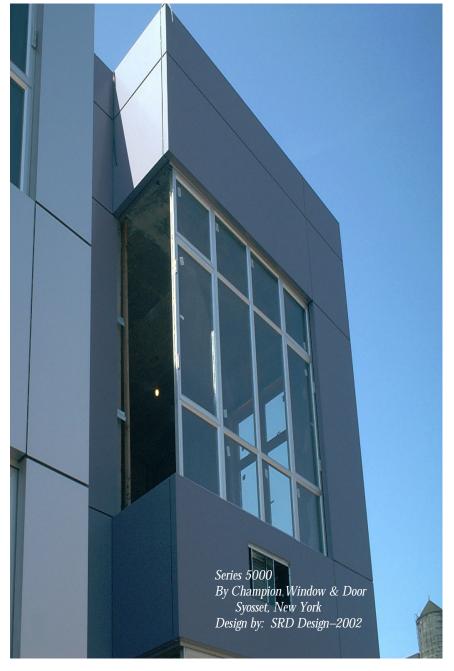


# SRD Design CORPORATION

## **ENGINEERING**



### **ENGINEERING SPECIALISTS**

#### **DIVERSITY**

From architectural to residential grade windows and doors, SRD Design Corporation can design a system to meet your requirements.

We have you covered from aluminum to vinyl, even wood.

# WE OFFER COMPLETE DESIGN PACKAGES INCLUDING:

- ? Assembly Drawings
- ? Extrusion Die Details
- ? Fabrication Drawings
- ? Bill of Materials (Excel Spreadsheets)
- ? Structural Load Calculations
- ? Custom Hardware Drawings
- ? Proto-typing & Sample Units

SRD Design can also help you with your shop & installation drawings.

#### **DESIGNS THAT WORK!**

Window designs are developed with the production tooling in mind. Our designs incorporate the use of standard hardware and placement. This ensures fabrication does not punch in places where walls interfere.

### SPECIALIZING IN CUSTOM, PROPRIETARY DESIGNS

Double Hung Tilt & Side Load
Single Hung Tilt & Side Load
Horizontal Slider
Picture / Fixed Windows
Project-In / Project-Out / Casement
Tilt & Turn
Storefront & Curtain Wall
Sliding Glass Doors
Terrace & Swing Doors
Sub-Sills & Receptor Systems
Trim & Clip
Panning

GIVE US A CALL
to have SRD DESIGN
quote on your next
Project!

92-6602 Srddesign.com www.srddesign.com

## **TOOLING**



### **TOOLING SPECIALISTS**

TRUST your next tooling job to SRD Design Corporation.

#### **WE OFFER A COMPLETE LINE OF:**

- ? Punch Press Tooling
- ? Corner Key Crimpers
- ? Automated Drill Machines
- ? Milling Machines
- ? Copy Routers
- ? Hydraulic Pumps
- ? Hydraulic & Pneumatic Presses

COMPARE our quality and value against any other equipment manufacturer. Dollar for Dollar, we offer the BEST equipment in the industry,

BAR NONE!

PRODUCTION oriented tooling that enables you the manufacturer to reduce time and costs in the fabrication process.



### **SRD Design Uses:**



1-1/2" Thick Lid & Shoe
Stressed Relieved & Ground Die Sets
1-1/2" Pins & Bushings
Heavy Duty Bushing Clamps
Adjustable Open & Shut Height
Hardened Stop Blocks
Universal Bridge Over Die Stands
Scrap Bins Standard
Clear Lexan Guards
25,000 Pound PSI Stand Rating
6" Minimum Out-Rigger Length
Steel Block Extrusion Guided

### **Our Competitors Use:**

1-1/4" Thick Lid & Shoe 1-1/4" Pins & Bushings Non-Adjustable Open & Shut Height Cold Rolled Steel Stop Blocks Flat Die Stands Guide Extrusions with Dowel Pins

#### "THE COMPETITION FALLS SHORT!"

Phone: (717) 792-6501 Fax: (717) 792-6602 Email: info@srddesign.com Website: www.srddesign.com



P: 717.699.0005 F: 717.699.0055

### **Product Development Guide**

The following is a list of detailed, contracted agreements for SRD Design Corp., further referred to as us or we. We are liable only for the information provided below or as agreed by quotation supplied.

Assembly Drawings: Drawing(s) detailing horizontal and vertical projections of product(s). Assembly includes all extrusions, hardware, fasteners, and forms of weather-stripping where applicable at full scale, unless otherwise specified. Customer must approve Assembly Drawing(s) before we proceed with other aspects of project.

**Structural Calculations:** Calculation(s) to correspond with desired rating per contract. Calculations are based on the AAMA 103.3 Procedural Guide.

**Bill of Materials:** Bill of Material(s) with the part name of extrusion, hardware, fastener and forms of weather-stripping, corresponding drawing numbers related to project number, extrusion wt. per. ft. where applicable, cut length formulas for all extrusions (as they pertain to their corresponding Assembly Drawing), vendors for hardware (specked out by us but not limited to).

**Extrusion Drawings:** Drawings detailing all necessary dimensions and tolerances. Extrusion Drawings also include all weights and areas of extrusion (when of known material) and moments of inertia. All drawings are sent either by customer, or by us to extruder (when applicable). Extruder drawings to be checked by us prior to release for production.

**Fabrication Drawings:** Drawing(s) detailing fabrication of extrusion (as they pertain to their corresponding Assembly Drawing), and all necessary dimensions and tolerances. Fabrication Drawings will be noted with other corresponding design applications and typical hardware specked out by us.

**Screen Charts:** Screen Chart(s) with cut length formulas (as they pertain to their corresponding Assembly Drawing when applicable).

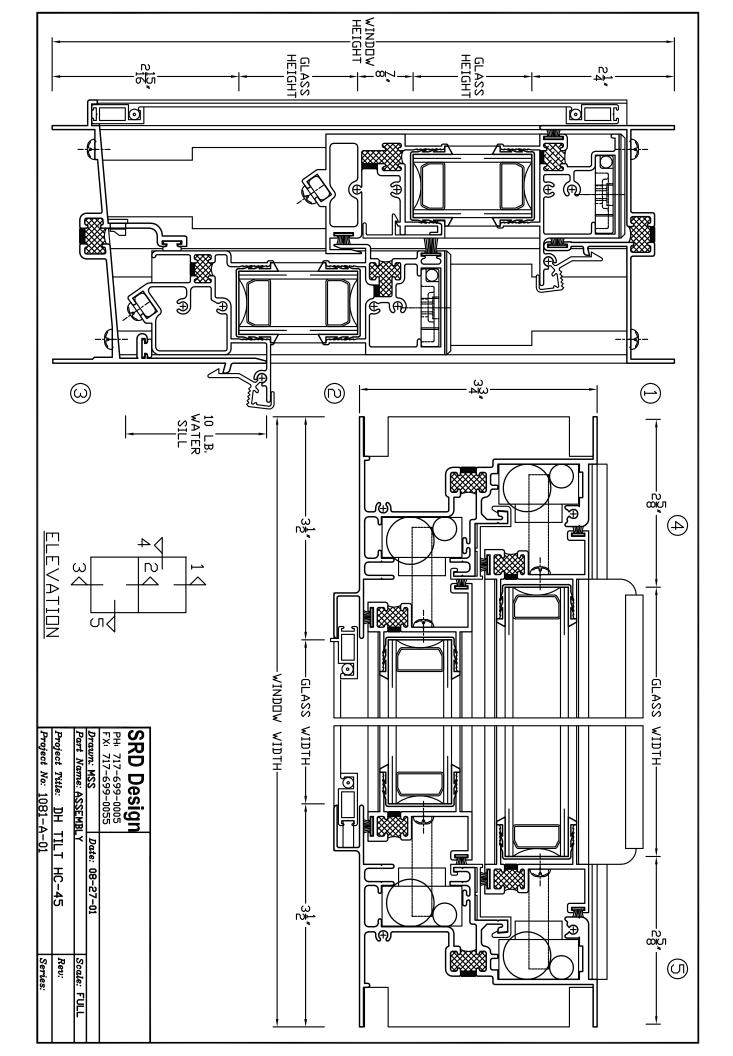
**Installation Drawings:** Drawing(s) detailing installation of product (not liable for actual installation of product in any way or manner) as requested by customer's application.

**Revisions of all drawings:** We will revise Assembly Drawing(s) prior to final approval. If revisions are requested after final approval of Assembly Drawing(s), customer may be informed of additional charges to corresponding contract prior to revisions being made.

**Sample Units:** We will supply sample unit(s) of contracted product. Sample will be proto-typed to show function fit and general appearance of the product.

**Testing:** We can provide the necessary lab assistance to obtain the specification as outlined in the design features. This quotation is based upon the testing being performed in York, PA. Should any other locale be required, traveling expenses will be charged. The actual costs of testing are not included in this proposal unless specifically stated.

**Additional Requests:** Any additional requests that the customer deems vital for a contract to be valid should be made verbal to us prior to a signed contract. We will evaluate the request, and if practical and agreeable by both parties, will be re-written into a revised contract, and resubmitted to customer.



## SRD Design

### Bill of Materials and Sources

Quantity 1
Window Width 36 WW=WINDOW WIDTH
Window Height 60 WH=WINDOW HEIGHT
Double Hung
Aluminum Extrusions

Customer Your Company Name
Project No. 1081-B-01
Ref. Assembly 1081-A-01
Double Hung Tilt
HC-45

ITEM	QTY.	NAME	SRD FAB. DWG. #	LBS\FT.	LENGTH (IN)	FORMULA	EST. WT.	SOURCE	SRD EXTRU. #
1	1	HEAD	1081-F-01	0.691	36	ww	2.073		1081-E-01
2	1	SILL	1081-F-02	1.079	36	WW	3.237		1081-E-02
3	2	JAMB	1081-F-03	1.493	58 1/2	WH - 1 1/2"	14.557		1081-E-03
4	1	TOP RAIL	1081-F-04	0.758	29 3/16	WW - 6 13/16"	1.844		1081-E-04
5	1	KEEPER RAIL	1081-F-05	1.026	29 3/16	WW - 6 13/16"	2.496		1081-E-05
6	1	LOCK RAIL	1081-F-06	0.830	30 7/8	WW - 5 1/8"	2.136		1081-E-06
7	1	BOTTOM RAIL	1081-F-07	0.808	30 7/8	WW - 5 1/8"	2.079		1081-E-07
8	2	TOP STILES	1081-F-08	0.421	29 11/16	(WH / 2) - 5/16"	2.083		1081-E-08
9	2	BOTTOM STILES	1081-F-08	0.421	29 11/16	(WH / 2) - 5/16"	2.083		1081-E-08
10	2	TOP SASH STOP	1081-F-09	0.335	8	8"	0.447		1081-E-09
11	2	BOTTOM SASH STOP	1081-F-09	0.335	6	6"	0.335		1081-E-09
12	1	TOP SNAP LATCH	1081-F-15	0.148	28 11/16	WW - 5/16"	0.354		1081-E-15
13	1	BOTTOM SNAP LATCH	1081-F-15	0.148	30 3/8	WW - 6 5/8"	0.375		1081-E-15
			·	-		Total Weight	34.097		

**Vinyl Extrusions** 

<u> </u>	THIS EXECUTIONS										
ITEM	QTY.	NAME	SRD FAB. DWG. #	LBS\FT.	LENGTH (IN)	FORMULA	EST. WT.	SOURCE	SRD EXTRU. #		
14	2	JAMB VINYL	1081-F-03	0.067	58 1/2	WH - 1 1/2"	0.653		1081-V-01		
15	1	KEEPER RAIL VINYL	1081-F-05	1.079	29 3/16	WW - 6 13/16"	2.624		1081-V-02		
•	•		•		•	Total Weight	3.278				

**Hardware Parts** 

TEM	QTY.	NAME	PART #	Cost Per.	LENGTH (IN)	Total	SOURCE
16	2	Lock Housing & Cam	9013 & 9018	\$0.90		\$1.80	Truth
17	2	Keeper	9004	\$0.35		\$0.70	Truth
18	2	Gaer Weep Cover		\$0.09		\$0.18	Gaer
19	1	Wrap-Around Marine Glazing		\$0.06	227 1/4	\$0.06	Boston Retail
20	2	Top Sash Cap	1081-H-01	\$0.28		\$0.56	SRD Design Co
21	2	Bottom Sash Cap	1081-H-02	\$0.28			SRD Design Co
22	4	Tilt Latch	SRD-011	\$0.53			SRD Design Co
23	4	Tilt Latch Spring	SRD-003	\$0.09		\$0.36	SRD Design Co
24	2	Snap Latch Springs	SRD-004	\$0.03		\$0.06	SRD Design Co
25	4	Pivot Bar	SRD-002	\$0.60		\$2.40	SRD Design Co
26	4	Rubber Bumper	SRD-009	\$0.65		\$2.60	SRD Design Co
27	4	Ultra-Lift Balances	Per Caldwell	\$8.20		\$32.80	Caldwell
28	4	Pencil Balances	Per Caldwell	\$5.80		\$23.20	Caldwell
29	4	Balances Shoe	16H033	\$0.40		\$1.60	Caldwell
	•	•	·			Total \$69.00	

Weatherstripping & Bulb Seals

ITEM	QTY.	NAME	Spec.	Cost Per/Ft.	LENGTH (IN)		Total	SOURCE
30	1	Head Weatherstripping	.180 HG. X .270 BK	\$0.08	36		\$0.23	
31	1	Top Rail Weatherstripping	.190 HG. X .270 BK	\$0.08	29 3/16		\$0.18	
32	1	Keeper Rail Weatherstripping	.220 HG. X .270 BK	\$0.08	29 3/16		\$0.18	
33	1	Lock Rail Weatherstripping	.220 HG. X .270 BK	\$0.08	30 7/8		\$0.19	
34	4	T & B Stile Ext. Weatherstripping	.190 HG. X .270 BK	\$0.08	29 11/16		\$0.74	
35	4	T & B Stile Int. Weatherstripping	.190 HG. X .187 BK	\$0.08	29 11/16		\$0.74	
36	2	Sill Bulb Seal	.230 HG. X .270 BK	\$0.12	36		\$0.72	
						Total	\$2.99	_

Fasteners

	. •					
ITEM	QTY.	NAME	PART#	Cost Per	LENGTH (IN)	Total SOURCE
37	8	Frame Screws	#8x1 PPH	\$0.02		\$0.16 Local Vendor
38	8	Sash Screws	#8x1 PFH	\$0.02		\$0.16 Local Vendor
39	2	Lock Screws	#10x1/2 PFH	\$0.02		\$0.04 Local Vendor
40	2	Keeper Screws	#6x3/4" PFH	\$0.02		\$0.04 Local Vendor
41	8	Balance Screws	#8x1" PFH	\$0.02		\$0.16 Local Vendor
42	4	Pivot Bar Screws	#8-32 x 3/8" Mach.	\$0.02		\$0.08 Local Vendor
43	4	Tilt Latch Screws	#8-32 x 1/2" Mach.	\$0.04		\$0.16 Local Vendor
44	8	Sash Stop Bumper Screws	#8x 3/4" PPH	\$0.04		\$0.32 Local Vendor

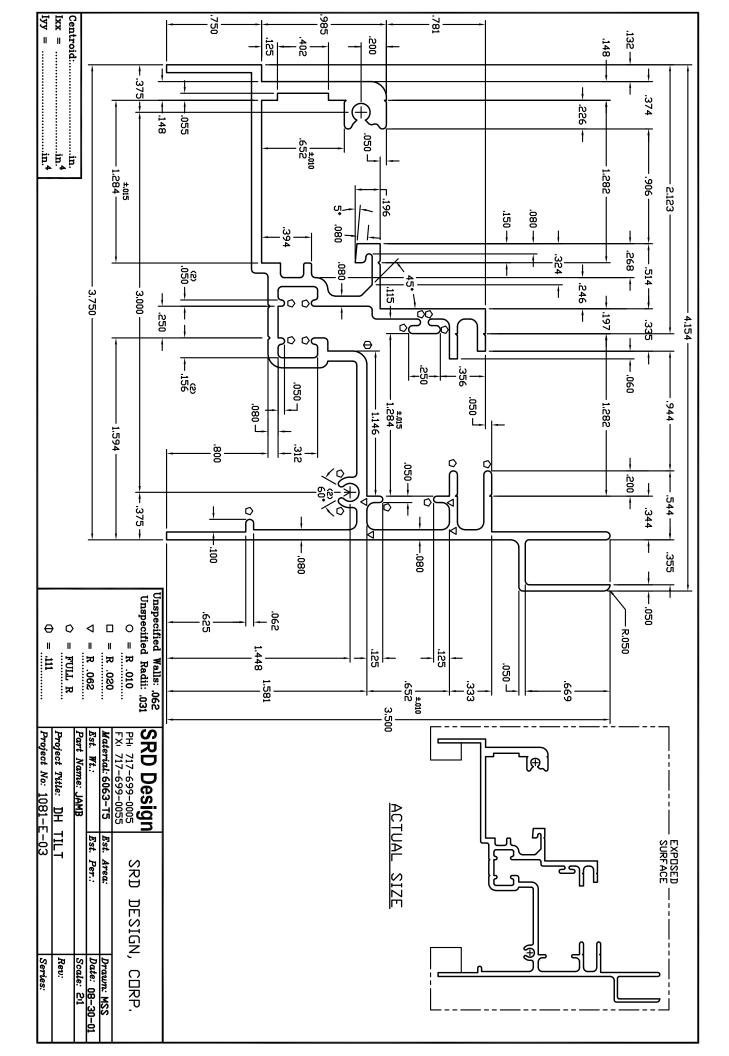
Total \$1.12

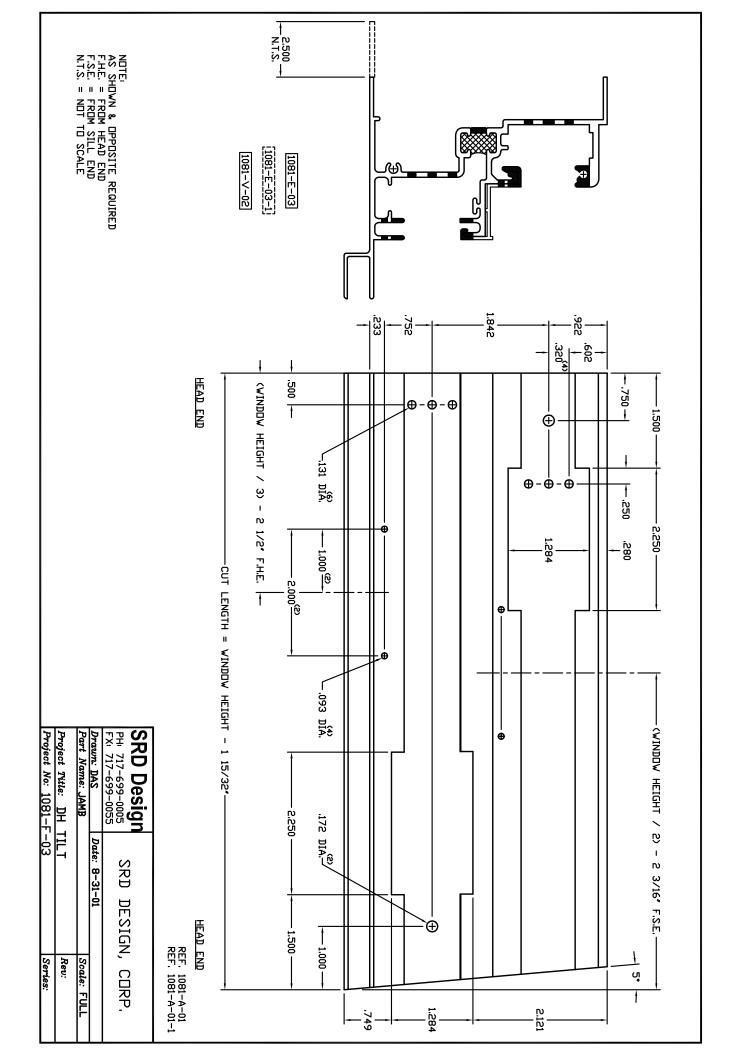
Glass Cut Lengths

ITEM	QTY.	NAME	Cost Per.				Total	SOURCE
45				Width		Height		
46	1	TOP GLASS 1" I.G.	\$4.5	0 29	Х	27	\$65.25	Local Vendor
47	1	BOTTOM GLASS 1" I.G.	\$4.5	0 30 5/8	Х	27	\$68.91	Local Vendor
		•	•	•		Total	¢424.46	

**Aluminum Extrusion** Approx. Cost **Vinyl Extrusion** Approx. Cost Hardware Approx. Cost \$69.00 Weatherstripping & Bulb Seal Approx. Cost \$2.99 **Fasteners** Approx. Cost \$1.12 Approx. Cost Glass <u>\$134.16</u> Approx. Total \$207.27

Note: All costs are approximate/some prices may vary Bill of material does not include screen assembly or pricing







P: 717.699.0005 F: 717.699.0055

### **Tooling Development Guide**

The following is a list of detailed, contracted agreements for SRD Design Corp., further referred to as us or we. We are liable only for the information provided below or as agreed by quotation supplied.

**Fabrication Tooling:** We provide fully detailed assembly drawings and details of each die. Commercially available punches and other parts are used in tooling and when required any custom parts are detailed to provide replacement of worn parts with minimal effort and cost. Tooling is custom built for maximum production. Guards are provided both front and back of the tooling

**Presses:** We provide either air or hydraulic presses, with foot pedal control, to actuate the tooling. When purchased with tooling dies will be installed into the presses for a turn-key installation.

**Sample Units:** We will supply sample unit of contracted product(s). Sample will be processed from production tooling to show function fit and general appearance of the product.

**Testing:** We can provide the necessary lab assistance to obtain the specification as outlined in the design features. This quotation is based upon the testing being performed in York, PA. Should any other locale be required, traveling expenses will be charged. The actual costs of testing are not included in this proposal unless specifically stated.

**Additional Requests:** Any additional requests that the customer deems vital for a contract to be valid should be made verbal to us prior to a signed contract. We will evaluate the request, and if practical and agreeable by both parties, will be re-written into a revised contract, and resubmitted to customer.



SRD Design Corporation

Date: 05/01 Drawn: SRD

Scale: N.T.S. Part Name:

Rev: Project Title: CORNER CRIMPER Project No:

Series:



# SRD Design PH: 717-699-0005 FX: 717-699-0055 SRD Design Corporation

Drawn: SRDDate: 05/01Part Name:Scale: FULLProject Title: COPY ROUTERRev:Project No:Series:



## SRD Design Corporation

Rev:

Date: 05/01 Drawn: SRD

Scale: FULL Part Name:

Project Title: DUAL MILLING MACHINE Project No: Series:



Project No:

SRD Design Corporation

Date: 05/01 Drawn: SRD

Scale: FULL Part Name:

Rev: Project Title: END MILLING MACHINE

Series:



Project No:

SRD Design Corporation

Date: 05/01 Drawn: SRD

Scale: FULL Part Name:

Rev:Project Title: DUAL HEAD MACHINE

Series:



SRD Design Corporation

Date: 05/01 Drawn: SRD

Scale: FULL Part Name:

Rev:Project Title: DUAL DRILL MACHINE

Project No: Series:



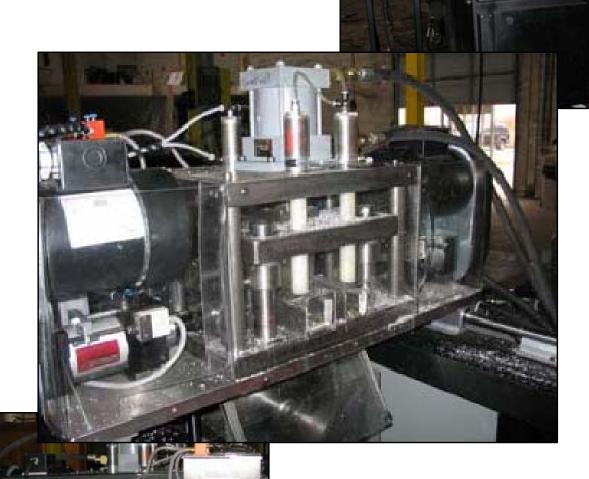
SRD Design Corporation

Date: 05/01 Drawn: SRD

Scale: FULL Part Name:

Rev: Project Title: AW CYCLE MACHINE Project No:

Series:



Drawn: SRD

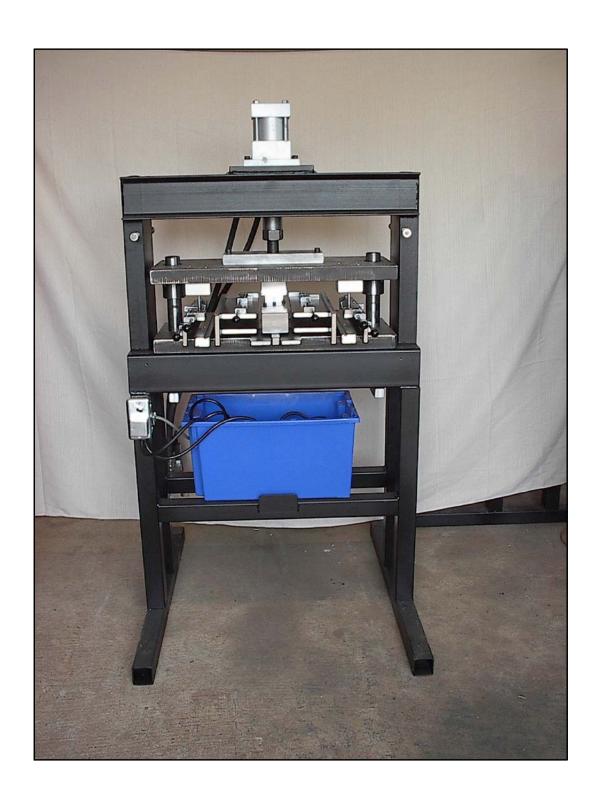
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Date: 05/01

Scale: FULL Part Name:

Project Title: MULTI PROCESSING MACHRev:

Project No: Series:



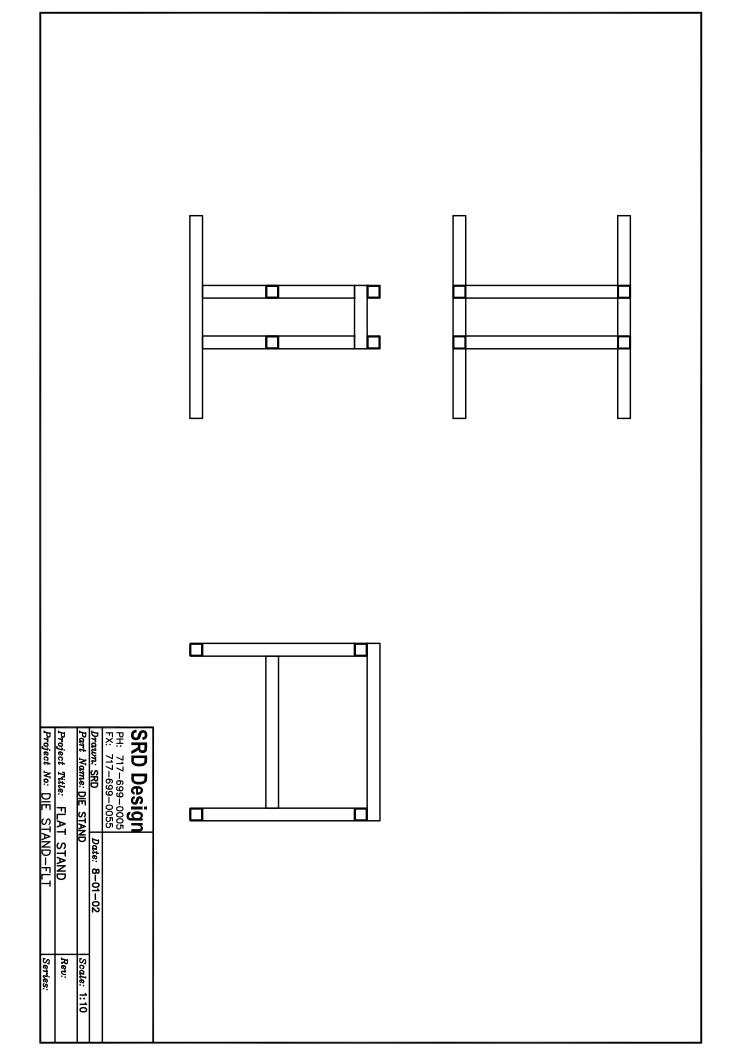
## SRD Design Corporation

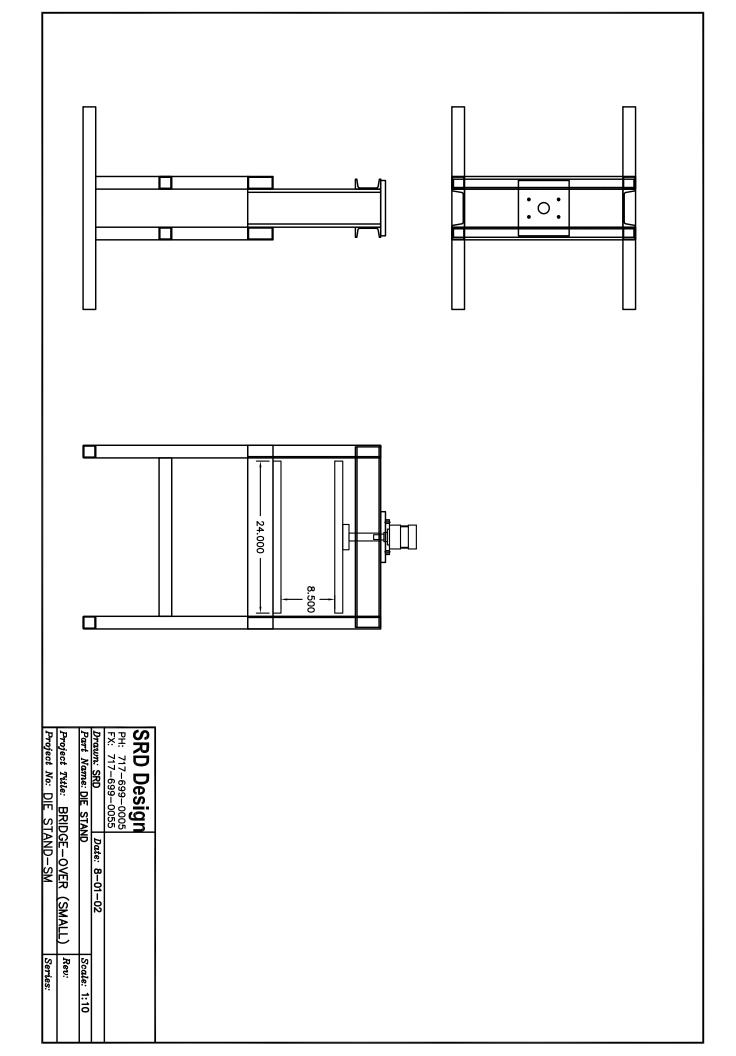
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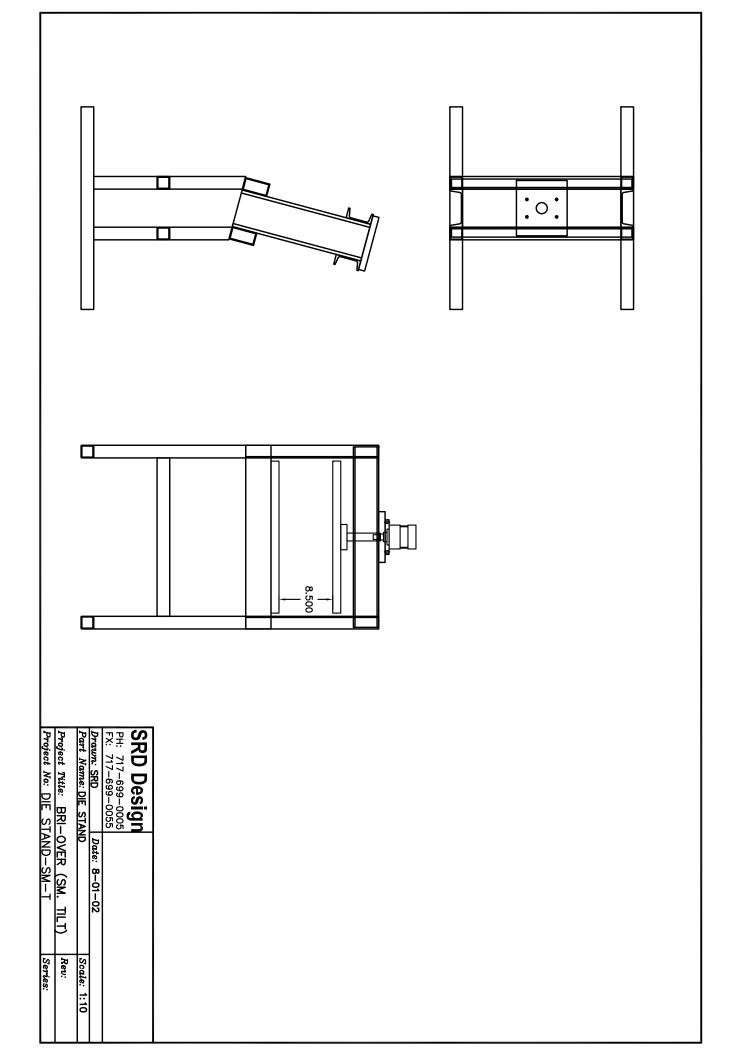
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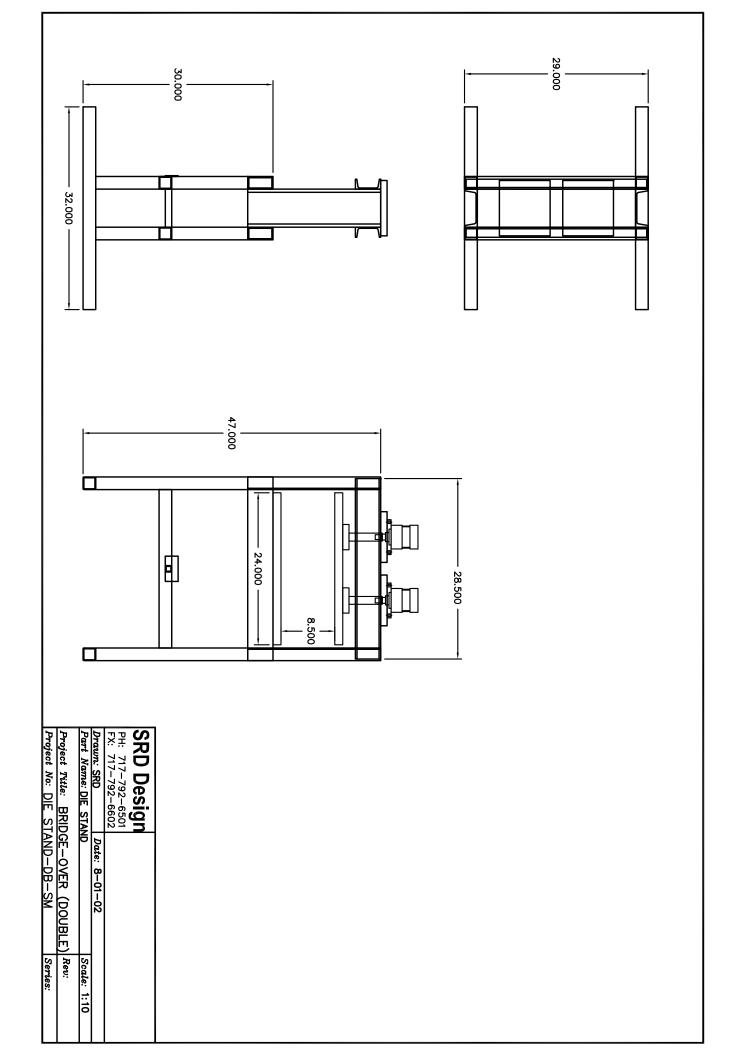
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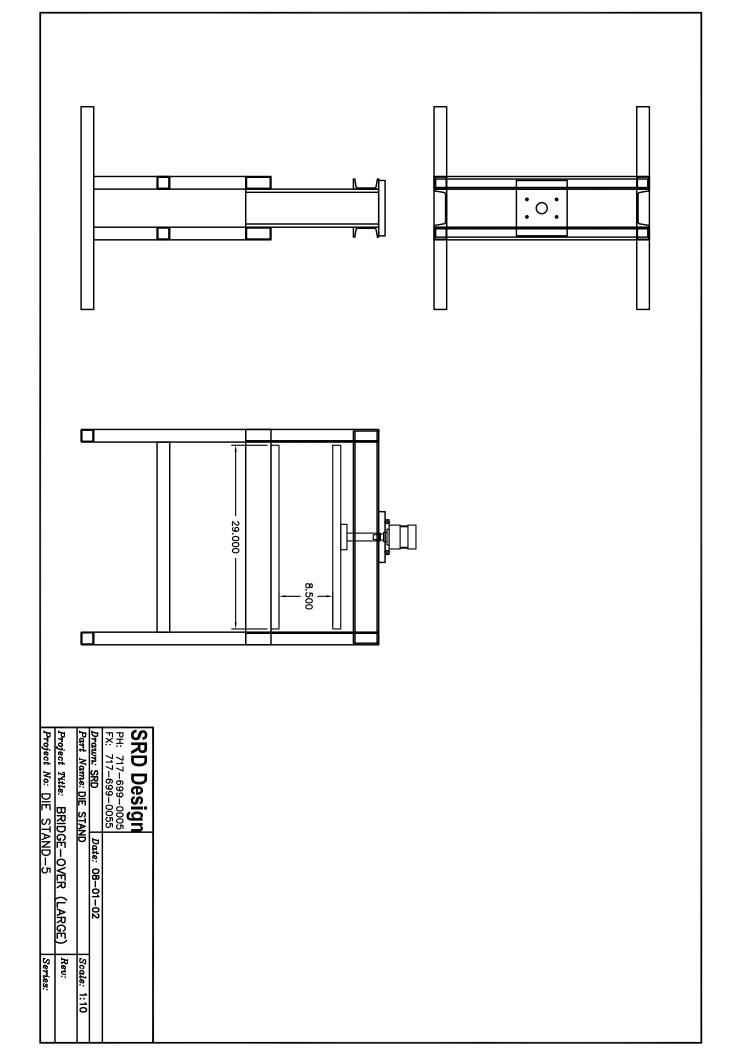
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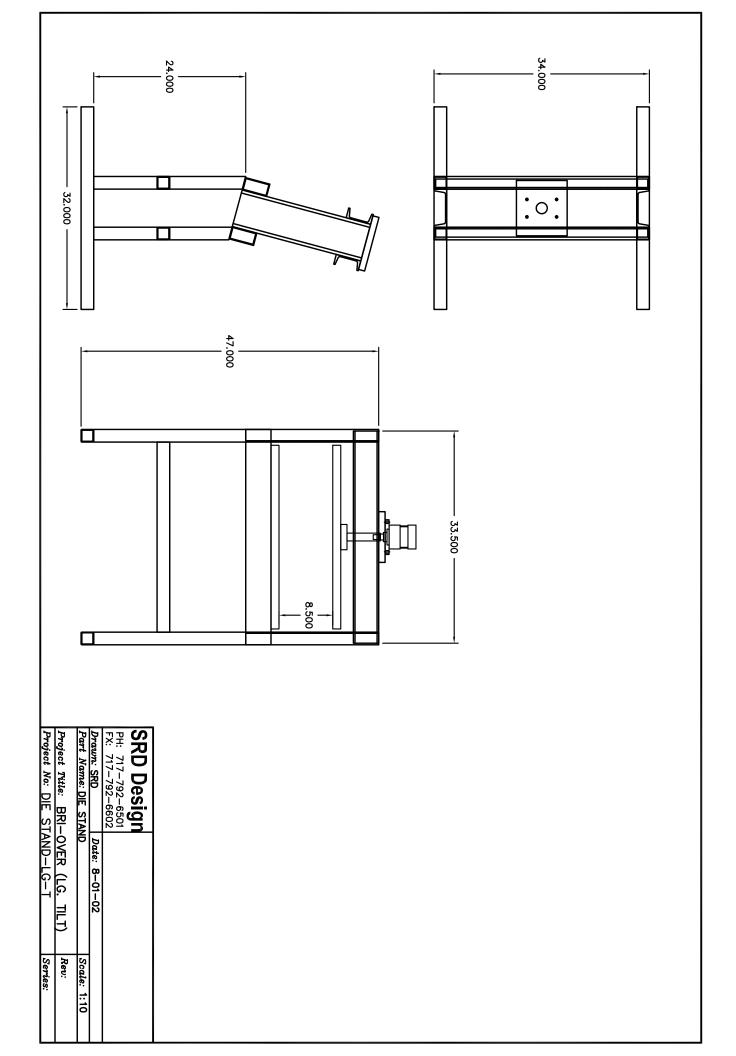


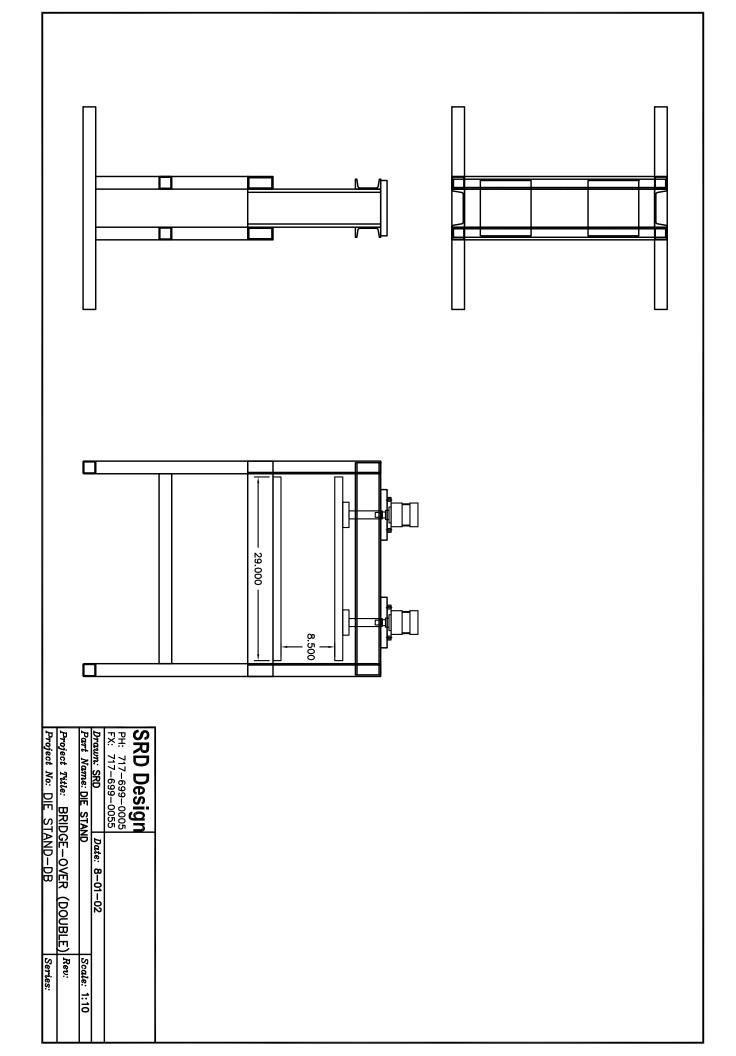


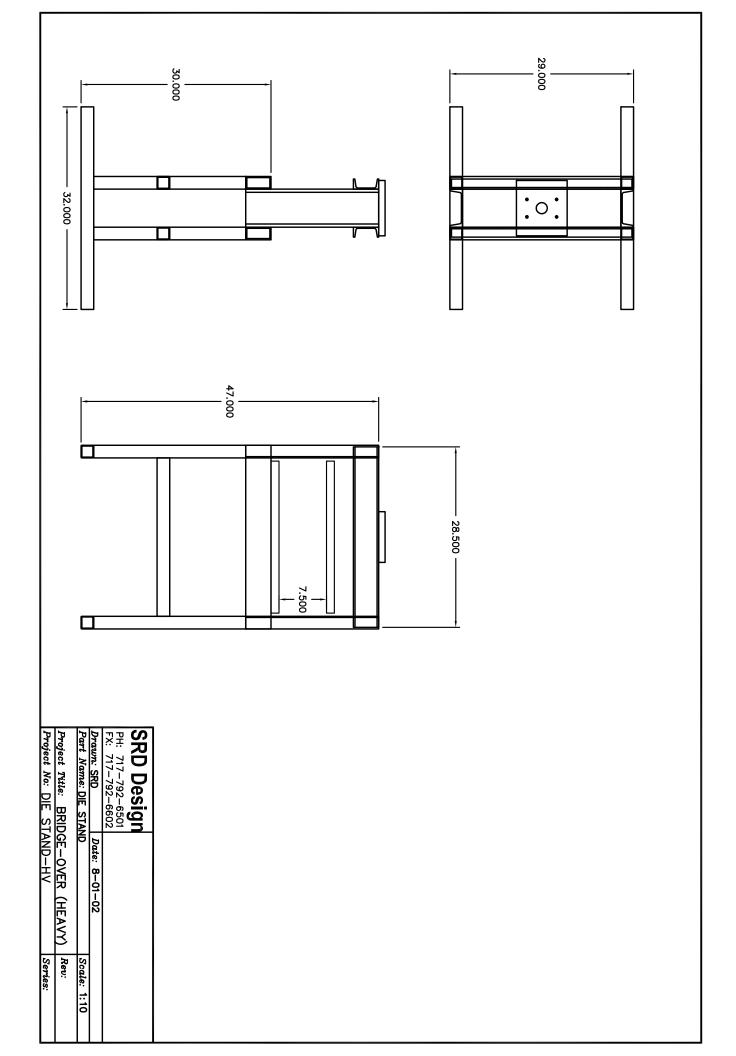


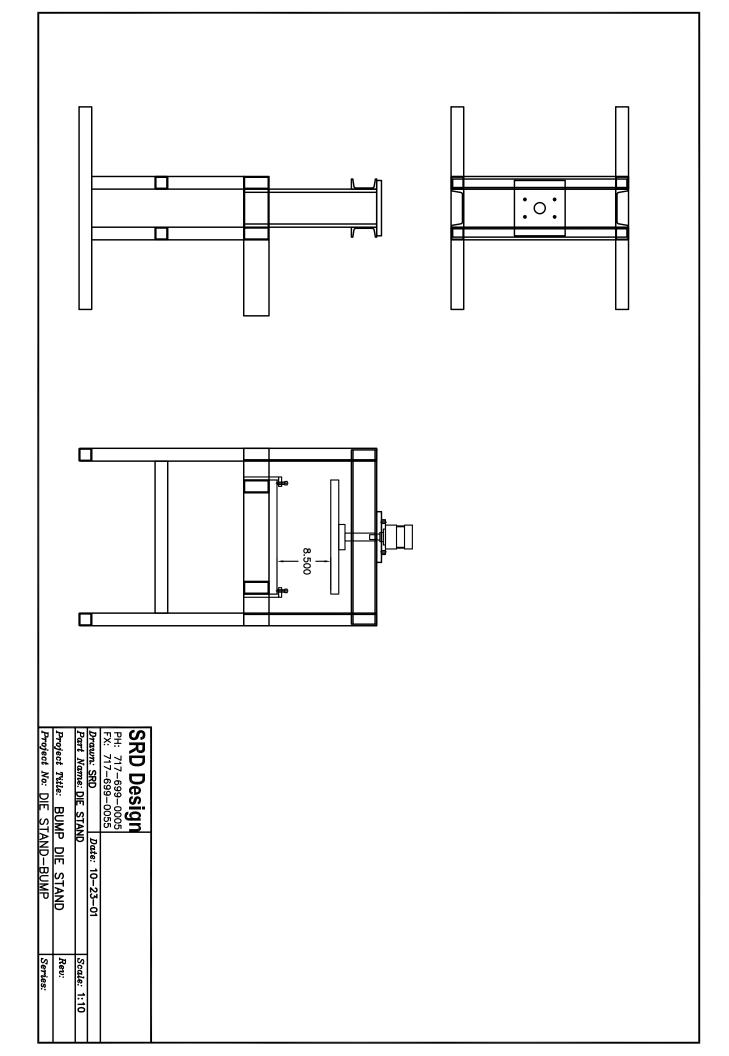




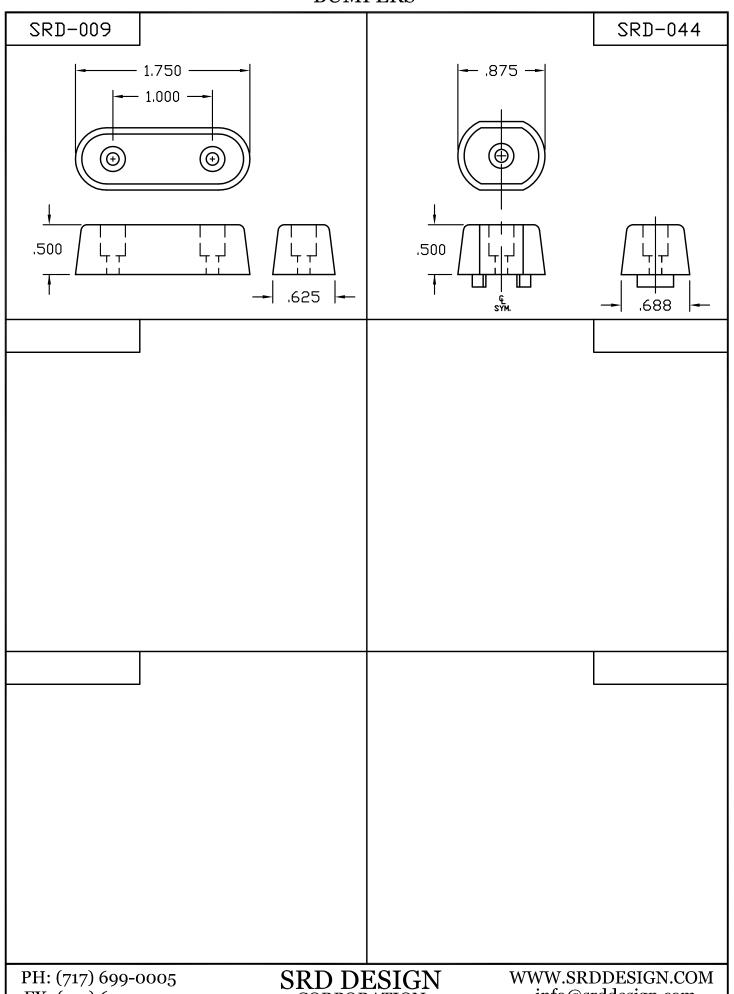








### **BUMPERS**

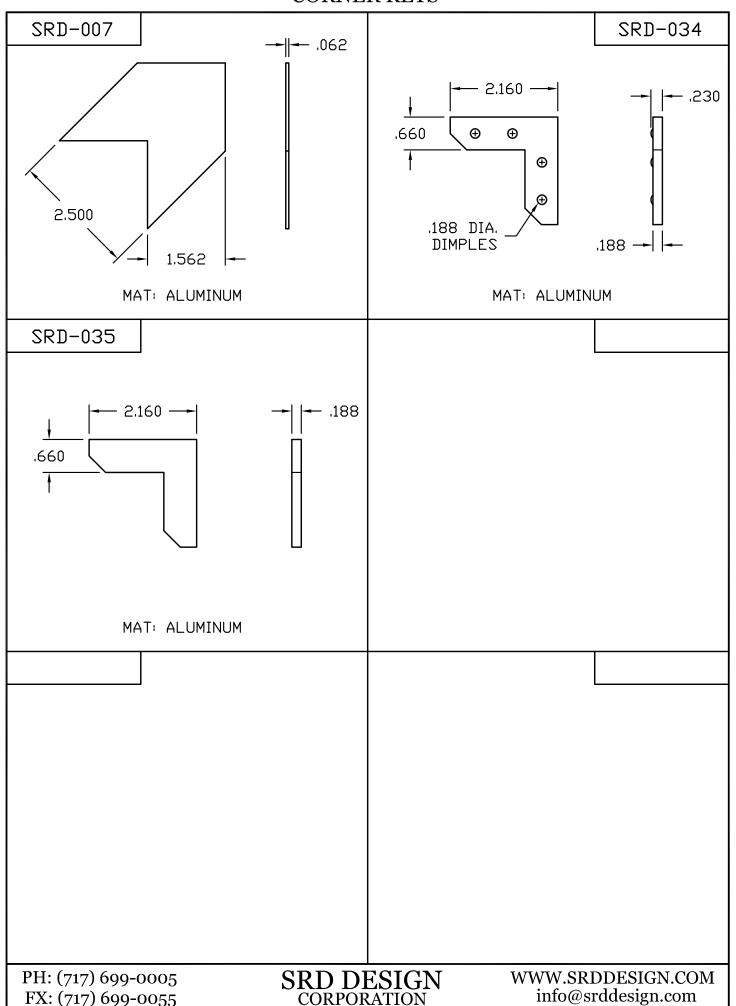


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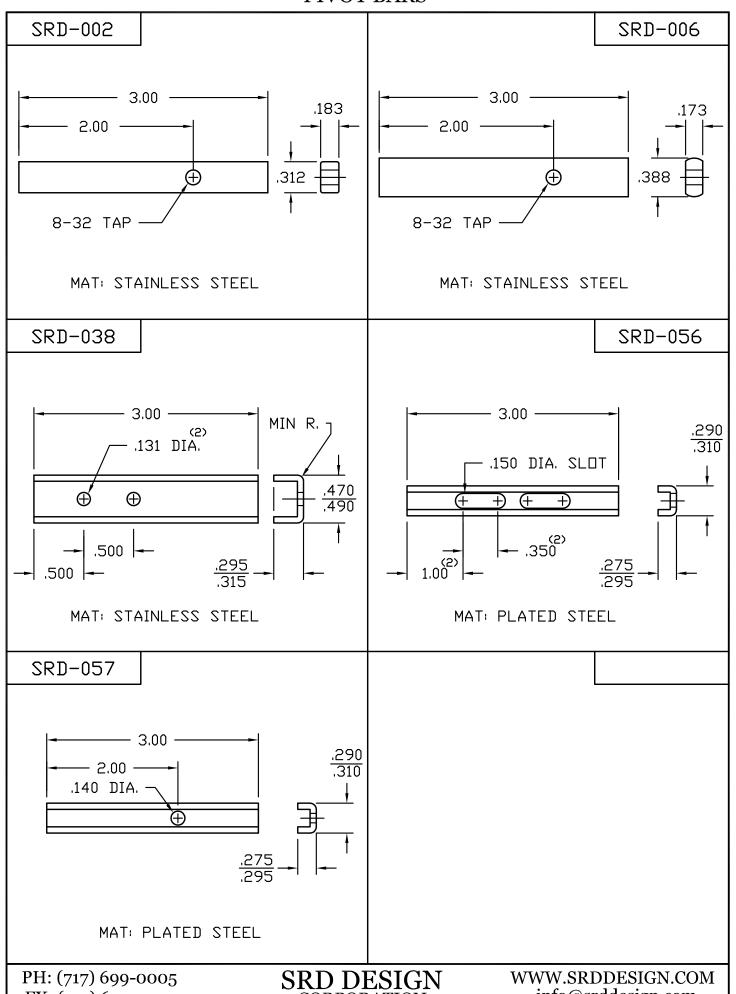
### **CORNER KEYS**



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SRD DESIGN CORPORATION

### **PIVOT BARS**

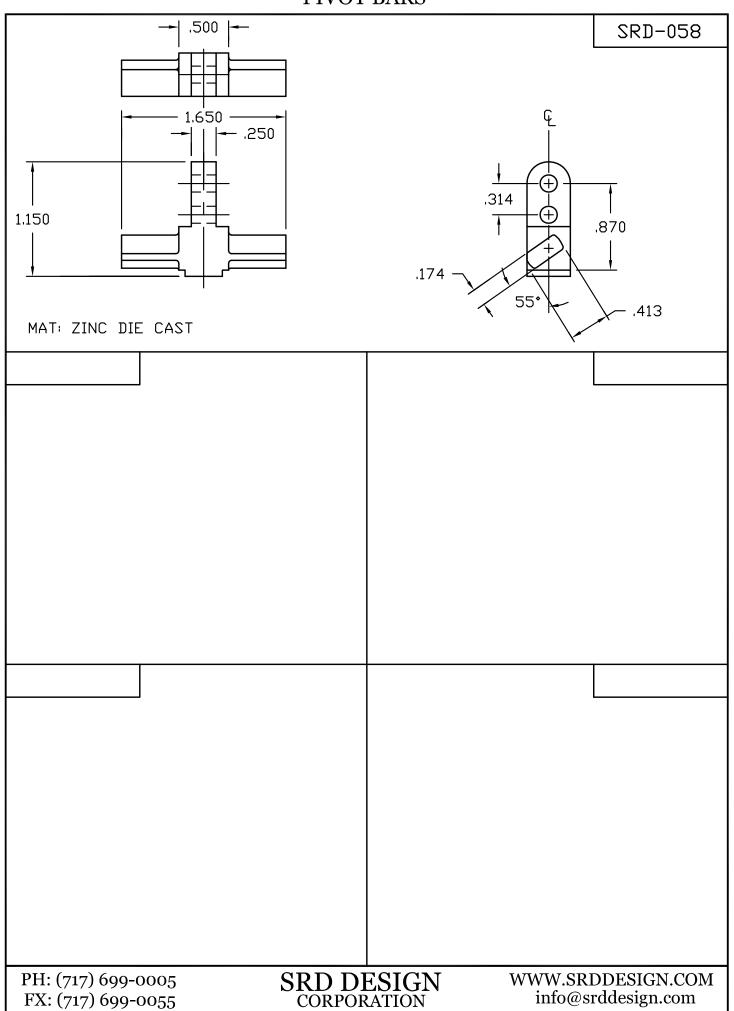


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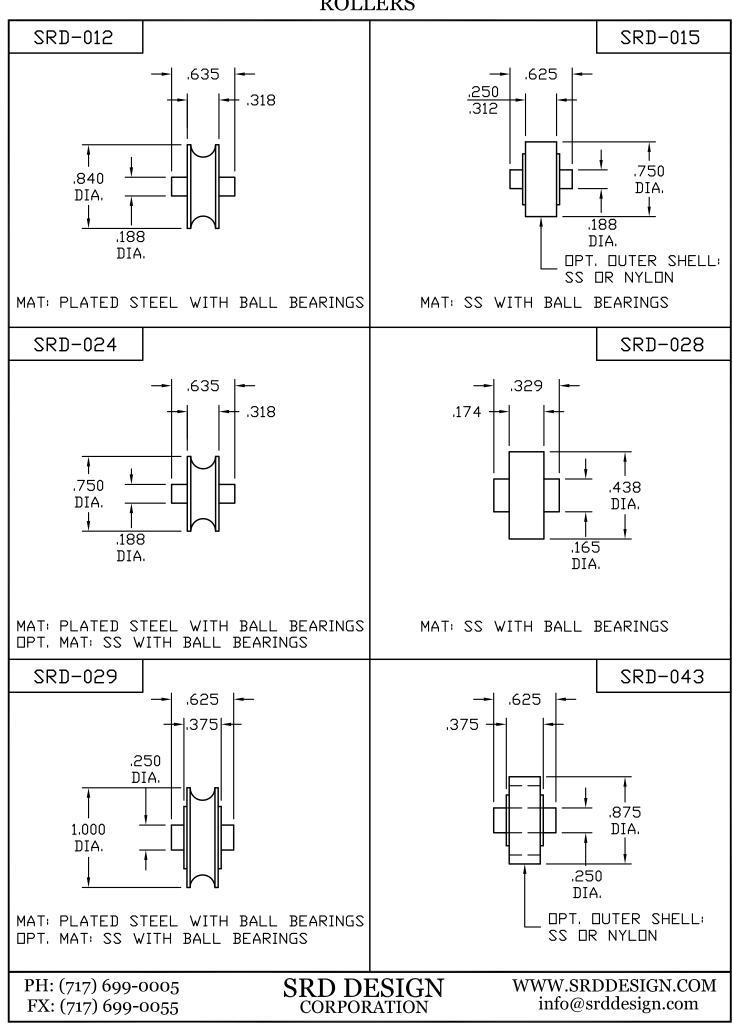
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info@srddesign.com

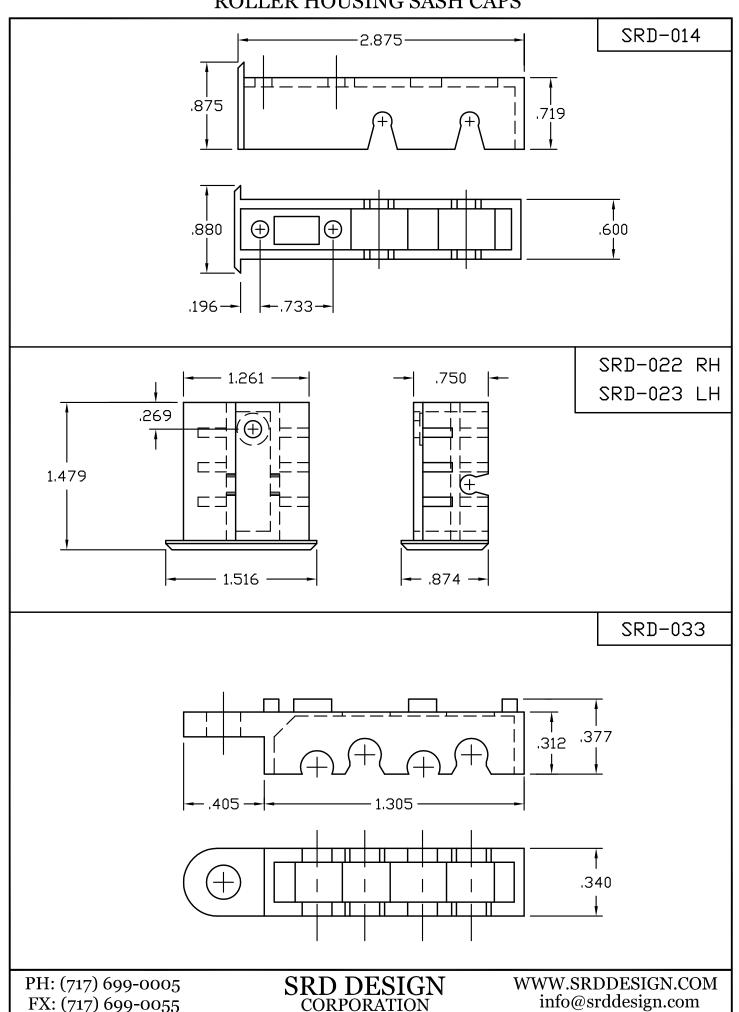
### **PIVOT BARS**



### **ROLLERS**



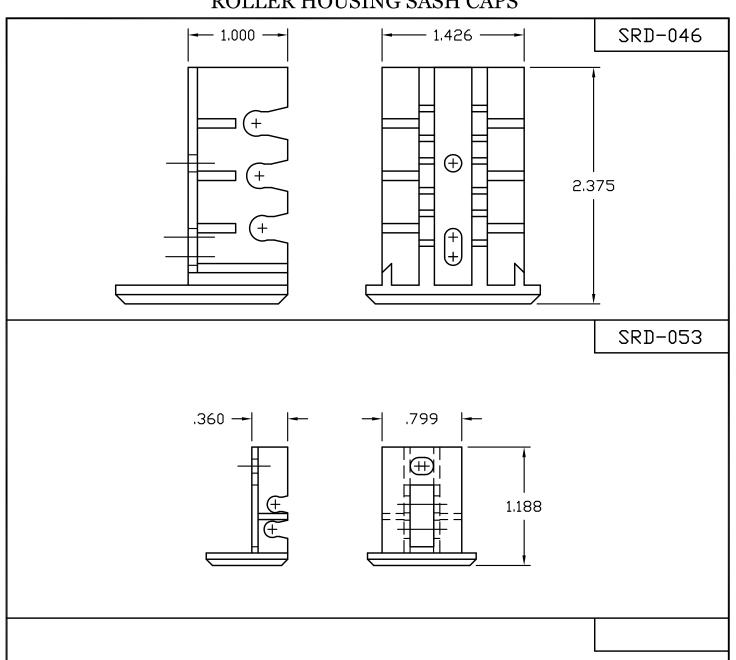
### ROLLER HOUSING SASH CAPS



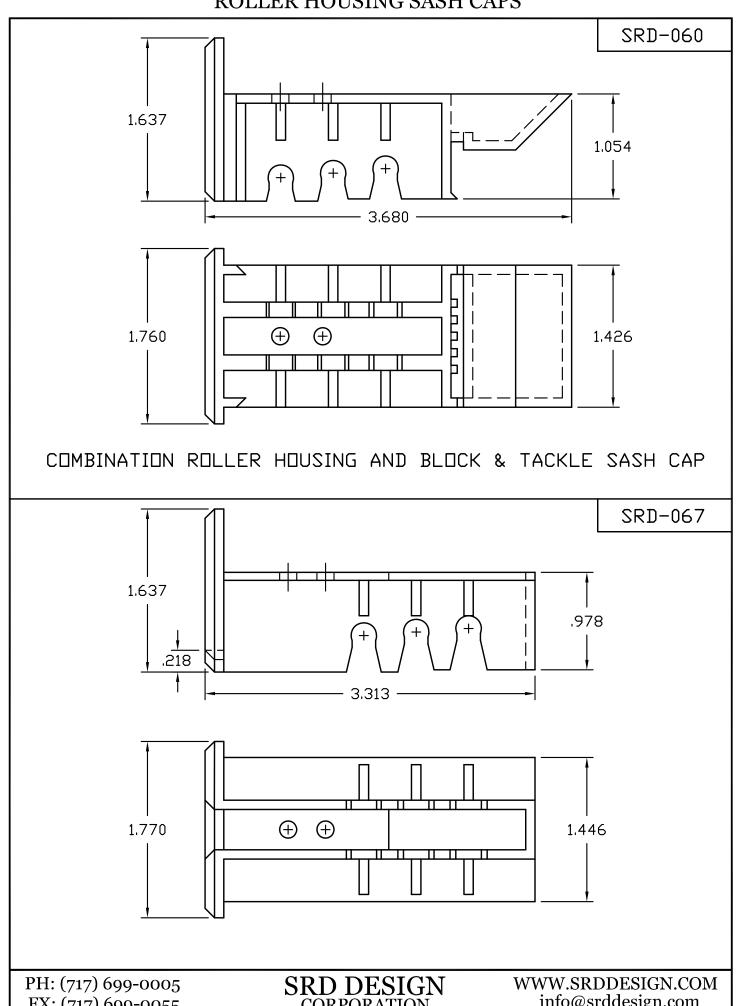
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**CORPORATION** 

## ROLLER HOUSING SASH CAPS



### ROLLER HOUSING SASH CAPS

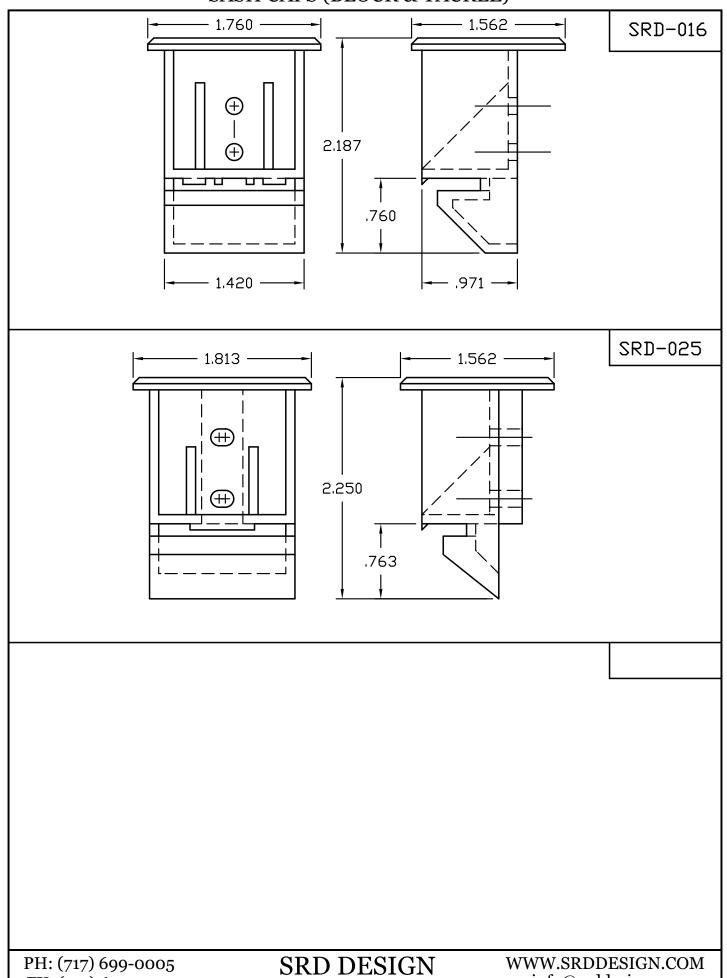


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CORPORATION

in fo@srdde sign.com

## SASH CAPS (BLOCK & TACKLE)

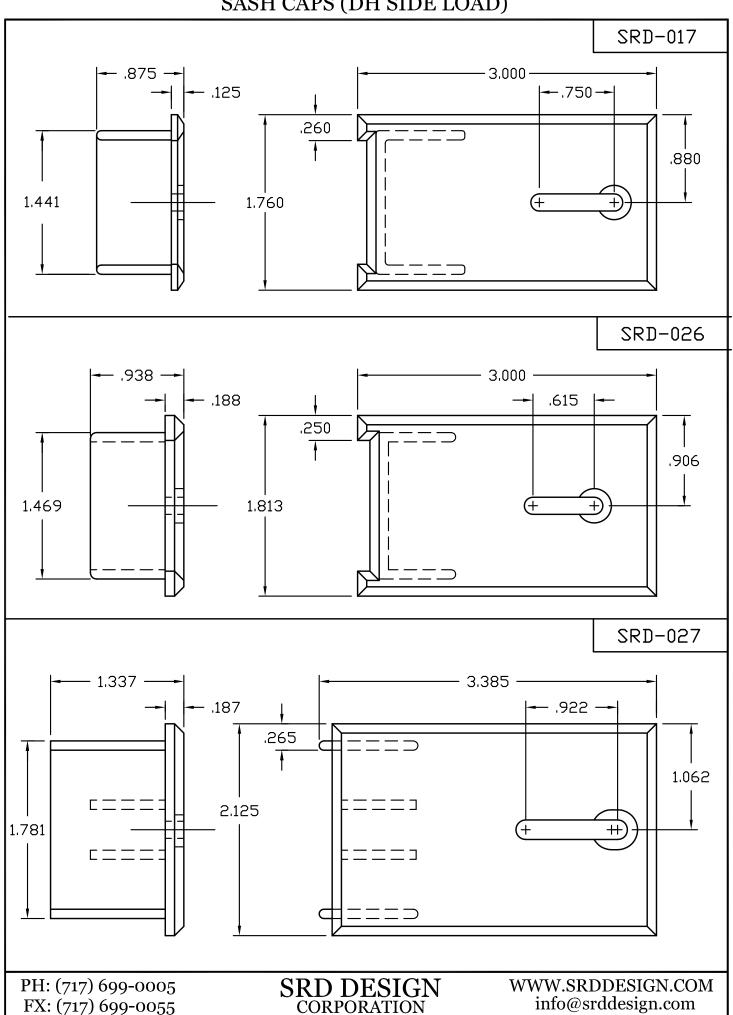


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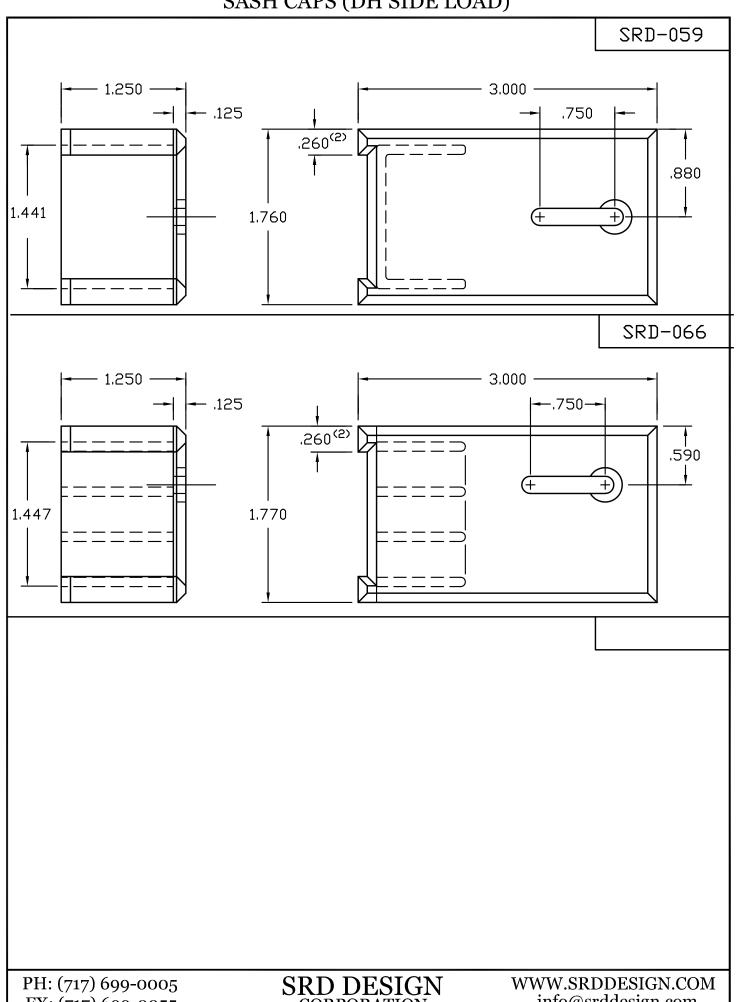
SRD DESIGN CORPORATION

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## SASH CAPS (DH SIDE LOAD)



## SASH CAPS (DH SIDE LOAD)

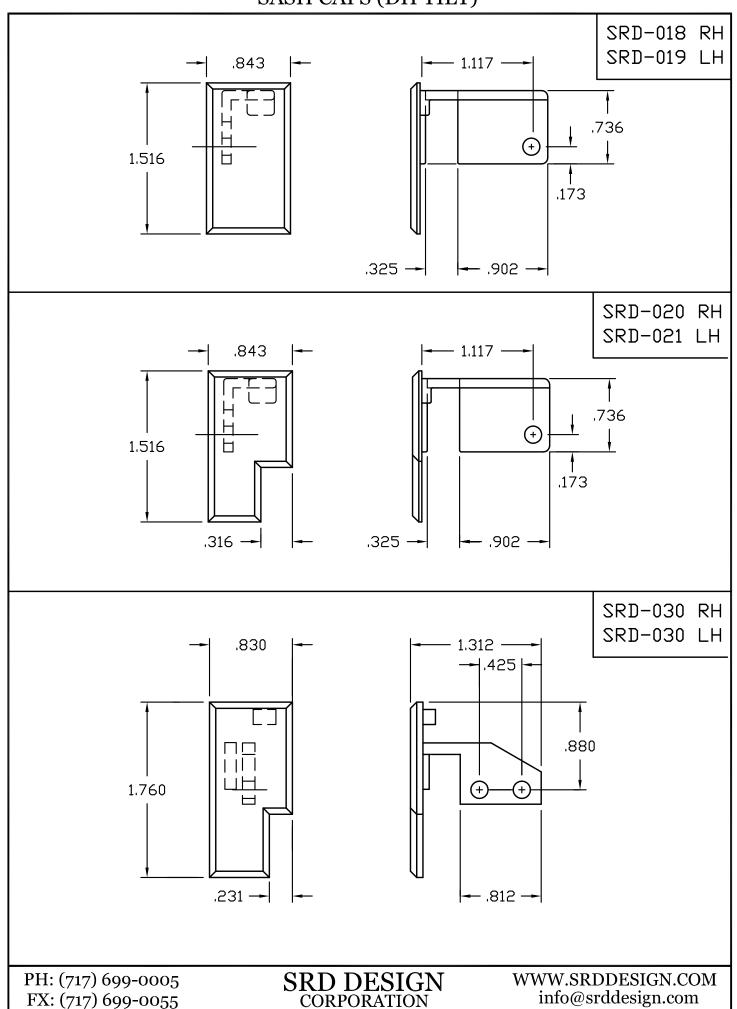


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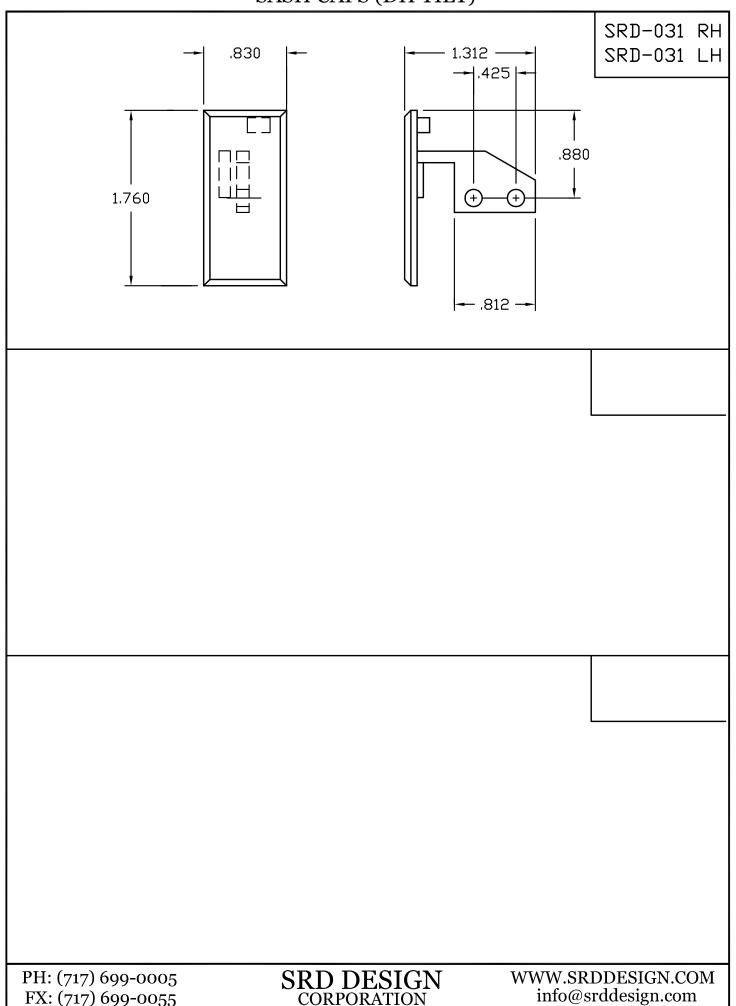
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## SASH CAPS (DH TILT)



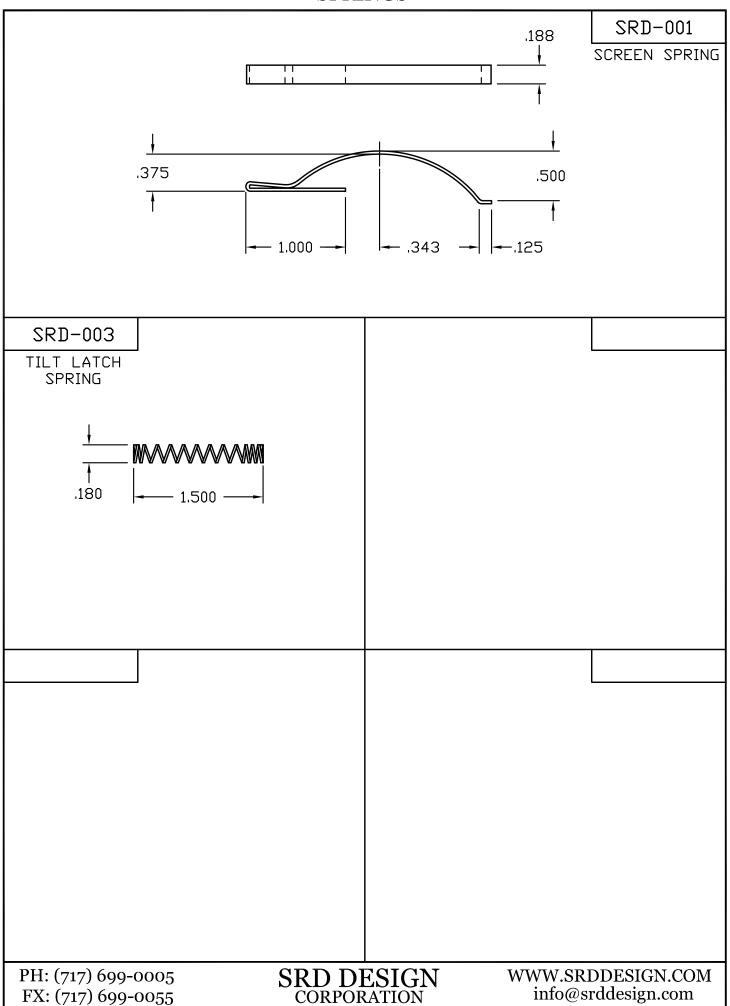
## SASH CAPS (DH TILT)



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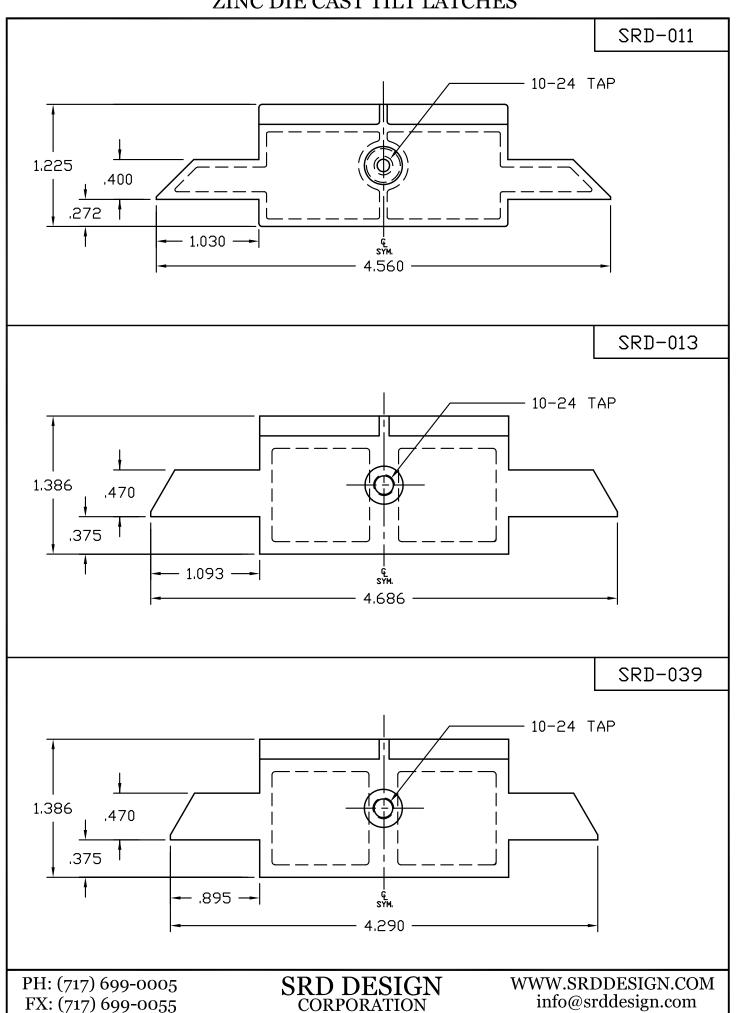
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### **SPRINGS**

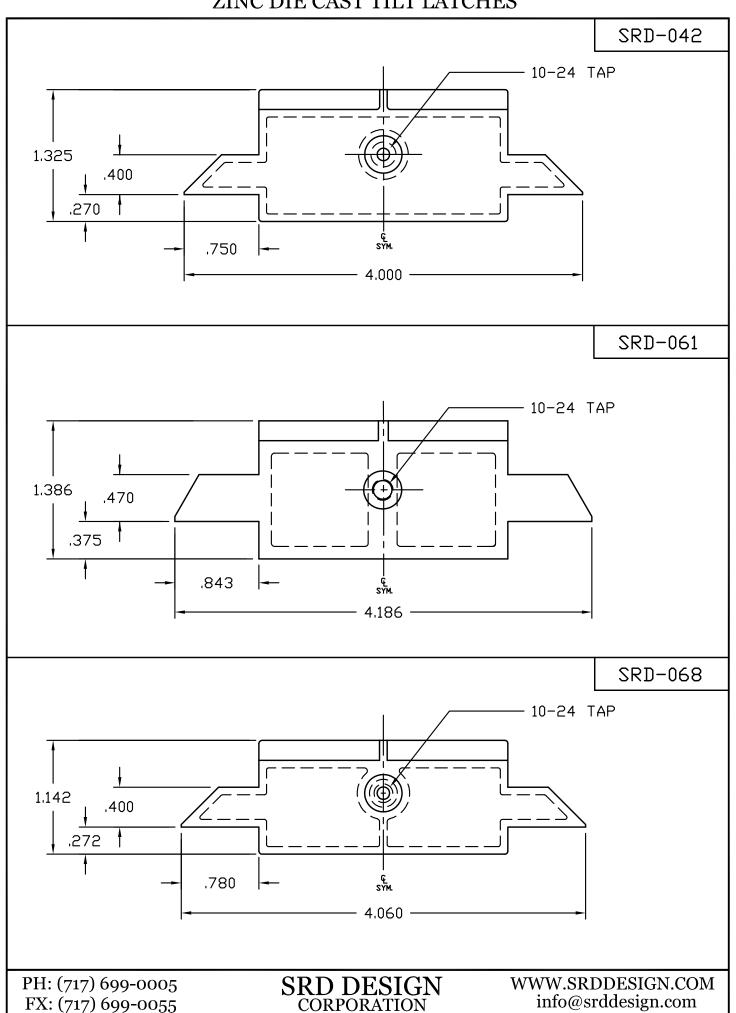


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### ZINC DIE CAST TILT LATCHES



### ZINC DIE CAST TILT LATCHES



### **MISCELLANEOUS**

