

# SECTION I

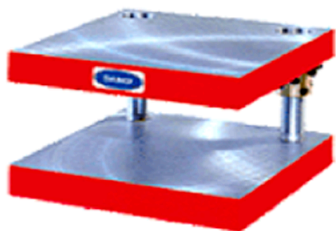
## DIE SETS AND ACCESSORIES

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DANLY CATALOG DIE SET CATALOG		CATALOG INSERT
DANLY ALUMINUM DIE SET FLYER		INSERT
DANLY *ACCU-BEND CATALOG		CATALOG INSERT

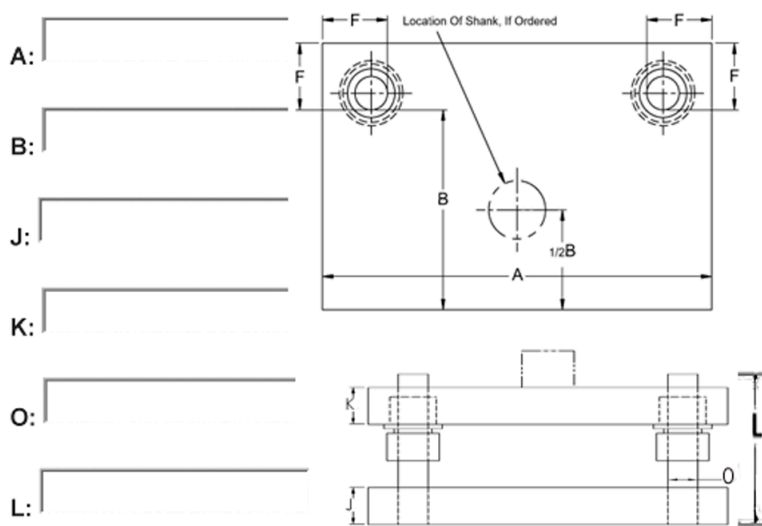


## AS-33 Back Post Series Plain Bearing Die Set



Dimensions - use diagrams at right when specifying dimensions

Notes: "O" and "F" dimensions per catalog unless otherwise specified.  
Plain Bearing Sets: "F" from guide post.

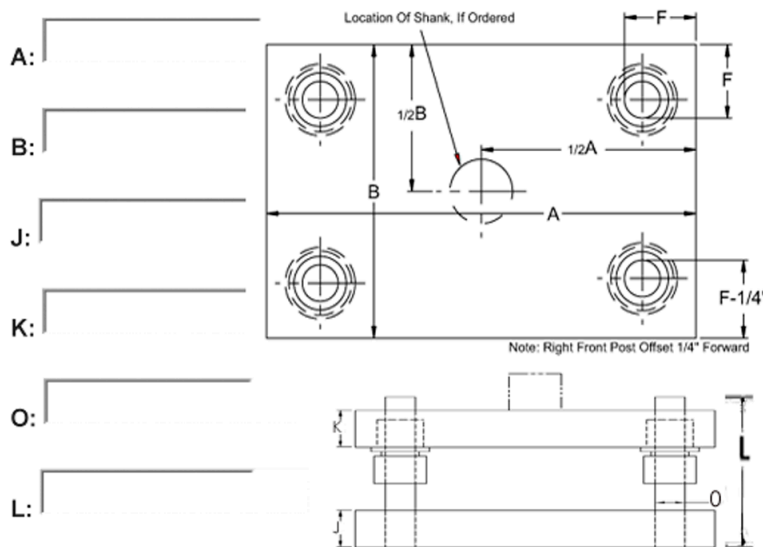


## AS-37 Four Post Series Plain Bearing Die Sets



Dimensions - use diagrams at right when specifying dimensions

Notes: "O" and "F" dimensions per catalog unless otherwise specified.  
Plain Bearing Sets: "F" from guide post.



WHEN	O=1	1-1/4	1-1/2	1-3/4	2	2-1/2	3
	F=2	2-1/4	2-1/2	2-3/4	3	3-3/4	4-1/4

Lift holes: \_\_\_\_\_ Lift hole quantity: \_\_\_\_\_

Special Instructions: \_\_\_\_\_

Name \_\_\_\_\_

Company Name \_\_\_\_\_

### Bushing style \_\_\_\_\_

**Demountable Steel Shoulder Bushings will be furnished unless otherwise specified**

If shank is desired, please indicate size: \_\_\_\_\_

size of shank, if ordered  
Shank will be located at  
1/2B dimension unless  
otherwise specified.

- ◆ 1-1/2" diameter x 2-1/8" long
- ◆ 1-9/16" diameter x 2-1/8" long
- ◆ 2" diameter x 2-7/8" long
- ◆ 2-1/2" diameter x 2-7/8" long
- ◆ 3" diameter x 2-7/8" long

QUOTE ONLY: \_\_\_\_\_

ORDER#: \_\_\_\_\_

DATE QUOTED: \_\_\_\_\_

DATE ORDERED: \_\_\_\_\_

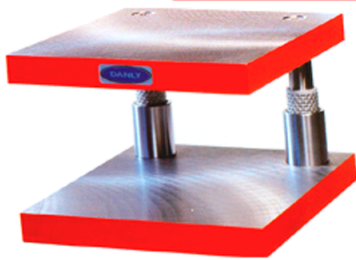
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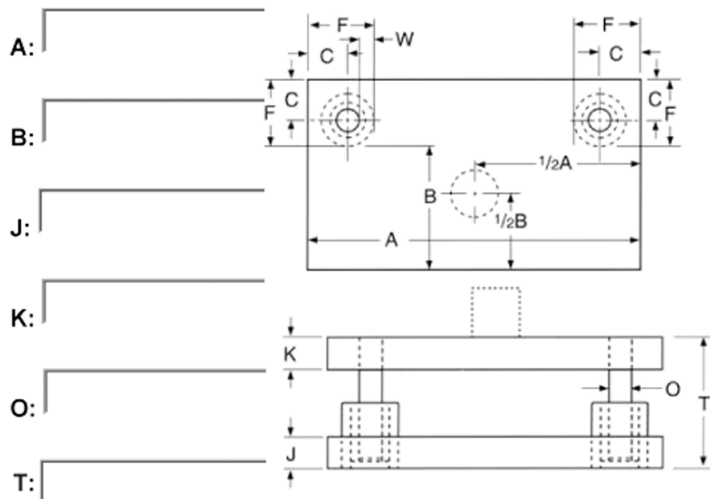
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## AS-33BB BACK POST BALL BEARING DIE SET



Dimensions - use diagrams at right when specifying dimensions

Notes: "O" and "F" dimensions per catalog unless otherwise specified.

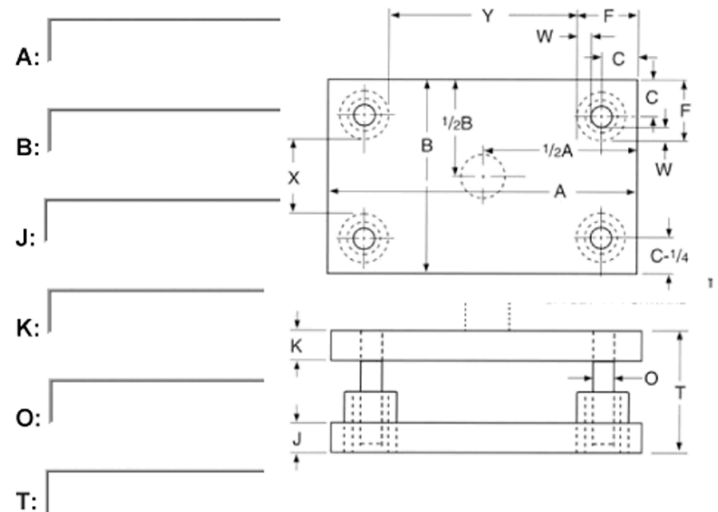


## AS-37BB FOUR POST BALL BEARING DIE SET



Dimensions - use diagrams at right when specifying dimensions

Notes: "O" and "F" dimensions per catalog unless otherwise specified.



Nominal Guide Post Diameter	C	Sleeve Bushing		Shoulder Bushing	
		F	W	F	W
1	1-3/4	2-11/16	7/16	2-7/8	9/16
1-1/4	1-7/8	2-15/16	7/16	3-1/16	9/16
1-1/2	2-1/8	3-3/8	1/2	3-9/16	11/16
1-3/4	2-1/4	3-5/8	1/2	3-13/16	11/16
2	2-1/2	4-1/8	5/8	4-5/16	13/16
2-1/2	2-7/8	4-3/4	5/8	5	13/16
3	3-1/4	5-3/8	5/8	5-5/8	7/8

NOTE: Diameter of larger post determines C and F dimensions for both posts.

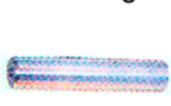
Special Instructions: \_\_\_\_\_

Bushing Style: \_\_\_\_\_

Pin Style: \_\_\_\_\_

Demountable or Straight sleeve

Demountable or Straight



If shank is desired, please indicate size: \_\_\_\_\_

Lift holes: \_\_\_\_\_ Lift hole quantity: \_\_\_\_\_

Material: \_\_\_\_\_

Steel 1020

Name: \_\_\_\_\_

Company Name \_\_\_\_\_

QUOTE ONLY: \_\_\_\_\_

ORDER#: \_\_\_\_\_

DATE QUOTED: \_\_\_\_\_

DATE ORDERED: \_\_\_\_\_

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# Aluminum Die Sets

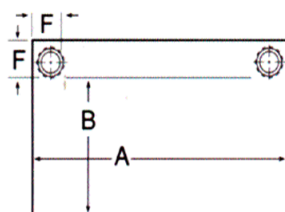
## Aircraft Quality Aluminum, Made in the U.S.A.

Any die set offered in steel can also be manufactured from aluminum. And, for some applications the advantages of light weight aluminum are worth looking into. For example, aluminum die sets weigh only about one third as much as their steel counterparts. That makes them much easier to handle, transport and store. Some feel that less weight in the die can reduce stress and wear on presses. Others report that the reduced weight of aluminum die sets can speed changeovers. For a variety of reasons, there is growing interest in aluminum.

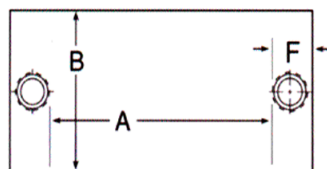
## Machined To Your Specifications

Aluminum die sets can be ground and EDM'd, as well as drilled, planed, milled, reamed, and tapped. There's really no limitation to the machining which can be performed. Today's aluminum is surprisingly strong too.

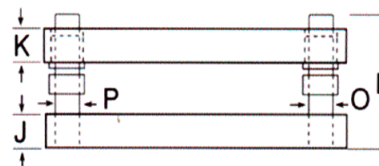
Tests show that aircraft aluminum outperforms 1020 hot rolled steel in both thermal conductivity and strength characteristics, as illustrated in the chart on the reverse side.



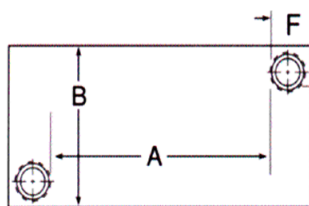
AS-33 Back Post Series



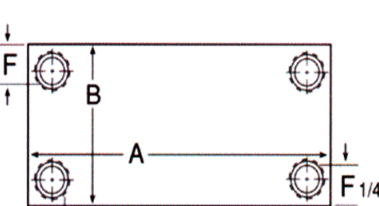
AS-34 Center Post Series



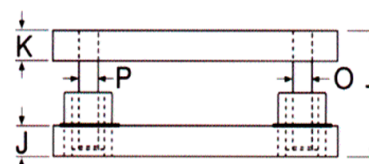
Plain Bearing Die Set



AS-35 Diagonal Post Series



AS-37 Four Post Series



Ball Bearing Die Set

**Note:** Dimension "P" required on AS-34 and AS-35 only.  
Locate shank on plan view when required.  
Locate lift holes when required.

**Note:** "O", "P" and "F" Dimensions per catalog  
unless otherwise specified.  
**Plain Bearing Sets** "F" from Guide Post  
**Ball Bearing Die Sets** "F" from Bushing

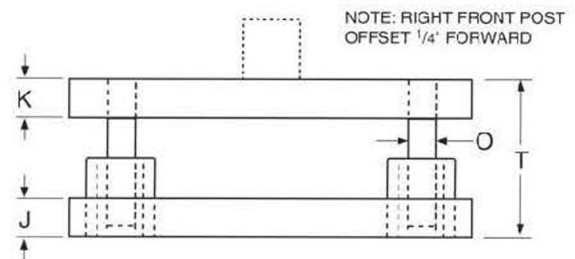
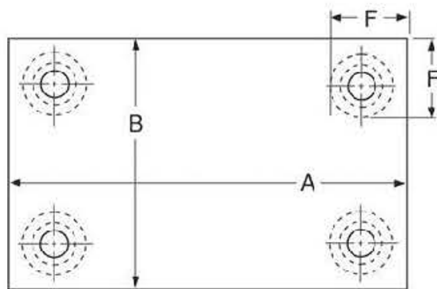
## Variety Of Material And Thicknesses Available

Die sets are usually made from QC-10™, they are also available in 6061 or 7075 material in a variety of configurations. Plate thicknesses are available in 1, 1½, 2, 2½, 3, 3½, 3¾, 4, 4½, 5, 5½, and 6 inches.

The combination of performance and value offered by steel is mighty tough to beat and there are certainly many applications where aluminum would not be the best choice. Because of the increased material expense, even with its easier machinability, aluminum die sets can be considerably more expensive than steel. And the greater malleability of aluminum could be a concern for some applications. Still, the overall benefits are worth looking into.

# Aluminum Die Sets

## Technical Data



PROPERTIES	1020 HR STEEL	4140 ALLOY STEEL	QC-10' M ALUMINUM	6061T651 ALUMINUM	7075T651 ALUMINUM
TENSILE STRENGTH	64	95	85	46	75
YIELD STRENGTH	50	60	77	40	65
DENSITY	.283	.282	.103	.098	.101
ELASTICITY	$30 \times 10^6$	$30 \times 10^6$	$10.4 \times 10^6$	$9.9 \times 10^6$	$10.3 \times 10^6$
BRINNELL	135	197	165-170	90-95	140-150
COEFFICIENT OF EXPANSION	$6.3 \times 10^{-6}$	$6.2 \times 10^{-6}$	$13.7 \times 10^{-6}$	$13.1 \times 10^{-6}$	$13.1 \times 10^{-6}$
THERMAL CONDUCTIVITY	20	24	92	95	75
WELDABILITY	GOOD	MODERATE	MODERATE	BEST	BETTER

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