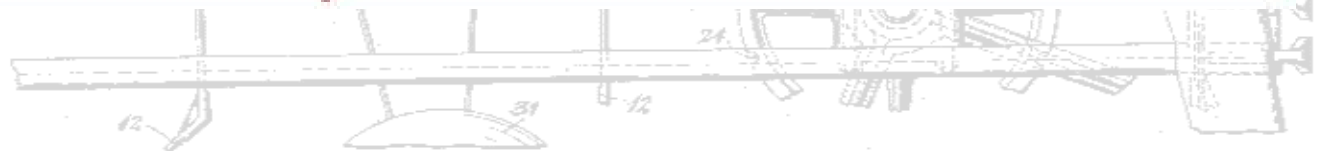
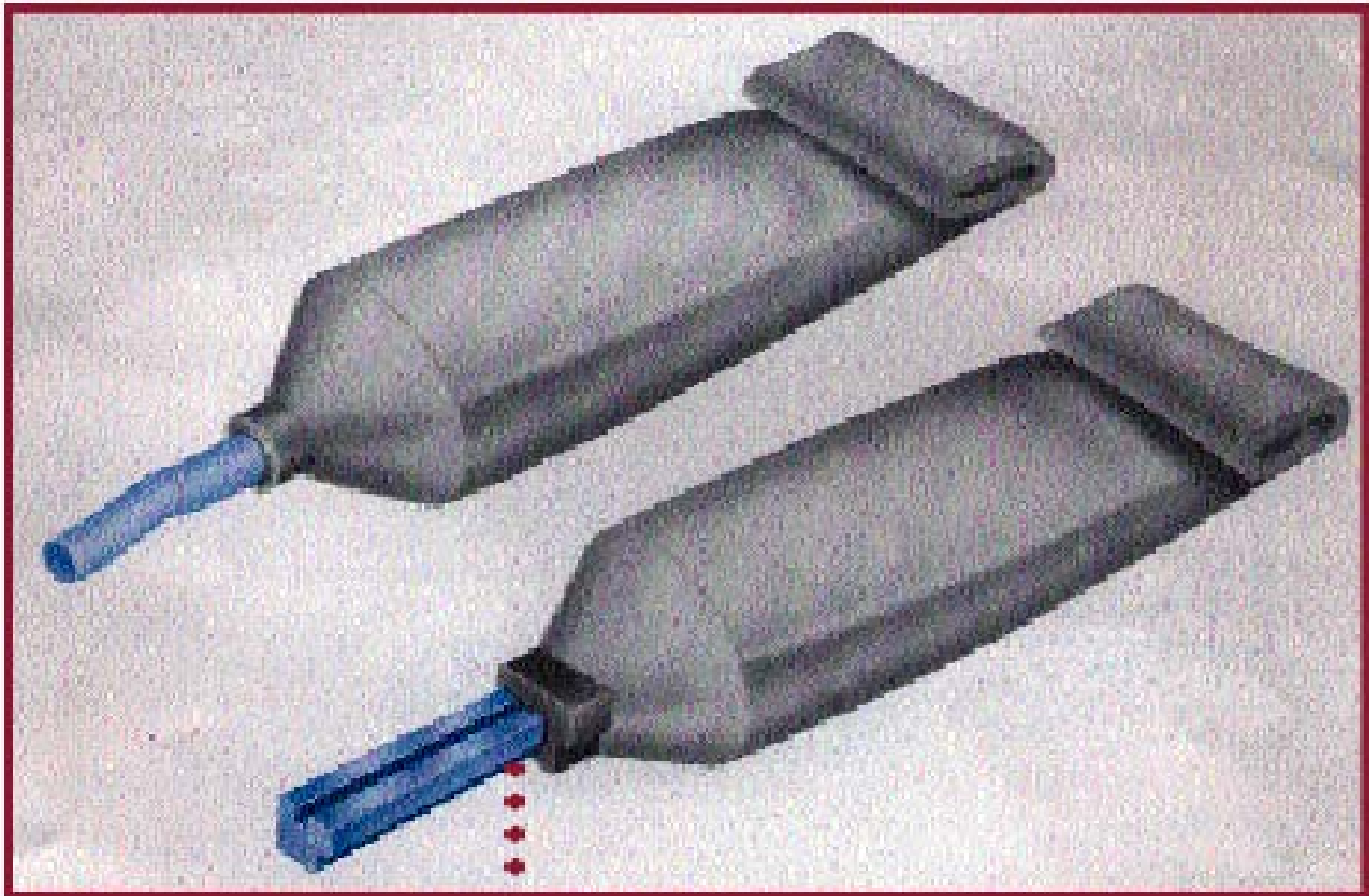
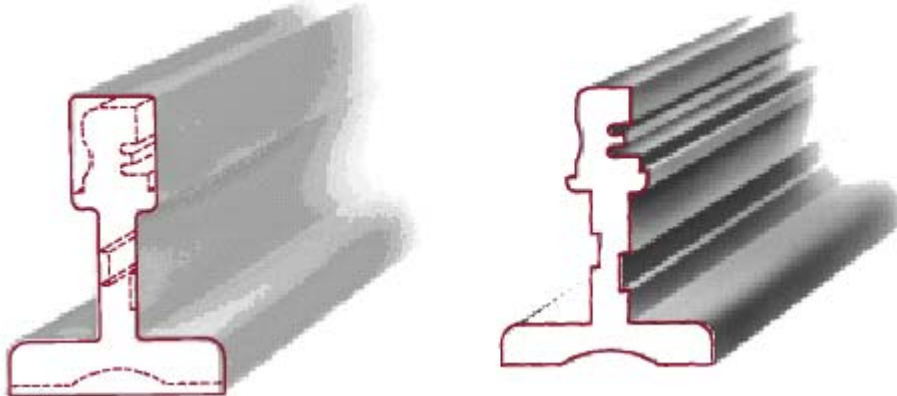
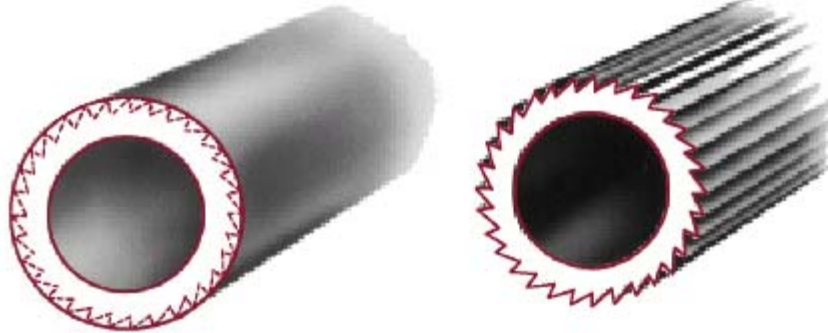
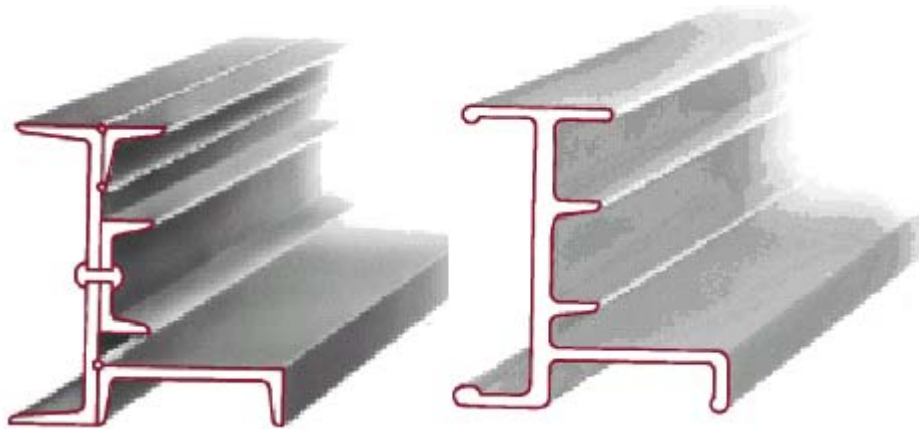


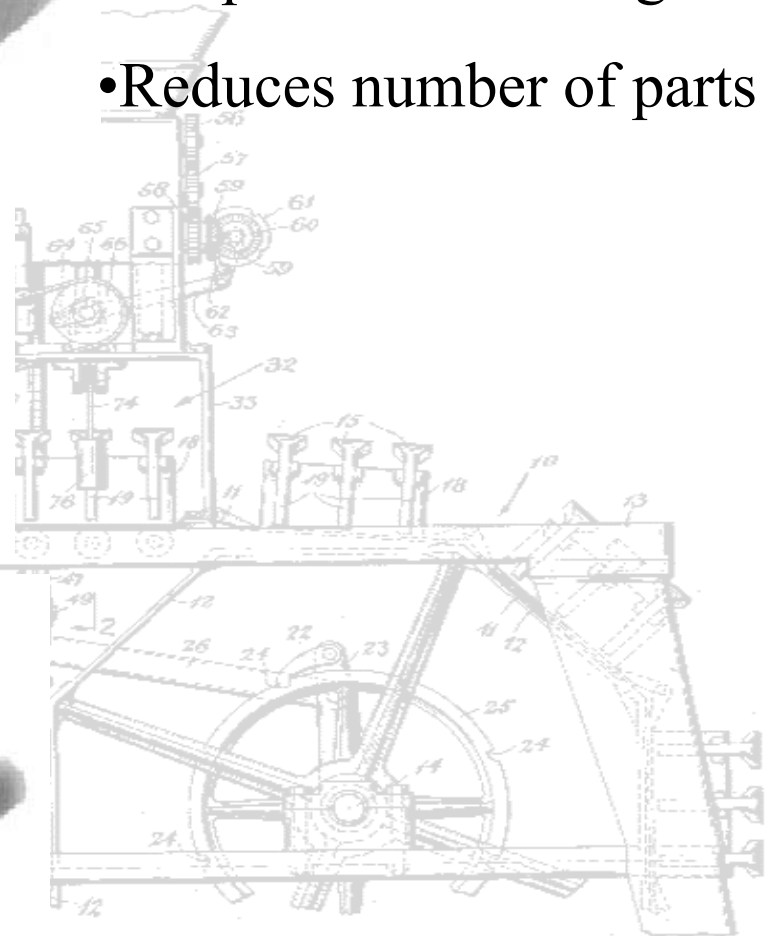
EXTRUSIONS



EXTRUSIONS

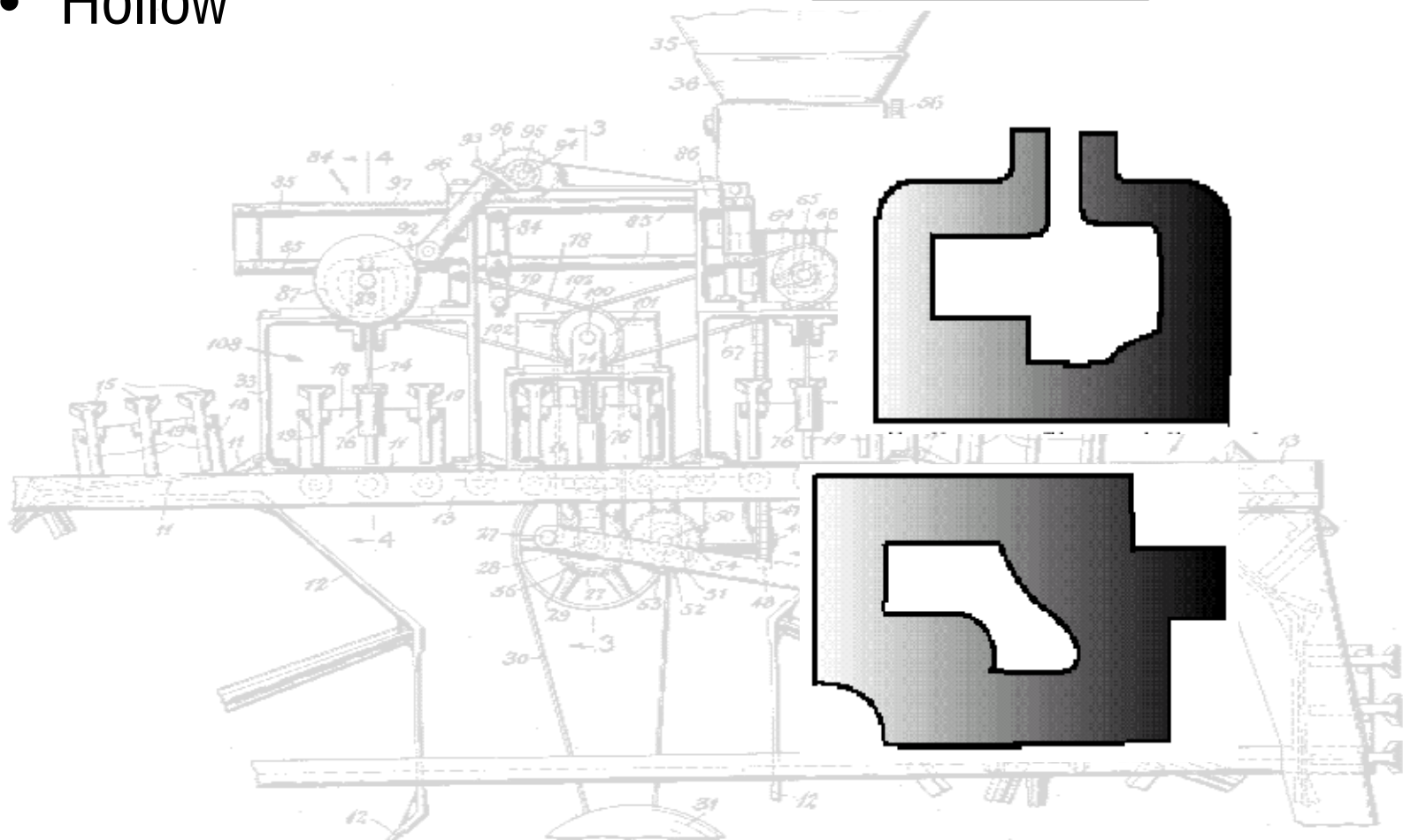
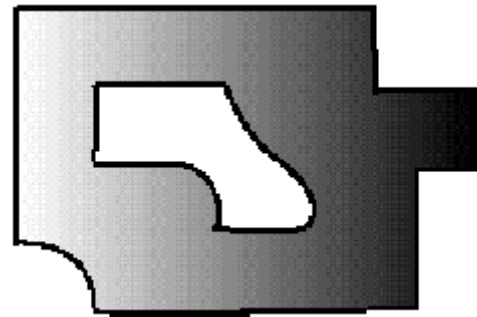
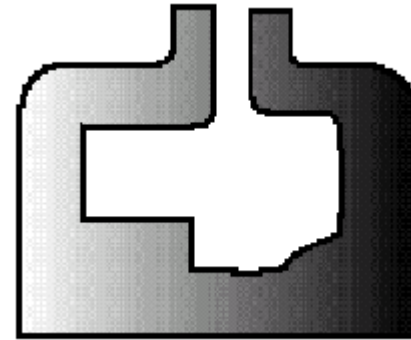


- Saves weight
- Simplifies machining
- Reduces number of parts



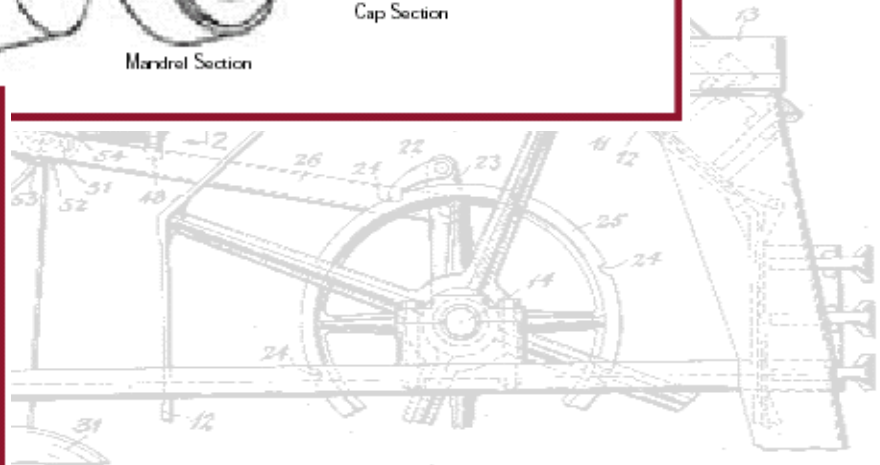
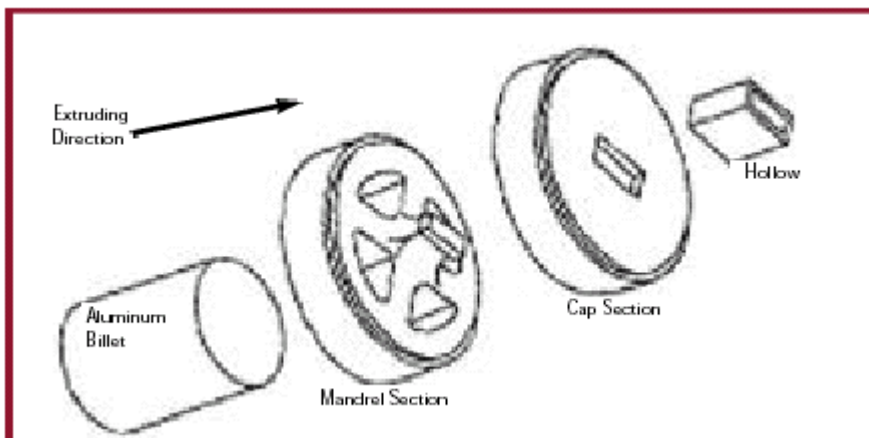
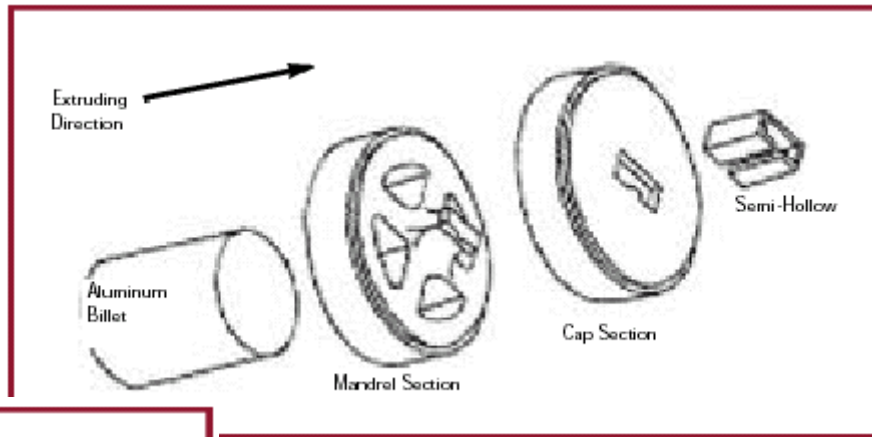
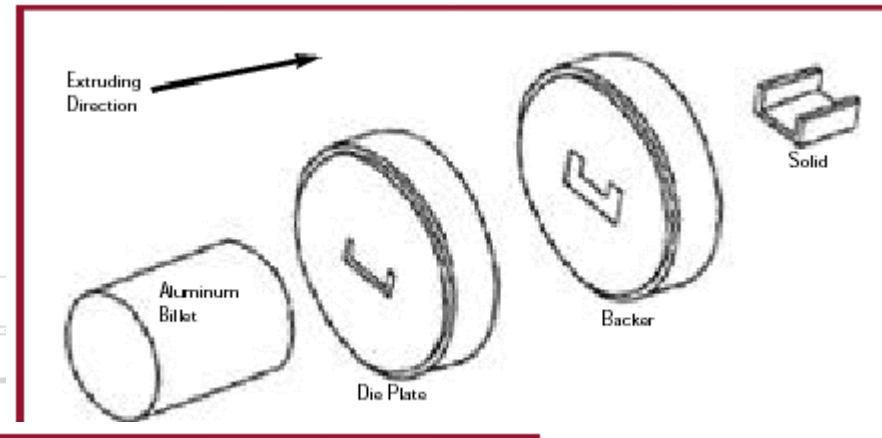
EXTRUSIONS

- Solid
- Semi-hollow
- Hollow

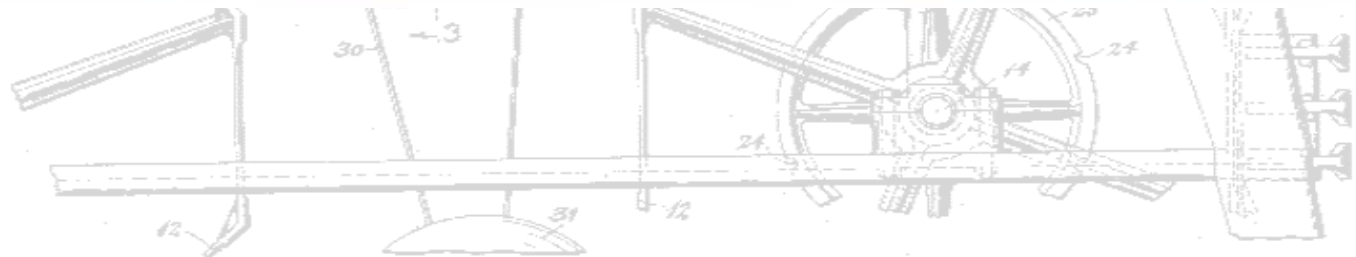
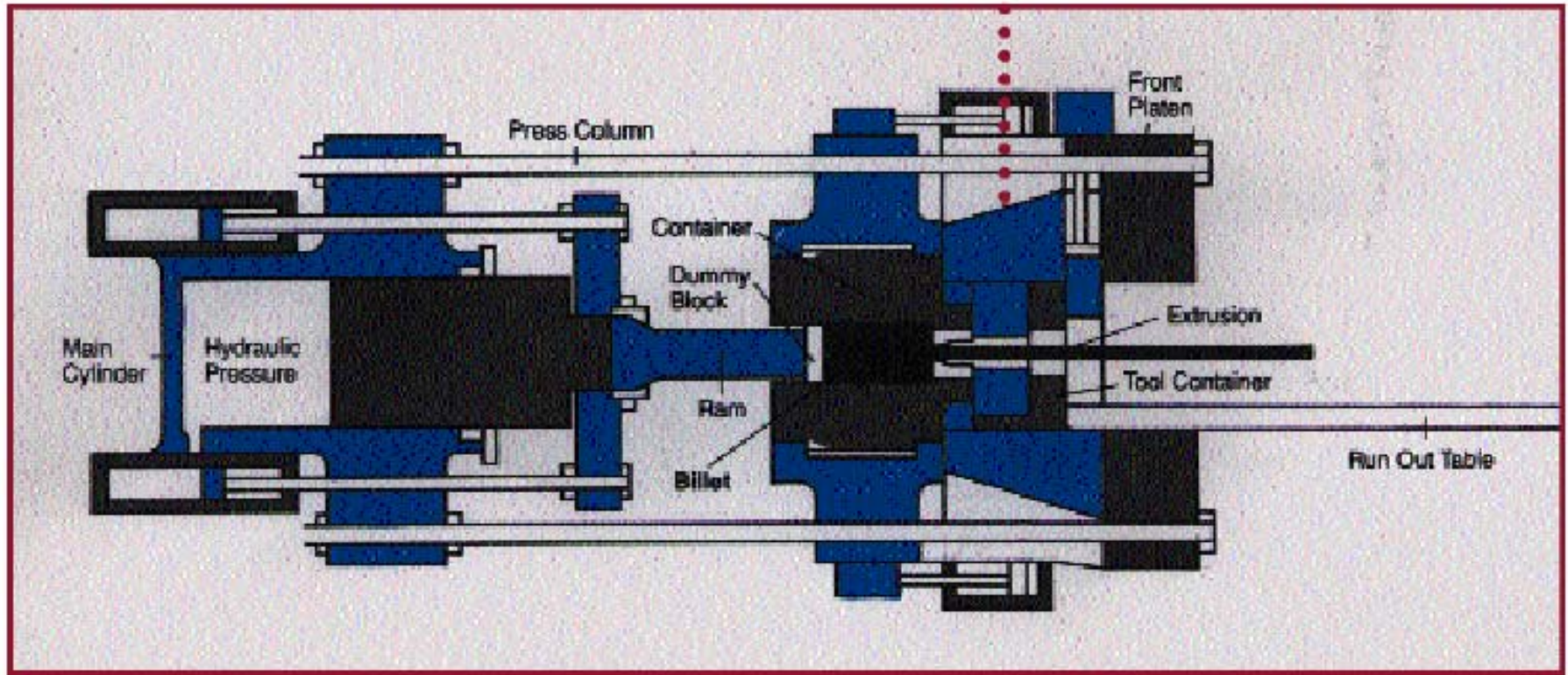


EXTRUSIONS

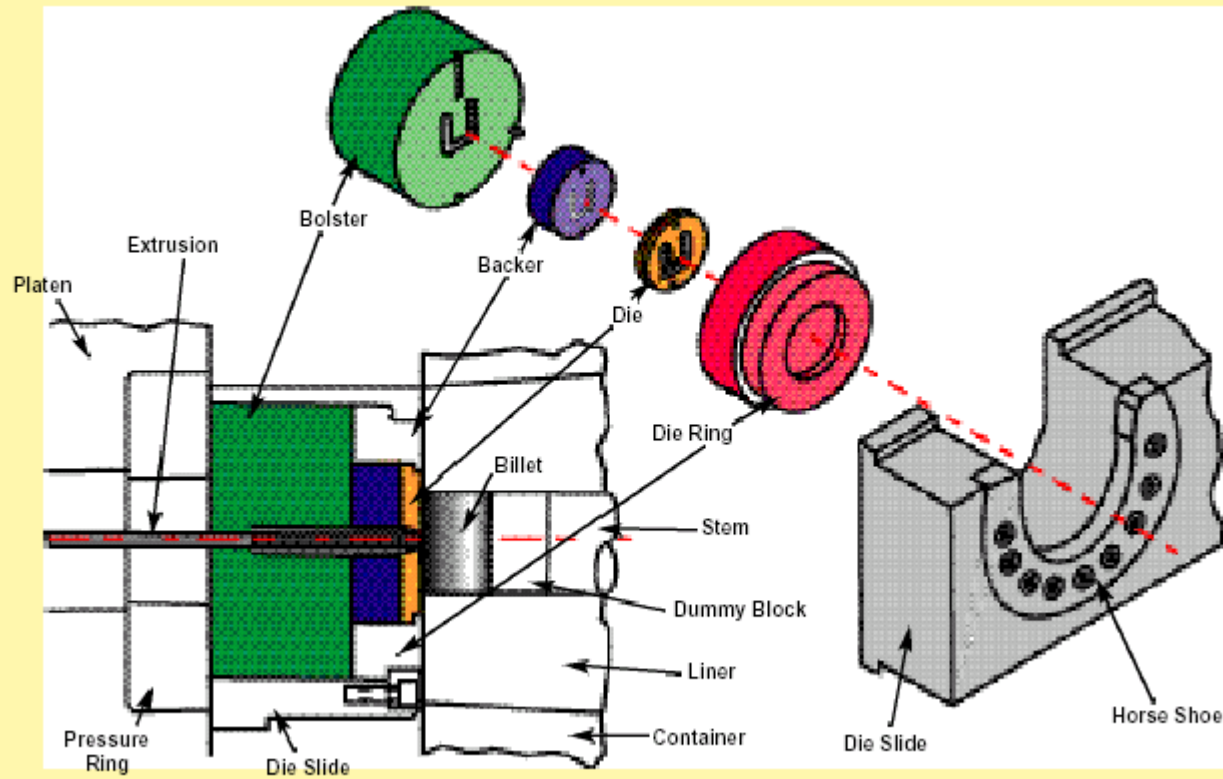
- Solid
- Semi-hollow
- Hollow



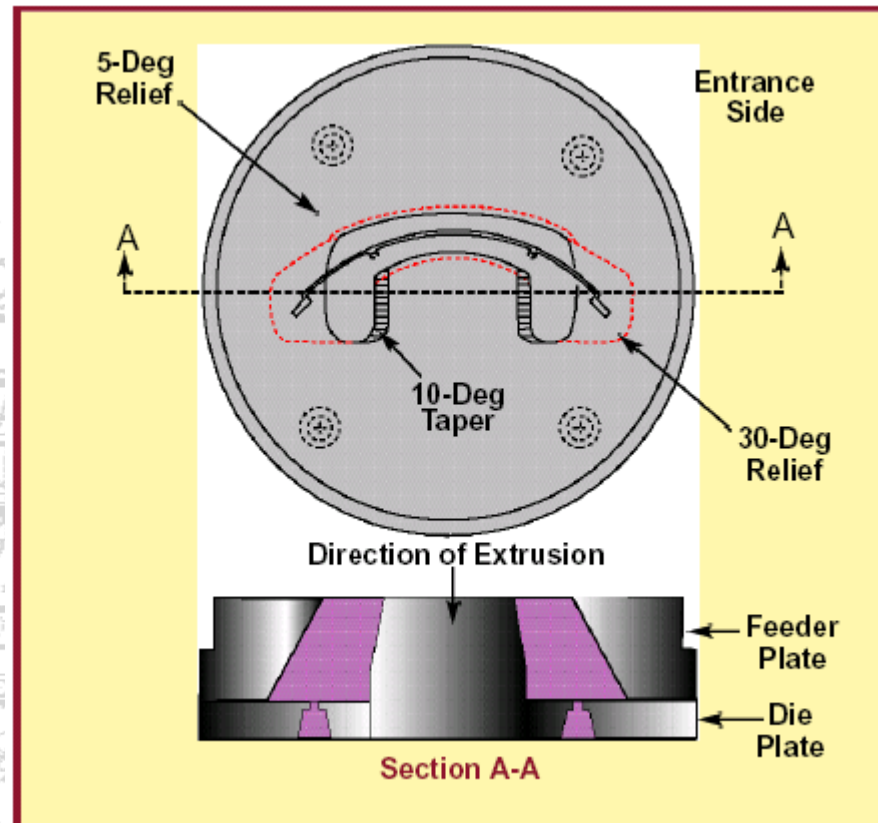
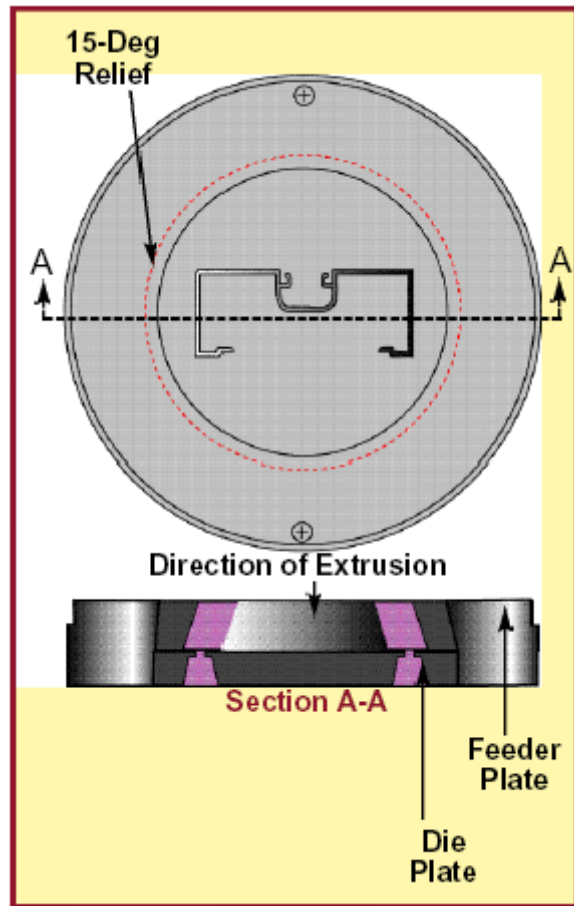
EXTRUSIONS



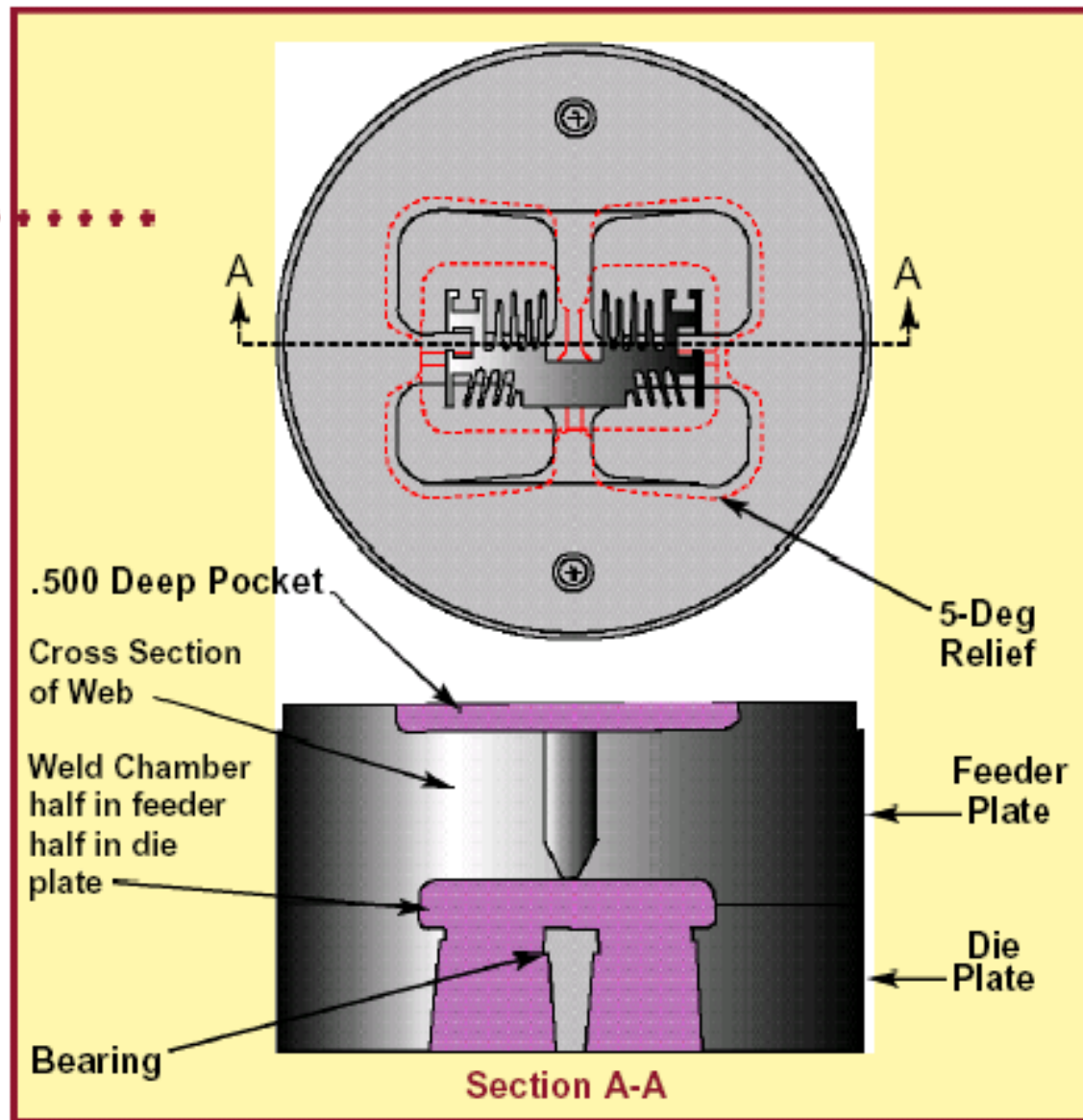
EXTRUSIONS



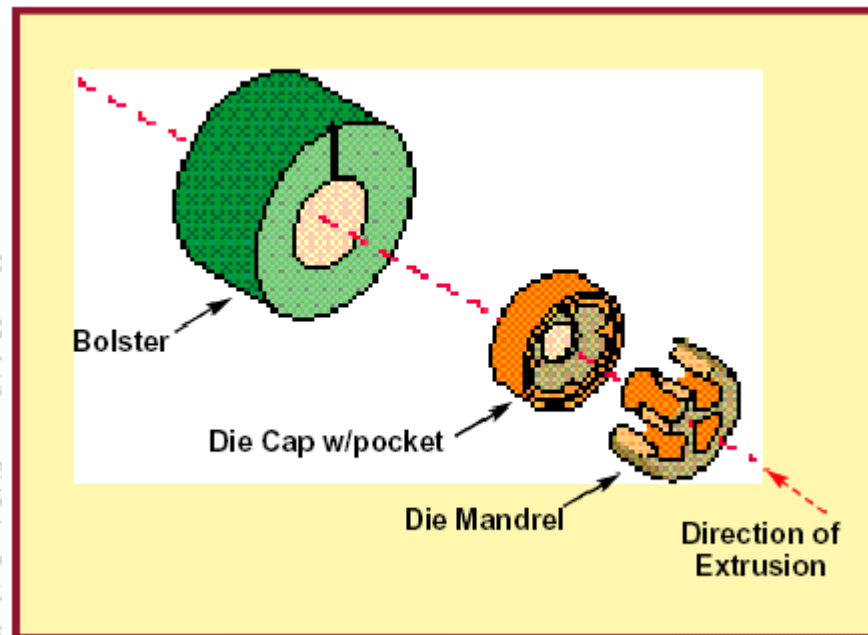
EXTRUSION DIES



EXTRUSION DIES

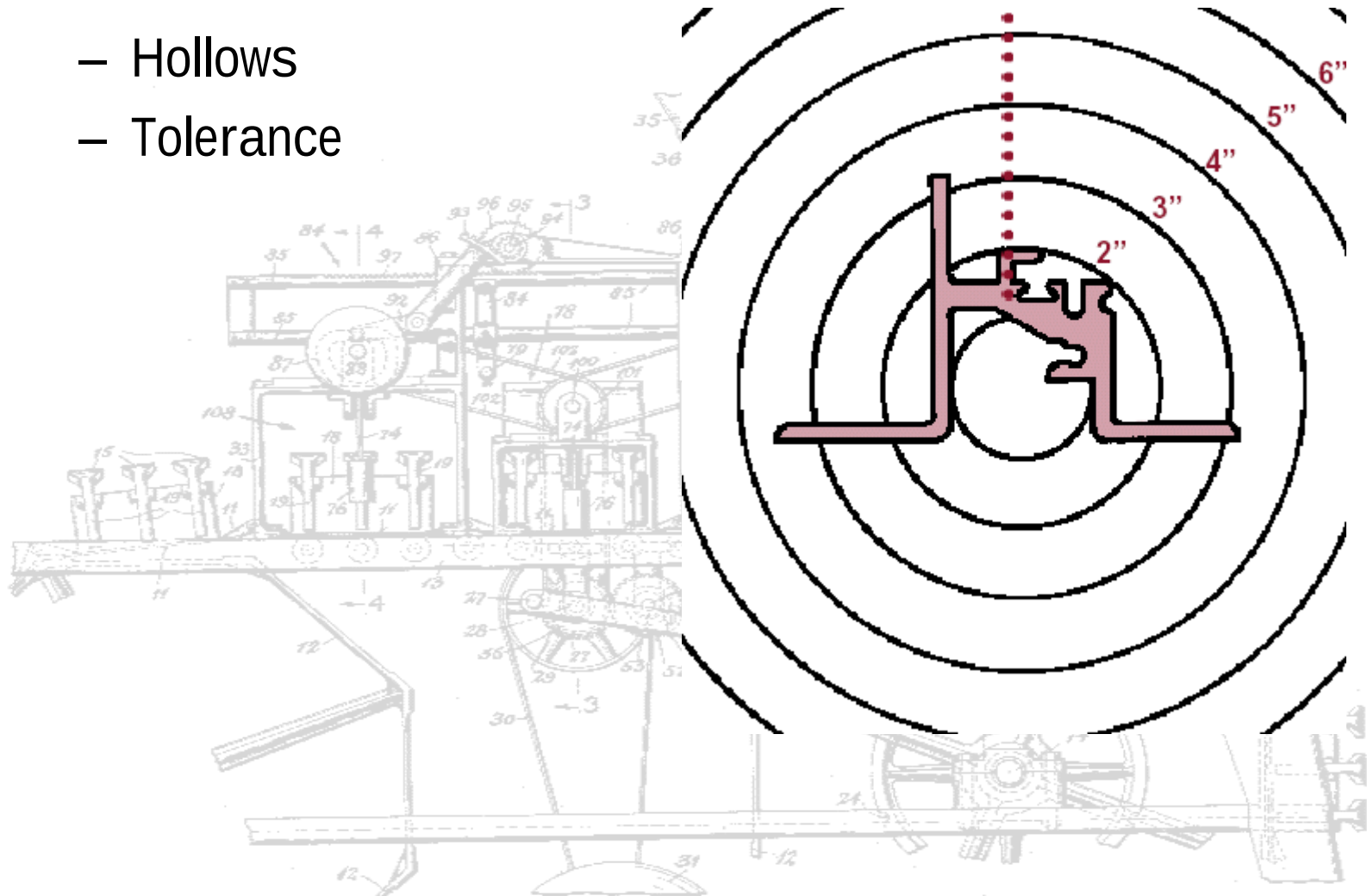


EXTRUSION DIES



EXTRUSIONS

- Cost
 - Circle-size
 - Hollows
 - Tolerance



EXTRUSION DESIGN EXAMPLE

FAX

Date August 14, 1995

Number of pages including cover sheet 4

TO: Western Extrusions
P.O. Box 810219-A
Dallas, TX 75381-0219

FROM: Ralph Stirling
Wallis Wallis College
School of Engineering
204 S. College Ave
College Place, WA 99324

Attn: Sales
Phone (800) 888-6063
Fax Phone (214) 245-2980

Phone (509) 527-2071
Fax Phone (509) 527-2253

CC

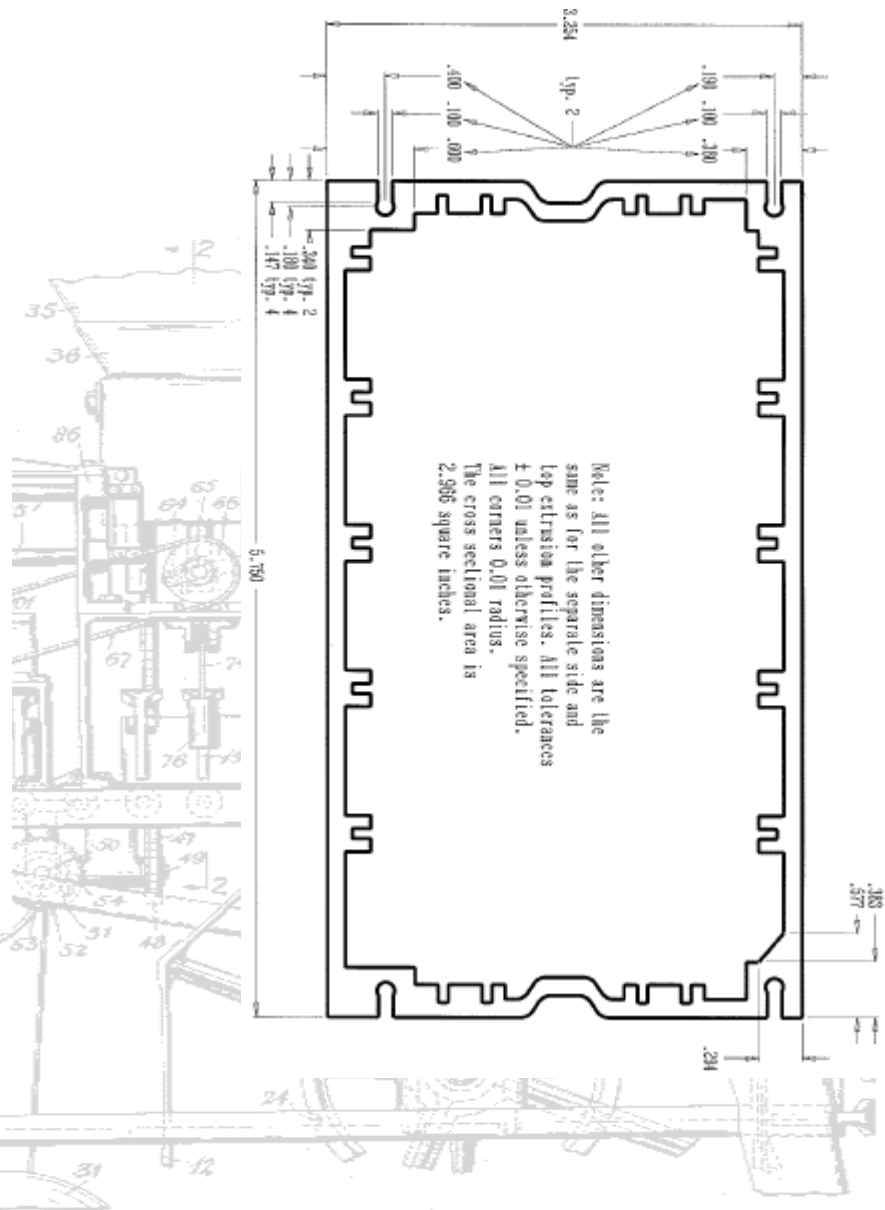
REMARKS: ☐ Urgent ☐ For your review ☒ Reply ASAP ☒ Please Comment

I would like to receive price estimates for producing the extrusions shown on the following pages. Please give us separate quotes for each piece. These extrusions will be used to fabricate electronics enclosures. The aluminum alloy we would like used is 6061-T6. If this is not available, another alloy with similar properties would do just as well. We could accept either radiused or chamfered inside and outside corners, whichever is cheaper. All dimensions on the drawings are in inches. We do not need large quantity, so please quote us your minimum setup charge and minimum material purchase requirement. We would be happy to make DXF files of the parts available to you if this would reduce the tooling charge.

Thank you!

Ralph Stirling

Ralph Stirling, Project Engineer



Note: All tolerances ± 0.01 unless otherwise specified. All corners 0.01 radius. Cross sectional area is 0.425 square inches.

Dimensions and Tolerances:

- Overall Width: 3.174 ± 0.005
- Overall Height: $1.178 \text{ typ. } 2$
- Top Step Height: $.125 \pm 0.005 \text{ typ. } 4$
- Second Step Height: $.070 \pm 0.005 \text{ typ. } 4$
- Third Step Height: $.063 \pm 0.005 \text{ typ. } 2$
- Fourth Step Height: $.125 \text{ typ. } 2$
- Fifth Step Height: $.225 \pm 0.005 \text{ typ. } 2$
- Sixth Step Height: $.275 \text{ typ. } 2$
- Bottom Step Height: $.190 \text{ typ. } 2$
- Radius: $R .100 \text{ typ. } 8$
- Radius: $R .174 \text{ typ. } 2$
- Internal Widths: $.125$, $.159$, $.225$, $.259$
- Internal Lengths: $1.018 \text{ typ. } 2$, $1.178 \text{ typ. } 2$
- Internal Widths (Bottom): $.100$, $.503$, $.628$, $.718$
- Side View Dimensions: 4.370^* , 3.370^* , 2.370^* , 1.370^*
- Side View Tolerances: ± 0.005 , $.125 \pm 0.005$, $.125 \pm 0.005 \text{ typ. } 5$, $.172 \pm 0.005 \text{ typ. } 5$
- Side View Radii: $R .120 \text{ typ. } 2$, $R .177$
- Side View Widths: $.040$, $.190$, $.100$, $.140$, $.380$, $.283 \text{ typ. } 2$
- Side View Height: 5.750
- Side View Internal Widths: $.250 \text{ typ. } 4$, $.070 \pm 0.005 \text{ typ. } 5$, $.204$
- Side View Bottom Dimensions: $.063 \text{ typ. } 2$, $.104 \text{ typ. } 2$, $.317 \text{ typ. } 2$, $.480^*$, $.550$

Note: All tolerances ± 0.01 unless otherwise specified. All corners 0.01 radius. Cross sectional area is 0.99.

EXTRUSION DESIGN EXAMPLE



**WESTERN
EXTRUSIONS**
THE ALTERNATIVE

QUOTATION

QUOTE EXPIRES IN 10 DAYS

WALLA WALLA COLLEGE
SCHOOL OF ENGINEERING
204 S. COLLEGE AVE.
COLLEGE PLACE, WA 99324

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WE THANK YOU FOR YOUR INQUIRY #		DATED AUGUST 22, 1995		SIGNATURE <i>Herb Schuler</i> BY JEWELL SAMPLES	
REFERENCE	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5
DIE NO. OR PART NO.	DATA BOX	WHOLE	TOP	SIDE	
ALLOY	6063	6063	6063		
TEMPER	T5	T5	T5		
TOOLING CHARGE	\$4,000.00	\$963.00	\$1,005.00	18 1400# 4.4/	
QUANTITY: MINIMUM PER LINE ITEM					
(A) XXXXX 1,000 POUNDS	*	\$2.0820/FT	\$.8772/FT		
(B) XXXXX 2,000 POUNDS	*	\$6.4796/FT			
(C) 2,001 TO 3,000	*	1.1216/ft	.5084/ft		
(D) 3,001 TO 4,000	*			585 ft. min	50 1200# 4.4/
(E) 4,001 TO 5,000	*		1163 ft. min	(823.6)(3.955)	
(F) 5,001 TO 10,000	*				592.6 ft. min
(G) 10,001 TO 20,000	*	1.1732	1.1726	1.1751	
(H) 20,001 TO 30,000	*	1.1732	1.1726	1.1751	59.14/box
(I) 30,001 & OVER	*	1.1732	1.1726	1.1751	59.14/box
OTHER LENGTHS	16'0"	16'0"	16'0"		
FINISH					
(A) MILL	X	X	X		
(B) PAINT					
(C) ANODIZE					
(D) FABRICATION					
FREIGHT:					
(A) PREPAID					
(B) COLLECT	X	X	X		
TOLERANCES	STANDARD	X	X	X	
PACKING:					
(A) BARE BUNDLES					
(B) BOX 100-150 POUNDS	X	X	X		
(C) PAPER INTERLEAVE					
TERMS:	QUOTE IS BASED ON CREDIT APPROVAL ONLY				
REMARKS:	LEAD TIME ON TOOLING, AFTER PRINT APPROVAL, 2-3 WEEKS				
	LEAD TIME ON PRODUCTION, AFTER SAMPLE APPROVAL, 3-4 WEEKS				



GENERAL EXTRUSIONS, INC.

Using Address:
P.O. BOX 1859
YOUNGSTOWN, OHIO 44327
PHONE: 216/725-0270
FAX: 216/788-1260
DATE OF INQUIRY
8-21-95

Shipping Address:
4045 LAKE PARK RD.
YOUNGSTOWN, OHIO 44512
G.E.I. CUSTOMER NO.
38820100
DATE OF QUOTATION
09/13/95

TO:

Walla Walla College
204 S. College
College Place, WA 99324
ATTN: Ralph Stirling
FAX #509-527-2253

QUOTATION

We appreciate the opportunity to quote on your requirements. Prices apply to quantities which you order for manufacture and shipment at one time.

We are pleased to quote as follows:

ITEM	QUANTITY	DRAWING OR PART	DESCRIPTION	UNIT PRICE
			Prime aluminum alloy 6063-T5, mill finish material packed in cardboard boxes with paper between rows.	
	100 and up	Databox Top	Extruded solid, length 120.000" ± .125" Est. wt./pc. 12.028#	\$20.850/pc.
			Extrusion Die Service Charge	\$1,540.00
	100 and up	Databox Side	Extruded solid, length 120.000" ± .125" Est. wt./pc. 5.088#	\$10.833/pc. \$9.816/pc.
			Extrusion Die Service Charge	\$1,180.00
	100 and up	Databox Whole	Extruded hollow, length 120.000" ± .125" Est. wt./pc. 35.876#	\$85.084/pc. \$4.858/pc. \$4.723/pc.
			Extrusion Die Service Charge	\$5,060.00
			NOTE: Please note exceptions taken to the cross-sections on attached prints.	
			Enc: Prints	
EST. DATE SUBJECT TO REVIEW IF GREAT PLACE		TERMS SUBJECT TO APPROVAL OF OLD GREAT DEPT		EST. POST 100 MILE TRUCK FREIGHT
As required		1% 10 days, net 30 on material		Shipping Point

PRICE IN EFFECT AT TIME OF SHIPMENT

This is a quotation, not a contract. All orders are subject to approval of the General Sales Office of General Extrusions, Inc. Orders resulting from this quotation which are accepted and shipped will be subject to the Terms and Conditions on the reverse side hereto.

Q91 120 REV 02

GENERAL EXTRUSIONS, INC.

Herb Schuler Jr.
AUTHORIZED SIGNATURE
Herb Schuler, Jr.

