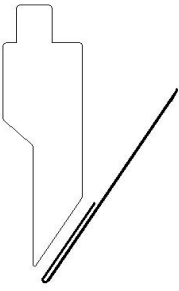

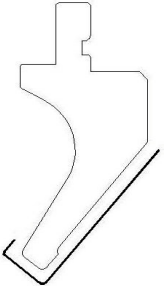
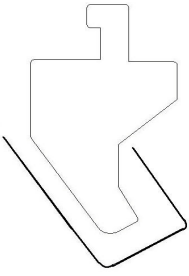
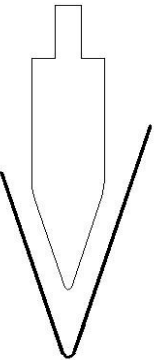
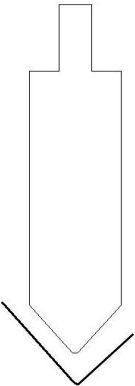
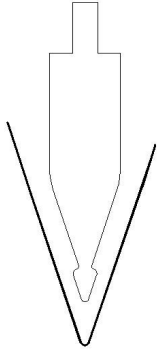




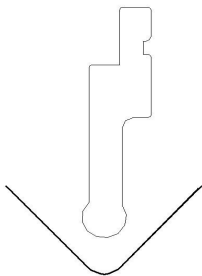
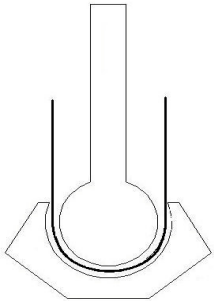
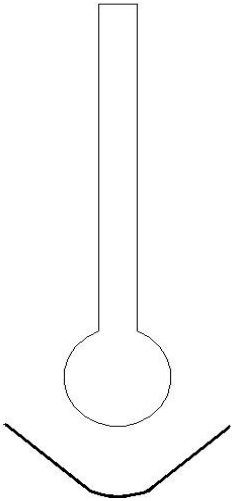
GENERAL PURPOSE BRAKE PUNCHES

	DESCRIPTIONS	ANGLE	TIP RADIUS	MAXIMUM MATERIAL THICKNESS
	Hemming	30°	1/32"	20 GA Maximum
	Acute-Angle Bending / Hemming	30°	13/16"	14 GA Maximum
	75° Bending with Gooseneck Punch	75°	13/16"	10 GA Maximum
	Angle Bending with Gooseneck Punch	15° / 50° 30° / 45° 35° / 42° 35° / 45° 40° / 45° 45° / 45°	7/64" 5/32" 3/16" 3/8" 3/16" 7/32"	10 GA Maximum
	Acute Angle Bending	25° 28° 30° 30° 30° 30° 35° 45° 70° 77° 82° 85°	3/64" 1/32" 1/16" 3/32" 1/8" 9/64" 1/8" 5/32" 1/4" 1/16" 1/8" 1/32"	10 GA Maximum

GENERAL PURPOSE BRAKE PUNCHES

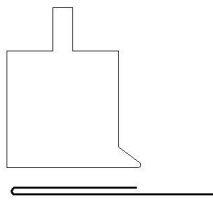
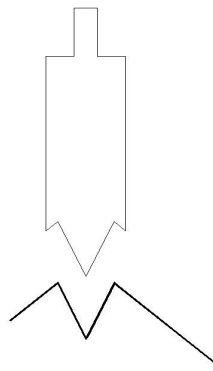
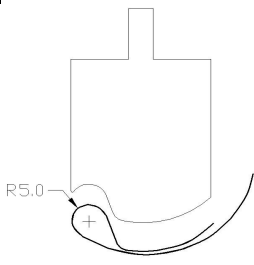

	DESCRIPTIONS	ANGLE	TIP RADIUS	MAXIMUM MATERIAL THICKNESS
	90° Angle Bending	90°	1/16"	10 GA Maximum
	Acute Angle Bending	28° 30° 30° 30° 30° 45°	1/32" 3/64" 1/16" 1/8" 3/16" 1/16"	10 GA Maximum
	Acute Angle Bending	Multiple - Angles	5/32" 3/16"	10 GA Maximum
	Large Radius Bending	Multiple Angle	3/16"	22 - 10 GA Depending on Bending Angle

GENERAL PURPOSE BRAKE PUNCHES

	DESCRIPTIONS	ANGLE	TIP RADIUS	MAXIMUM MATERIAL THICKNESS
	Radius Bending	Multiple - Angles	1/4" 3/8"	1/4" Maximum
	Radius Bending w/ Urethane Die	Multiple - Angles	1/2" 1" 1-1/2" 1-3/4" 2" 2-7/8" 3-1/2"	22 - 16 GA Depending on Bending Angle
	Radius Bending	Multiple - Angles	3/16" 7/32" 1/4" 3/8" 1/2" 5/8" 3/4" 1" 1-7/16" 3" 4" 4-1/4" 5" 5-1/2" 5-3/4" 6"	22 - 10 GA Depending on Bending Angle

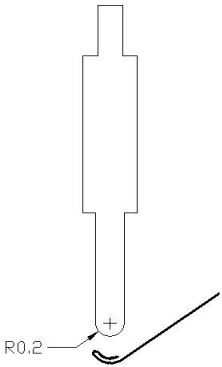
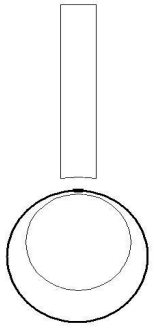
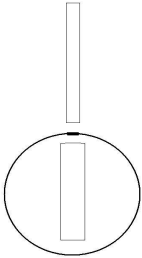
SPECIAL PURPOSE BRAKE PUNCHES

(Custom designed brake punches can be made to tailor specific manufacturing requirements.)

	DESCRIPTIONS	ANGLE	TIP RADIUS	MAXIMUM MATERIAL THICKNESS
	Flattening	-	-	20 - 18 GA
	Acute-Angle Bending	30°	1/32"	20 GA Maximum
	R5.0 mm Tear-Drop Hem	-	-	20 GA Maximum
	Radius Flattening / Form	-	29/32"	20 GA Maximum

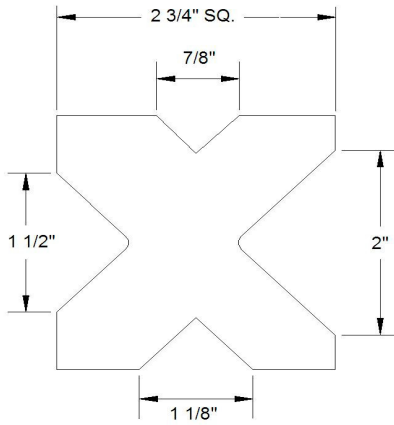
SPECIAL PURPOSE BRAKE PUNCHES

(Custom designed brake punches can be made to tailor specific manufacturing requirements.)

	DESCRIPTIONS	ANGLE	TIP RADIUS	MAXIMUM MATERIAL THICKNESS
 <p>A vertical punch with a long handle and a shorter, wider body. The tip is rounded with a radius of R0.2, indicated by a dimension line and a plus sign.</p>	Radius Flattening / Form	-	13/64"	20 GA Maximum
 <p>A circular punch with a long handle. The circular head is shown with a seam, indicating it is used for flattening seams.</p>	Dia 178 mm Seam Flattening	-	-	20 GA Maximum
 <p>A circular punch with a long handle. The circular head is shown with a seam, indicating it is used for flattening seams.</p>	Dia 281 mm Seam Flattening	-	-	20 GA Maximum

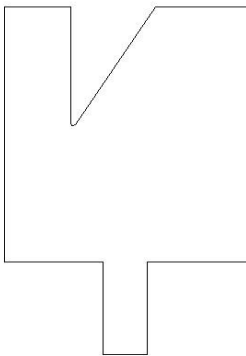
GENERAL PURPOSE BRAKE DIES

(Custom designed brake dies can be made to tailor specific manufacturing requirements.)



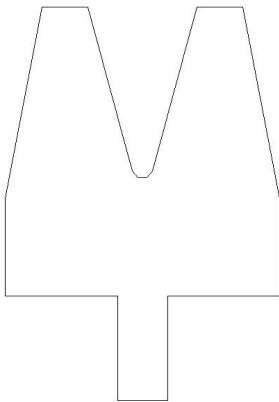
4-Way Brake Die

- * For use with different brake punches:
 - Acute-angle bending / hemming punches
 - 75° bending with gooseneck punches
 - Various angle bending with gooseneck punches
 - Various acute angle bending punches
 - 90° angle bending
 - Various acute angle bending punches
 - Large radius bending punches
 - Radius bending punches



Hemming Die

- * For use with all hemming punches



Angle Brake Die

- * For use with:
 - Various acute angle bending punches
 - 90° angle bending punches