



**Magnaloy Couplings** are available with a variety of special features which include splined bores. The “Splined Coupling Specifications” chart on page 7 shows several “In-house” splines available for quick delivery. Many additional splined bores are available by contacting the factory, including straight sided “PTO” type splines and metric splines.



**The Clamp-Type Coupling** utilized the basic Magnaloy coupling with the addition of the clamp feature. Developed to compensate for variations in spline formation methods and tolerances. Assures centering of the coupling and positive retention on the shaft. The clamp feature is suggested for all splined couplings, but is also available in smooth bored and keyed models.



**Magnaloy’s Steel Bushed Splined Bore\* Coupling** combines all the design and lightweight features of the Magnaloy Coupling with the added spline tooth strength and wear resistance of steel. Under normal conditions the standard “Splined Bore” coupling will perform satisfactorily and the addition of the “Clamp Feature” compensates for various fit conditions. When heavy cyclic loads, reverse loading and high torque loads exist in combination with fit variations, spline tooth failures and fretting can be corrected by utilizing Magnaloy’s steel bushed coupling. Of course, to achieve optimum benefits, Magnaloy’s clamp feature is recommended - assuring accurate centering and positive retention of the coupling on the shaft.

\* Although the steel bushing feature was designed primarily for spline bores, it is also available in smooth bored and keyed sizes.

## Spline Coupling Specifications

Spline Size			Pressure Angle (Degrees)	SAE Designation	Major Diameter (Inches)	Std Coupling Available Model Sizes	Steel Bushed Coupling	
Number of Teeth	Pitch Ratio	Spline Code					Bushing Diameter	Available Model Sizes
9	16/32	0916	30°	A	0.625	100 - 900	1.250	200 - 900
13	8/16	1308	30°	D, E	1.750	400 - 900	2.625	600 - 900
13	16/32	1316	30°	B	0.875	100 - 900	1.500	300 - 900
14	12/24	1412	30°	C	1.250	200 - 900	2.250	500 - 900
15	8/16	1508	30°	F	2.000	500 - 900	3.500	800 - 900
15	16/32	1516	30°	BB	1.000	100 - 900	1.750	400 - 900
17	12/24	1712	30°	CC	1.500	300 - 900	2.250	500 - 900
21	16/32	2116	30°		1.375	300 - 900	2.250	500 - 900
23	16/32	2316	30°		1.500	300 - 900	2.250 <sup>1</sup>	500 - 900
27	16/32	2716	30°		1.750	400 - 900	2.625 <sup>2</sup>	600 - 900
40	16/32	4016	30°		2.562	600 - 900	3.875	800 - 900

**Note:** 1 - With Model 600 - 900, Bushing O.D. is 2.625.  
 2 - With Model 700 & 800, Bushing O.D. is 2.875.

**Spline Type Identifier Code:** A = Spline, B = Steel Bushing

**Clamp Type Code:** C = Clamp Type.

**Part Number Usage:** Magnaloy Splined Coupling part numbers may be specified using the following format: Start with letter "M" designating Magnaloy, follow with 3 digit Model Code (100, 200, etc.), next use a single letter Spline Type Identifier Code ("A" for regular spline or "B" for steel bushing), then the specific 4 digit Spline Code. If a clamp type coupling is desired, use the letter code "C" after the Spline Code.

**Examples:** Model 300 hub with 13 tooth 16/32 splined bore: M300A1316. Same item with steel bushing: M300B1316. Same item with steel bushing and clamp: M300B1316C.

## Clamp Type Coupling Specifications

Coupling Model	Bolt Location		U	
	Z	Y	Bolt Size	Torque Spec.
100	0.31	0.68	1/4 - 20	130-140 in lbs
200	0.43	0.75	1/4 - 20	130-140 in lbs
300	0.47	0.95	5/16 - 18	210-220 in lbs
400	0.69	0.106	5/16 - 18	210-220 in lbs
500	0.72	1.25	3/8 - 16	300-310 in lbs
600	1.13	1.50	7/16 - 14	35-36 ft lbs
700	1.13	1.75	7/16 - 14	35-36 ft lbs
800	1.30	2.56	1/2 - 13	49-50 ft lbs
900*	0.75 & 2.19	3.00	3/4 - 10	100-110 ft lbs

\* Model 900 utilizes two bolt clamp design.

