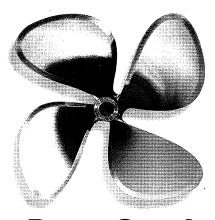
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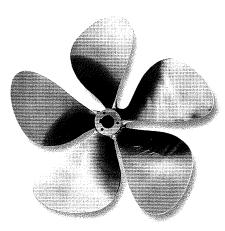
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**Dyna-Jet** 



**Dyna-Quad** 



M-500

## 0.56 E.A.R. Diameter range: 19" - 46" Pitch range: 0.7-1.1 dia/pitch ratio

The 3-blade **Dyna-Jet** is the most popular propeller in the world for moderate size boats, generally through 40', providing outstanding speed and performance. Designed for both the hard working fishing boats to get to their destination on time, to the pleasure craft owner who looks for the ultimate performance and speed. The **Dyna-Jet** pushes it to the limit.

Each **Dyna-Jet** propeller is carefully hand crafted and inspected to meet today's performance demands. When using NiBrAl material, a cupped trailing edge is available for maximizing thrust and minimizing vibration of a cavitating propeller where blade loading is at the upper end.

#### 0.69 E.A.R. Diameter range: 19" - 46" Pitch range: 0.7-1.1 dia/pitch ratio

The **Dyna-Quad** design is as popular as the three blade Dyna-Jet, but generally suggested for vessels larger than 40' requiring greater blade area due to the added weight and thrust requirements. The four blade design gives extreme smoothness, superb maneuverability, plus the speed and "dig" of a three blade.

In addition, if slight vibration is present with a 3 blade, the added blade in the **Dyna-Quad** may offer a more comfortable ride reducing that vibration. This is also an excellent choice for the performance minded commercial boat operators. Like the three blade Dyna-Jet, all **Dyna-Quads** in NiBrAl material are available with cupped trailing edges.

## 0.86 E.A.R. Diameter range: 22" - 44" Pitch range: 0.75-1.3 dia/pitch ratio

The **M-500** is selected by many operators for new boat construction, re-powers and upgrading of propellers. The excellent design and increased blade area provides superior and higher performance without increasing propeller diameter, which may be impossible due to clearance or tip speed consideration. The **M-500** is the top choice on installations where heavy vee-struts, dead wood or other hull appendages are agitating the water flow to the propeller. In addition, the **M-500** is the choice where vibration caused by resonance is a problem. The blade design reduces vibration caused by the propeller, achieving smoother and quiet cruising.

Available in NiBrAl (Nickel, Bronze, Aluminum) & Manganese Bronze. Also available cupped.



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# **IUM COSHAFT ACCESSORIES**

### Michigan Wheel Moderate Duty Propellers

Dyna-Jet & Dyna-Quad Specifications								Dyna-Jet - (0.56 E.A.R.)				Dyna-Quad - (0.69 E.A.R.)			
DIAMETER		Нив	HUB DIMENSIONS (INCHES)			STANDARD TAPER BORE(INCHES)			EXPANDED AREA PER	Approx. Net		MAXIMUM BLADE	EXPANDED AREA PER	Approx. Net	
INCHES	MM / M	AFT END	FORWARD END	LENGTH	MINIMUM Bore	MAXIMUM Bore	PILOT Bore	WIDTH (INCHES)	Blade (sq. in)	WEIGHT (LBS.)	*WR²	WIDTH (INCHES)	BLADE (SQ. IN)	WEIGHT (LBS.)	*WR² (LBSIN²)
9	229	1-3/8	1-1/2	2-1/8	3/4	7/8	3/4	3-7/8	11.7	2.5	10	-	-	-	-
10	254	1-1/2	1-5/8	2-1/4	3/4	1	3/4	4-5/16	14.5	3	17				1051
11	279	1-1/2	1-5/8	2-1/4	3/4	1	3/4	4-3/4	17.7	4	26	-	-	-	-
12	305	1-5/8	1-3/4	2-3/8	7/8	1-1/8	7/8	5-3/16	21.1	5	40				- 1
13	330	1-5/8	1-13/16	2-3/4	1	1-1/4	1	5-5/8	24.8	6	60	-	-	-	-
14	356	1-7/8	2	2-3/4	1.5.11	1-1/4	1	6	28.7	8	86				
15	381	1-7/8	2	2-3/4	1	1-1/4	1	6-7/16	33.1	9	120	-	-	-	-
16	406	2-1/8	2-3/8	3-1/4	1-1/8	1-3/8	1-1/8	6-7/8	37.5	11	167	-		-	
17	432	2-1/8	2-3/8	3-1/4	1-1/4	1-3/8	1-1/4	7-5/16	42.8	13	224	6-3/4	38.7	14	257
17**	432	2-3/8	2-5/8	3-3/4	1-1/4	1-1/2	1-1/4	7-5/16	42.8	13	224	<u>-</u>	-	-	-
18	457	2-3/8	2-5/8	3-1/4	1-1/4	1-1/2	1-1/4	7-3/4	47.4	16	298	7-1/8	43.2	17	341
19	483	2-3/8	2-5/8	3-3/4	1-1/4	1-1/2	1-1/4	8-3/16	53.1	18	388	-7-1/2	48.3	20	445
20	508	2-3/8	2-5/8	3-3/4	1-1/4	1-1/2	1-1/4	8-5/8	59.0	20	500	7-15/16	53.7	23	573
21	533	2-3/4	3	4-1/8	1-3/8	1-3/4	1-3/8	9-1/16	64.6	. 25	640	8-5/16	58.8	28	733
22	559	2-3/4	3	4-1/8	1-3/8	1-3/4	1-3/8	9-1/2	71.2	28	803	8-11/16	64.8	31	920
23	584	3	3-1/4	4-1/2	1-1/2	2	1-1/2	9-7/8	77.6	33	1,004	9-1/16	70,6	36	1,150
24	610	3	3-1/4	4-1/2	1-1/2	2	1-1/2	10-3/8	84.7	36	1,237	9-1/2	77.1	40	1,216
26	660	3-3/8	3-3/4	4-7/8	1-3/4	2-1/4	1-3/4	11-1/4	99.1	46	1,844	10-1/4	90.2	52	2,110
28	711	3-3/4	4-1/8	5-3/4	2	2-1/2	2	12-1/16	114.7	60	2,671	11-1/16	104.4	66	3,056
30	762	4-1/4	4-5/8	6	2	3	2	12-15/16	131.1	76	3,775	11-7/8	119.3	84	4,316
32	813	4-1/4	4-5/8	6	2	3	2	13-3/4	150.0	88	5,172	12-5/8	136.5	97	5,917
34	864	4-1/4	4-5/8	6-1/2	2-1/4	3	2-1/4	14-5/8	170.0	101	6,973	13-7/16	154.7	112	7,978
36	914	4-5/8	5-1/8	8	2-3/4	3-1/2	2-3/4	15-1/2	190.1	124	9,289	14-1/4	173.0	138	10,622
38	965	4-5/8	5-1/8	8	2-3/4	3-1/2	2-3/4	16-3/8	212.7	140	12,108	15	193.5	156	13,851
40	1016	5	5-1/2	9	3	3-3/4	3	17-1/4	235.3	168	15,646	15-13/16	214.1	186	17,892
42	1067	5-3/8	6	10-7/16	3	4	3	18-1/8	258.8	205	20,016	16-5/8	235.5	226	22,878
44	1118	5-7/16	6-3/16	11	3	4	3	19	284.5	233	25,187	13-3/8	258.9	258	28,790
46	1168	5-5/8	6-1/4	11-7/8	3	4	3	19-7/8	311.5	266	31,385	18-3/16	283.5	293	35,376

<sup>\*\*</sup> Sizes (Dia. x Pitch) 17x16, 17x17, & 17x18 maximum bore is 1-1/2". All other 17" dia. x available pitch - maximum bore is 1-3/8". See hub dimensions for hub size detail. \*WR² = ±10% in Air (inch squared lbs.)

B.T.F. = 0.050 B.T.F. = 0.047 For Dyna Jet M.W.R. = 0.33 For Dyna-Quad M.W.R. = 0.33

M-500 Specifications - (0.86 E.A.R.)												
Dian	METER	Hub Dimensions (Inches)			Sī	ANDARD TAPER BOI	RE	Maximum	Expanded Area per	APPROX. NET		
Inches	MM / M	AFT END	FORWARD END	LENGTH	MINIMUM Bore	MAXIMUM Bore	Pilot Bore	BLADE WIDTH (INCHES)	BLADE (SQ. IN)	WEIGHT (LBS.)	*WR² (LBSIN²)	
22	356	2-3/4	3	4-1/8	1-3/8	1-3/4	1-3/8	8-11/16	64.9	37	1,150	
23	381	3	3-1/4	4-1/2	1-1/2	2	1-1/2	9-1/16	70.6	43	1,430	
24	406	3	3-1/4	4-1/2	1-1/2	2	1-1/2	9-1/2	77.1	48	1,770	
26	432	3-3/8	3-3/4	4-7/8	1-3/4	2-1/4	1-3/4	10-1/2	90.2	62	2,630	
28	457	3-3/4	4-1/8	5-3/4	2	2-1/2	2	11-1/16	104.4	79	3,810	
30	483	4-1/4	4-5/8	6	2	3	2	11-7/8	119.3	99	5,380	
32	508	4-1/4	4-5/8	6	2	3	2	12-5/8	136.5	115	7,380	
34	533	4-1/4	4-5/8	6-1/2	2-1/4	3	2-1/4	13-7/16	154.7	134	9,960	
36	559	4-5/8	5-1/8	8	2-3/4	3-1/2	2-3/4	14-1/4	173.0	164	13,250	
38	584	4-5/8	5-1/8	8	2-3/4	3-1/2	2-3/4	15	193.5	186	17,280	
40	610	5	5-1/2	9	3	3-3/4	3	15-7/8	214.1	221	22,320	
42	660	5-3/8	6	10-7/16	3	4		16-9/16	235.5	267	28,520	
44	711	5-7/16	6-3/16	11	3	4	3	17-3/8	258.9	305	35,900	
46	762	5-5/8	6-1/4	11-7/8	3	4	3	18-3/16	283.5	347	44,740	

\*WR $^2$  =  $\pm 10\%$  in Air (inch squared lbs.)

M.W.R. = 0.30

B.T.F. @ 0.2R = 0.049