



**3400 Babcock Blvd.
Pittsburgh, PA USA 15237-2473**

**1-800 SWCOILS
1-800-792-6457
(412) 364-5200
FAX: (412) 364-5299**

**www: <http://www.swcoils.com>
email: swcoils@swcoils.com**

Manufacturers of Electric Motor & Control Coils

Coil Data Sheets

(Please photocopy as needed & retain originals for future use.)

Please use these data sheets in requesting quotations and placing orders for various types of coils. While it has been attempted to provide a data sheet for most common coil designs, where necessary, the data sheet should be modified to accommodate the actual coil design by modifying the coil diagrams and/or sketching the coil on a separate sheet.

These data sheets represent the most common types of coils, and are not representative of our full coil manufacturing capabilities. We manufacture most any type of coil for rotating equipment or control applications.

INSULATION SYSTEMS AVAILABLE:

- **Dipped & Baked**
 - Insulated with materials designed for this process, typically mica, kapton, and/or glass tapes or sheet materials. Dipped in Class F or H, Polyester or Epoxy resins and baked to cure.
 - Coils are fully cured and require no further processing to achieve optimal physical and electrical properties.
 - A very forgiving insulation system which is suitable for most AC & DC industrial machinery.

- **VPI**
 - Insulated with materials designed for this process, typically low binder mica, nomex, and/or glass tapes. Typically, sheet materials are not used in order to facilitate penetration of the VPI resin.
 - Coils are supplied dry, uncured and require post-insertion vacuum pressure impregnation (VPI) processing in order to achieve maximum physical and electrical properties.
 - Coils designed with this system require special care in handling due to the soft uncured insulation and must be tested at reduce voltages prior to VPI processing.
 - Well suited for harsher environments. Improved moisture resistance, heat transfer, and contamination resistance when impregnated with the proper resin system.

LEAD PREPARATION (Armature, Equalizer, & Stator Coils):

- **Tinned Leads**
Coils leads are coated with 95% Tin, 5% Antimony, facilitating excellent flow during the soldering process.

- **Bare Leads**
Leads are left bare for a TIG welded or brazed connection.

Temperature Classifications / Typical Materials

Class	Temperature	Kraft Paper	Cotton	Polyesters	Mica (organic binder)	Nomex	Kapton	Mica (inorganic binder)	Fiberglass
A	105° C	X	X	X	X	X	X	X	X
B	120° C			X	X	X	X	X	X
F	155° C			X	X	X	X	X	X
H	180° C					X	X	X	X
N	200° C					X	X	X	X
R	220° C					X	X	X	X

Temperature Conversion Table

C	F	C	F
0	32	150	302
10	50	160	320
20	68	170	338
30	86	180	356
40	104	190	374
50	122	200	392
60	140	210	410
70	158	220	428
80	176	230	446
90	194	240	464
100	212	250	482
110	230	260	500
120	248	270	518
130	266	280	536
140	284	290	554
150	302	300	572



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

ARMATURE COILS

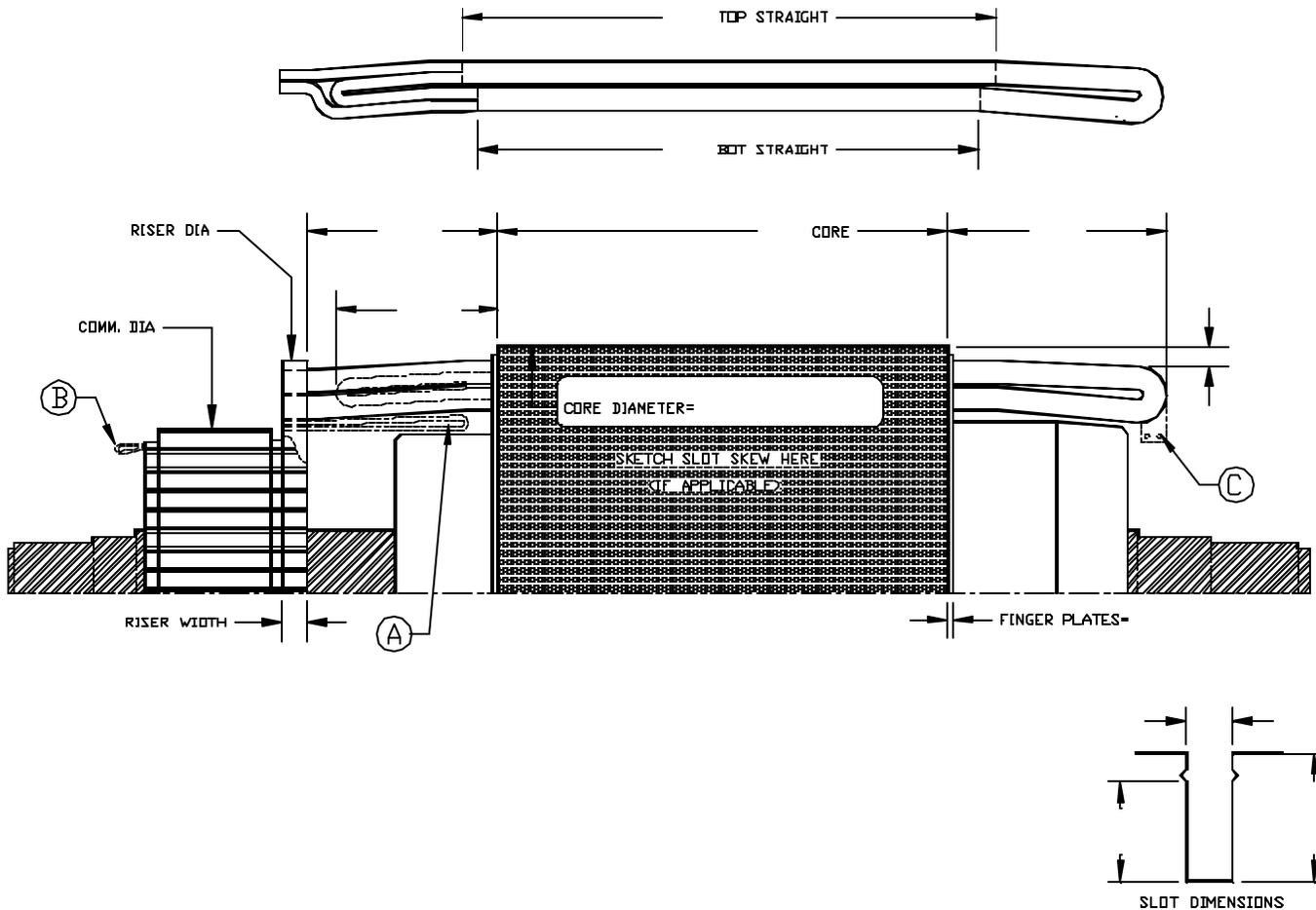
(Page 1 of 2)

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

COIL DATA / REQUEST FOR QUOTE

3400 Babcock Blvd.
Pittsburgh, PA USA

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



No. of Bars	Wire Size	Equalizer Location (see above): <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
No. of Slots	Wire Insulation	No. of Equalizers:
Coil Span: 1 to	Weight per Coil	Equalizer Wire Size
Lead Span: (Attach PAGE 2)	Leads: <input type="checkbox"/> TINNED <input type="checkbox"/> BARE	Equalizer Span:
Turns/ Coil	Insulation System <input type="checkbox"/> DIPPED & BAKED <input type="checkbox"/> VPI	Slot liner in use? <input type="checkbox"/> YES, _____ Thick <input type="checkbox"/> NO
No. of Wires per Circuit	Swaged leads? <input type="checkbox"/> YES, _____ THICK <input type="checkbox"/> NO	

S&W Job#:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

ARMATURE COILS

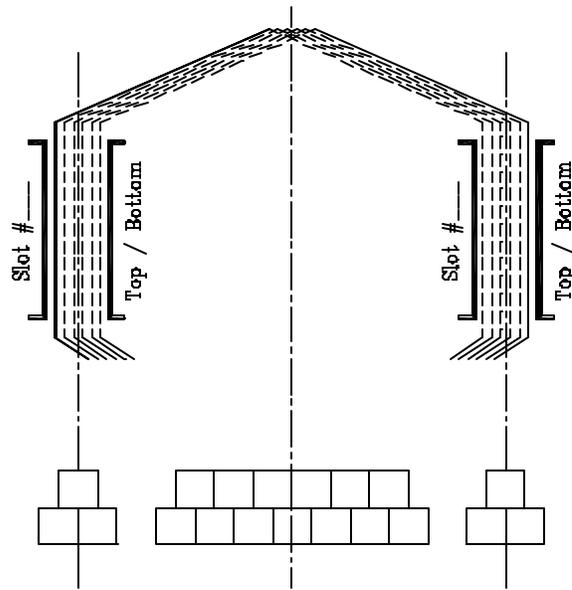
(Page 2 of 2)

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

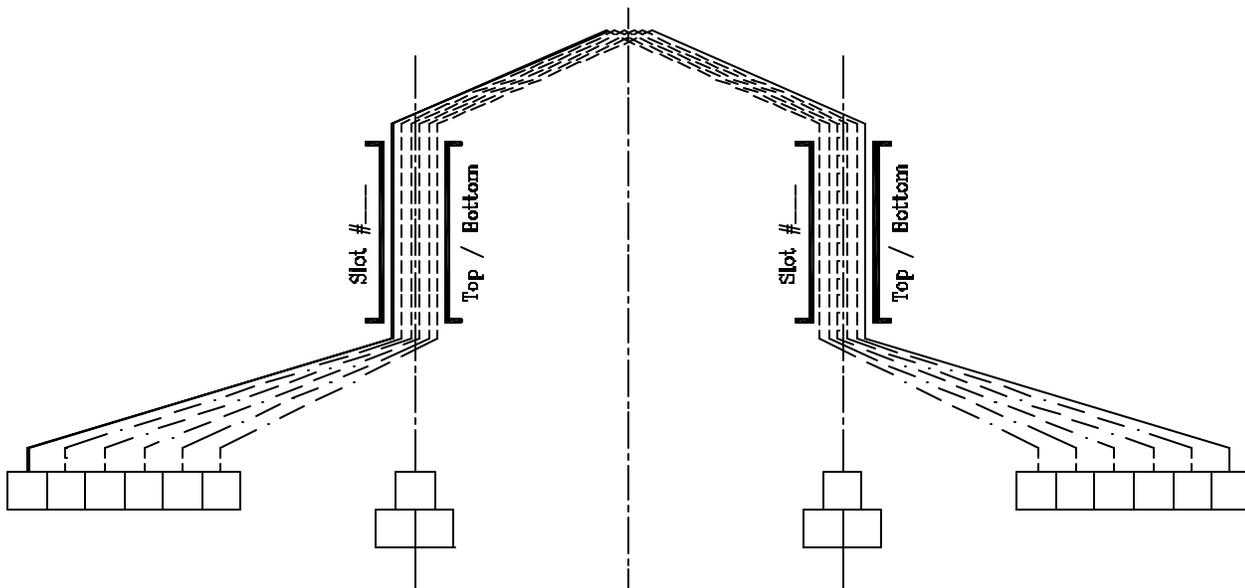
3400 Babcock Blvd.
Pittsburgh, PA USA

COIL DATA / REQUEST FOR QUOTE

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



LAP WOUND



WAVE WOUND

S&W Job #:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

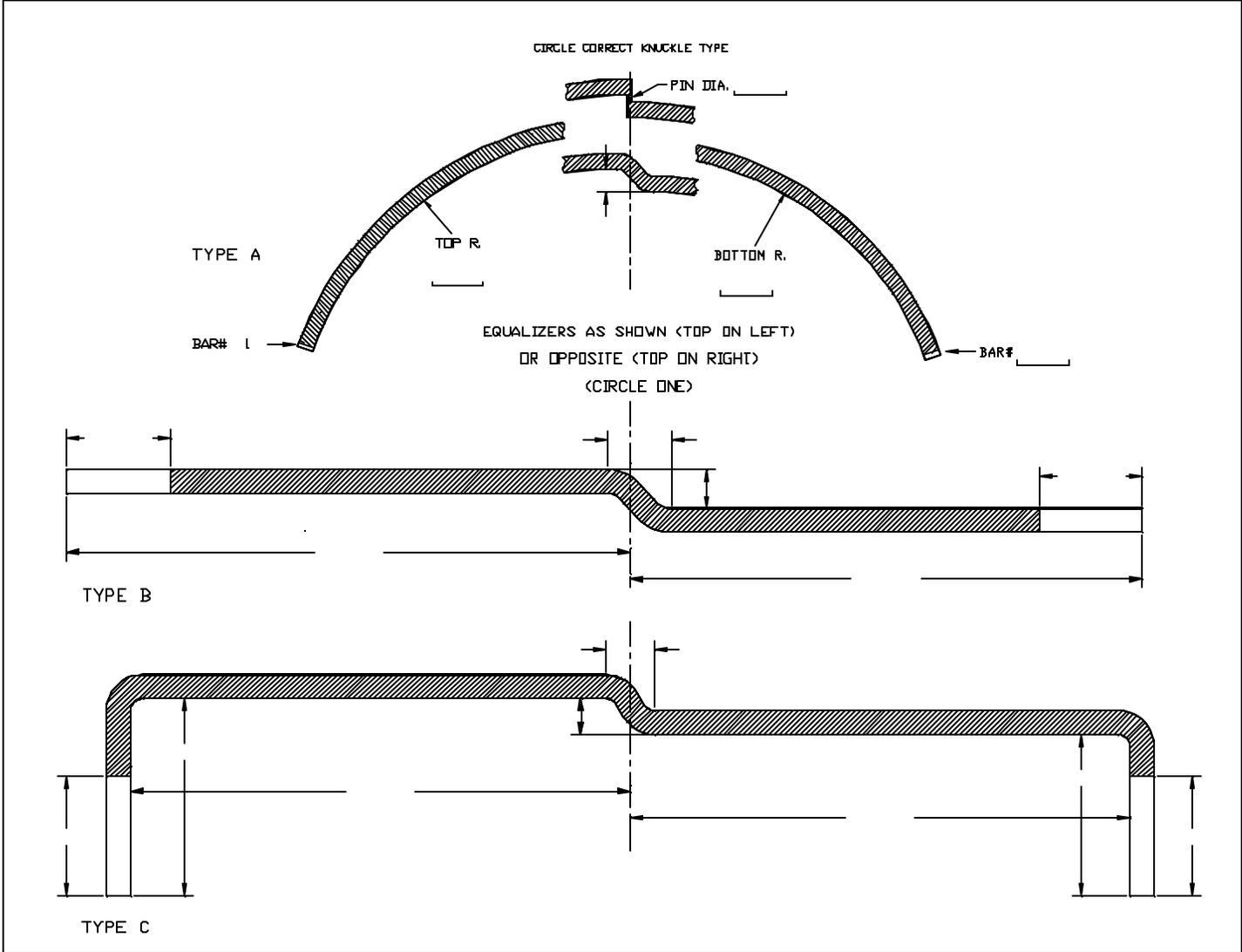
EQUALIZER COILS

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

COIL DATA / REQUEST FOR QUOTE

3400 Babcock Blvd.
Pittsburgh, PA USA

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



No. of Bars	Wire Size	Leads: <input type="checkbox"/> TINNED <input type="checkbox"/> BARE
No. of Equalizers:	Wire Insulation	Insulation System <input type="checkbox"/> DIPPED & BAKED <input type="checkbox"/> VPI
Equalizer Type: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C	Weight per Coil	Rolled/Swaged leads? <input type="checkbox"/> YES, _____ THICK <input type="checkbox"/> NO
Equalizer Connection: 1 - - - - - - - - - - -		

S&W Job#:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

STATOR COILS

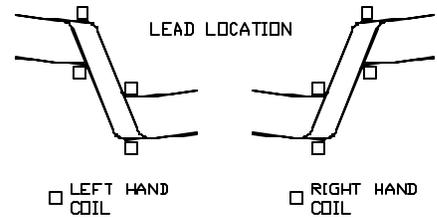
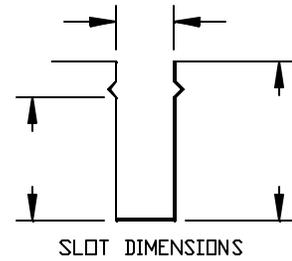
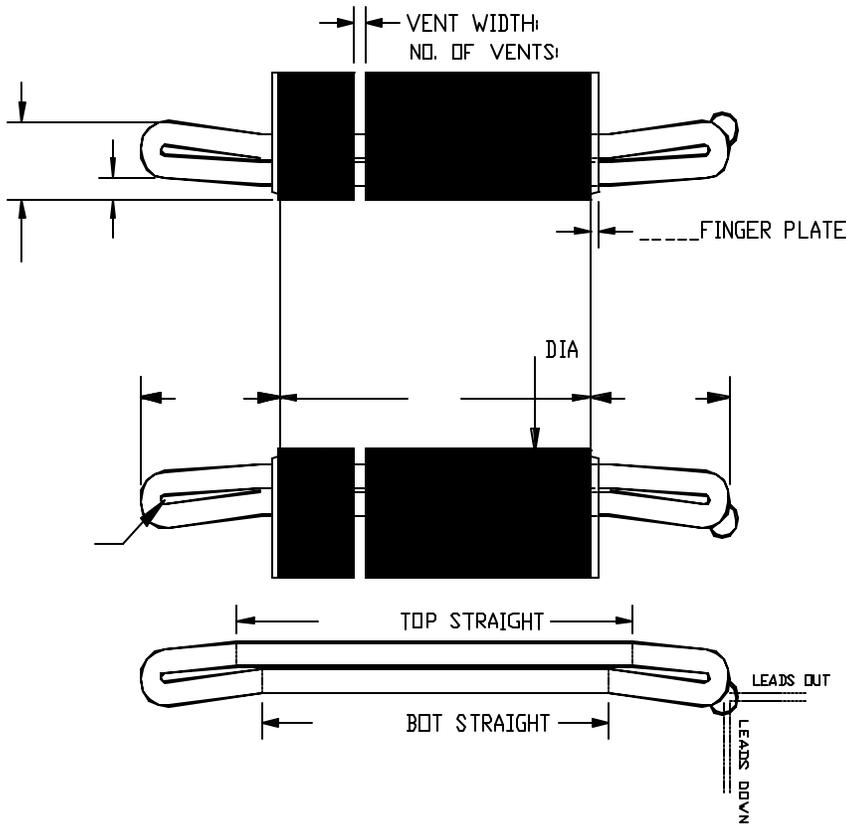
1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

COIL DATA / REQUEST FOR QUOTE

3400 Babcock Blvd.
Pittsburgh, PA USA

S&W Job #:

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



No. of Slots	Wire Size(s)	Insulation System <input type="checkbox"/> DIPPED & BAKED <input type="checkbox"/> VPI
Connection	Wire Insulation	REMARKS:
Coil Span: 1 to	Weight per Coil	
Turns / Coil	Coil Leads: <input type="checkbox"/> TINNED <input type="checkbox"/> BARE	
Wires in Parallel	Coil Leads: <input type="checkbox"/> TAPED <input type="checkbox"/> SLEEVED	
Coil Lead Location (Indicate above)	Slot Liner ? <input type="checkbox"/> YES, _____ Thick <input type="checkbox"/> NO	



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

**EDGEWOUND COIL
(Rectangular Ends)**

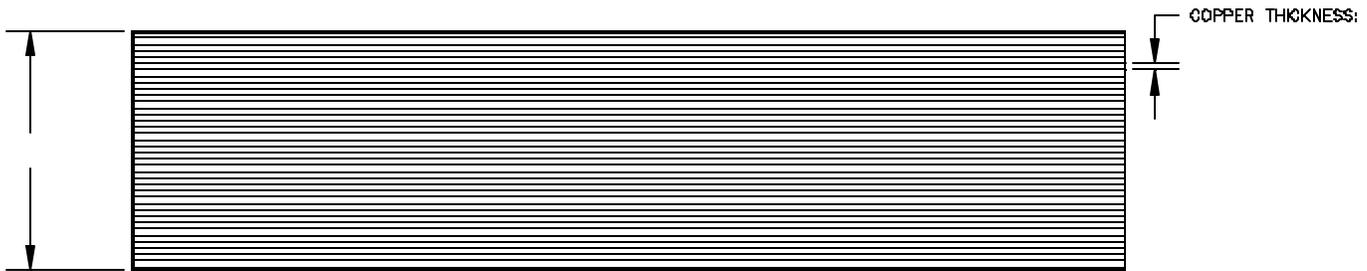
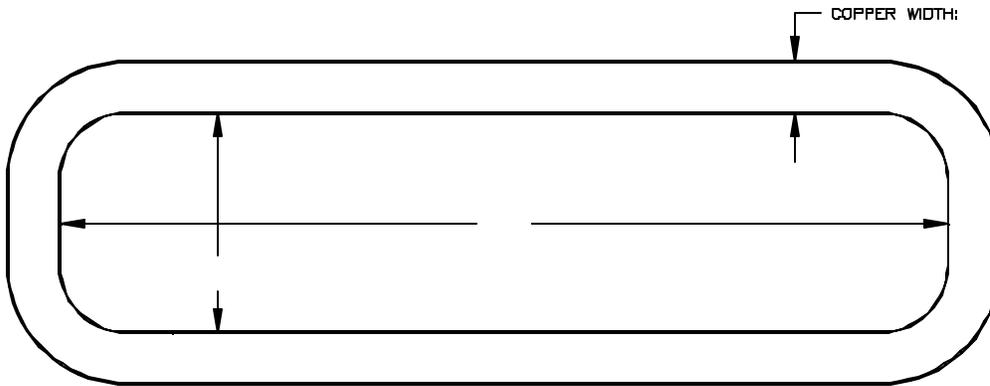
COIL DATA / REQUEST FOR QUOTE

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

3400 Babcock Blvd.
Pittsburgh, PA USA

S&W Job#:

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



<input type="checkbox"/> SUPPLY COILS BARE	TURNS: EXTENDED (FAN) TURNS?
<input type="checkbox"/> SUPPLY COILS INSULATED (NOTE: A sample coil or detailed information will be needed.)	COPPER SIZE:
<input type="checkbox"/> PER OUR STANDARDS	LBS (KG) PER COIL:
<input type="checkbox"/> AS PER ATTACHED INSTRUCTIONS	



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

**EDGEWOUND COIL
(Rounded Ends)**

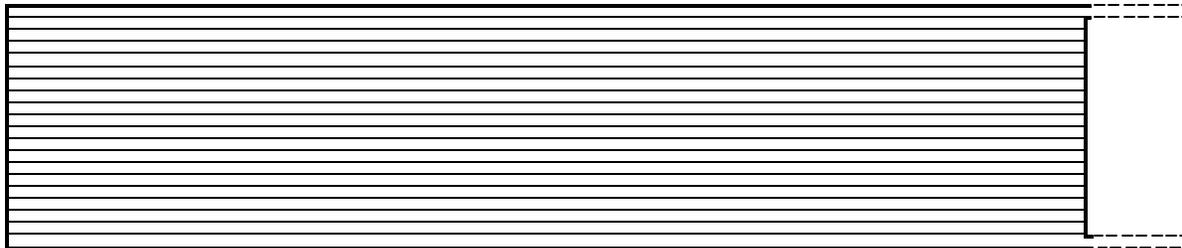
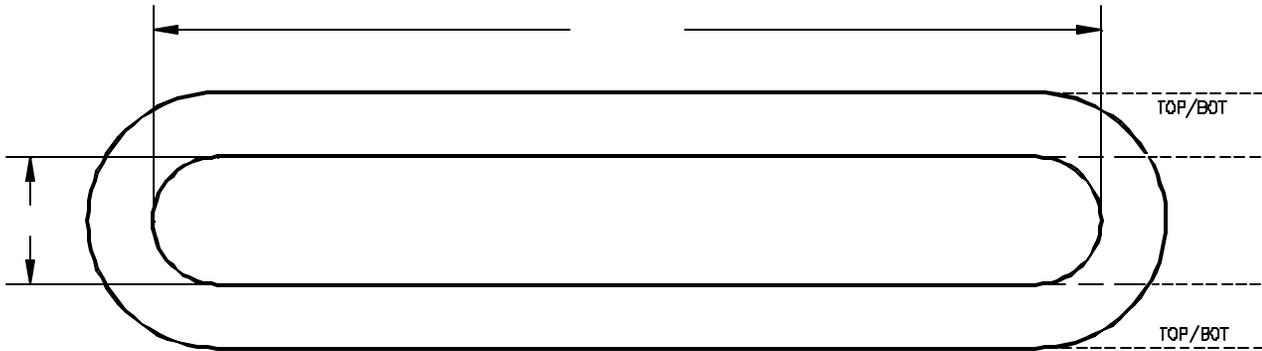
1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

3400 Babcock Blvd.
Pittsburgh, PA USA

COIL DATA / REQUEST FOR QUOTE

S&W Job#:

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



€SUPPLY COILS BARE €SUPPLY COILS INSULATED (NOTE: A sample coil or detailed information will be needed.) €PER OUR STANDARDS €AS PER ATTACHED INSTRUCTIONS	TURNS: EXTENDED (FAN) TURNS?
	COPPER SIZE: LBS (KG) PER COIL:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

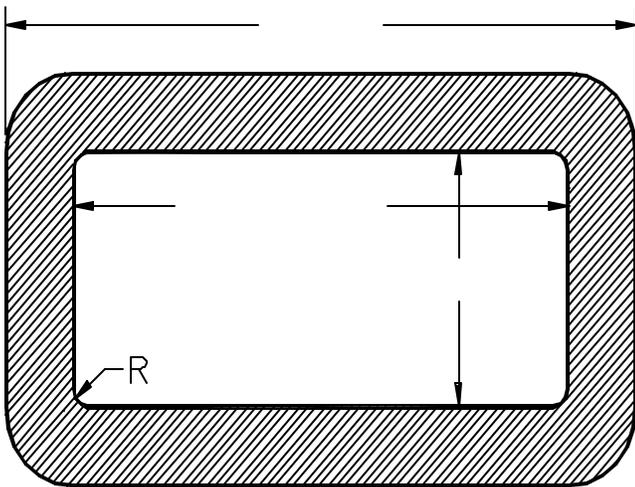
**FIELD COIL
(No Taper)**

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

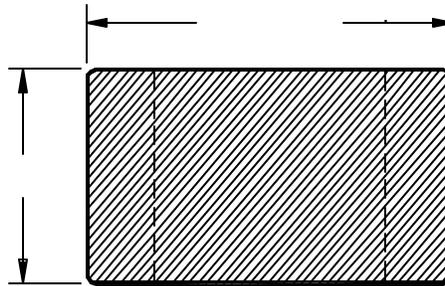
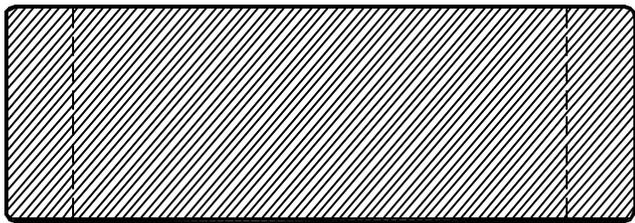
COIL DATA / REQUEST FOR QUOTE

3400 Babcock Blvd.
Pittsburgh, PA USA

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



SKETCH LEADS
TYPE & LOCATION
ON COIL



Wire Size	Additional Info.
Wire Insulation	
Coil Weight	
Turns/ Coil	
Wires in Parallel	
Coil Resistance	

S&W Job#:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

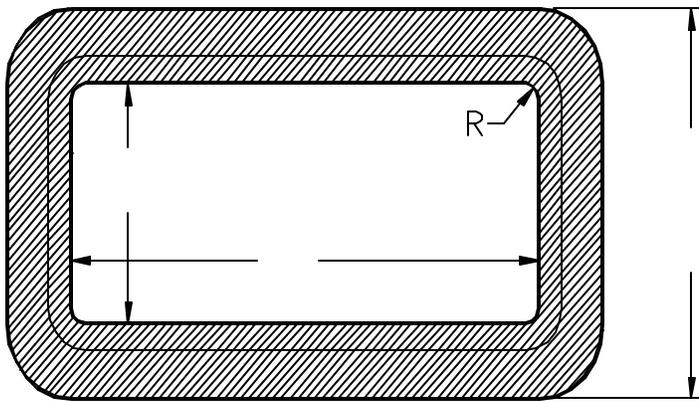
**FIELD COIL
(Tapered Sides)**

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

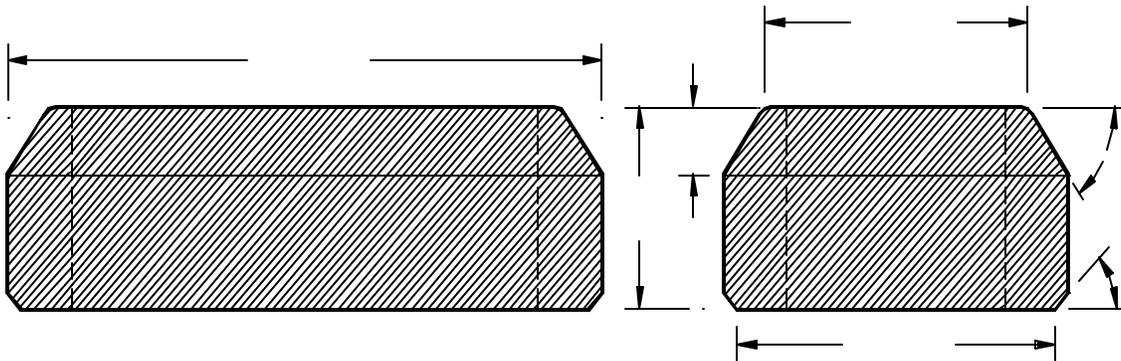
3400 Babcock Blvd.
Pittsburgh, PA USA

COIL DATA / REQUEST FOR QUOTE

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



SKETCH LEADS
TYPE & LOCATION
ON COIL



Wire Size	Layer No.	Turns / Layer	Drop L	Drop R	Total Turns
Wire Insulation					
Coil Weight					
Total Turns/Coil					
Wires in Parallel					
Coil Resistance					

S&W Job#:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

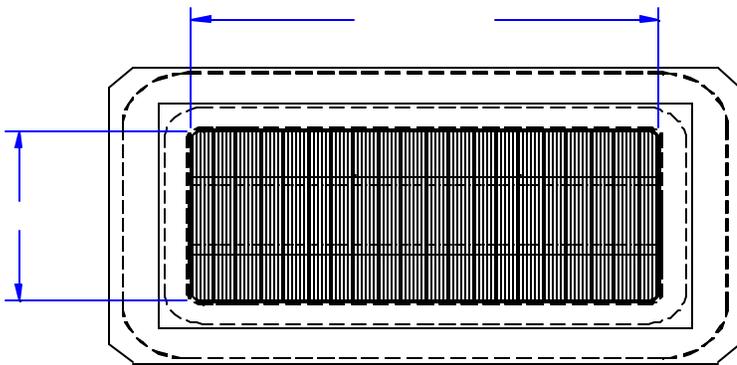
**SYNCHRONOUS FIELD COIL
(Wire Wound)**

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

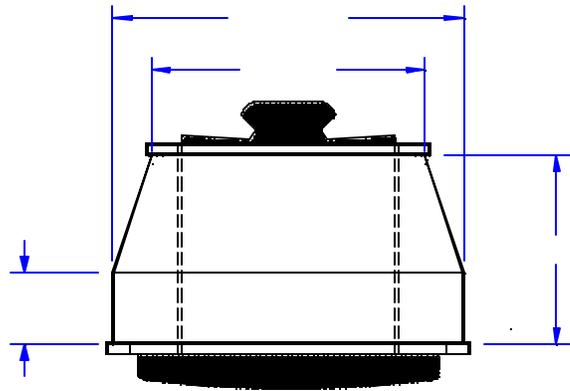
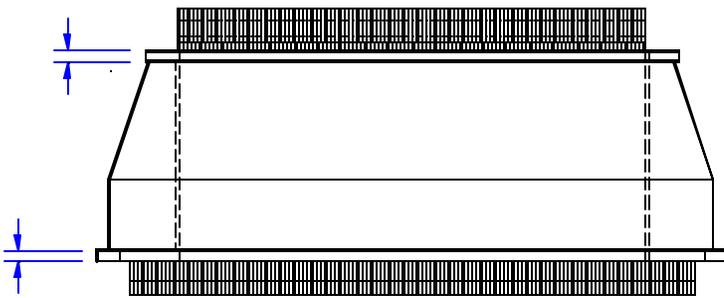
3400 Babcock Blvd.
Pittsburgh, PA USA

COIL DATA / REQUEST FOR QUOTE

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:		Date:	
		Serial #	



SKETCH LEADS
TYPE & LOCATION
ON COIL



Wire Size	Layer No.	Turns / Layer	Drop L	Drop R	Total Turns
Wire Insulation					
Coil Weight					
Total Turns/Coil					
Wires in Parallel					
Coil Resistance					

S&W Job#:



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

BRAKE / CLUTCH COIL

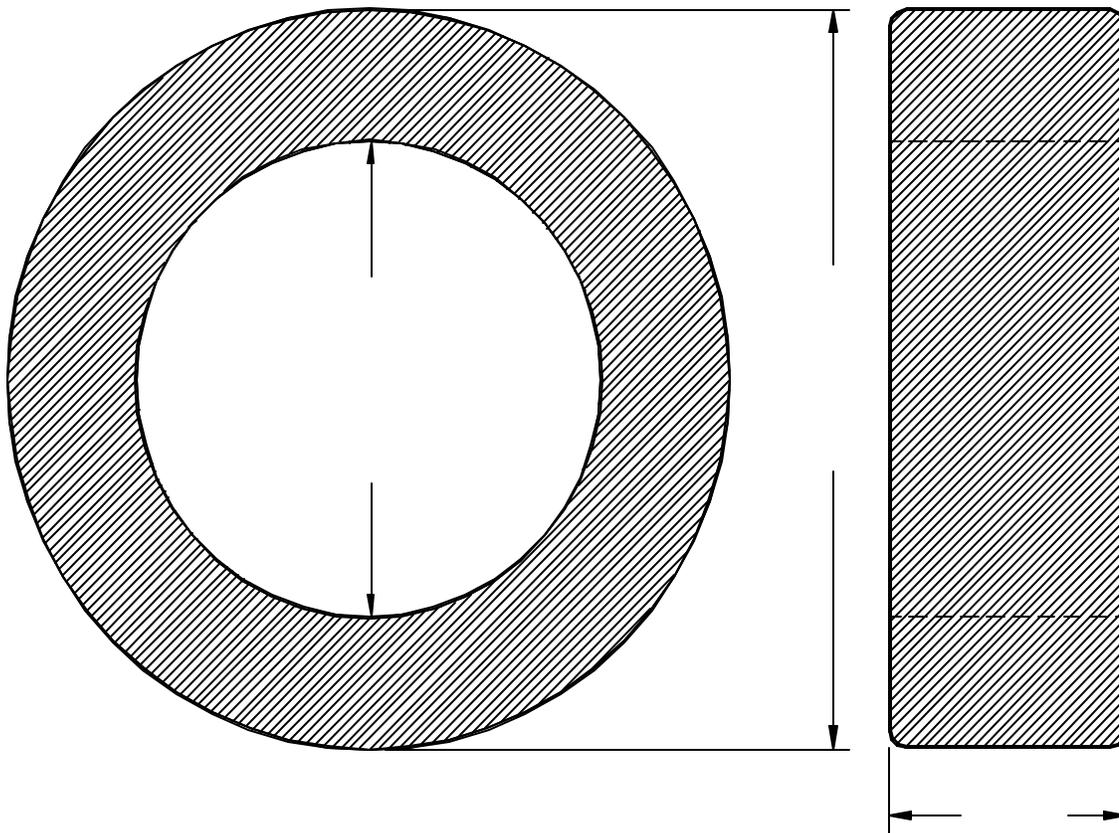
COIL DATA / REQUEST FOR QUOTE

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

3400 Babcock Blvd.
Pittsburgh, PA USA

S&W Job#:

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:	Date:	Serial #	



Wire Size	Additional Info.
Wire Insulation	
Coil Weight	
Turns/ Coil	
Wires in Parallel	
Coil Resistance	



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

OTHER COILS

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

3400 Babcock Blvd.
Pittsburgh, PA USA

COIL DATA / REQUEST FOR QUOTE

S&W Job#:

Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:		Date:	Serial #

Sketch Coil Here, Including Basic Dimensions

Wire Size(s)	Additional Info.
Wire Insulation	
Coil Weight	
Turns/ Coil	
Wires in Parallel	
Coil Resistance	



**Stimple
&
Ward**
company

World Class Coils at Down-to-Earth Prices

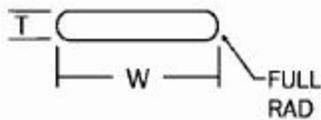
WEDGES

1-800-SWCOILS
1-800-792-6457
412-364-5200
FAX: 412-364-5299
email: swcoils@swcoils.com

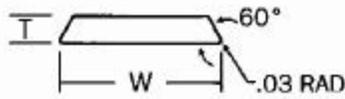
DATA / REQUEST FOR QUOTE

3400 Babcock Blvd.
Pittsburgh, PA USA

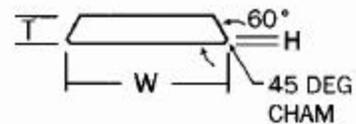
Your Company Name:		Manufacturer	
Person to Contact:		Type:	Frame:
Phone:	Fax:	HP:	Volts:
Your Job/Ref.#		RPM:	Amps:
Customer:		Model #	
Data taken by:		Date:	Serial #



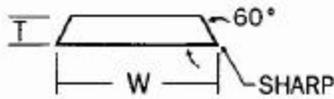
Detail A



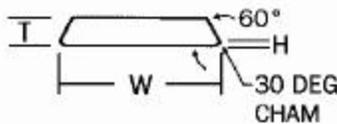
Detail B



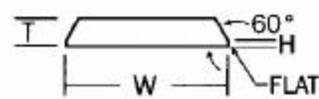
Detail C



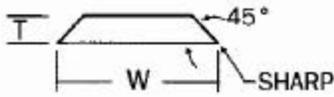
Detail D



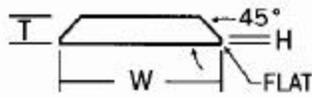
Detail E



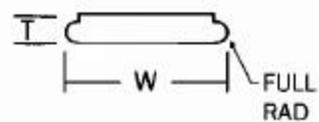
Detail F



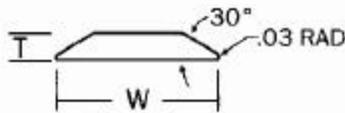
Detail G



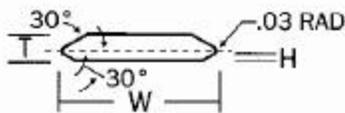
Detail H



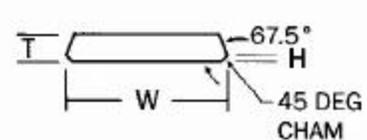
Detail J



Detail K



Detail L



Detail M

Detail (A-M):	Materials Available			Additional Info.
T (+.000, -.006"):		Armatures	Stators	
W:	Class B	G-9, G-10	GPO-1	
Length:	Class F	G11, HT	GPO-1	
No. of Wedges:	Class H	G-7, HT, EMD	SG200, HSTII	
Material:				

S&W Job#: