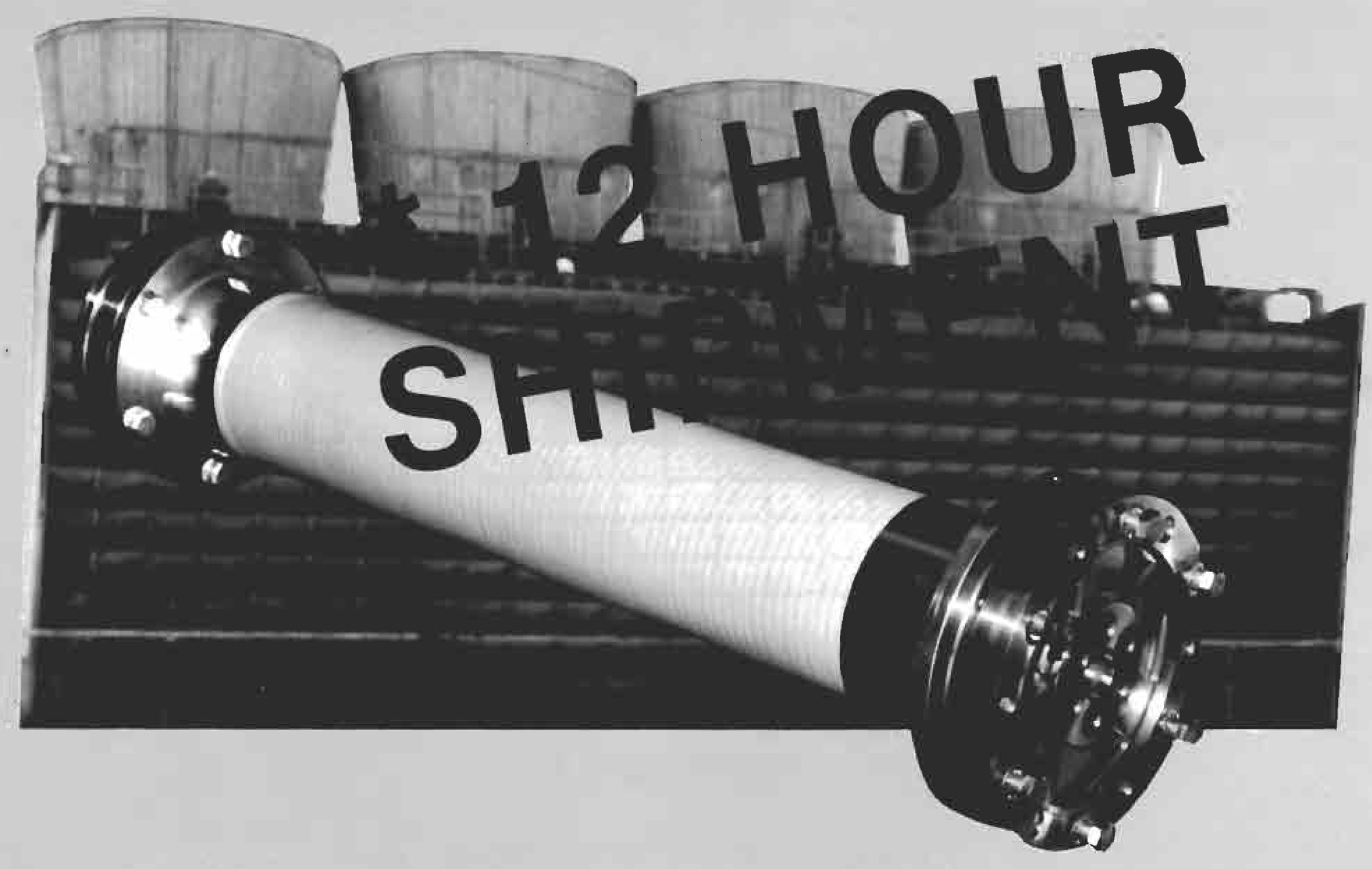
John Crane

METASTREAM
FLEXIBLE COUPLINGS

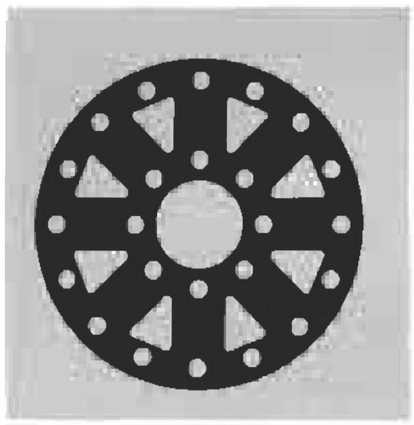
FLEXIBLE COUPLINGS

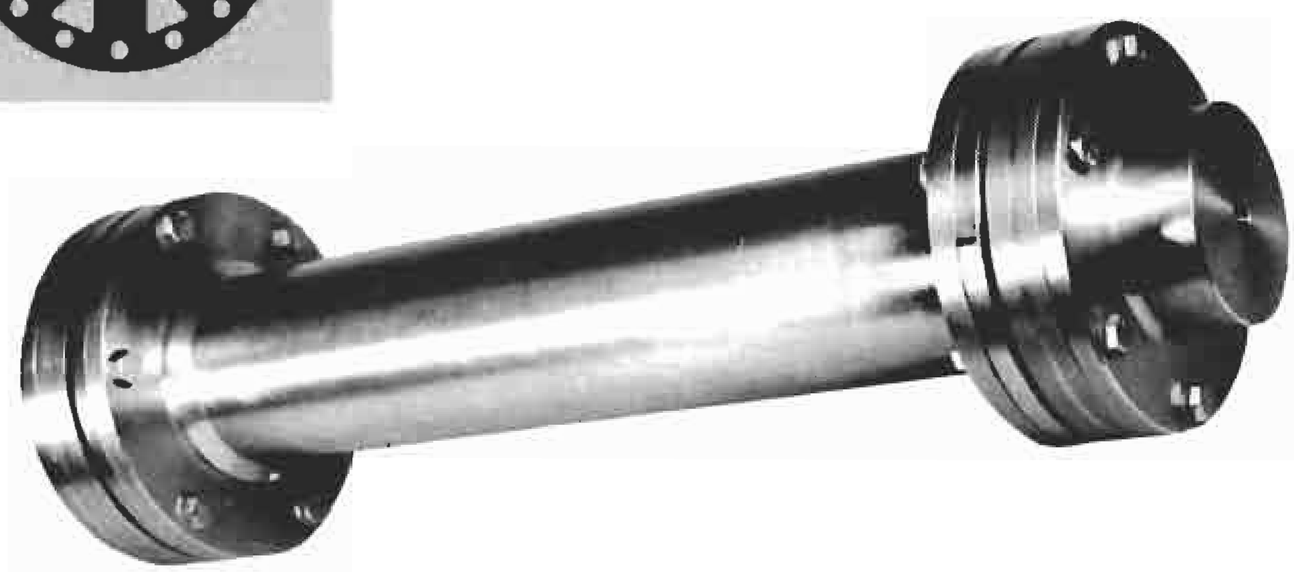
M SERIES-TYPE ZM/ZMC COOLING TOWER COUPLINGS



CTI
MEMBER

TYPE ZM
COOLING TOWER COUPLINGS
All Stainless Steel Construction





FEATURES

- Piloted fit of hub to disc pack to torque tube assures dynamic balance retention
- Unique disc pack spokes are designed to shear if torque overload or excessive misalignment conditions occur, protecting expensive motor and gear.

SELECTION PROCEDURE

For drives at 1800 RPM, use selection guide at right. At other speeds use:

$$\text{Coupling rating} = \frac{HP \times 100}{RPM}$$

HP	RPM	SIZE
1-50	1800	25
51-100	1800	50
101-150	1800	80
151-300	1800	160
301-700	1800	375

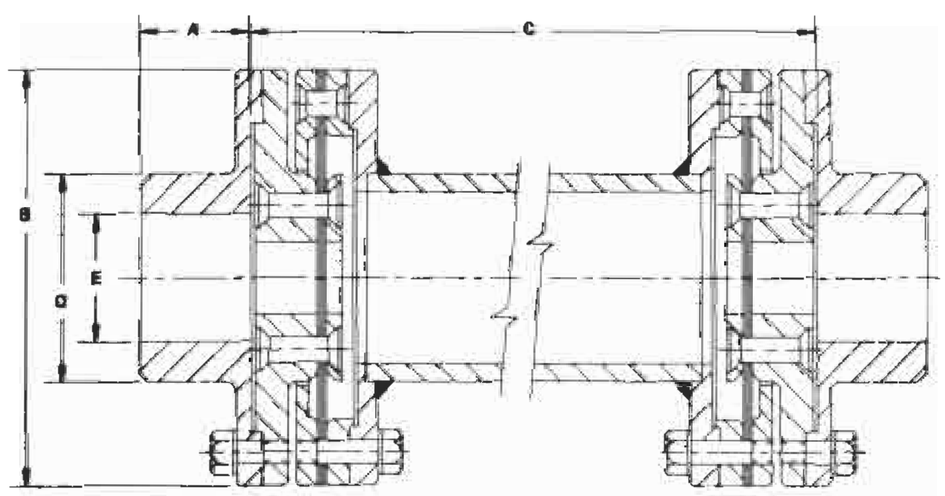
Determine coupling rating; select size from chart below. Check limiting factors, such as maximum bore and maximum span.

DIMENSIONAL DATA

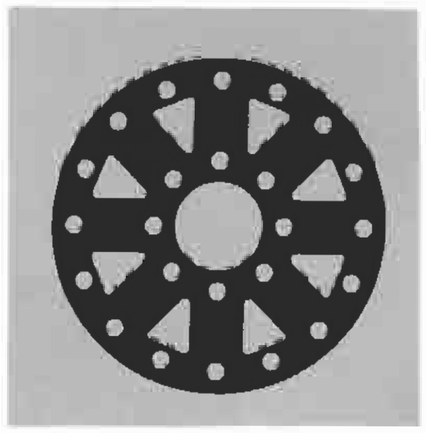
Coupling Designation SYN.	Rating HP/100 RPM[1]	A Inch	B Inch	C Max. Inch[2]	D Inch	E Inch
ZM 25/25	2.8	1.56	5.88	96	4.00	2.63
ZM 50/50	5.6	2.19	6.75	103	4.75	3.13
ZM 80/80	8.7	2.81	7.50	109	5.25	3.50
ZM 160/160	16.8	3.28	8.63	133	5.63	3.75
ZM 375/375	40.2	3.63	10.38	151	6.69	4.50

[1]These ratings include an appropriate Service Factor for fan applications.
[2]This is the maximum for single span units at 1800 RPM. For longer shaft separations, consult ZMC data.

SYMMETRICAL



TYPE ZMC
COOLING TOWER COUPLINGS
Composite Fiber Construction



All the quality FEATURES of the ZM coupling PLUS:

Size: ZMC 160/160 Length: 160" Weight: 49 lbs.

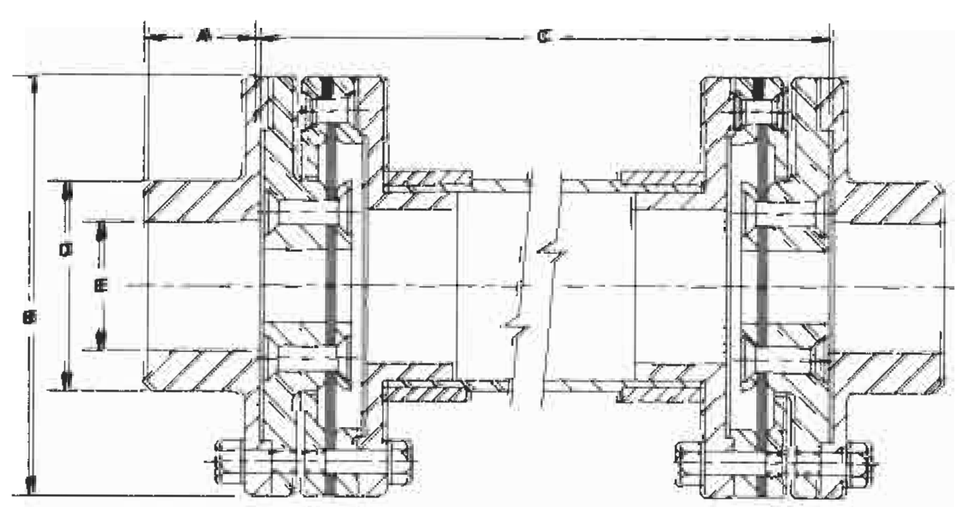
- Computer controlled, filiament wound matrix torque tube with stainless steel hubs, hardware and disc packs.
- Mechanical fit of torque to flanges offers superior reliability.
- Up to 80% lighter than comparable welded metal torque tubes.
- Shaft separation up to 20 feet in a single span with no intermediate bearing.
- Corrosion resistant to cooling tower environment and temperatures up to 300°F.
- Tube design virtually eliminates thermal expansion and sag.

DIMENSIONAL DATA

Coupling Designation SYN.	Rating HP/100 RPM[1]	A Inch	B Inch	C Max. Inch[2]	D Inch	E Inch
ZMC 25/25	2.8	1.56	5.88	134	4.00	2.63
ZMC 50/50	5.6	2.19	6.75	134	4.75	3.13
ZMC 80/80	8.7	2.81	7.50	134	5.25	3.50
ZMC 160/160	16.8	3.28	8.63	160	5.63	3.75
ZMC 375/375	40.2	3.63	10.38	240	6.69	4.50

[1]These ratings include an appropriate Service Factor for fan applications.
[2]For longer lengths please contact factory.

SYMMETRICAL



METASTREAM COUPLINGS FOR OTHER SERVICES

TSCS
Up to 188 HP/100 RPM–API 610
Spacer Coupling

TLCS
Up to 6571 HP/100 RPM–API 610
Spacer Coupling

TG/TJ
Up to 7510 HP/100 RPM–API 671
High Performance

MHS/MOD
Up to 1341 HP/100 RPM
Unique Spoke-Form Disc

CPLR
Up to 10 1/2" Diameter Shaft
Rigid Coupling
For Vertical Pumps

TSE
Up to 167 HP/100 RPM
API–610 Axially-split
Close Coupled

U.S. Manufacturing Facility
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Fax: (713) 946-8252

For your nearest John Crane facility, please contact the locations above.

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