

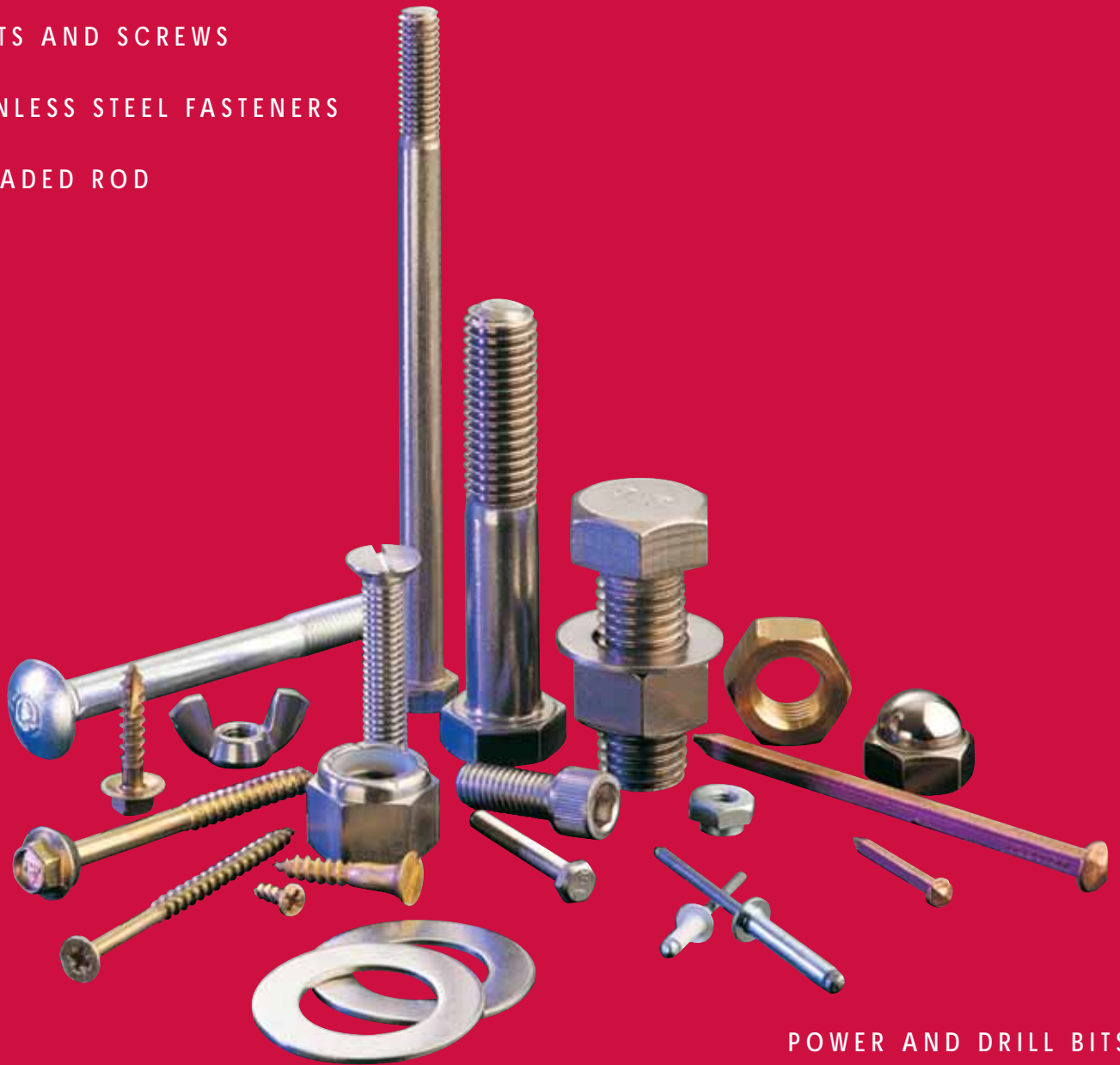
# FASTENERS

BOLTS, NUTS, WASHERS

RIVETS AND SCREWS

STAINLESS STEEL FASTENERS

THREADED ROD



POWER AND DRILL BITS

HACKSAW BLADES

SEALANTS AND ADHESIVES

**Mico** *Metals*



## SALES SUPPORT

*With 50 years experience in New Zealand, Mico Metals can provide technical support and assistance through their field sales representatives and in-house customer services teams at all locations. If stock is not held locally, each branch can call upon the nationwide network for backup.*

*Wherever possible, the company establishes a supply partnership with clients to ensure that metals and fasteners are available when and wherever the customer wants them. As well as giving technical advice and support, Mico Metals will source and indent specialist metals and fasteners to customers requirements.*

## COMMITMENT TO QUALITY

*All Mico Metals operations are accredited to ISO9002 and the company is committed to a programme of continuous improvement across all aspects of the business.*



## ADDED VALUE SERVICES

### **Cut-to-Length Line**

*Mico Metals operates a state-of-the-art cut-to-length facility with precision leveller and PVC coater for processing metal sheet from coil to customer requirements. The line processes coil up to 1550mm in width, from thickness of 0.45mm to 3.25mm. This facility enables fabricators to purchase pre-cut sheet which reduces waste and on-site fabrication, resulting in lower overall costs. It also reduces the leadtime necessary in sourcing sheet to customised sizes.*

### **Plasma Cutter**

*Mico Metals also operates a high performance computer driven CNC plasma cutter for production of specialised shapes and designs from aluminium and stainless steel plate. With a 1.2mm to 40.0mm thickness capacity, and 2500 x 6100mm cutting area, the plasma cutter has wide applications for the marine, transport and heavy plate manufacturing industries.*

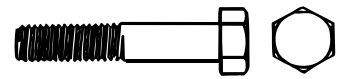
### **PVC Coating**

*Sheet and plate products can be PVC coated to protect the surface and ensure a high quality finish. PVC coating can be applied single and double sided up to 1500mm in width and 6000mm in length.*





# STAINLESS STEEL BOLTS - Metric (DIN 931)



M6 Diameter		
Length	304	316
30		•
35	•	
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65	•	•
70		•
75	•	•
80	•	•
90		•
100	•	•
110		•

M8 Diameter		
Length	304	316
35	•	•
40	•	•
45	•	
50	•	•
60	•	•
65	•	•
70	•	•
75	•	•
80		•
90	•	•
100	•	•

M10 Diameter		
Length	304	316
40	•	
45	•	•
50	•	•
55		•
60	•	•
65		•
70	•	•
75	•	•
80		•
90		•
100	•	•
110		•
120		•
130		•
150	•	•
170		•
200		•

Non Preferred Items.  
 Minimum quantities may apply.

M12 Diameter		
Length	304	316
45	•	•
50	•	•
55	•	•
60	•	•
65	•	•
70	•	•
75	•	•
80	•	•
90	•	•
100	•	•
110	•	•
120		•
130	•	•
150	•	•
180		•
200		•
240		•
260		•
280		•
300		•

M16 Diameter		
Length	304	316
50	•	•
55	•	•
65	•	•
70	•	•
75	•	•
80	•	•
90		•
100	•	•
120		•
125		•
130	•	•
140		•
150		•
180		•
200		•
240		•
260		•
280		•
300		•

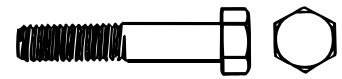
  

M20 Diameter		
Length	304	316
65		•
70		•
75		•
85		•
90		•
100		•
110		•
120		•
130		•
150		•
160		•
170		•

M24 Diameter		
Length	304	316
80		•
110		•
120		•
130		•
150		•

# STAINLESS STEEL BOLTS - Imperial



UNC		1/4 Inch Diameter	
Length	304	316	
1 1/4		•	
1 1/2	•	•	
1 3/4	•		
2	•	•	
2 1/4	•	•	
2 1/2	•	•	
2 3/4	•	•	
3		•	
3 1/4		•	
3 1/2		•	
4		•	
4 1/2		•	
5	•	•	
5 1/2		•	
6	•	•	

UNC		5/16 Inch Diameter	
Length	304	316	
1 1/4		•	
1 1/2	•	•	
1 3/4	•	•	
2	•	•	
2 1/2	•	•	
2 1/4	•	•	
3	•	•	
3 1/4	•	•	
3 1/2		•	
4	•	•	
4 1/2	•	•	
5		•	
6		•	

UNC		3/8 Inch Diameter	
Length	304	316	
1 1/2		•	
1 3/4	•	•	
2	•	•	
2 1/4	•	•	
2 1/2		•	
2 3/4		•	
3	•	•	
3 1/4	•		
3 1/2		•	
4		•	
4 1/2		•	
5		•	
5 1/2		•	
6		•	

UNC		1/2 Inch Diameter	
Length	304	316	
1 3/4			
2		•	
2 1/2		•	
3		•	
3 1/2		•	
4		•	
4 1/2		•	
5		•	
5 1/2			
6		•	
6 1/2		•	
7		•	
7 1/2		•	

BSW		1/2 Inch Diameter	
Length	304	316	
1 1/2		•	
2		•	
2 1/2		•	
3		•	
3 1/2		•	
4		•	
4 1/2		•	
5		•	
5 1/2		•	

UNC		5/8 Inch Diameter	
Length	304	316	
2		•	
2 1/4		•	
2 1/2		•	
2 3/4		•	
3		•	
3 1/2		•	
4		•	
4 1/2		•	
5		•	
5 1/2		•	
6		•	
7		•	
8		•	

UNC		3/4 Inch Diameter	
Length	304	316	
2 1/2		•	
3		•	
3 1/2		•	
4		•	
5		•	
5 1/2		•	
6		•	

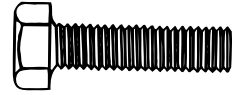
  

UNC		7/8 Inch Diameter	
Length	304	316	
3 1/2		•	
4		•	
5		•	

UNC		1 Inch Diameter	
Length	304	316	
3 1/2		•	
4		•	
6		•	

# STAINLESS STEEL SET SCREWS - Metric (DIN 933)



M4 Diameter		
Length	304	316
10		•
12		•
16		•
20		•
25		•
30		•
40		•

M10 Diameter		
Length	304	316
16		•
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
60		•
65		•
70	•	•
75		•
80		•
90	•	•
100	•	•

M5 Diameter		
Length	304	316
8		•
10		•
12		•
16	•	•
20	•	•
25		•
30	•	•
35	•	•
40		•
45	•	
50		•
65	•	

M12 Diameter		
Length	304	316
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
60		•
65	•	•
70		•
75		•
80		•
90		•
100	•	•

M6 Diameter		
Length	304	316
10		•
12	•	•
16	•	•
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
60		•
65		•
70		•
80		•

M16 Diameter		
Length	304	316
25		•
30	•	•
35	•	•
40	•	•
45		•
50	•	•
60	•	•
75		•
80		•
100		•

M8 Diameter		
Length	304	316
12	•	•
16	•	•
20	•	•
25	•	
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
60	•	•
65	•	•
70		•
75		•
80		•
90	•	•
100	•	

M20 Diameter		
Length	304	316
40		•
50		•
60		•
70		•
75		•
90		•
100		•

M24 Diameter		
Length	304	316
65		•

# STAINLESS STEEL SET SCREWS - Imperial



UNC	3/16 Inch Diameter	
Length	304	316
1/2	•	•
5/8	•	
3/4	•	•
1	•	•
1 1/4	•	•
1 1/2	•	•
2	•	•
2 1/2		•
3		•

UNC	5/16 Inch Diameter	
Length	304	316
1/2	•	•
3/4	•	•
1		•
1 1/4	•	•
2 1/2		•
3		•
4		•
4 1/2	•	

UNC	1/4 Inch Diameter	
Length	304	316
1/2	•	•
5/8		•
3/4	•	•
1	•	•
1 1/4	•	•
1 1/2		•
2		•
2 1/4		•
3		•
3 1/2		•
4		•

UNC	1/2 Inch Diameter	
Length	304	316
3/4		•
1		•
1 1/4		•
1 1/2		•
1 3/4		•
2		•
2 1/2		•
3		•

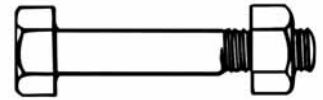
UNC	3/8 Inch Diameter	
Length	304	316
1/2		•
3/4		•
1		•
1 1/4		•
1 1/2		•
2		•
2 1/4		•
2 1/2		•
2 3/4		•
3		•
3 1/2		•

BSW	1/2 Inch Diameter	
Length	304	316
3/4		•
1		•
1 1/4		•
1 1/2		•
1 3/4		•
2		•
2 1/2		•
3		•

UNC	5/8 Inch Diameter	
Length	304	316
1		•
1 1/4		•

UNC	3/4 Inch Diameter	
Length	304	316
1		•
1 1/4		•
1 1/2		•
2		•

# MILD STEEL BOLTS AND NUTS - Metric



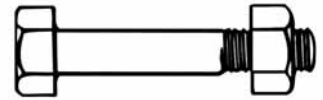
M6 Diameter Class 4.6			
Length	ZP	SC	GALV
12	•		
16	•		
20	•	•	
25	•		
30	•	•	
40	•		
50	•		
60	•		
70	•		
80	•		
90	•		
100	•		

M10 Diameter Class 4.6			
Length	ZP	SC	GALV
20	•		•
25	•	•	
30	•	•	•
40	•	•	
45		•	
50	•		•
55			
60	•		•
65		•	
70	•	•	•
75		•	
80	•		
90	•	•	•
100	•		•
110	•		•
120	•		•
130	•		•
140	•		•
150	•		•
200		•	•
220			•
240			•
260			•
280			•
300			•

M8 Diameter Class 4.6			
Length	ZP	SC	GALV
16	•		
20	•	•	
25	•		
30	•	•	
35			•
40	•		
45		•	
50	•	•	
55		•	
60	•		
70	•		
75		•	
80	•		•
90	•	•	•
100	•	•	•
110		•	
120	•		
130	•		
140	•		
150	•		

Non Preferred Items.  
 Minimum quantities may apply.

# MILD STEEL BOLTS AND NUTS - Metric



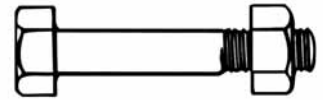
M12 Diameter Class 4.6			
Length	ZP	SC	GALV
25	•	•	•
30	•	•	•
35		•	
40	•		•
45		•	
50	•		•
55			
60	•	•	•
70		•	•
75			
80	•		•
90	•		•
100	•		•
110	•	•	•
120	•	•	•
130			•
140			•
150		•	•
160			•
180			•
200			•
220			•
240			•
260			•
280			•
300			•
325			•
350			•
375			•
400			•
425			•
450			•
500			•

M16 Diameter Class 4.6			
Length	ZP	SC	GALV
25			•
30	•		
35			•
40	•	•	•
45		•	
50	•		•
55		•	
60	•	•	•
65			
70	•	•	•
75	•		
80	•		•
90	•		•
100		•	•
110	•		•
120		•	•
130	•		•
140			•
150	•	•	
160			•
170			•
180			•
200		•	•
220			•
230			•
240			•
260			•
280			•
300			•
325			•
350			•
375			•
400			•
425			•
450			•
475			•
500			•
600			•

Non Preferred Items.  
 Minimum quantities may apply.



# MILD STEEL BOLTS AND NUTS - Metric



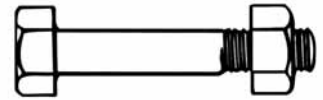
M20 Diameter Class 4.6			
Length	ZP	SC	GALV
40			•
50	•		•
55		•	
60		•	•
65		•	
70		•	•
75		•	
80		•	•
90			•
100		•	•
110		•	•
120		•	•
130		•	•
140			•
150			•
160			•
180			•
200			•
220			•
240			•
260			•
280			•
300			•
325			•
350			•
375			•
400			•
450			•
500			•
550			•
620			•
650			•

M24 Diameter Class 4.6			
Length	ZP	SC	GALV
30			•
50			•
60			•
65			•
70			•
75			•
80			•
90			•
100			•
110			•
120			•
130			•
150			•
160			•
180			•
220			•
260			•
280			•
300		•	•
350			•
500			•
550			•
600			•

M30 Diameter Class 4.6			
Length	ZP	SC	GALV
130			•
140			•

  Non Preferred Items.  
 Minimum quantities may apply.

# HIGH TENSILE STEEL BOLTS AND NUTS - Metric



M6 Diameter Class 8.8		
Length	ZP	SC
16	•	
20	•	•
25	•	•
30	•	•
35	•	
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65	•	•
70	•	
80	•	
90	•	
100	•	

M12 Diameter Class 8.8		
Length	ZP	SC
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65	•	•
70	•	•
75	•	
80	•	•
90	•	•
100	•	•
110	•	•
120	•	•
130	•	

M8 Diameter Class 8.8		
Length	ZP	SC
16	•	
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	
50	•	•
55	•	•
60	•	•
65	•	•
70	•	•
75	•	
80	•	•
90	•	

M16 Diameter Class 8.8		
Length	ZP	SC
35	•	•
40	•	•
45	•	•
50	•	•
55	•	•
60	•	
65	•	•
70	•	•
75	•	•
80	•	•
90	•	•
100	•	•
120		•
130		•
140		•
150	•	•

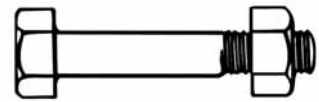
M10 Diameter Class 8.8		
Length	ZP	SC
20	•	•
25	•	•
30	•	•
35	•	•
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65	•	•
70	•	•
75	•	•
80	•	
90	•	•
100	•	•

M20 Diameter Class 8.8		
Length	ZP	SC
40	•	•
45	•	•
50	•	•
55	•	•
60	•	•
65	•	•
70	•	•
75	•	•
80	•	•
90	•	•
100	•	•
110		•
120		•

M24 Diameter Class 8.8		
Length	ZP	SC
50	•	
65		•
90		•
100		•

Non Preferred Items.  
Minimum quantities may apply.

# HIGH TENSILE STEEL BOLTS AND NUTS - Imperial



1/4 Inch Diameter Grade 5				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1/2		•	•	
5/8		•		
3/4		•	•	•
1		•	•	•
1 1/4		•	•	•
1 1/2	•	•	•	•
1 3/4		•		•
2		•	•	•
2 1/4				•
2 1/2		•	•	•
2 3/4		•		
3		•	•	•
3 1/2		•		
4		•		

7/16 Inch Diameter Grade 5				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1		•	•	
1 1/4		•	•	•
1 1/2		•		•
1 3/4		•		
2		•	•	•
2 1/2		•	•	
3		•		
3 1/2		•		
4		•	•	•
4 1/2		•		
5		•		

5/16 Inch Diameter Grade 5				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1/2				•
5/8			•	
3/4		•	•	•
1 1/4		•		•
1 1/2		•	•	•
1 3/4		•	•	
2		•	•	•
2 1/4		•		
2 1/2		•		
2 3/4		•	•	
3		•	•	
3 1/2		•	•	
4		•	•	
4 1/2		•		
5		•		
5 1/2	•			
6		•		

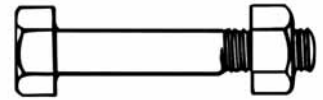
1/2 Inch Diameter Grade 8				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1		•	•	•
1 1/4		•	•	
1 1/2	•	•	•	
1 3/4		•	•	
2		•	•	
2 1/4		•		
2 1/2		•		
2 3/4		•		
3		•	•	•
3 1/2		•		•
4		•	•	•
4 1/2	•	•		
5		•		
8		•		

3/8 Inch Diameter Grade 5				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
3/4		•	•	
1		•	•	•
1 1/4		•	•	•
1 1/2		•	•	•
2		•	•	•
2 1/4		•		•
2 1/2		•	•	•
2 3/4		•		
3		•	•	•
3 1/2		•	•	•
4		•		•
5		•		
6		•		

9/16 Inch Diameter Grade 8				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1 3/4		•		
2		•		
2 1/2		•		
3		•		
4		•		

• Non Preferred Items.  
Minimum quantities may apply.

# HIGH TENSILE STEEL BOLTS AND NUTS - Imperial



5/8 Inch Diameter Grade 8				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1 1/4		•		
1 1/2		•	•	
1 3/4		•		
2		•	•	•
2 1/4		•		
2 1/2		•	•	
3		•	•	
3 1/2		•		
4		•		
4 1/2		•		
5		•	•	
5 1/2		•		
6		•		
8			•	

7/8 Inch Diameter Grade 8				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
2		•		
4		•		
4 1/2		•		
5		•		
6		•		
7		•		
8		•		
9		•		

3/4 Inch Diameter Grade 8				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
1 1/2		•		
1 3/4		•		
2		•		
2 1/2		•		
3		•		
3 1/2		•		
4		•		
4 1/2		•		
5		•		
6		•		
7		•		
9		•		

1 Inch Diameter Grade 8				
Length	SC		ZP	
	UNC	UNF	UNC	UNF
2 1/2		•		
3 1/2		•		
5		•		
9		•		
10		•		

Non Preferred Items.  
 Minimum quantities may apply.

# MILD STEEL SET SCREWS - Metric



M6 Diameter Class 4.6	
Length	ZP
12	•
16	•
20	•
25	•
30	•
35	•
40	•
45	•
50	•

M8 Diameter Class 4.6	
Length	ZP
12	•
16	•
20	•
25	•
30	•
35	•
40	•
45	•
50	•
55	•
60	•
65	•
70	•
75	•

M10 Diameter Class 4.6	
Length	ZP
16	•
20	•
25	•
30	•
35	•
40	•
45	•
50	•
55	•
60	•
65	•
75	•

M12 Diameter Class 4.6	
Length	ZP
20	•
25	•
30	•
35	•
40	•
45	•
50	•
60	•
65	•
70	•
75	•

M16 Diameter Class 4.6	
Length	ZP
40	•
50	•

# HIGH TENSILE STEEL SET SCREWS - Metric



M6 Diameter Class 8.8	
Length	ZP
12	•
16	•
20	•
25	•
30	•
35	•
40	•
45	•
50	•

M8 Diameter Class 8.8	
Length	ZP
12	•
16	•
20	•
25	•
30	•
35	•
50	•
90	•

M10 Diameter Class 8.8	
Length	ZP
16	•
20	•
25	•
30	•
35	•
40	•
45	•
50	•

M12 Diameter Class 8.8	
Length	ZP
25	•
30	•
35	•
40	•
45	•
50	•
35	•

M16 Diameter Class 8.8	
Length	ZP
40	•
50	•

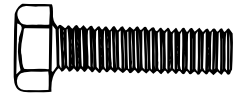


# HIGH TENSILE STEEL SET SCREWS - Imperial



1/4 Inch Diameter Grade 5					
Length	UNC		UNF		BSW
	SC	ZP	SC	ZP	ZP
1/2		•		•	
5/8				•	
3/4		•			
1		•			
1 1/4	•	•			
1 1/2		•	•		
1 3/4		•			
2		•			
5/16 Inch Diameter Grade 5					
Length	UNC		UNF		BSW
	SC	ZP	SC	ZP	ZP
1/2		•			
5/8		•			
3/4	•	•			
1		•			
1 1/4	•	•	•		
1 1/2		•			
1 3/4		•			
2		•			
3		•			
3/4		•			
3/8 Inch Diameter Grade 5					
Length	UNC		UNF		BSW
	SC	ZP	SC	ZP	ZP
5/8		•		•	
3/4		•		•	
1		•			
1 1/4		•			
1 1/2		•			
1 3/4		•			
2		•			
2 1/4		•			
2 1/2		•			
3		•			
1/2 Inch Diameter Grade 5					
Length	UNC		UNF		BSW
	SC	ZP	SC	ZP	ZP
3/4				•	
1					•
1 1/2	•				•
1 3/4	•				
2					•
2 1/2					•
3					•
5/8 Inch Diameter Grade 5					
Length	UNC		UNF		BSW
	SC	ZP	SC	ZP	ZP
1 1/2		•			
2		•			

# HIGH TENSILE STEEL SET SCREWS - Imperial



1/4 Inch Diameter Grade 8			
Length	UNC		UNF
	SC	ZP	SC
1/2	•	•	•
5/8		•	
3/4	•	•	
1		•	
1 1/4		•	•
2	•	•	•

7/16 Inch Diameter Grade 8			
Length	UNC		UNF
	SC	ZP	SC
1 1/2		•	
2		•	

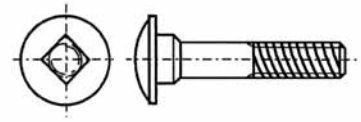
5/16 Inch Diameter Grade 8			
Length	UNC		UNF
	SC	ZP	SC
1/2	•	•	•
3/4	•		
1	•	•	•
1 1/4	•		
1 1/2	•		•
2	•	•	•

1/2 Inch Diameter Grade 8			
Length	UNC		UNF
	SC	ZP	SC
1		•	
1 1/2		•	
2		•	

3/8 Inch Diameter Grade 8			
Length	UNC		UNF
	SC	ZP	SC
5/8		•	
1		•	
1 1/4	•		•
1 1/2	•		•
2	•		•

# MILD STEEL CUP HEAD BOLTS & NUTS

(Carriage Bolts/Coach Bolts) - Metric



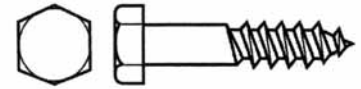
Mild Steel			
Diameter	Length	GALV	ZP
M6	20		•
M6	25		•
M6	30		•
M6	35		•
M6	40		•
M6	45		•
M6	50		•
M6	55		•
M6	60		•
M6	65		•
M6	70		•
M6	75		•
M6	80		•
M6	90		•
M6	100		•
M6	110		•
M6	130		•
M6	150		•
M8	20	•	•
M8	25	•	•
M8	30	•	•
M8	40	•	•
M8	45	•	•
M8	50	•	•
M8	55	•	•
M8	60	•	•
M8	65	•	•
M8	75	•	•
M8	80	•	•
M8	90	•	•
M8	100	•	•
M8	110	•	•
M8	130	•	•
M8	140	•	•
M8	150	•	•
M8	160	•	•
M8	180	•	•
M10	20		•
M10	25	•	•
M10	30	•	•
M10	35		•
M10	40	•	•
M10	50	•	•
M10	55		•
M10	60	•	•
M10	65	•	•
M10	70	•	•
M10	75	•	•
M10	80	•	•
M10	85		•
M10	90	•	•
M10	100	•	•
M10	110	•	•
M10	120	•	•
M10	130	•	•
M10	140	•	•
M10	150	•	•
M10	160	•	•
M10	170	•	•

Mild Steel			
Diameter	Length	GALV	ZP
M10	180	•	
M10	190	•	
M10	200	•	
M10	220	•	
M10	240	•	
M10	260	•	
M10	280	•	
M10	300	•	
M12	30	•	
M12	40	•	
M12	45	•	
M12	50	•	
M12	65	•	
M12	70	•	
M12	75	•	
M12	90	•	
M12	100	•	
M12	110	•	
M12	120	•	
M12	130	•	
M12	140	•	
M12	150	•	
M12	160	•	
M12	170	•	
M12	180	•	
M12	190	•	
M12	200	•	
M12	220	•	
M12	240	•	
M12	260	•	
M12	280	•	
M12	300	•	
M12	350	•	
M16	50	•	
M16	65	•	
M16	75	•	
M16	90	•	
M16	100	•	
M16	120	•	
M16	130	•	
M16	150	•	
M16	160	•	
M16	180	•	
M16	200	•	
M16	220	•	
M16	240	•	
M16	250	•	
M16	260	•	
M16	280	•	
M16	300	•	
M16	350	•	
M16	400	•	
M20	75	•	
M20	180	•	
M20	200	•	
M20	240	•	
M20	260	•	
M20	350	•	

Cup Bolts are manufactured to Standards AS1112-1980.

Some Cup Bolts available in Stainless Steel, subject to availability.

# COACH SCREWS - Metric

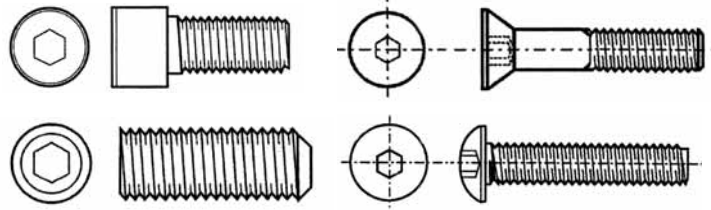


		Stainless
Diameter	Length	316
M4	16	•
M5	30	•
M5	50	•
M5	60	•
M6	30	•
M6	40	•
M6	50	•
M6	60	•
M6	70	•
M6	75	•
M8	30	•
M8	40	•
M8	50	•
M8	60	•
M8	65	•
M8	80	•
M8	90	•
M8	100	•
M10	50	•
M10	60	•
M10	75	•
M10	80	•
M10	90	•
M10	100	•
M10	120	•
M10	150	•
M10	160	•
M12	50	•
M12	60	•
M12	70	•
M12	80	•
M12	90	•
M12	100	•
M12	110	•
M12	120	•
M12	150	•
M12	160	•
M12	180	•
M12	200	•

		Steel AS/NZS 1393-1993
Diameter	Length	GALV
M6	40	•
M6	50	•
M6	65	•
M6	75	•
M6	80	•
M6	90	•
M6	100	•
M8	40	•
M8	50	•
M8	60	•
M8	65	•
M8	75	•
M8	90	•
M8	100	•
M10	40	•
M10	50	•
M10	65	•
M10	75	•
M10	90	•
M10	100	•
M10	110	•
M10	120	•
M10	130	•
M10	150	•
M10	160	•
M10	180	•
M12	40	•
M12	50	•
M12	65	•
M12	75	•
M12	90	•
M12	100	•
M12	120	•
M12	130	•
M12	150	•
M12	180	•
M12	200	•
M16	75	•
M16	150	•
M16	200	•
M16	220	•

# STAINLESS STEEL SOCKET SCREWS

(Hex Drive) - Metric

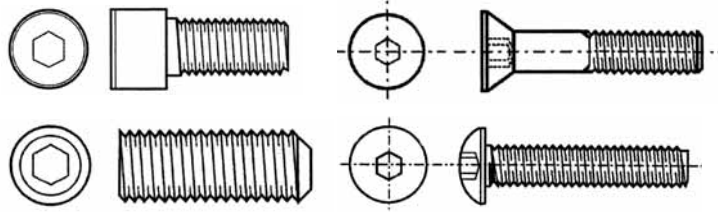


Diameter	Length	304				316	
		CAP	GRUB	CSK	BUTTON	CAP	CSK
		DIN 912	DIN 916	DIN 7991	ISO7380	DIN 912	DIN 7991
M2	12			.			
M3	3		.				
M3	4		.				
M3	5		.				
M3	6		.				
M3	8	.	.		.	.	
M3	10	.	.		.	.	
M3	12	.	.			.	
M3	16		.		.	.	
M3	20	.	.			.	
M3	25	.					
M4	4		.				
M4	5		.				
M4	6		.				
M4	8		.		.		.
M4	10		.		.	.	.
M4	12	.	.	.	.	.	.
M4	16	.	.		.	.	.
M4	20	.	.	.		.	.
M4	25	.				.	.
M5	5		.				
M5	6		.				
M5	8		.				
M5	10	.	.		.	.	
M5	12	.	.	.	.	.	.
M5	16	.	.	.	.	.	.
M5	20	.	.	.	.	.	.
M5	25	.	.	.	.	.	.
M5	30	.	.	.	.	.	.
M5	35	.	.				
M5	40	.		.			
M5	50	.					
M5	70					.	
M6	6		.				
M6	8		.				
M6	10		.	.	.		
M6	12	.	.	.	.	.	.
M6	16	.	.	.	.	.	.
M6	20	.	.	.	.	.	.
M6	25	.	.	.	.	.	.
M6	30	.		.	.	.	.
M6	32	.					
M6	35	.				.	.
M6	40	.	.	.	.	.	
M6	45	.	.				
M6	50	.		.			
M6	60					.	
M6	80					.	



# STAINLESS STEEL SOCKET SCREWS

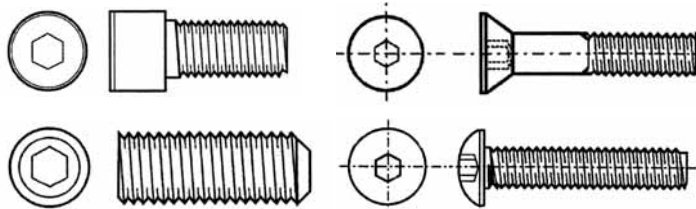
(Hex Drive) - Metric



Diameter	Length	304				316	
		CAP	GRUB	CSK	BUTTON	CAP	CSK
		DIN 912	DIN 916	DIN 7991	ISO7380	DIN 912	DIN 7991
M8	8		•				
M8	10		•				
M8	12		•				
M8	16	•	•	•	•	•	
M8	20	•		•	•	•	•
M8	25	•		•	•	•	•
M8	30	•		•	•	•	•
M8	35	•				•	•
M8	40	•	•	•	•	•	•
M8	45	•					
M8	50	•		•	•		
M8	60	•					
M8	70					•	
M10	10		•				
M10	12		•				
M10	16					•	
M10	20	•	•		•	•	•
M10	25	•				•	•
M10	30	•			•	•	•
M10	35	•				•	•
M10	40	•			•	•	•
M10	50	•				•	•
M10	60	•		•			
M10	70					•	•
M12	12		•				
M12	20	•	•				
M12	25	•					
M12	30	•					•
M12	35	•					
M12	40	•					
M12	50	•		•			•
M16	70					•	

# STAINLESS STEEL SOCKET SCREWS

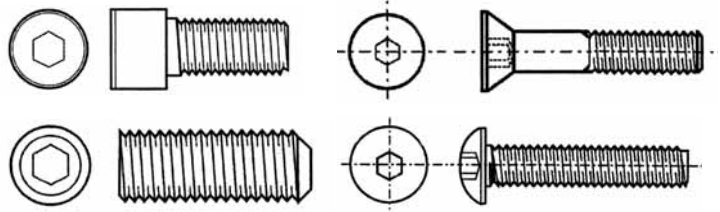
(Hex Drive) - Imperial



Diameter	Length	304		316	
		CAP	GRUB	CAP	GRUB
3/16	3/16			•	
3/16	1/4		•		
3/16	1/2	•			
3/16	3/4	•			
3/16	1	•			
3/16	2	•			
1/4	1/4		•		•
1/4	5/16		•		
1/4	3/8	•			
1/4	1/2	•	•	•	•
1/4	5/8	•	•		
1/4	3/4	•	•		
1/4	1 1/4	•			
1/4	1 1/2	•			
1/4	2	•		•	
1/4	3	•			
5/16	3/8		•		
5/16	1/2	•	•		•
5/16	3/4	•	•	•	
5/16	1	•			
5/16	2	•		•	
3/8	3/8	•	•		•
3/8	1/2		•		
3/8	5/8	•	•		
3/8	3/4	•	•		
3/8	1	•	•		
3/8	1 1/4	•			
3/8	1 1/2	•			
3/8	2	•			
1/2	1/2	•			
1/2	3/4	•			
1/2	1	•			

# STEEL SOCKET SCREWS

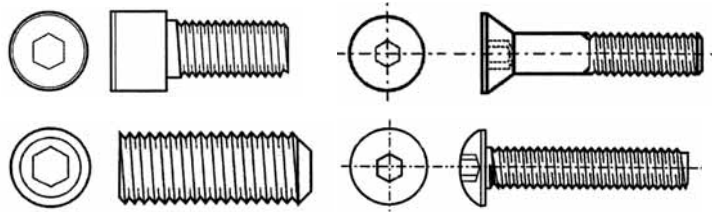
(Hex Drive) - Metric



Steel Self Coloured					
Diameter	Length	CAP	GRUB	CSK	BUTTON
M3	3		•		
M3	5	•			
M3	8				•
M3	10			•	•
M3	12			•	
M3	16	•			•
M3	30	•			
M4	6		•		
M4	8		•		•
M4	10	•	•		•
M4	12	•		•	•
M4	16	•		•	•
M4	20	•		•	
M4	25	•		•	
M5	5		•		
M5	6		•		
M5	8				
M5	10	•	•	•	•
M5	12		•	•	•
M5	16	•		•	•
M5	20	•		•	•
M5	25	•		•	•
M5	30	•			•
M5	35	•			
M5	40	•			
M5	50	•			
M5	55	•			
M5	70	•			
M6	6		•		
M6	10	•	•		•
M6	12		•	•	•
M6	16	•	•	•	
M6	20	•	•	•	•
M6	25	•		•	
M6	30	•			
M6	35	•		•	
M6	40	•		•	
M6	45	•			
M6	50	•			
M6	60	•			
M6	70	•			
M6	90	•			

# STEEL SOCKET SCREWS

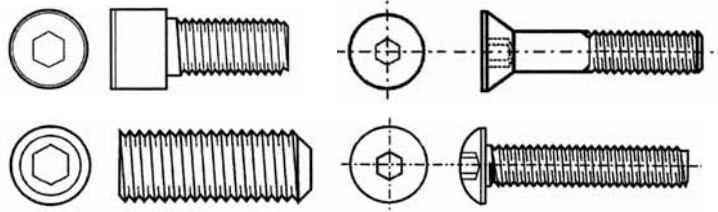
(Hex Drive) - Metric



Steel Self coloured					
Diameter	Length	CAP	GRUB	CSK	BUTTON
M8	8		•		
M8	10			•	
M8	12	•	•	•	•
M8	16	•	•	•	
M8	20	•		•	
M8	25	•	•	•	
M8	30	•	•		
M8	35	•			
M8	40	•		•	
M8	45	•			
M8	50	•		•	
M8	65	•			
M8	70	•		•	
M8	75	•			
M8	90	•			
M10	10		•		
M10	12		•		
M10	16		•		
M10	20	•	•	•	
M10	25	•		•	
M10	30	•		•	•
M10	35	•		•	
M10	40	•		•	
M10	45	•			
M10	50	•		•	
M10	55	•			
M10	60	•		•	
M10	65	•			
M10	70	•		•	
M10	80	•			
M10	100	•			
M10	110	•			
M10	130	•			
M12	12		•		
M12	20		•	•	
M12	25	•	•		
M12	30	•			•
M12	35	•		•	
M12	40	•			•
M12	45	•			
M12	50	•		•	
M12	55	•			
M12	60	•			
M12	65	•			
M12	70	•			
M12	80	•			
M12	90	•			
M12	100	•			
M12	120	•			
M16	25		•		
M16	50	•			
M16	70	•			
M20	40			•	
M20	60	•			

# STEEL SOCKET SCREWS

(Hex Drive) - Imperial



Steel Self Coloured				
Diameter	Length	GRUB	CSK	CAP
3/16	3/8	•		
3/16	1/2			•
3/16	3/4			•
3/16	1			•
3/16	2			•
1/4	3/8			•
1/4	1/2	•		•
1/4	5/8			•
1/4	3/4			•
1/4	1	•	•	•
1/4	1 1/2	•		
5/16	1/2			•
5/16	5/8			•
5/16	3/4			•
5/16	1	•		•
5/16	1 1/4			•
5/16	1 1/2		•	•
5/16	2			•
5/16	2 1/2			•
5/16	3			•
3/8	1/2	•		
3/8	3/4			•
3/8	1		•	•
3/8	1 1/2		•	•
3/8	2		•	•
3/8	2 1/2		•	
3/8	3		•	
3/8	4			•
1/2	1/2	•		
1/2	1 1/4		•	•
1/2	1 1/2		•	•
1/2	2		•	•
1/2	3		•	•
1/2	2 1/2			•
5/8	1		•	
5/8	1 1/4			•
5/8	2		•	
5/8	4			•
5/8	5			•
5/8	6			•
3/4	3			•
3/4	5			•
7/8	2 1/2			•
1	2			•
1	3			•
1 1/2	3			•



# STEEL GUTTER BOLTS

## Mushroom Head Slot Drive



### - Metric

Steel -Zinc Plated			
Diameter	Length	Bolt	Bolt & Nut
M5	10	•	•
M5	12	•	•
M5	16	•	•
M5	20	•	•
M5	25	•	•
M5	30	•	•
M5	40	•	•
M5	50	•	•
M5	60	•	•
M5	80	•	•
M6	10	•	•
M6	12	•	•
M6	16	•	•
M6	20	•	•
M6	25	•	•
M6	30	•	•
M6	35	•	•
M6	40	•	•
M6	45	•	•
M6	50	•	•
M6	60	•	•
M6	80	•	•

### - Imperial

Steel -Zinc Plated			
Diameter	Length	Bolt	Bolt & Nut
3/16	3/8	•	•
3/16	1/2	•	•
3/16	5/8	•	•
3/16	3/4	•	•
3/16	1	•	•
3/16	1 1/4	•	•
3/16	1 1/2	•	•
3/16	1 3/4	•	•
3/16	2	•	•
3/16	2 1/2	•	•
3/16	3	•	•
1/4	3/8	•	•
1/4	1/2	•	•
1/4	5/8	•	•
1/4	3/4	•	•
1/4	1	•	•
1/4	1 1/4	•	•
1/4	1 1/2	•	•
1/4	1 3/4	•	•
1/4	2	•	•
1/4	2 1/2	•	•
1/4	3	•	•

# STAINLESS STEEL MACHINE SCREWS - Metric



304						
Diameter	Length	Slot			Phillips	
		CSK	PAN	CHEESE	CSK	PAN
		DIN 963	DIN 85A	DIN 965A	DIN 7985A	DIN 84A
M3	8	•				•
M3	10	•	•			•
M3	12	•	•			•
M3	16	•	•			•
M3	20	•	•			•
M3	40					•
M3	50					•
M4	5	•			•	
M4	6	•			•	•
M4	8	•		•	•	•
M4	10	•	•	•		•
M4	12	•	•	•	•	•
M4	16	•	•	•		•
M4	20	•	•	•	•	•
M4	25	•	•	•	•	•
M4	30					•
M4	35	•	•		•	•
M4	50				•	•
M5	8	•	•	•	•	•
M5	10	•	•	•	•	•
M5	12		•			
M5	14	•	•	•	•	•
M5	16	•	•	•	•	•
M5	20	•	•	•	•	•
M5	25	•	•	•	•	•
M5	30				•	•
M5	35	•	•	•	•	•
M5	40		•			
M5	45	•	•	•		•
M5	50		•			•
M5	60					•

# STAINLESS STEEL MACHINE SCREWS - Metric



		304				
Diameter	Length	Slot		Phillips		
		CSK	PAN	CHEESE	CSK	PAN
		DIN 963	DIN 85A	DIN 965A	DIN 7985A	DIN 84A
M6	8		•		•	•
M6	10	•	•	•	•	•
M6	12	•	•	•	•	•
M6	16	•	•	•	•	•
M6	20	•	•	•	•	•
M6	25	•	•	•	•	•
M6	30		•		•	•
M6	35	•	•	•	•	•
M6	40	•	•	•	•	•
M6	55	•				
M6	60	•				
M6	65	•				
M6	100			•		
M8	12	•		•		
M8	16	•		•		
M8	20	•	•	•		
M8	25	•		•		
M8	30	•				
M8	35	•	•	•		
M8	40	•				
M8	45	•		•		
M8	50	•				
M8	55	•				
M8	60			•		
M8	75	•				
M10	20	•				
M10	25	•				
M10	30	•				
M10	35	•				
M10	40	•				
M10	50	•				
M12	25	•				
M12	30	•				

# STAINLESS STEEL MACHINE SCREWS - Imperial



304			
Slot			
Diameter	Length	CSK	RND
1/8	1/4	•	
1/8	3/8		•
1/8	1/2	•	•
1/8	5/8	•	•
1/8	3/4	•	•
1/8	1	•	•
1/8	1 1/2		•
1/8	2	•	
5/32	3/8		•
5/32	1/2	•	•
5/32	3/4	•	•
5/32	1	•	•
5/32	1 1/4	•	•
5/32	1 1/2		•
5/32	2		•
3/16	1/4	•	•
3/16	5/16	•	
3/16	3/8	•	•
3/16	1/2	•	•
3/16	5/8	•	•
3/16	3/4	•	•
3/16	1	•	•
3/16	1 1/4	•	•
3/16	1 1/2	•	•
3/16	1 3/4	•	•
3/16	2	•	•
3/16	2 1/2	•	•
3/16	3	•	•
3/16	4	•	
1/4	3/8	•	•
1/4	1/2	•	•
1/4	5/8	•	•
1/4	3/4	•	•
1/4	7/8	•	
1/4	1	•	•
1/4	1 1/4	•	•
1/4	1 1/2	•	•
1/4	1 3/4	•	•
1/4	2	•	•
1/4	2 1/4	•	
1/4	2 1/2	•	•
1/4	3	•	•
1/4	4	•	•

304			
Slot			
Diameter	Length	CSK	RND
5/16	1/2	•	•
5/16	3/4	•	•
5/16	1	•	•
5/16	1 1/4	•	•
5/16	1 1/2	•	•
5/16	1 3/4	•	
5/16	2	•	•
5/16	2 1/2	•	•
5/16	3	•	•
5/16	4	•	•
5/16	4 1/2	•	
3/8	3/4	•	•
3/8	1	•	•
3/8	1 1/4	•	•
3/8	1 1/2	•	•
3/8	1 3/4	•	
3/8	2	•	•
3/8	2 1/2	•	•
3/8	3	•	•
3/8	3 1/2	•	
3/8	4	•	
3/8	5	•	
3/8	6	•	
1/2	1	•	
1/2	1 1/2	•	
1/2	2	•	
1/2	3	•	
1/2	4	•	

# STEEL MACHINE SCREWS



## - Metric

Zinc Plated						
Diameter	Length	Slot			Pozi	
		CSK	PAN	CHEESE	CSK	PAN
M2	6	•				
M2	10			•		
M3	6	•	•	•	•	•
M3	8	•	•		•	•
M3	10	•	•		•	•
M3	12	•	•		•	•
M3	16	•	•		•	•
M3	20	•	•		•	•
M3	25		•		•	•
M3	30	•	•		•	•
M3	35				•	
M3	40	•	•			
M3	50	•	•			
M4	5		•			
M4	6	•			•	•
M4	8	•	•		•	•
M4	10	•	•	•	•	•
M4	12	•	•	•	•	•
M4	16	•	•		•	•
M4	20	•	•	•	•	•
M4	25	•	•	•	•	•
M4	30	•	•	•		
M4	35	•	•		•	•
M4	40	•	•			•
M4	50	•	•	•	•	•
M5	8		•			•
M5	10	•	•		•	•
M5	12	•	•		•	•
M5	16	•	•		•	•
M5	20	•	•		•	•
M5	25	•	•	•	•	•
M5	30	•	•			•
M5	35	•	•			•
M5	40	•	•		•	•
M5	50	•	•			•
M6	10	•	•		•	•
M6	12	•	•		•	•
M6	16	•	•		•	•
M6	20	•	•		•	•
M6	25	•	•		•	•
M6	30	•	•		•	•
M6	35	•	•			•
M6	40	•	•		•	•
M6	50	•	•		•	•
M6	55		•			
M8	12		•			
M8	16	•	•			
M8	20	•	•			•
M8	25	•	•			
M8	30	•	•			
M8	40	•	•			
M8	45					
M8	50		•			
M8	75		•			
M10	10				•	
M10	20		•			

Note: Some sizes available in Phillips, subject to availability.



# STEEL MACHINE SCREWS



## - Imperial

Zinc Plated			
Slot			
Diameter	Length	CSK	RND
1/8	1/4		•
1/8	3/8		•
1/8	1/2		•
1/8	5/8		•
1/8	3/4		•
1/8	7/8		•
1/8	1	•	
1/8	1 1/4		•
1/8	1 1/2		•
1/8	1 3/4		•
1/8	2	•	
5/32	1/4		•
5/32	3/8		•
5/32	1/2		•
5/32	5/8		•
5/32	3/4		•
5/32	1	•	•
5/32	1 1/4	•	•
5/32	1 1/2	•	•
5/32	1 3/4		•
5/32	2	•	•
3/16	1/4	•	•
3/16	3/8	•	•
3/16	1/2	•	•
3/16	5/8	•	•
3/16	3/4	•	•
3/16	1	•	•
3/16	1 1/4		•
3/16	1 1/2	•	•
3/16	1 3/4		•
3/16	2	•	•
3/16	2 1/2		•
3/16	3	•	

Zinc Plated			
Slot			
Diameter	Length	CSK	RND
5/16	1/2	•	•
5/16	3/4	•	•
5/16	1	•	•
5/16	1 1/4	•	•
5/16	1 1/2	•	•
5/16	1 3/4	•	
5/16	2	•	•
5/16	2 1/2	•	•
5/16	3	•	•
5/16	4	•	•
5/16	4 1/2	•	
3/8	3/4	•	•
3/8	1	•	•
3/8	1 1/4	•	•
3/8	1 1/2	•	•
3/8	1 3/4	•	
3/8	2	•	•
3/8	2 1/2	•	•
3/8	3	•	•
3/8	3 1/2	•	
3/8	4	•	
3/8	5	•	
3/8	6	•	
1/2	1	•	
1/2	1 1/2	•	
1/2	2	•	
1/2	3	•	
1/2	4	•	

# BRASS MACHINE SCREWS



## - Metric

Self Coloured		
Slot		
Diameter	Length	PAN
M3	6	•
M3	16	•
M3	20	•
M3	25	•
M3	40	•
M4	8	•
M4	10	•
M4	16	•
M4	20	•
M4	25	•
M4	30	•
M5	8	•
M5	10	•
M5	16	•
M5	25	•
M5	30	•
M5	50	•
M6	10	•
M6	12	•
M6	16	•
M6	20	•
M6	25	•
M6	30	•
M6	40	•
M6	50	•

## - Imperial

Self Coloured			
Slot			
Diameter	Length	CSK	RND
1/8	1/4	•	
1/8	1/2	•	•
1/8	3/4	•	•
1/8	1	•	•
1/8	1 1/4	•	•
1/8	2	•	
5/32	3/8		•
5/32	1/2		•
5/32	3/4	•	•
5/32	1 1/4	•	•
5/32	1 1/2	•	•
5/32	2	•	•
3/16	3/8		•
3/16	1/2		•
3/16	5/8		•
3/16	3/4	•	•
3/16	1	•	
3/16	1 1/4	•	•
3/16	1 1/2		•
3/16	2	•	•
1/4	1/2		•
1/4	5/8		•
1/4	3/4	•	•
1/4	1	•	
1/4	1 1/4		•
1/4	1 1/2	•	•
1/4	2	•	•

# STAINLESS STEEL SELF TAPPERS Type AB Point - Imperial



Gauge	Length	Square		Pozi		Slot		Phillips	
		CSK	PAN	CSK	PAN	CSK	PAN	CSK	PAN
4	1/4				•				
4	3/8			•	•			•	
4	1/2		•	•	•	•	•		
4	5/8			•	•				
4	3/4		•	•	•		•		
4	1		•	•					
6	1/4				•		•		
6	5/16								
6	3/8		•	•	•	•			
6	1/2	•	•	•	•	•			•
6	5/8			•	•	•		•	•
6	3/4	•	•	•	•	•			•
6	1	•	•	•	•				
6	1 1/4	•	•	•	•				
6	1 1/2	•	•	•	•				
6	2	•	•		•				
8	1/4						•		
8	3/8		•	•	•	•	•		
8	1/2	•	•	•	•				
8	5/8	•		•	•	•	•		
8	3/4	•	•	•	•			•	
8	1	•	•	•	•				•
8	1 1/4	•	•	•	•	•		•	
8	1 1/2	•	•	•	•				
8	1 3/4			•					
8	2	•	•	•	•				
8	2 1/2	•		•	•				
8	3		•	•	•				
10	3/8			•	•				
10	1/2	•	•	•	•	•	•		
10	5/8		•	•	•		•		
10	3/4	•	•	•	•				
10	1	•	•	•	•				
10	1 1/4	•	•	•	•	•			
10	1 1/2	•	•	•	•				
10	2	•	•	•	•				
10	2 1/2	•	•	•	•			•	
10	3			•				•	
12	1/2								
12	3/4			•	•	•	•	•	•
12	1			•	•	•		•	•
12	1 1/4			•	•	•	•	•	•
12	1 1/2			•	•			•	
12	2			•	•	•	•	•	•
12	2 1/2			•	•			•	
12	3			•	•			•	•
14	1/2			•					
14	3/4						•		•
14	1					•		•	•
14	1 1/4			•			•	•	•
14	1 1/2			•		•	•	•	•
14	2			•		•	•	•	•
14	2 1/2							•	
14	3			•				•	•

Self Tapping Screws	
4 gauge	#0 Drive
6 - 8 gauge	#1 or #2 drive
10 gauge	#2 drive only
12 - 14 gauge	#3 drive

Products are available in alternative points (either Point T17 or T25)

# STEEL SELF TAPPERS



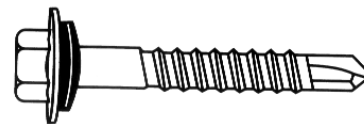
## Type AB Point - Imperial

		Zinc Plated			
Gauge	Length	Slot		Pozi	
		CSK	PAN	CSK	PAN
4	1/4				•
4	3/8		•	•	•
4	1/2		•	•	•
4	5/8		•	•	•
4	3/4		•	•	•
4	1				•
6	1/4		•	•	•
6	5/16		•		
6	3/8	•	•	•	•
6	1/2	•	•	•	•
6	5/8		•	•	•
6	3/4	•	•	•	•
6	1	•	•	•	•
6	1 1/4		•		•
6	1 1/2		•	•	•
8	3/8	•			•
8	1/2	•	•		•
8	5/8		•	•	•
8	3/4	•	•	•	•
8	1		•	•	•
8	1 1/4	•	•	•	•
8	1 1/2	•	•	•	•
8	1 3/4				•
8	2	•	•	•	•
10	3/8		•		•
10	1/2		•		•
10	5/8				•
10	3/4	•		•	•
10	1	•		•	•
10	1 1/4	•		•	•
10	1 1/2	•		•	•
10	2	•	•	•	•
12	1/2		•		
12	3/4		•		•
12	1		•		•
12	1 1/4	•	•		
12	1 1/2	•	•		•
12	2			•	•
12	3			•	
14	1/2		•		
14	3/4		•		•
14	1		•		•
14	1 1/4		•		•
14	1 1/2		•		•

Self Tapping Screws	
4 gauge	#0 Drive
6 - 8 gauge	#1 or #2 drive
10 gauge	#2 drive only
12 - 14 gauge	#3 drive

# STEEL TEK SCREWS

## Self Drilling - Metal Fixing



Gauge	Length	HEX		YZC	Class 4/M/G
		Threads per inch			
10	16	16	24	•	•
10	25	16		•	•
12	20	14	24	•	•
12	25	14	24	•	•
12	35	14	24	•	•
12	45	14		•	•
12	55	14		•	•
12	65	14		•	•
12	75	14		•	•
14	22	10		•	•
14	42	10		•	•
14	50	10		•	•
14	65	10		•	•
14	75	10		•	•
14	90	10		•	•
14	115	10		•	•
14	150	10		•	•

Highlighted products indicate Tek Screws with/without an attached Neo (EPDM Rubber Washer).

CSK			
Diameter	Length	Threads per inch	M/G
12	25	11	•
12	25	11	•
12	40	11	•
12	50	11	•
12	65	11	•
14	50	10	•
14	65	10	•
14	75	10	•
14	100	10	•
14	125	10	•

Available with coloured heads. Contact Mico Metals for colour options.

WAFER				
Gauge	Length	Threads per inch	YZC	M/G
10	16	16	•	•
10	16	24	•	•
10	22	16	•	•
10	22	24	•	•
10	30	24	•	•

# STEEL WING TEK SCREWS

## Self Drilling



CSK			
Diameter	Length	Threads per inch	YZC
10	30	16	•
10	35	16	•
10	40	16	•
10	45	16	•
10	50	16	•
10	57	16	•
10	70	16	•
10	75	16	•
14	50	16	•

Refer to page 66 for Tek Screw drilling capacities.

# STEEL T17 SCREWS

## Self Drilling



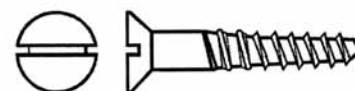
HEX				
Gauge	Length	Threads per inch	YZC	M/G
12	25	11	•	•
12	35	11	•	•
12	40	11	•	•
12	50	11	•	•
12	65	11	•	•
12	75	11		•
14	25	10		•
14	50	10		•
14	65	10		•
14	75	10		•
14	90	10		•
14	100	10		•
14	115	10		•
14	125	10		•
14	150	10		•

Highlighted products indicate T17 Screws with/without an attached Neo (EPDM Rubber Washer).

CSK				
Gauge	Length	Threads per inch	YZC	M/G
10	40	12	•	•
10	50	12	•	•

BUGLE				
Gauge	Length	Threads per inch	YZC	M/G
14	50	10	•	•
14	75	10	•	•
14	100	10	•	•
14	150	10	•	•

# STEEL WOODSCREWS



Steel						
CSK Pozi						
Gauge	Length	Twinfast		Square	Surefast	Hingefast
		ZP	BMA	ZC	ZC	ZP
4	3/8		•			
4	1/2	•	•			
4	5/8	•	•			
4	3/4	•				
4	1		•			
5	1/2	•	•			
5	5/8	•	•			
5	3/4	•	•			
5	1	•	•			
6	1/2	•	•			
6	5/8	•	•			
6	3/4	•	•			
6	1	•	•			
6	1 1/4	•	•			
6	1 1/2	•				
7	3/4	•	•			
7	1	•	•			
7	1 1/4	•	•			
7	1 1/2	•	•			
8	1/2	•	•			
8	5/8	•			•	•
8	3/4	•	•	•	•	•
8	1	•	•	•	•	•
8	1 1/8			•	•	
8	1 1/4	•	•	•	•	•
8	1 1/2	•	•	•	•	•
8	1 5/8			•		
8	1 3/4	•	•	•	•	
8	2	•		•	•	
9	3/4	•	•			
9	1	•	•			
9	1 1/4	•				
9	1 3/4	•	•			
9	2	•	•			
10	3/4	•				
10	1	•	•			
10	1 1/4	•	•			
10	1 1/2		•			
10	2 1/2			•	•	
10	3			•	•	

**Surefast** A standard woodscrew, with four ribs under the head of the screw.

**Twinfast** Twin threaded woodscrew, with twice as many threads as a Surefast Woodscrew.

**Hingefast** A Surefast Woodscrew with no ribs under the head of the screw.



# STAINLESS STEEL WOODSCREWS



## Square Drive

### -Metric

Stainless 302			
Square Bugle			
Screw Gauge	Metric Length	Drive	Deck Screw T17
8	32	#2	•
8	41	#2	•
8	50	#2	•
8	57	#2	•
10	50	#2	•
10	70	#2	•
10	90	#2	•

### - Imperial

Stainless 302			
Sure Fast			
Screw Gauge	Metric Length	Drive	CSK T17
8	3/4	#2	•
8	1	#2	•
8	1 1/4	#2	•
8	1 1/2	#2	•
8	2	#2	•
10	1 1/2	#2	•
10	2	#2	•
10	2 1/2	#2	•
10	3	#2	•

# STAINLESS STEEL HEX NUTS



## - Metric

Stainless		
Diameter	304	316
M2		•
M3	•	•
M4	•	•
M5	•	•
M6	•	•
M8	•	•
M10	•	•
M12	•	•
M16	•	•
M20	•	•
M24	•	•
M27	•	•

## - Imperial

Stainless				
Diameter	304		316	
	UNC	BSW	UNC	BSW
1/8	•		•	
5/32	•		•	
3/16	•		•	
1/4	•		•	
5/16	•		•	
3/8	•		•	
7/16			•	
1/2	•	•	•	•
5/8	•		•	
3/4	•		•	
7/8	•		•	
1	•		•	
1-1/8			•	
1-1/4			•	
1-1/2			•	

# STEEL HEX NUTS



## - Metric AS1120/1996

Diameter	Mild Steel	
	ZP	HDG
M2	•	
M3	•	
M4	•	
M5	•	
M6	•	
M8	•	•
M10	•	•
M12	•	•
M16	•	•
M20	•	•
M24	•	•
M30		•

## - Imperial

Diameter	Mild Steel		High Tensile Steel	
	ZP	HDG	ZP	
	UNC	UNF	UNC	UNF
1/8	•			
5/32	•			
3/16	•			
1/4	•			•
5/16	•	•	•	•
3/8	•	•	•	•
1/2	•	•	•	•
5/8	•	•	•	•
3/4		•	•	•
7/8			•	•
1		•		

# BRASS HEX NUTS



## - Metric

Brass	
Diameter	SC
M3	•
M4	•
M5	•
M6	•
M8	•
M10	•
M12	•
M24	•

## - Imperial

Brass	
Diameter	SC
1/8	•
5/32	•
3/16	•
1/4	•
5/16	•
3/8	•
7/16	•
1/2	•
5/8	•
3/4	•
7/8	•

# STAINLESS STEEL HEXAGON NYLOC NUTS



## - Metric (DIN 985)

Stainless		
Diameter	304	316
M3	•	•
M4	•	•
M5	•	•
M6	•	•
M8	•	•
M10	•	•
M12	•	•
M16	•	•
M20	•	•
M24	•	•

## - Imperial

Stainless				
Diameter	304		316	
	UNC	BSW	UNC	BSW
1/8	•			
3/16	•		•	
1/4	•		•	
5/16	•		•	
3/8	•		•	
1/2	•	•	•	•
5/8	•		•	
3/4	•		•	

# STEEL HEXAGON NYLOC NUTS



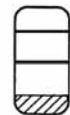
## - Metric

Steel	
Diameter	ZP
M3	•
M4	•
M5	•
M6	•
M8	•
M10	•
M12	•
M16	•
M20	•
M24	•
M30	•

## - Imperial

Steel			
Diameter	ZP		
	UNC	UNF	BSW
3/16	•	•	
1/4	•	•	
5/16	•	•	
3/8	•	•	
7/16	•	•	
1/2	•	•	•
9/16	•	•	
5/8	•	•	
3/4	•	•	
7/8	•	•	
1	•	•	
1-1/8		•	
1-1/4	•		
1-1/2	•	•	

# PRESSED NUTS



## - Metric

Dia.	Steel		Brass
	SQUARE	HEX	HEX
	ZP	ZP	SC
M3	•	•	•
M4	•	•	•
M5	•	•	•
M6	•	•	•
M8	•	•	•

## - Imperial

Dia.	Steel		Brass
	SQUARE	HEX	HEX
	ZP	ZP	SC
1/8	•	•	•
5/32	•	•	•
3/16	•	•	•
1/4	•	•	•
5/16	•	•	•

# HEXAGON DOME NUTS



## - Metric

Diameter	Stainless		Steel	Brass
	304	316	ZP	SC
M3	•			•
M4	•			
M5	•	•		•
M6	•	•		•
M8	•	•		•
M10	•	•	•	•
M12	•	•		
M16	•	•		

## - Imperial

Dia.	Stainless			Brass
	304		316	SC
	UNC	BSW	UNC	
1/8	•			•
5/32				•
3/16	•		•	•
1/4	•		•	•
5/16	•		•	•
3/8	•		•	•
1/2	•	•		•
3/4				•
5/8	•			

# WING NUTS Stainless Steel



## - Metric

Diameter	Stainless	
	304	316
M4	•	
M5	•	•
M6	•	•
M8	•	•
M10	•	•
M12	•	•

## - Imperial

Diameter	Stainless			
	304		316	
	UNC	BSW	UNC	BSW
1/8	•			
3/16	•		•	
1/4	•		•	
5/16	•		•	
3/8	•		•	
1/2		•	•	•

## Steel - Metric

Diameter	Steel
	ZP
M4	•
M5	•
M6	•
M8	•
M10	•
M12	•

## - Imperial

Diameter	Steel
	ZP UNC
1/8	
3/16	•
1/4	•
5/16	•
3/8	•
1/2	•

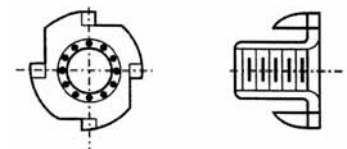
## Brass - Metric

Diameter	Brass
	SC
M4	
M5	•
M6	
M8	•
M10	
M12	

## - Imperial

Diameter	Brass
	SC UNC
1/8	
3/16	•
1/4	•
5/16	•
3/8	
1/2	

# STEEL FOUR PRONGED TEE NUTS



## - Metric

Dia.	ZP
M4	•
M5	•
M6	•
M8	•
M10	•

## - Imperial

Dia.	ZP
3/16	•
1/4	•
5/16	•
3/8	•

# FLAT WASHERS



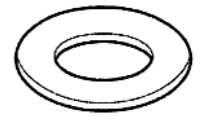
## - Metric

		Stainless		Steel	Brass
SIZE	OD	304	316	ZP	SC
M3	7		0.8	0.6	0.8
M3	9.5			1.0	
M4	9	0.9	0.9	1.0	0.8
M5	10	0.8	0.8	1.0	1.0
M5	12.5			1.0	
M6	12.5	1.0	1.0	1.2	1.0
M6	16			1.2	1.6
M8	16	1.2	1.2	1.2	
M8	17			1.6	1.2
M8	19	3.0		1.6	
M8	21			1.6	
M10	21	1.5	1.5	1.6	1.2
M12	24	1.5	1.5	1.6	1.6
M12	26			1.6	
M16	30	1.5	1.5	1.6	1.6
M20	37	1.5	1.5	1.6	1.6
M24	44			1.6	1.6
M24	48	1.5	1.5		

## - Imperial

		Stainless		Steel
Size	OD	304	316	ZP
1/8	5/16	20	20	20
1/8	3/8	20		20
5/32	3/8	20		20
5/32	7/16			18
3/16	7/16	20	20	
3/16	1/2	20	20	18
3/16	5/8	18	18	18
3/16	3/4			16
3/16	7/8		16	
1/4	1/2	20	20	18
1/4	5/8	18	18	18
1/4	3/4	18	18	
1/4	7/8		16	
5/16	5/8	18	18	18
5/16	3/4		18	18
5/16	7/8		16	
3/8	3/4	18	18	16
3/8	7/8		18	16
3/8	1	16		
7/16	7/8			16
7/16	1		16	
1/2	1	18	18	16
5/8	1 1/4	16	16	16
3/4	1 3/8	16	16	16
3/4	1 7/8		12	
7/8	1 5/8		16	16
1	1 3/4	16	16	
1	1 7/8			16

# FENDER WASHERS



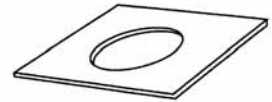
## - Metric

		Stainless		Steel
Size	OD	304	316	ZP
M6	32	1.5	1.5	1.6
M8	32	1.5	1.5	1.6
M10	32	1.5	1.5	1.6
M12	32	1.5	1.5	1.6
M16	32	1.5	1.5	1.6

## - Imperial

		Stainless		Steel
Size	OD	304	316	ZP
3/16	1 1/4	16	16	16
1/4	1 1/4	16	16	16
5/16	1 1/4	16	16	16
3/8	1 1/4	16	16	16
1/2	1 1/4	16	16	16
5/8	1 1/4	16	16	16
3/4	1 1/4	16	16	16

# HEAVY WASHERS



## - Metric

		Steel	
Size	OD	HDG	SC
M6	19	3	3
M8	22	3	3
M10	24	3	3
M12	28	3	
M12	32	3	
M16	34	3	
M16	38	3	3
M20	39	3	3
M20	44.5	3	3
M24	50	3	
M30	60	3	3

# SQUARE WASHERS



## - Metric

		Stainless	Steel
Size	OD	316	HDG
M10	50	3	3
M12	40		3
M12	50	3	3
M12	50		6
M16	40		3
M16	50	3	3
M16	50		6
M20	50	3	3
M20	50		6
M20	60		6
M24	50		3

Non Preferred Items.  
Minimum quantities may apply.

Boxed number denotes gauge of washer.

# SPRING WASHERS



## - Metric

Size	Stainless		Steel	
	304	316	ZP	GALV
M3	•	•	•	
M4	•	•	•	
M5	•	•	•	
M6	•	•	•	
M8	•	•	•	•
M10	•	•	•	•
M12	•	•	•	•
M16	•	•	•	•
M20	•	•	•	•
M22		•	•	
M24		•		
M25			•	

## - Imperial

Size	Stainless		Steel	
	304	316	ZP	GALV
1/8		•	•	
5/32	•	•	•	
3/16	•	•	•	
1/4	•	•	•	
5/16	•	•	•	
3/8	•	•	•	
7/16		•	•	
1/2	•	•	•	
9/16			•	
5/8	•	•	•	
3/4	•	•		
1	•	•	•	

# LOCK WASHERS



## - Metric

Size	Stainless	Steel	
	304	ZP	ZP
	Internal	Internal	External
M3	•	•	•
M4	•	•	•
M5	•	•	•
M6	•	•	•
M8	•	•	•
M10	•	•	•
M12	•	•	

## - Imperial

Size	Steel	
	ZP	
	Internal	External
3/16		•
1/2	•	

Starlock push-on fasteners are also available in metric and imperial on request.

# RIVETS No. 4 Diameter



Rivet Diameter 3.2 mm

Drill Size Diameter 3.3 mm

Material Type	Head Type	Grip Range (mm)	Pop Code	Cherry Code	Miway Code
STAINLESS BODY STAINLESS MANDREL	TRUSS HEAD	1.6 - 3.2	SSD42SSBS	73STST 4-2	STSS42
		3.2 - 4.8	SSD43SSBS	73STST 4-3	STSS43
		4.8 - 6.4	SSD44SSBS	73STST 4-4	STSS44
		7.9 - 9.5	SSD46SSBS	73STST 4-6	STSS46
		11.0 - 12.7	SSD48SSBS		
STAINLESS BODY STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	SSD42BS	73STS 4-2	STS42
		3.2 - 4.8	SSD43BS	73STS 4-3	STS43
		4.8 - 6.4	SSD44BS	73STS 4-4	STS44
		7.9 - 9.5	SSD46BS	73STS 4-6	STS46
		11.0 - 12.7	SSD48BS		
ALUMINIUM BODY ALUM. MANDREL	TRUSS HEAD	1.6 - 3.2	TLPD 44	73AA 4-2	
		4.8 - 6.4	TLPD 48	73AA 4-4	
		7.9 - 9.5	TLPD 412	73AA 4-6	
ALUMINIUM BODY STEEL MANDREL	TRUSS HEAD	Up to 1.6	TAPD 42	73AS 4-1	AS41
		1.6 - 3.2	TAPD 44	73AS 4-2	AS42
		3.2 - 4.8	TAPD 46	73AS 4-3	AS43
		4.8 - 6.4	TAPD 48	73AS 4-4	AS44
		6.4 - 7.9	TAPD 410	73AS 4-5	AS45
		7.9 - 9.5	TAPD 412	73AS 4-6	AS46
		11.0 - 12.7	TAPD 416	73AS 4-8	AS48
		14.3 - 15.9	TAPD 421	73AS 4-10	
	15.9 - 19.0	TAPD 425	73AS 4-12		
	COUNTERSUNK HEAD	1.6 - 3.2	TAPK 44	72AS 4-2	
		3.2 - 4.8	TAPK 46	72AS 4-3	
		4.8 - 6.4	TAPK 48	72AS 4-4	
		7.9 - 9.5	TAPK 412	72AS 4-6	
		11.0 - 12.7	TAPK 416	72AS 4-8	
	LARGE FLANGE	1.6 - 3.2	TAPD 44LF	73ASL 4-2	
4.8 - 6.4		TAPD 48LF	73ASL 4-4		
7.9 - 9.5		TAPD 412LF	73ASL 4-6		
SEALED RIVET	Up to 1.6	AD 42	73TA 4-1		
	1.6 - 3.2	AD44	73TA 4-2		
	3.2 - 4.8	AD 46	73TA 4-3		
	4.8 - 6.4	AD 48	73TA 4-4		
	6.4 - 7.9	AD 410	73TA 4-5		
	7.9 - 9.5		73TA 4-6		
MONEL BODY STEEL MANDREL	TRUSS HEAD	Up to 1.6	TLPD 419	73MS 4-1	
		1.6 - 3.2	TLPD 424	73MS 4-2	
		3.2 - 4.8	TLPD 429	73MS 4-3	
		4.8 - 6.4	TLPD 435	73MS 4-4	
		6.4 - 7.9	TLPD 440	73MS 4-5	
		7.9 - 9.5		73MS 4-6	
	11.0 - 12.7		73MS 4-8		
COUNTERSUNK HEAD	3.2 - 4.8	TLPK 429	72MS 4-3		
4.8 - 6.4	TLPK 435	72MS 4-4			
7.9 - 9.5	TLPK 440	72MS 4-5			
STEEL BODY STEEL MANDREL	TRUSS HEAD	Up to 1.6	TSPD 42		
		1.6 - 3.2	TSPD 44	73SS 4-2	SS42/42
		3.2 - 4.8	TSPD 46	73SS 4-3	SS43/43
		4.8 - 6.4	TSPD 48	73SS 4-4	SS44/44
		6.4 - 7.9	TSPD 410	73SS 4-5	
		7.9 - 9.5	TSPD 412	73SS 4-6	SS46/46

Refer to page 67 for any rivet problems or contact your local Mico Metals Store.



# RIVETS No. 5 Diameter



Rivet Diameter 4.0 mm

Drill Size Diameter 4.1 mm

Material Type	Head Type	Grip Range (mm)	Pop Code	Cherry Code	Miway Code
STAINLESS BODY STAINLESS MANDREL	TRUSS HEAD	1.6 - 3.2	SSD52SSBS	73STST 5-2	STSS52
		4.8 - 6.4	SSD54SSBS	73STST 5-4	STSS54
		7.9 - 9.5	SSD56SSBS	73STST 5-6	STSS56
STAINLESS BODY STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	SSD52BS	73STS 5-2	STS52
		4.8 - 6.4	SSD54BS	73STS 5-4	STS54
		7.9 - 9.5	SSD56BS	73STS 5-6	STS56
ALUMINIUM BODY	TRUSS HEAD	1.6 - 3.2	TAPD 54	73AS 5-2	
		3.2 - 4.8	TAPD 56	73AS 5-3	
		4.8 - 6.4	TAPD 58	73AS 5-4	
		6.4 - 7.9	TAPD 510	73AS 5-5	
		7.9 - 9.5	TAPD 512	73AS 5-6	
		11.0 - 12.7	TAPD 516	73AS 5-8	
STEEL MANDREL	COUNTERSUNK HEAD	1.6 - 3.2	TAPK 54	72AS 5-2	AS52
		3.2 - 4.8	TAPK 56	72AS 5-3	AS53
		4.8 - 6.4	TAPK 58	72AS 5-4	AS54
		7.9 - 9.5	TAPK 512	72AS 5-6	AS56
		11.0 - 12.7	TAPK 516	72AS 5-8	
SEALED RIVET	SEALED RIVET	1.6 - 3.2	AD 54	73TA 5-2	
		4.8 - 6.4	AD 58	73TA 5-4	
MONEL BODY  STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	TLPD 524	73MS 5-2	
		3.2 - 4.8	TLPD 530	73MS 5-3	
		4.8 - 6.4	TLPD 537	73MS 5-4	
		6.4 - 7.9	TLPD 540	73MS 5-5	
		7.9 - 9.5	TLPD 545	73MS 5-6	
		11.0 - 12.7		73MS 5-8	
STEEL BODY  STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	TSPD 54	73SS 5-2	SS52/52
		3.2 - 4.8	TSPD56	73SS 5-3	SS53/53
		4.8 - 6.4	TSPD58	73SS 5-4	SS54/54
		6.4 - 7.9	TSPD510	73SS 5-5	
		7.9 - 9.5	TSPD512	73SS 5-6	SS56/56
		11.0 - 12.7		73SS 5-8	
		14.3 - 15.9		73SS 5-10	

Refer to page 67 for any rivet problems.

# RIVETS No. 6 Diameter



Rivet Diameter 4.8 mm

Drill Size Diameter 4.9 mm

Material Type	Head Type	Grip Range (mm)	Pop Code	Cherry Code	Miway Code
STAINLESS BODY STAINLESS MANDREL	TRUSS HEAD	1.6 - 3.2	SSD62SSBS	73STST 6-2	
		3.2 - 4.8		73STST 6-3	
		4.8 - 6.4	SSD64SSBS	73STST 6-4	
		7.9 - 9.5	SSD66SSBS	73STST 6-6	
		11.0 - 12.7	SSD68SSBS	73STST 6-8	
		14.3 - 15.9		73STST 6-10	
STAINLESS BODY STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	SSD62BS	73STS 6-2	
		4.8 - 6.4	SSD64BS	73STS 6-4	STS64
		7.9 - 9.5	SSD66BS	73STS 6-6	STS66
		11.0 - 12.7	SSD68BS	73STS 6-8	
		14.3 - 15.9		73STS 6-10	
ALUMINIUM BODY ALUMINIUM MANDREL	TRUSS HEAD	4.8 - 6.4		73AA 6-4	
ALUMINIUM BODY STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	TAPD 64	73AS 6-2	AS62
		3.2 - 4.8	TAPD 66	73AS 6-3	AS63
		4.8 - 6.4	TAPD 68	73AS 6-4	AS64
		6.4 - 7.9	TAPD 610	73AS 6-5	
		7.9 - 9.5	TAPD 612	73AS 6-6	AS66
		11.0 - 12.7	TAPD 617	73AS 6-8	AS68
		14.3 - 15.9	TAPD 620	73AS 6-10	
		15.9 - 19.0	TAPD 625	73AS 6-12	
		19.8 - 26.2	TAPD 633	73AS 6-16	
		26.2 - 32.8	TAPD 6150	73AS 6-20	
	COUNTERSUNK HEAD	1.6 - 3.2	TAPK 64	72AS 6-2	
		4.8 - 6.4	TAPK 68	72AS 6-4	
		6.4 - 7.9	TAPK 610	72AS 6-5	
		7.9 - 9.5	TAPK 612	72AS 6-6	
		11.0 - 12.7	TAPK 617	72AS 6-8	
		14.3 - 15.9	TAPK 620	72AS 6-10	
	LARGE FLANGE HEAD	3.2 - 4.8	TAPD 66LF	73ASL 6-3	
		4.8 - 6.4	TAPD 68LF	73ASL 6-4	
		6.4 - 7.9	TAPD 610LF	73ASL 6-5	
		7.9 - 9.5	TAPD 612LF	73ASL 6-6	
		11.0 - 12.7	TAPD 616LF	73ASL 6-8	
		14.3 - 15.9	TAPD 620LF	73ASL 6-10	
	SEALED RIVET	1.6 - 3.2	AD 64	73TA 6-2	
		3.2 - 4.8	AD 66	73TA 6-3	
		4.8 - 6.4	AD 68	73TA 6-4	
		6.4 - 7.9	AD 610	73TA 6-5	
		7.9 - 9.5	AD 612	73TA 6-6	
		11.0 - 12.7	AD 616	73TA 6-8	
MONEL BODY	TRUSS HEAD	1.6 - 3.2	TLPD 630	73MS 6-2	
		3.2 - 4.8	TLPD 636	73MS 6-3	
		4.8 - 6.4	TLPD 639	73MS 6-4	
		6.4 - 7.9	TLPD 650	73MS 6-5	
		7.9 - 9.5		73MS 6-6	
		11.0 - 12.7	TLPD 665	73MS 6-8	
		14.3 - 15.9	TLPD 675	73MS 6-10	
STEEL MANDREL	COUNTERSUNK HEAD	4.8 - 6.4	TLPK 68	72MS 6-4	
		6.4 - 7.9	TLPK 610	72MS 6-5	
		7.9 - 9.5	TLPK 612	72MS 6-6	
		11.0 - 12.7	TLPK 616	72MS 6-8	
		14.3 - 15.9	TLPK 620	72MS 6-10	
STEEL BODY STEEL MANDREL	TRUSS HEAD	1.6 - 3.2	TSPD 64	73SS 6-2	SS62/62
		3.2 - 4.8	TSPD 66	73SS 6-3	SS63/63
		4.8 - 6.4	TSPD 68	73SS 6-4	SS64/64
		6.4 - 7.9	TSPD 610	73SS 6-5	SS65/65
		7.9 - 9.5	TSPD 612	73SS 6-6	
		11.0 - 12.7	TSPD 616	73SS 6-8	
		14.3 - 15.9	TSPD 620	73SS 6-10	

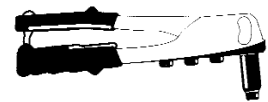
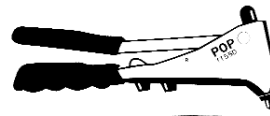
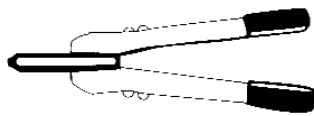
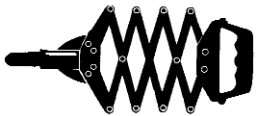
# COLOURED RIVETS



	4-2	4-3	4-4	4-6	5-2	5-3	5-4	5-6	5-7	6-3	6-4	6-5
Almond			•									
Alpine Blue		•				•					•	
Beige		•				•					•	
Black	•	•	•	•	•	•	•	•	•		•	•
Charcoal		•				•					•	
Coral Red		•				•					•	
Desert Sand		•				•					•	
Gold	•		•									
Grey Friar		•				•					•	
Iron Sand		•				•					•	
Karaka		•				•					•	
Lichen		•				•					•	
Lignite		•				•					•	
Mist Green		•				•					•	
New Denim Blue		•				•					•	
Permanent Green		•				•					•	
Pioneer Red		•				•					•	
River Gum		•				•					•	
Sandstone Grey		•				•					•	
Scoria		•				•	•				•	
Smooth Cream		•				•					•	
Terracotta		•				•					•	
Titania		•				•					•	
Tuscon Red		•				•					•	
White	•	•	•	•	•	•	•	•	•	•	•	•

  Non Preferred Items. Minimum quantities may apply.

# RIVET TOOLS



Rivet Tool			
Lobster	POP	MiWay	SRC
HR200 STD 3/32-5/32 (Hand)	TT55D Hand Riveter	Hand Rivet Tool SRC-501	SRC 5000 Pneumatic Riveter (pneudraulic)
HR005 Swing 3/32-3/16 (Hand)	Powerlink 30 Hand Riveter	Hand Rivet Tool SRC-502	
HR003EX 3/16-1/4 (Lever)	Powerlink Plus Hand Riveter (Lever)	Hand Rivet Tool SRC-503	
HR003B 3/16 (Lever)	Powerlink Leverlite (Lazy Tong) Hand Riveter		
	PRG 510 Pneumatic Riveter (pneudraulic)		
	PRG 540 Pneumatic Riveter (pneudraulic)		

# JOBBER DRILLS



## - Metric

Diameter	High Speed Steel Silver Jet
1.00	•
1.50	•
2.00	•
2.50	•
3.00	•
3.30	•
3.50	•
4.00	•
4.10	•
4.50	•
4.90	•
5.00	•
5.50	•
6.00	•
6.50	•
7.00	•
7.50	•
8.00	•
8.50	•
9.00	•
9.50	•
10.00	•
10.50	•
11.00	•
11.50	•
12.00	•
12.50	•
13.00	•

Please contact your nearest Mico Metals Team for details.

## - Imperial

Diameter	High Speed Steel Silver Jet
1/32	•
3/64	•
1/16	•
5/64	•
3/32	•
7/64	•
1/8	•
9/64	•
5/32	•
11/64	•
3/16	•
13/64	•
7/32	•
15/64	•
1/4	•
17/64	•
9/32	•
19/64	•
5/16	•
21/64	•
11/32	•
23/64	•
3/8	•
25/64	•
13/32	•
27/64	•
7/16	•
29/64	•
15/32	•
31/64	•
1/2	•

# COBALT DRILLS



## - Metric

Diameter	High Speed
2.00	•
2.50	•
3.00	•
3.50	•
4.00	•
5.00	•
6.00	•
7.00	•
8.00	•
9.00	•
10.00	•
11.00	•
12.00	•

## - Imperial

Diameter	High Speed
5/64	•
3/32	•
7/64	•
1/8	•
9/64	•
5/32	•
3/16	•
13/64	•
15/64	•
1/4	•
9/32	•
5/16	•
3/8	•

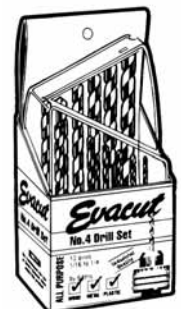
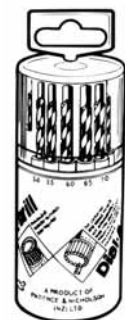
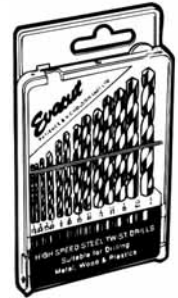
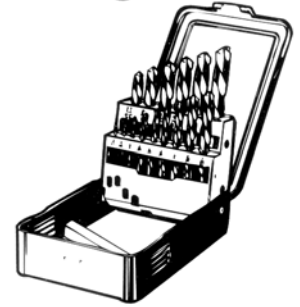
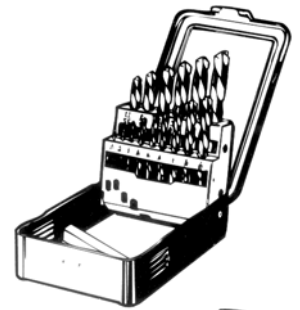
# DRILL SETS

High Speed Steel, Silver Jet - Metal Case				
Set Number		Size Range	No of Drills	
Imperial	Metric			
1	1/16 - 1/4 x 64ths	13		
2	1/16 - 3/8 x 64ths	21		
3	1/16 - 1/2 x 64ths	29		
	1M	1.00 - 7.00 x 0.5MM rises	13	
	2M	1.00 - 10.00 x 0.5MM rises	19	
	3M	1.00 - 13.00 x 0.5MM rises	25	

High Speed Steel, Silver Jet - Plastic ABS Case				
Set Number		Size Range	No of Drills	
Imperial	Metric			
E1		1/16 - 1/4 x 64ths	13	
E2		1/16 - 3/8 x 64ths	21	
E3		1/16 - 1/2 x 64ths	29	
	E1M	1.00 - 6.50 x 0.5MM rises	12	
	E2M	1.00 - 10.00 x 0.5MM rises	19	
	E3M	1.00 - 13.00 x 0.5MM rises	25	

High Speed Steel, Silver Jet - Stub/Panel				
Set Number		Stub/Panel	Stub/Panel	No of Drills
Metric	Imperial	Single End	Double End	
3.3		•	•	•
4.1		•	•	•
4.9		•	•	•
	1/8		•	•
	5/32			•

Refer to drilling guide on page 64.



# THREADED RODS



## -Metric

Diameter	Metres	Stainless (DIN 975)		Steel		Brass
		304	316	ZP	HDG	
M3	1		•			
M4	1		•			
M5	1		•	•		•
M6	1	•	•	•		•
M6	2			•		
M8	1	•	•	•		•
M8	2			•		
M10	1	•	•	•	•	•
M10	2			•	•	
M12	1	•	•	•	•	•
M12	2			•	•	
M16	1	•	•	•	•	•
M20	1	•		•	•	
M20	3		•	•		
M24	1	•	•	•	•	
M30	1				•	

## - Imperial

Diameter	Length (feet)	Stainless				Steel	Brass
		304		316		ZP	SC
		UNC	BSW	UNC	BSW	BSW	BSW
3/16	2	•		•		•	•
3/16	3	•		•			
1/4	2	•		•		•	•
1/4	3	•		•			
1/4	12					•	
5/16	2			•		•	•
5/16	3			•			
3/8	2			•		•	•
3/8	3	•		•			
1/2	2		•			•	•
1/2	3		•	•	•		
5/8	2	•				•	•
5/8	3	•		•			
3/4	2	•				•	•
7/8	2			•		•	
1	2	•				•	•
1	3			•			

# STEEL ROD CONNECTORS

## Thread Hex

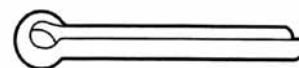
### -Metric

Steel	
Diameter	ZP
M6	•
M8	•
M10	•
M12	•
M16	•

### - Imperial

Steel	
Diameter	ZP
1/4	•
5/16	•
3/8	•
1/2	•

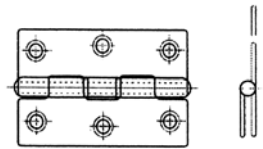
# STAINLESS SPLIT PINS



Metric		Imperial Equivalent		Stainless 304
Dia. (mm)	Length (mm)	Dia. (Inch)	Length (Inch)	DIN 94
M1.6	12	1/16	1/2	•
M1.6	20	1/16	3/4	•
M1.6	25	1/16	1	•
M1.6	32	1/16	1 1/4	•
M1.6	40	1/16	1 1/2	•
M1.6	50	1/16	2	•
M2.5	12	3/32	1/2	•
M2.5	20	3/32	3/4	•
M2.5	25	3/32	1	•
M2.5	32	3/32	1 1/4	•
M2.5	40	3/32	1 1/2	•
M2.5	50	3/32	2	•
M3.2	20	1/8	3/4	•
M3.2	25	1/8	1	•
M3.2	32	1/8	1 1/4	•
M3.2	40	1/8	1 1/2	•
M3.2	50	1/8	2	•
M3.2	63	1/8	2 1/2	•
M4	20	5/32	3/4	•
M4	25	5/32	1	•
M4	32	5/32	1 1/4	•
M4	40	5/32	1 1/2	•
M4	50	5/32	2	•
M5	20	3/16	3/4	•
M5	25	3/16	1	•
M5	32	3/16	1 1/4	•
M5	40	3/16	1 1/2	•
M5	50	3/16	2	•
M5	63	3/16	2 1/2	•
M5	71	3/16	3	•
M6	25	1/4	1	•
M6	32	1/4	1 1/4	•
M6	40	1/4	1 1/2	•
M6	50	1/4	2	•
M6	63	1/4	2 1/2	•
M6	71	1/4	3	•

Available in metric only. Imperial sizes listed as a guide only.

# BUTT HINGES



Series	Size A	Width B	Thickness (T)	Holes per	Screw
	Inches	Inches	Inches	Hinge	Gauge
814	1	2 29/32	.048	6	5
	1 1/2	3 3/8	.064	6	7
808/804 4	3 1/2	3 1/2	.104	6	10
	4	.104	8	10	
3000	2 1/2	1	.048	5	5
3500	3 1/2	1 9/16	.080	6	9
5000	1	7/8	.028	4	2
	1 1/2	1	.036	4	3
	2	1 3/16	.048	4	5
	2 1/2	1 5/16	.048	6	5
333/1840 STD	3	2	.064	6	7
	3 1/2	2 1/4	.080	6	9
	4	2 7/8	.080	8	9
1000	45mm	Refer Sketch	Refer Sketch	4	5
2000	50mm	Refer Sketch	Refer Sketch	5	5
1840 RADIUS	3 1/2	2 1/4	.080	6	9
	(1/4 AND 1/2)	4	2 7/8	.080	8

Steel

Zinc Plated

Florentine Brass

Bronze

Not all materials may be in stock. Please see Mico Metals for availability.

Non Preferred Items.

Minimum quantities may apply.

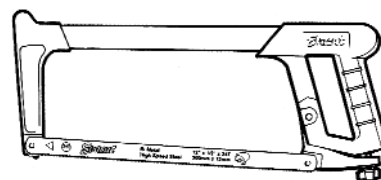
Mico Metals also sell Piano Hinges (continuous hinges).

Piano Hinges are only available in Stainless Steel.



# HAND HACKSAW BLADES

## High Speed Steel



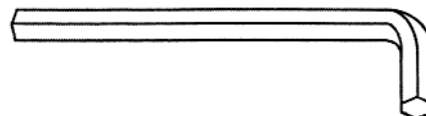
Length (mm)	Height	Teeth per Inch	Bi-Metal Orange	Hard Blue
300	12	18	•	•
300	12	24	•	•
300	12	32	•	•

Pro-frames are also available, please contact your Mico Metals branch.

Refer page 68 for hacksaw blade trouble shooting guide.

# SOCKET WRENCH

## (Allen Key)



Metric	Imperial	Hex Socket Shortarm	Hex Socket Longarm
M1.5		•	
M4		•	•
M5		•	•
M6		•	•
M8		•	•
	3/32	•	
	5/32	•	•
	3/16	•	•
	7/32	•	•
	5/16	•	•

# POWER BITS



## Insert Bit

Drive Bit				
Length (mm)	Single End	Pozi	Square	Phillips
25	#1	10B	95B	01B
25	#2	11B	96B	02B
25	#3	143B		

## Single End Power Bit

Drive Bit				
Length (mm)	Single End	Pozi	Square	Phillips
50	#1	04B	97B	12B
75	#1	166B		
100	#1		125B	
50	#2	05B	98B	13B
65	#2	152B		
75	#2	136B		
100	#2	149B	126B	
150	#2	153B	197B	

## Double End Power Bit

Drive Bit					
Length (mm)	Single End	Pozi	Square	Phillips	Pozi/Square
45	#1		121B		
65	#1	130B	123B		200B
65	#2			83B	
45	#2	76B	122B		
65	#2	77B	124B		201B
100	#2			54B	
50	#1 - #2		174B		

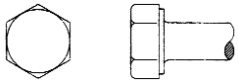
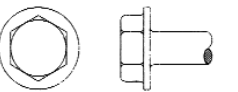


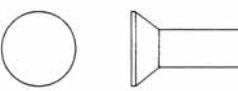
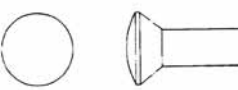
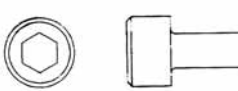








## Nut Setter

Drive Bit			
Head Size A/F	Length	Nut Setter Magnetic	Nut Setter Non-Magnetic
1/4	42	26B	
5/16	42	27B	
3/8	42	28B	
5/16	65	30B	
3/8	65	31B	
5/16	45		90B




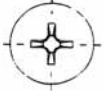

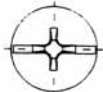






# GLOSSARY OF TERMS

Grades	Description
Stainless Steel 304	Used for general corrosive environments, such as industrial, coastal and fresh water. Good strength.
Stainless Steel 316	Ideal for marine applications (please note that the fastener must be able to breathe and be above the water line). Good for corrosive environments, especially geothermal applications. Good strength.
UNS 31803 (2205)	A specialty stainless steel especially useful for high strength and corrosion resistant applications. Available on indent only.
Class 4.6 Steel	Often described as Mild Steel (MS). Metric.
Grade 5.0 Steel	Often described as High Tensile Steel (HT). High strength for industrial applications. Imperial.
Grade 8.0 Steel	Often described as High Tensile Steel (HT). High strength for industrial applications. Imperial.
Class 8.8 Steel	Often described as High Tensile Steel (HT). High strength for industrial applications. Metric.
Copper	Longevity of life. Available on indent only.
Brass	Brass is often used in either the electrical industry or for decorative purposes.
Aluminium	Only aluminium fasteners held in stock are rivets and Huck fasteners. Ideal for boating purposes. All other aluminium fasteners are available on indent only.
Monel	Medium to High strength and corrosion resistance. Only monel fasteners held in stock are rivets. All other monel fasteners are available on indent only.
<i>If stock is not held locally, each branch can call upon the nationwide network for backup. Mico Metals represent some of the most respected worldwide manufacturers and will source and indent specialist metals and fasteners to customers requirements.</i>	
Threads	Description
Metric Coarse Pitch	Identified by capital M placed before diameter e.g. M12. The absence of any statement as to the pitch is taken to indicate the fastener has a coarse thread pitch.
Metric Fine Pitch	Identified by capital M placed before the diameter, followed by the pitch e.g. M12 x 1.5. The pitch must be specified to accurately service a customer requirement for Metric Fine product. This is due to the fact that there are at least two pitches for some diameters of Metric Fine threads.
Unified National Fine	Identified by the abbreviation UNF
Unified National Coarse	Identified by the abbreviation UNC
British Standard Whitworth	Identified by the abbreviation BSW
British Standard Fine	Identified by the abbreviation BSF
<i>Refer to Thread table on page 63 to find Thread per Inch for differing thread types.</i>	
Finishes	Description
Self Coloured (SC)	Self coloured fasteners do not have a coating, which offers no corrosion protection at all. In external situations, rusting will commence within days of installation. Self Coloured is also referred to as Plain finish, plain, natural, or black.
Zinc Plated (ZP)	Zinc coating is common because it is inexpensive, thin, clean to handle, looks good and can be painted.
Zinc and Clear Chromate (BZP)	Because zinc can be easily scratched off, a chromate covering can be used to protect the fastener. Clear chromate is also known as 'Bright Zinc' because of the silvery and smooth look.
Zinc and Yellow Chromate (YZC)	Yellow chromate is similar to clear chromate, except for the yellow/gold colour. The chromate conversion is heavier than clear zinc, offering better corrosion protection. Yellow Chromate is often referred to as YZC and zinc di chromate.
Hot Dipped Galvanised (GALV)	Dipping a fastener into a bath of molten zinc leaves a coating that is ten times thicker, and also approximately ten times the protection of zinc plating. The coating thickness means that allowances must be made for the threadfit. The final product is silver with a very rough appearance.
Mechanical Galvanised (M/G)	Mechanical Galvanizing is a more advanced form of the galvanization process, where fasteners are placed in a drum with molten zinc and mixed together with tiny spheres. The Spheres act to ensure that the zinc is evenly applied to the surface of the fastener. This method also allows for the zinc to adhere to the material better than the coating and dipping method. M/G has a minimum coverage of 40 micron for class 3.
Decorative Finishes	Decorative finishes are used to produce a decorative colour, rather than provide substantial corrosion protection. These fasteners are usually used indoors, where good looks are vital and corrosive elements are limited.

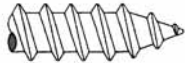




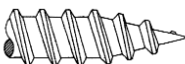



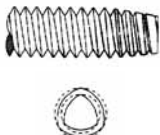
# MICO METALS HEAD TYPES

	<b>Hexagon Head</b>	Normally referred to as Hexagon or Hex. Note the small washer face under the head.
	<b>Hexagon Washer Head</b>	Note the large flange under the head.
	<b>Full Bearing Hexagon</b>	This will also be referred to as Hexagon or Hex. There is no washer face under the head.
	<b>Cup Square Head</b>	A shallow round head. The head shape is drawn here with a square under the neck, as typically found on Cup Square Bolts.
	<b>Countersunk Head</b>	"Found on bolt, screw and socket recess products.
	<b>Raised Countersunk Head</b>	Found on bolt and screw products. Bolts normally also have a square under the head, creating a form of plow bolt. In screws this head is often called oval.
	<b>Cap Head</b>	The standard head shape on the range of Socket Head Cap Screw products.
	<b>Button Head</b>	Normally only found in standard fasteners in the socket recess product range
	<b>Round Head</b>	A deeper head than cup head. In standard fasteners this shape is found mainly on woodscrew and imperial metal thread products.
	<b>Pan Head</b>	Major products featuring this head shape are self tappers and metric metal threads. Note that the head is shallower than round head and that the top of the head tends to be flat.
	<b>Mush Head</b>	Another head shape from the screw product range. Note that the head diameter is larger and the head thinner than pan or round heads. Gutter bolts have this shape head.
	<b>Cheese Head</b>	A head shape from the screw product range, normally found on imperial metal threads.
	<b>Bugle Head</b>	This head shape is normally only used on screw products, particularly fasteners used to screw plasterboard to steel or timber studs.
	<b>Flower Head</b>	Reaming cutters formed around the edge of the head allow the screw to self embed in cement, steel and timber products.
	<b>Wafer Head</b>	Another head shape used mainly on screws for the building industry. Most commonly, the head is found on self drilling screws.

# MICO METALS DRIVE TYPES

	<b>External Hexagon</b>	The most common drive type, and found on many bolt and screw products.
	<b>Internal Hexagon</b>	Usually found on products referred to as socket head cap screws, socket set screws and similar associated products. Driven with a hexagon key.
	<b>Slotted</b>	Found on standard woodscrews, metal threads and self tappers. Driven by a conventional bladed screwdriver.
	<b>Phillips Recess</b>	A form of cross recess. Driven by a Philip's screwdriver.
	<b>Pozi Drive Recess</b>	The most common of cross recess, often available on screw products. Driven by a Pozi Drive Screwdriver.
	<b>Combination Recess/slot</b>	This drive, consisting of a cross recess and a slot is found on some standard screws driven with either a cross recess or blade screwdriver.
	<b>Square</b>	This drive consists of a square shaped recess punched into the head of the screw, driven by a square head screwdriver.
	<b>Tri Wing</b>	A recess drive, with three rather than four driving arms. This drive is found in screws in electrical appliances to prevent disassembly by unqualified persons.
	<b>Torx Recess</b>	A six sided recess which features curved driving faces. Most commonly found on high volume screw items in automotive or electrical applications. Special driving tools are required.
	<b>Tamper Resistant (security)</b>	Anti theft drives used to avoid the unauthorised disassembly of a component. These drives take different forms and all require specialised driving tools for installation and removal.
	<b>One Way</b>	This drive utilises a standard bladed screwdriver for tightening. The fastener cannot be undone because the driving faces in the reverse direction are not formed.
	<b>Snake Eyes</b>	The head of the fastener has two holes which provide the driving feature.

# MICO METALS POINT TYPES

	<b>Type AB</b>	<p>This point is found on Type AB self tappers, and a range of screws used for fastening timber or timber based building products. Its purpose is to assist the screw in engaging in the material being fastened.</p>
	<b>Type B</b>	<p>This point is applied to self tapping screws and generally specified where the screw is being driven into a shallow hole. Type B points provide for more full threads to be engaged in the material being fastened.</p>
	<b>Type 17</b>	<p>Similar to Type AB point, except that screw material has been cut away. This feature, sometimes called a shank shot provides the ability for the screw to self drill through thin metal and then drill into the timber members of the structure.</p>
	<b>Type 25</b>	<p>A point designed to cut threads in plastic material. The presence of the shank slot provides the cutting ability and also for the clearance of cutting chips.</p>
	<b>Type S</b>	<p>A self drilling point for use in joining sheet metals, steel cladding, or fixing timber, cement sheet or plasterboard to light metal structural members.</p>
	<b>Needle Point</b>	<p>Suitable for use in situations where fasteners are required to pierce light metals. This point can be used in light metal to light metal joining or where there is a need to fix plasterboard to light steel structural members.</p>
	<b>Type 23</b>	<p>Fasteners with this thread cutting point are designed for use in soft metals or die castings. Threads produced belong to the machine thread series.</p>
	<b>Drill</b>	<p>A point designed to fasten material of varying types to steel. The shape of the drill point gives the fastener the ability to drill its own hole in most materials including steel. Once drilling is complete, the screw produces its own thread in the steel.</p>
	<b>Winged Drill Winged Tex</b>	<p>In thicker building materials such as plyboard, hardboard or cement sheet, the addition of wings cuts a slightly oversize hole permitting clear passage of the thread to engage with supporting steel structural members.</p>
	<b>Thread Forming Point (Triobular)</b>	<p>These screws produce threads by moving material rather than cutting it away. In addition to the point form, where the shape of the thread is progressively developed, the shank of the screw takes the form of a rounded triangle. The point and the shank form provide the ability to produce the thread.</p>

# MEASUREMENT CONVERSION CHART

Iso Metric Course	mm	Decimal of an inch	Inch	Screw SWG Dia
	25.40	1.0000	1	
M24	24.00	0.9448		
M24	22.23	0.8750	7/8	
M20	20.00	0.7874		
M20	19.06	0.7500	3/4	
M16	16.00	0.6299		
M16	15.88	0.6250	5/8	
M16	14.29	0.5625	9/16	
M16	12.70	0.5000	1/2	
M12	12.00	0.4724		
M12	11.11	0.4375	7/16	
M10	10.00	0.3937		
M10	9.53	0.3750	3/8	
M8	8.00	0.3149		
M8	7.94	0.3125	5/16	
M8	6.35	0.2500	1/4	
M6	6.00	0.2362		
M6	5.49	0.2160		12
M6	5.30	0.2087		
M5	5.00	0.1968		
M5	4.83	0.1900		10
M5	4.76	0.1875	3/16	
M5	4.70	0.1850		
M5	4.17	0.1640		8
M5	4.10	0.1614		
M4	4.00	0.1574		
M4	3.97	0.1562	5/32	
M4	3.60	0.1417		
M4	3.51	0.1380		6
M4	3.20	0.1260		
M4	3.18	0.1250	1/8	5
M3	3.00	0.1181		
M3	2.84	0.1120		4
M3	2.79	0.1102		
M3	2.50	0.0984		

# CONVERSION CHART

Stress				
Megapascals (Mpa)	to	Pounds Force/Sq. in (psi)	MPa x 145	= psi
Pounds Force/Sq. in. (psi)	to	Megapascals (Mpa)	psi / 145	= MPa
Megapascals (Mpa)	to	Newtons/Sq. mm (N/mm)	1 MPa	= 1N/mm

Force				
Kilonewton (kN)	to	Pounds Force (lbf)	kN x 225	= lbf
Pounds Force (lbf)	to	Kilonewton (kN)	lbf x 225	= kN

Torque				
Newton Metre (Nm)	to	Inch Pounds (in.lbs)	Nm x 8.85	= in.lbs
Inch Pounds (in.lbs)	to	Newton Metre (Nm)	in.lbs / 8.85	= Nm
Inch Pounds (in.lbs)	to	Foot pounds (ft.lbs)	in.lbs / 12	= ft.lbs
Foot pounds (ft.lbs)	to	Inch Pounds (in.lbs)	ft.lbs / 12	= in.lbs

# GAUGE COMPARISON

Stress		
6 gauge	=	3.45mm
8 gauge	=	4.20mm
10 gauge	=	4.87mm
12 gauge	=	5.43mm
14 gauge	=	6.41mm

# THREAD AND TAPPING CHART

Nom. Dia.	BSW		BSF		UNC		UNF		Metric		Isometric Pitch		Width across flange		
	Threads Per inch	Tapping Drill	Threads Per inch	Tapping Drill	Threads Per inch	Tapping Drill	Threads Per inch	Tapping Drill	Nominal Dia.	Tapping Drill	Coarse	Fine	BSW & BSF	UNC & UNF	ISO Metric
3/16	24	3.7mm	32	5/32	24	3.9mm	32	4.1mm	M5	4.2mm	0.80	0.50	0.324	0.312	8mm
1/4	20	5.1mm	26	5.4mm	20	13/64	28	7/32	M6	5.1mm	1.00	0.75	0.445	0.437	10mm
5/16	18	6.5mm	22	6.8mm	18	6.6mm	24	7.0mm	M8	6.8mm	1.25	1.00	0.525	0.500	13mm
3/8	16	5/16	20	21/64	16	8.0mm	24	8.5mm	M10	8.6mm	1.50	1.25	0.600	0.562	16mm
7/16	14	9.3mm	18	9.7mm	14	9.4mm	20	25/64	M12	10.4mm	1.75	1.25	0.710	0.625	18mm
1/2	12	27/64	16	7/16	13	10.9mm	20	29/64	M14	12.1mm	2.00	1.50	0.820	0.750	21mm
9/16	12	31/64	16	1/2	12	31/64	18	13.0mm	M16	14.0mm	2.00	1.50	0.920	0.812	24mm
5/8	11	17/32	14	14mm	11	35/64	18	14.5mm	M18	15.5mm	2.50	1.50	1.010	0.937	27mm
3/4	10	16.5mm	12	43/64	10	21/32	16	17.5mm	M20	17.5mm	2.50	1.50	1.200	1.125	30mm
7/8	9	49/64	11	20mm	9	49/64	14	20.5mm	M22	19.5mm	2.50	1.50	1.300	1.312	32mm
1	8	7/8	10	29/32	8	57/64	12	59/64	M24	21.0mm	3.00	2.00	1.480	1.500	36mm
1 1/8	7	63/64	9	1 1/64	7	63/64	12	1 3/64	M27	24.0mm	3.00	-	1.670	1.687	41mm
1 1/4	7	1 7/64	9	1 27/28	7	1 7/64	12	1 11/64	M30	36.5mm	3.50	-	1.860	1.875	46mm
1 3/8	6	1 13/64	8	1 1/4	6	1 7/32	12	33.0mm	M36	32.0mm	4.00	-	2.050	2.062	55mm
1 1/2	6	1 21/64	8	1 3/8	6	1 11/32	12	1 27/64	M39		4.00	-	2.220	2.250	60mm
1 3/4	5	1 35/64	7	1 39/64	5	1 9/16			M42		4.50	-	2.580	2.625	65mm
2	4.5	45mm	7	1 55/64	4.5	1 51/64			M48		5.00	-	2.760	3.000	75mm

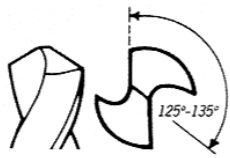
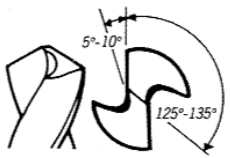
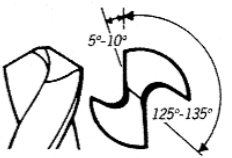
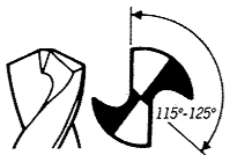


# GENERAL GUIDE TO CORRECT DRILLING

Workplace Material				Drill Type	HSS Type	Point Angle Degree	Drill PointCuttingCoolant			
Type	HB	Tons/ inch	Kg/ mm				Style Code (Refer Table 2)	Relief Code (Refer Table 3)	Speed Code (Refer Table 4)	
<b>Carbon Steel</b>										
Free Cutting	150	33	52	General Purpose	Standard	110 to 120	A	N	8	Soluble Oil Or Semi-Synthetic
0.3 to 0.4% Carbon	170	38	59						8	
0.4 to 0.4% Carbon	248	54	85						7	
0.4 to 0.7% carbon	206	44	69						7	
0.4 to 0.7% carbon	286	63	99						C	
<b>Alloy Steel</b>										
Steel Alloys	248	54	85	Standard Helix	Standard	118 to 125	A	N	7	Soluble Oil or Semi-Synthetic
	330	74	116					N-H	6	
	381	82	129		Cobalt		C	N-H	5	Soluble Oil - Extreme Pressure or Sulpho-Chlorinated
<b>Stainless Steel</b>										
Martensitic Free Cutting	248	54	85	Standard Helix	Standard	118 - 125	A	Empty	7	Soluble Oil - Extreme Pressure or Sulpho-Chlorinated
Martensitic Std Grade	As Supplied						C		N	
Austenitic Free Cutting							6			
Austenitic Std Grade	125-135	5								
<b>Aluminium</b>										
Aluminium Alloys	As Supplied			General purpose High Helix	Standard	135 to 145	C	N-S	10	Soluble Oil
<b>Copper Alloys</b>										
Brass Free Cutting	As Supplied			General Purpose Std to Low Helix	Standard	118 to 125	A-C	N	10	Soluble Oil
Brass Low Leaded									9	
Bronze Silicon				Heavy Duty or General Purpose High Helix		125 to 135	C-D		7	
Bronze Manganese										
Copper				General Purpose Std Low Helix		118 to 125	A-C			
Bronze Aluminium										
Bronze Ccommercial										
Bronze Phosphor										
<b>Zinc</b>										
Zinc Alloys	As Supplied			General Purpose Std or High Helix	Standard	118 to 125	C	N-S	10	Soluble Oil

# GENERAL GUIDE TO CORRECT DRILLING

## Table 2. Drill point styles

A Standard	B Point Relieved	C Point Thinned	D Centre Cutting (Crankshaft Split)
 <p>General Purpose</p>	 <p>Improves chisel edge chip flow. Recommended for soft materials.</p>	 <p>Reduces end thrust and improves centre cutting efficiency. Recommended for (1) Restoring chisel edge to original length after several regrinds. (2) For larger drill where the machine thrust is limited. (3) For difficult materials.</p>	 <p>Minimises end thrust. Maximises centre cutting efficiency. Recommended for difficult materials and deep hole drilling.</p>

## Table 3. Lip relief angle in degrees per drill diameter

Material Condition	Up to 2.5mm Up to 3/32"	3mm 1/8"	5mm 3/16"	8mm 5/16"	11mm 7/16"	19mm 3/4"	32mm 1 1/4"	50mm 2"
N General	21	18	16	14	12	10	8	8
S Very Soft	26	23	20	18	15	13	10	10
H Very Hard	16	14	12	10	8	8	6	6

## Table 4. Drill speed in revolutions per minute

Surface Speed per minute			Up to 2.5mm Up to 3/32"	3mm 1/8"	5mm 3/16"	8mm 5/16"	11mm 7/16"	19mm 3/4"	32mm 1 1/4"	50mm 2"
Number	Metres	Feet								
5	10.5 - 13.5	35 - 45	1400-1780	1100-1400	700-890	430-540	310-390	180-225	107-135	68-85
6	14.5 - 18.0	48 - 60	1900-2380	1500-1880	960-1190	590-730	425-520	255-300	145-180	93-115
7	19.5 - 24.0	64 - 80	2550-3180	2000-2500	1280-1590	780-970	560-700	330-400	195-240	125-150
8	26 - 34	85 - 110	3380-4300	2700-3400	1700-2100	1050-1300	750-960	440-550	260-330	165-210
9	36 - 46	118 - 150	4700-5960	3700-4700	2400-2900	1450-1800	1050-1300	600-760	360-450	230-280
10	49 - 61	160 - 200	6400-7900	5000-6200	3200-3900	2000-2400	1400-1750	820-1000	490-600	310-380

# TEK SCREWS

## Metal Drilling Capacity

Gauge	Diameter (mm)	Threads per inch	Max Thickness
6	3.0	20	2.3mm
8	3.4	18	2.5mm
10	4.0	16	4.0mm
10	4.1	24	4.0mm
12	4.5	14	5.0mm
12	5.0	24	5.0mm
14	5.4	10	5.3mm
14	5.7	20	5.3mm

## Metal Mechanical Properties

Gauge	Threads per inch	Min. Axial Force for Withdrawal (steel Plate 1.6mm)	Min Axial Tensile Strength	Min. Ultimate Torsional Strength
10	16	2.5 KN	8.60 KN	6.9 Nm
10	24	2.5 KN	10.01 KN	7.3 Nm
12	14	2.8 KN	11.63 KN	10.69 Nm
12	24	2.8 KN	14.44 KN	11.3 Nm
14	10	3.1 KN	14.95 KN	14.1 Nm
14	20	3.1 KN	18.90 KN	17.6 Nm

# RIVET TROUBLE SHOOTING GUIDE

Problem	Contributing Factors	Solution
Mandrel Protusion: where mandrel breaks in the correct place but travels up the rivet to protude through the head. May also extrude ring of material from the head of rivet.	Oversize nosepiece	Replace
	Worn nosepiece	Replace
	Oversize holes	Drill recommended hole
	Overlength rivet	Select correct length
	Compressible material	Select Lower break load rivet
Remote Break: where the mandrel breaks at any point, leaving a length of mandrel protuding from the rivet head.	Excessive jaw bite (check teeth marks on mandrel)	Examine/ repair tool
	Double cycling of tool	Adjust tool stroke
	Long rivet	Select shorter rivet
	Operator action (bending mandrel)	Train operator
	Out of round holes	Drill correct holes
Rivet fails to set tightly	Remote break	Refer Remote Break above
Base Metal Cracks (ie plastics)	Many plastics are not suitable for use with general rivets	Change plastics Washers may help Soft rivets or peel rivets
Requires several tool cycles to set rivet	Rivet too long	Select right rivet
	Tool not operating properly	Check air pressure Adjust stroke Prime air tools Clean Jaws Replace worn jaws (check teeth marks on mandrel).
	Improper operating action	Training
	Wrong nosepiece	Select correct nosepiece
Mandrel head ejects	Rivet too short	Select correct length rivet
Rivet shears during setting	Undersize holes	Drill correct hole size
	Materials too thin	Check minimum plate thickness
Jamming tools (bent mandrels)	Improper operating action	Train operator
Jaws slipping on mandrels	Dirt in jaw teeth	Clean Jaws
	Worn jaw teeth	Replace jaws
	Fatigues jaw pusher spring	Replace jaw pusher spring
	Loose jaw guide or pulling Head Adaptor	Tighten
Jaws fail to open	Nosepiece loose	Tighten
	Jaws sticking to jaw guide	Clean and lubricate
	Dirt packed inside front of Nose Housing	Clean and lubricate. Remove Nose Housing and scrape out dirt buildup if necessary.
	Fatigued Return Spring	Replace
Excess oil	Drain oil excess	
Shortened stroke	Insufficient oil	Add oil
Slow pulling action	Air Line plugged	Check air line
	Low air pressure	Check air supply
	Damaged Air Valve	Replace
	Sludge in Intensifier Chamber Sleeve	Clean. Check air supply.
Slow return	Fatigued Return Spring	Replace
	Damaged Air Valve	Replace
	Sludge in Intensifier Chamber Sleeve	Clean. Check air supply.
Excessive oil leakage; 1. Noted on rear of tool 2. Noted on Return Spring 3. Noted at Trigger Port or Trigger Rod Cover	Damaged or worn Hydraulic Piston Seal	Replace
	Damaged or worn Sleeve Seal	Replace
	Damaged or worn Rarn Seal	Replace

# SELF DRILLING SCREW TROUBLE SHOOTING GUIDE

Problem	Contributing Factors	Solution
Wandering Point	Screw not perpendicular to material	Position screw at 90° angle to material that is being drilled
	Insufficient tension placed on screw head	Increase drill pressure
Screw sways and will not start drilling	Damaged or worn bit	Replace Driver bit
	Incorrect socket being used	Replace socket with correct size/driver.
Screw is unable to penetrate material	Screwdriver is running in reverse option.	Flick switch to forward drilling
	Material is too hard or thick for screw drive.	Predrill Pilot Hole
Breaking Drill Points	Drill point breaking due to excessive gap between materials	"Reduce the gap between the materials being fastened, by correct clamping procedures.
Will not screw into pre-drilled holes	Material thickness exceeds drill point capacity.	Ensure drilling capacity of screw point is within the thickness of the materials
	Screw gun has insufficient power	Use a more powerful screwgun Reduce length of extension lead if possible.
Breaking heads due to tightening of screws	Screw is being overtightened due to incorrect tool	Use a tool with a Depth Locator and Torque Gauge.
	Torque clutch set too high.	Use torque clutch to reduce the level of torque
	Depth locator is set too low	Use a screwgun with an adjustable depth locating nose piece, that releases pressure once screw head reaches the required depth.
Screw stripping	Tool is incorrectly set	Reduce torque by adjusting torque clutch, or adjust the depth locator.
Premature deterioration of drive bits.	Excessive pressure is being applied due to incorrect tool being used	Adjust depth locator and torque clutch
	Using incorrect driver bit	Replace with correct driver bit
Wood lifting up when threading in Wing Drillers	Premature breaking off of wings	Reduce drilling pressure.
	Screw is driving into knot of the wood. knots.	Choose position to avoid wood

# POWER HACKSAW BLADES TROUBLE SHOOTING GUIDE

Problem	Contributing Factors
Blade Breakage	<ul style="list-style-type: none"> <li>Material has worked loose in the vise</li> <li>Too light a blade for too heavy a feed</li> <li>Using a new blade in a cut made by a previous blade</li> <li>Too large a pitch</li> <li>Blade is worn out</li> <li>Material jamming against blade when cut is finished</li> <li>Insufficient or excessive blade tension</li> <li>Starting the cut with the blade resting on the stock</li> </ul>
Teeth Stripping out	<ul style="list-style-type: none"> <li>Too few teeth in contact when sawing thin sections</li> <li>Sawing on sharp edge or corner</li> <li>Material moving during sawing</li> <li>Tooth pitch too small - chip space clogged and overloaded</li> </ul>
Crooked Cutting	<ul style="list-style-type: none"> <li>Insufficient blade tension</li> <li>Excessive feed pressure</li> <li>Excessive stroke rate</li> <li>Saw frame out of line or bearings worn</li> <li>Hard spot in the stock</li> <li>Blade held in blade holder insecurely or out of square, due to wear on pins or face of clamp</li> <li>Tooth set worn on one side</li> </ul>
Abnormal Tooth Wear	<ul style="list-style-type: none"> <li>Material too hard to cut, or with hard inclusions</li> <li>Blade fails to lift correctly on return stroke</li> <li>Failure to use correct coolant or cutting compound</li> <li>Excessive feed pressure - chip pockets become clogged and blade slides across workpiece</li> <li>Excessive speed on hard material</li> <li>Insufficient feed pressure - blade slides across workpiece</li> <li>Incorrect toothsize - too many teeth on soft material, too few on hard material</li> <li>Using a new blade in a previous cut</li> </ul>

## Tension

Blades must be correctly tensioned for effective cutting. Insufficient tension could result in the blade bending upwards, twisting and producing a crooked cut. It also allows the blade to wear quickly. Excessive tension can result in blade breakage, and is not good for the machine frame. Tensioning can be carried out with a torque wrench or a tensiometer.

## Stroke Rate

The stroke rate used on any given job depends on the machinability of the material. As a general rule for maximum blade life, the stroke rate should be low and feed rate moderate. Harder materials call for a lower stroke rate and a higher feed rate.

## Feed Rate

For effective cutting performance, the correct combination of stroke and feed rates must be found. Excessive feed pressure may give rise to tooth stripping, cutting out of square or blade breakage. Insufficient feed pressure may cause the saw teeth to slide and not cut the workpiece, resulting in overheating and rapid wear. A general rule is to use the highest possible feed pressure while reducing the stroke rate for efficient cutting.

## Problem

Maximum rigidity of the workpiece is essential for effective performance. Any movement of the work away from the line of cut while sawing will result in badly chipped teeth, or probable fracture of the blade. Attention to these points will give longer blade life, more efficient cutting, and a reduction in scrap.

Maximum rigidity of the workpiece is essential for effective performance. Any movement of the work away from the line of the cut while sawing will result in badly chipped teeth, or probable fracture of the blade. Attention to these points will give longer blade life, more efficient cutting, and a reduction in scrap.

# GALVANIC COMPATABILITY OF DIFFERING METAL TYPES

Galvanic corrosion is caused when two metals are in electrical contact with the presence of an electrolyte. The boxed number below denotes the compatibility of two metals. Numbers range between 34 and 0, with a number closer to zero the most favourable (0 is ideal). When fastening an aluminium 1100 material, then aluminium 2017-T (2) has better compatibility than Steel (3). Aluminium 1100 would be the ideal material of choice to fasten to Aluminium 1100 (0).

Corrosion Order of Alloys	Corrosion Order of Alloys																																					
	Magnesium	Magnesium Alloys	Zinc	Aluminium, 1100	Cadmium	Aluminium, 2017-T	Steel or Iron	Cast Iron	Stainless, chrome (Active)	Ni-resist	Stainless, 18Cr, 8 Ni (Active)	Stainless - 18Cr, 8Ni, 3Mo (Active)	Hastelloy C	Lead-tin Solders	Lead	Tin	Nickel (active)	Inconel (active)	Hastelloy A	Hastelloy B	Brasses	Copper	Bronzes	Copper-Nickel Alloys	Monel	Silver Solder	Nickel (Passive)	Inconel (Passive)	Stainless, chrome (Passive)	Stainless - 18Cr, 8Ni (Passive)	Stainless - 18Cr, 8Ni, 3Mo (Passive)	Silver	Graphite	Gold	Platinum			
Platinum	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0			
Gold	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	14	12	11	10	9	8	8	6	6	5	4	2	2	0				
Graphite	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	4	2	2	0					
Silver	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0						
Stainless-18Cr,8Ni,3Mo (Passive)	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0							
Stainless-18Cr,8Ni (Passive)	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0								
Stainless, chrome (Passive)	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0									
Inconel (Passive)	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0										
Nickel (Passive)	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0											
Silver Solder	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0												
Monel	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0													
Copper-Nickel Alloys	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0														
Bronzes	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0															
Copper	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																
Brasses	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																	
Hastelloy B	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																		
Hastelloy A	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																			
Inconel (Active)	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																				
Nickel (Active)	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																					
Tin	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																						
Lead	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																							
Lead-tin Solders	13	12	11	10	9	8	7	6	5	4	3	2	1	0																								
Hastelloy C	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Stainless-18Cr,8Ni,3Mo (Active)	11	10	9	8	7	6	5	4	3	2	1	0																										
Stainless, 18Cr, 8 Ni (Active)	10	9	8	7	6	5	4	3	2	1	0																											
Ni-resist	9	8	7	6	5	4	3	2	1	0																												
Stainless, chrome (Active)	8	7	6	5	4	3	2	1	0																													
Cast Iron	7	6	5	4	3	2	1	0																														
Steel or Iron	6	5	4	3	2	1	0																															
Aluminium, 2017-T	5	4	3	2	1	0																																
Cadmium	4	3	2	1	0																																	
Aluminium, 1100	3	2	1	0																																		
Zinc	2	1	0																																			
Magnesium Alloys	1	0																																				
Magnesium	0																																					

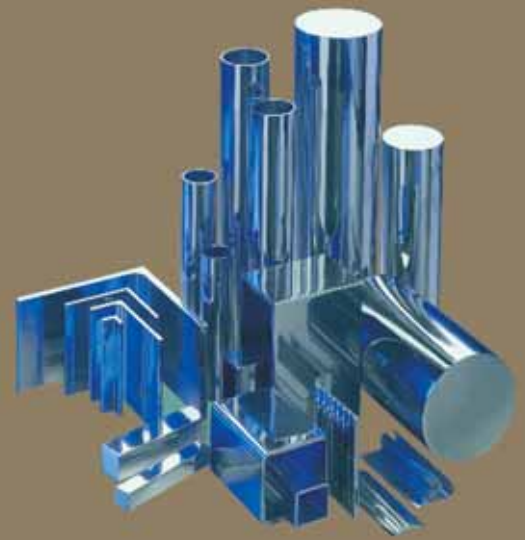
The less noble metal will be the metal that will be sacrificed (the anode), while the metal that is more noble will be protected (cathodic). If Aluminium 1100 and Zinc are joined together then zinc will be anodic and corrode more rapidly, while the aluminium will be cathodic. Corrosion can be deterred by isolating cracks, crevices, sharp bends, scale and surface deposits between interface areas where possible.



**ALUMINIUM** Sheet, plate, coil, flat and square bar, extruded round rod, free machining rod, tubes and sections.

**STAINLESS STEEL** Sheet, plate, coil, rod, bar, sections, mesh, wire, pipe and pipe fittings, tube and tube fittings. Special stainless steel alloys, Aquamet boat shafting, Monel, Inconel and Incoloy special Alloys. Hastelloy, Haynes and Ultimec special alloys.

**BRASS** Sheet, plate, flat and square bar, rod and hexagonal rod, round and square tube, angles, channels, beadings and sections.



**COPPER** Sheet and plate, flat and square bar, round rod, industrial, refrigeration and water tubing as well as wire.

**ZINC** Plate, sheet and coil.

**FASTENERS** Rivets, screws, bolts and nuts, washers, drills, tools, sealants and adhesives, construction fasteners. Includes specialty stainless steel and brass fasteners options.

