

STOCKER HINGES

Continuous Hinges



75th ANNIVERSARY EDITION



Introduction

Continuous Hinge has long been utilized because of its superior qualities as a movable fastener. Providing uniform strength throughout the entire length, smooth pivotal action, and easy and accurate alignment, Continuous Hinge can serve a variety of design functions at relatively low cost.

In addition to describing Stocker Continuous Hinge in detail, this catalog contains information about standard terminology, standard production sizes, engineering suggestions and technical data helpful in new design.

Continuous Hinge/Design Advantages

- Uniform strength throughout entire length
- Smooth pivotal action
- Easy and accurate alignment
- No mortising required
- Many load bearing points
- Increased product rigidity
- Any length, width and finish
- Easily modified to special shapes
- All popular materials available

Continuous Hinge/Design Suggestions

For greatest economy, consideration should be given the following details when making your specifications:

- Select a combination of standard leaf thickness, pin diameter and knuckle length
- Select a standard width
- Specify a length which is a multiple of the knuckle length
- Avoid partial end knuckles
- If unequal leaf widths are required, total open width should be a standard width
- Select the lightest leaf thickness and smallest pin diameter consistent with the material thickness to which the hinge will be affixed
- All other factors being constant, hinge knuckles formed for smaller diameter pins have greater load bearing strength than if formed for a larger pin
- Flush pins staked in place are standard. Only for severe vibration or tamper-proof applications should pins be spun or peened
- Choose a standard material and / or alloy. Special materials are purchased on an individual order basis, usually at a substantial premium to standard materials

STOCKER HINGES

Stocker Hinge Manufacturing Co.
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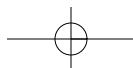
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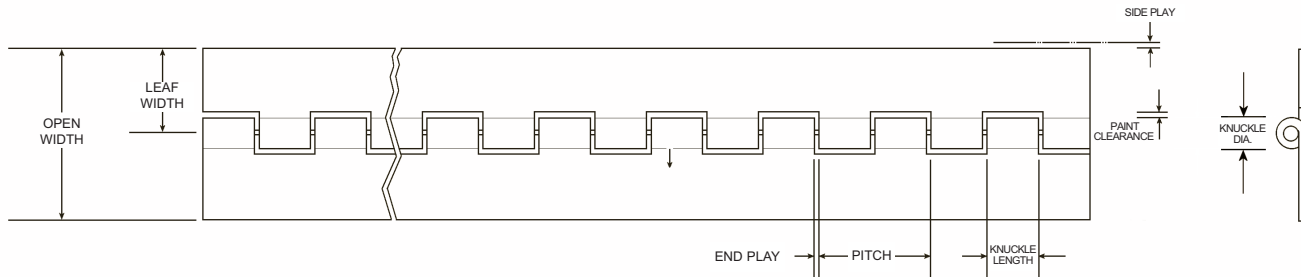


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Standard Terminology for Continuous Hinge Construction



Leaf

That portion of a hinge extending laterally from the knuckle, which generally revolves around the pin.

Pin

That portion of a hinge which runs axially through the inside of the knuckle about which the leaves revolve.

Knuckle

The hollow circular part at the joint of a hinge through which a pin is passed. (Sometimes called loop, joint, node, or curl.)

Knuckle Length

The nominal or typical dimension of the knuckle measured parallel to the pin.

Plain or Standard Assembly

Neither leaf swaged. Leaves lay flat in the same plane in an open position.



PLAIN ASSEMBLY

Reverse Assembly

Neither leaf swaged. Opposing leaves extend laterally from opposite sides of the pin. Leaves will not close to a parallel position.



REVERSE ASSEMBLY



REVERSE ASSEMBLY
(CLOSED VIEW)

Hinge Length

The length of the leaves measured parallel to the pin.

Hinge Width

The over-all dimension of the leaves measured perpendicular to or across the pin.

Leaf Width

The dimension from the center of the pin to the outer edge of the leaf.

Pitch

The dimension from a point on the knuckle to the same point on an adjacent knuckle on the same leaf.

End Play

The amount of axial movement between the leaves.

Paint Clearance

The minimum dimension between the outer face of the knuckle and the opposing edge of the leaf cutout over the entire range of pivotal movement on the hinge.

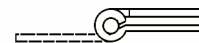
Swaging

Forming one or both leaves within the proximity of the paint clearance toward or beyond the center of the pin.



One Leaf Half Swaged

One leaf swaged one half the pin diameter.

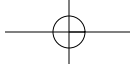


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All hinges are furnished with leaves and pins of similar material unless otherwise specified. (*) Sizes, and materials other than those listed are available to specifications. Perforating, forming, swaging, plated and painted finishes are available to specification.



Standard Terminology for Continuous Hinge Construction

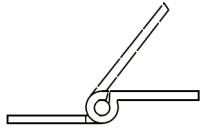
One Leaf Full Swaged

One leaf swaged equal to the pin diameter. Both leaves will be parallel when in a closed position.



Reverse Swaged

One leaf swaged to simulate reverse assembly. Leaves will not close to a parallel position.



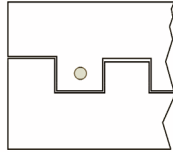
Both Leaves Half Swaged

Both leaves swaged approximately one half the pin diameter with a minimum clearance between the leaves when parallel.



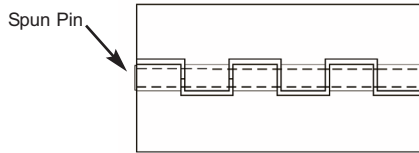
Staked Pin

Upsetting the knuckle(s) of one leaf to secure the pin and prevent axial movement of the pin in the knuckle. Staking is usually located on the bottom of the knuckle in a uniform consistent pattern.



Spun Pin

Cold forming one or both ends of the pin to a diameter greater than the inside diameter of the knuckle to prevent axial movement. Pins spun at both ends are most commonly specified for tamper proof applications.



Offset

Forming one or both leaves in the proximity of the pin clearance away from the center of the pin. When both leaves are offset and in a closed and parallel position, the dimension between the leaves will be greater than the pin diameter.

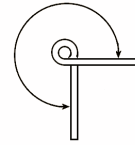


Stop Hinge

A hinge manufactured to limit the travel of the leaves to a specified angle.

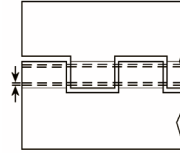
Back Angle

The angle described by the leaves when the hinge is rotated to its full open position. Back angle is usually a minimum of 270°.



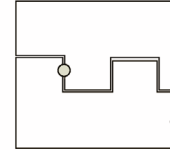
Side Play

Lateral movement of the leaves caused by clearance between the inside diameter of the knuckles and the diameter of the pin.



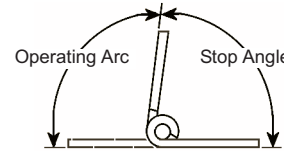
Lock Punch

A temporary method of preventing leaf rotation by upsetting material from two adjacent knuckles to remove end play. Lock punching is usually located on the bottom of the knuckle in a uniform consistent pattern.



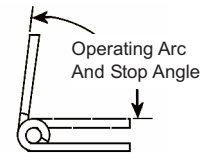
Stop Hinge, Outside

Leaves will move from an open or flat position and stop at a specified angle.



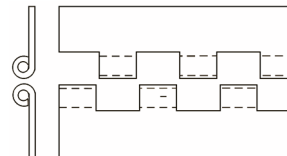
Stop Hinge, Inside

Leaves will open from a closed position, (leaves parallel to each other), to a stop angle as specified.



Standard Cutoff

A hinge with an even number of full length knuckles, the assembly plan view lower leaf having a knuckle at the left end and a notch at the right, and the upper leaf having a notch at the left end and a knuckle at the right. Standard cutoff refers to hinges of plain assembly only.



Opposite Standard Cutoff

Opposite to above with lower leaf with a notch at the left end and a knuckle at the right, etc.

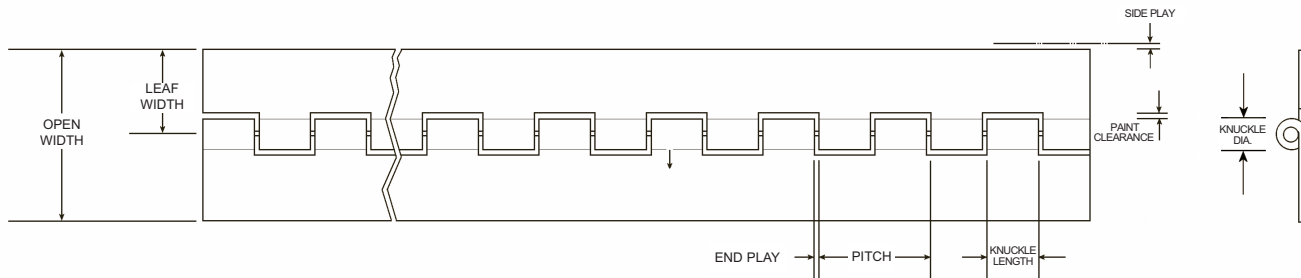
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Full Acting Continuous Hinges



Series	Gauge	Pin Dia. (In.)	Knuckle Length (In.)	Open Width (In.)	Steel	Stainless Steel	Aluminum	Leaf Width To (In.)	Pitch (In.)	Knuckle Dia. (In.)	Paint Clearance (In.)	End Play (In.)	Side Play (In.)
0300	.025	.062	.250	0.75	1-030811	1-030822	1-030044	Up To 2.00	0.500	.125	.010	.007	.010
				1.00	1-030011	1-030022	1-030044						
				1.25	1-030411	*	*						
				1.50	1-030511	*	*						
0360	.030	.066	.500	1.00	1-036011	1-036022	*	Up To 2.00	1.000	.135	.020	.007	.010
				1.25	1-036411	1-036422	*						
				1.50	1-036511	1-036522	*						
0360	.032	.062	.500	1.00	*	*	1-036044	Up To 2.00	1.000	.135	.020	.007	.010
				1.25	*	*	1-036444						
				1.50	*	*	1-036544						
0400	.035	.086	.250	0.75	1-040811	1-040822	*	Up To 2.00	0.500	.170	.020	.010	.010
				1.06	1-040011	1-040022	*						
				1.25	1-040411	1-040422	*						
				1.50	1-040511	1-040522	*						
				1.75	1-040711	*	*						
0400	.040	.080	.250	1.06	*	*	1-040044	Up To 2.00	0.500	.170	.020	.010	.010
				1.25	*	*	1-040444						
				1.50	*	*	1-040544						
0500	.042	.076	.250	1.06	1-050011	*	*	Up To 2.00	0.500	.170	.020	.005	.010
				1.25	1-050411	*	*						
				1.50	1-050511	*	*						
				2.00	1-051911	*	*						
0530	.042	.091	.500	1.06	1-053011	1-053022	1-053044	Up To 2.50	1.000	.180	.030	.010	.015
				1.25	1-053411	1-053422	1-053444						
				1.50	1-053511	1-053522	1-053544						
				2.00	1-053611	1-053622	1-053644						
0570	.050	.091	.625	1.06	1-057011	*	*	Up To 2.12	1.250	.205	.020	.010	.010
				1.25	1-057411	*	*						
				1.50	1-057511	*	*						
				2.00	1-057611	*	*						
				2.50	1-057711	*	*						
0600	.050	.115	.312	1.06	1-060011	*	*	Up To 2.50	0.625	.230	.015	.010	.010
				1.25	1-060411	*	*						
				1.50	1-060511	*	*						
				2.00	1-060611	*	*						
				2.50	1-060711	*	*						
				3.00	1-060811	*	v						



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Full Acting Continuous Hinges

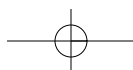
Series	Gauge	Pin Dia. (In.)	Knuckle Length (In.)	Open Width (In.)	Steel	Stainless Steel	Aluminum	Leaf Width To (In.)	Pitch (In.)	Knuckle Dia. (In.)	Paint Clearance (In.)	End Play (In.)	Side Play (In.)
0660	.050	.120	.500	1.06	1-066011	1-066022	1-066044	Up To 3.50	1.000	.235	.047	.018	.005
				1.25	1-066411	1-066422	1-066444						
				1.50	1-066511	1-066522	1-066544						
				2.00	1-066611	1-066622	1-066644						
				2.50	1-066711	1-066722	1-066744						
				3.00	1-066811	1-066822	1-066844						
				3.50	1-066911	1-066922	1-066944						
				4.00	1-066111	1-066122	1-066144						
0630	.060	.120	.500	1.06	1-063011	1-063022	1-063044	Up To 3.50	1.000	.250	.020	.010	.010
				1.25	1-063411	1-063422	1-063444						
				1.50	1-063511	1-063522	1-063544						
				2.00	1-063611	1-063622	1-063644						
				2.50	1-063711	1-063722	1-063744						
				3.00	1-063811	1-063822	1-063844						
				3.50	1-063911	1-063922	1-063944						
				4.00	1-063111	1-063122	1-063144						
0670	.060	.120	1.000	1.25	1-067411	1-067422	1-067444	Up To 2.50	2.000	.250	.020	.010	.010
				1.50	1-067511	1-067522	1-067544						
				1.75	1-067211	1-067222	1-067244						
				2.00	1-067611	1-067622	1-067644						
				2.50	1-067711	1-067722	1-067744						
				3.00	1-067811	1-067822	1-067844						
				3.50	1-067911	1-067922	1-067944						
				4.00	1-067111	1-067122	1-067144						
0780	.060	.187	1.000	1.50	1-078511	1-078522	1-078544	Up To 2.50	2.000	.315	.032	.015	.015
				2.00	1-078611	1-078622	1-078644						
				2.50	1-078711	1-078722	1-078744						
				3.00	1-078811	1-078822	1-078844						
				3.50	1-078911	1-078922	1-078944						
				4.00	1-078111	1-078122	1-078144						
0710	.060	.187	.625	1.50	1-071511	1-071522	*	Up To 3.50	1.250	.315	.040	.015	.015
				2.00	1-071611	1-071622	*						
				2.50	1-071711	1-071722	*						
				3.00	1-071811	1-071822	*						
0740	.072	.250	1.000	1.50	1-074511	1-074522	1-074544	Up To 3.50	2.000	.410	.040	.025	.015
				2.00	1-074611	1-074622	1-074644						
				2.50	1-074711	1-074722	*						
				3.00	1-074811	1-074822	1-074844						
				3.50	1-074911	1-074922	*						
				4.00	1-074111	1-074122	1-074144						
5.00	1-074311	1-074322	*										
0760	.072	.187	.500	1.50	1-076511	1-076522	1-076544	Up To 2.50	1.000	.350	.025	.015	.015
				2.00	1-076611	1-076622	1-076644						
				2.50	1-076711	1-076722	1-076744						
				3.00	1-076811	1-076822	1-076844						
				3.50	1-076911	1-076922	1-076944						
				4.00	1-076111	1-076122	1-076144						
0900	.090	.250	1.000	1.50	1-090511	1-090522	*	Up To 3.50	2.000	.450	.047	.018	.012
				2.00	1-090611	1-090622	1-090644						
				2.50	1-090711	1-090722	1-090744						
				3.00	1-090811	1-090822	1-090844						
				3.50	1-090911	1-090922	1-090944						
				4.00	1-090111	1-090122	*						

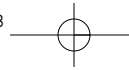


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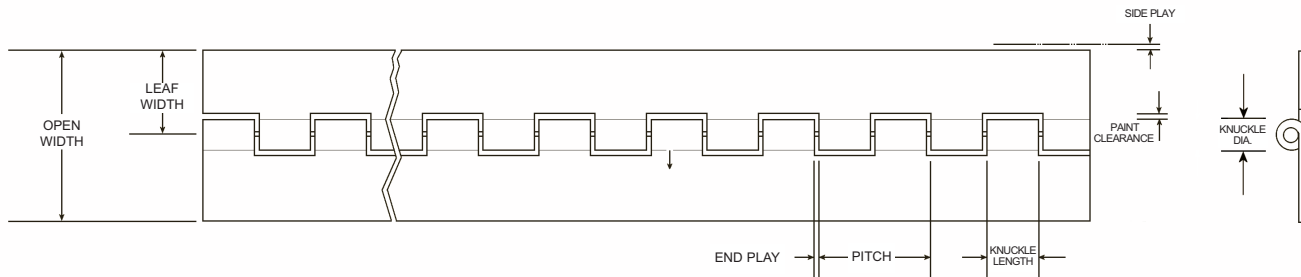
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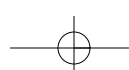
Stop Continuous Hinges



Series	Gauge	Pin Dia. (In.)	Knuckle Length (In.)	Open Width (In.)	Steel	Leaf Width To (In.)	Pitch (In.)	Knuckle Dia. (In.)	Paint Clearance (In.)	End Play (In.)	Side Play (In.)
Stop Hinge - Outside											
0400	.035	.086	.250	0.75	1-040811	Up To 2.00	0.500	.180	.020	.010	.010
				1.06	1-0400111						
0500	.042	.076	.250	1.06	1-050011	Up To 2.00	0.500	.180	.020	.005	.010
				1.25	1-050411						
				1.50	1-050511						
				2.00	1-051911						
<p>Outside stop hinges normally operate from the 180° or flat, open position, towards the closed position, stopping at 90°. Upon request, special stop angles can be furnished ranging from 105° to 60°.</p>											
Stop Hinge - Inside											
0450	.035	.091	.250	1.25	1-045411	Up To 2.00	0.500	.170	.020	.010	.010
				1.50	1-045511						
<p>Inside stop hinges normally operate from the 0° or closed position towards the open position, stopping at 90°. Upon request, special stop angles can be furnished ranging from 57° to 100°.</p>											
Stop Hinge - Available on Special Order											
0520	.040	.091	.500	Up to 4.00"	Inside Sliding Stop 90° and 113°	Up to 2.00"	1.000	.180	.024	.016	.005
0540	.040	.091	.500	Up to 4.00"	Outside Stop - Variable Angle	Up to 2.00"	1.000	.180	.024	.016	.005
0610	.060	.120	.500	Up to 5.00"	Outside Stop - Variable Angle	Up to 2.50"	1.000	.260	.042	.012	.008
0640	.060	.120	.500	Up to 6.00"	Inside Stop - Variable Angle	Up to 3.00"	1.000	.260	.042	.012	.008
0700	.060	.187	.625	Up to 5.00"	Inside Stop 95°	Up to 2.50"	1.250	.322	.114	.006	.008
0720	.060	.187	.375	Up to 6.00"	Inside Stop - Variable Angle	Up to 3.00"	0.750	.305	.050	.012	.010
0730	.072	.187	.500	Up to 4.00"	Inside Sliding Stop 110° and 180°	Up to 2.00"	1.000	.350	.057	.012	.010

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SEAWARE™ Stocker Marine Butt Hinges

Product Number	Length	Width	No. of Holes & Size
4-0627-7206	1-1/8"	1-1/16"	2 - #8
4-0827-0225	1-1/8"	2-13/16"	2 - #8
4-0990-0224	2"	1-1/2"	4 - #8
4-0991-0224	2"	1-3/4"	4 - #8
4-0992-0224	2"	2"	4 - #8
4-0993-0224	3"	2"	6 - #8
4-0994-0224	3"	3"	6 - #10
4-0998-0225	1-1/2"	2-3/4"	6 - #8
4-0999-0225	1-1/2"	2"	5 - #8
4-1000-0225	1-1/2"	4"	4 - #8
4-1001-0225	1-1/2"	6"	6 - #8
4-1010-0225	2-1/8"	4-1/4"	5 - #8
4-1012-0225	1-1/16"	4"	4 - #8

SEAWARE™ Marine Continuous Hinges

Seaware™ Marine continuous hinges are made from highest quality corrosion resistant materials in a broad range of attractive and durable finishes. From tough, rugged stainless steel lightweight aluminum, Stocker Hinges offers a selection of Seaware™ Marine continuous hinge suitable for every application.

General Specifications:

Series	Leaf Thickness	Pin Diameter	Knuckle Length
	Inch	Inch	Inch
0530	.040	.091	.50
0630	.060	.120	.50

Product Number	Gauge	Open Width	Screw	Hole Center	Material	Finish
3-0530-0024	.040"	1-1/16"	#5	2.00"	Stainless Steel	Polished
3-0534-0027	.040"	1-1/4"	#5	2.00"	Stainless Steel	Polished
3-0535-0029	.040"	1-1/2"	#6	2.00"	Stainless Steel	Polished
3-0536-0013	.040"	2"	#6	2.00"	Stainless Steel	Polished
3-0635-0099	.060"	1-1/2"	#6	2.00"	Stainless Steel	Polished
3-0636-0106	.060"	2"	#6	2.00"	Stainless Steel	Polished
3-0638-0191	.060"	3"	#6	2.00"	Stainless Steel	Polished
3-0530-0272	.040"	1-1/16"	#4	2.00"	Aluminum	Mill
3-0534-0234	.040"	1-1/4"	#4	2.00"	Aluminum	Mill
3-0535-0477	.040"	1-1/2"	#4	2.00"	Aluminum	Mill
3-0536-0242	.040"	2"	#4	2.00"	Aluminum	Mill
3-0634-0262	.060"	1-1/4"	#6	2.00"	Aluminum	Mill
3-0635-0356	.060"	1-1/2"	#6	2.00"	Aluminum	Mill
3-0636-0423	.060"	2"	#6	2.00"	Aluminum	Mill

STOCKER HINGES

Stocker Hinge Manufacturing Co.
 8822 West 47th Street
 P.O. Box 149
 Brookfield, IL 60513-1049
 1-708-485-3400 / 1-800-631-2600
 FAX 1-708-485-0058
 www.stocker.com



Pre-Plated Continuous Hinges

Expertly fabricated, with short lead time, these low cost products are ideal for most light and medium duty interior applications. Stocker pre-plated continuous hinges are made with galvanized pins securely staked in place. Holes are perforated and countersunk on 2.00" centers for #4, #5, or #6 flat head screws.

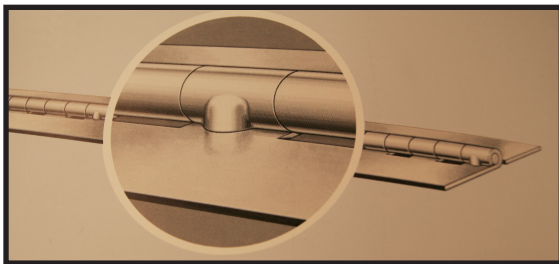


GENERAL SPECIFICATIONS LEAF THICKNESS .040" PIN DIAMETER .091" KNUCKLE LENGTH .50"		OPEN WIDTH			
		HOLE SIZE	INCH 1.06	INCH 1.25	INCH 1.50
		PRODUCT NUMBERS			
BRASS, PREMIUM GRADE, BRIGHT	4	1-9530-1494	1-9534-1494	1-9535-1494	1-9536-1494
Top side high luster, bottom side satin	5		1-9534-1495	1-9535-1495	1-9536-1495
both sides lacquered.	6			1-9535-1496	1-9536-1496
NICKEL, PREMIUM GRADE	4	1-9530-2474	1-9534-2474	1-9535-2474	1-9536-2474
Top side high luster, bottom side dull	5		1-9534-2475	1-9535-2475	1-9536-2475
both sides lacquered.	6			1-9535-2476	1-9536-2476

Electro-Galvanized Continuous Hinges

GENERAL SPECIFICATIONS GALVANIZED STEEL FLUSH PINS STAKED IN PLACE. NO HOLES.		OPEN WIDTH		
		INCH 1.50	INCH 2.00	INCH 3.00
		PRODUCT NUMBERS		
LEAF THICKNESS .040" PIN DIAMETER .091" KNUCKLE LENGTH .50"		1-9535-2460	1-9536-2460	
LEAF THICKNESS .060" PIN DIAMETER .120" KNUCKLE LENGTH .50"		1-9635-2460	1-9636-2460	1-9638-2460

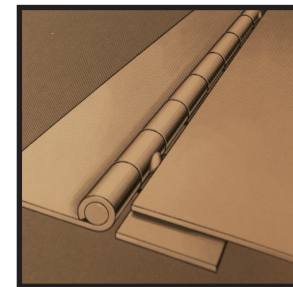
Weld Guide® Brand Continuous Hinge



Available in the 0300, 0400, and 0500 series, **Weld Guide®** Brand Continuous Hinge is designed for use where adjoining parts are butted against the knuckle of the hinge. Rounded projections spaced at frequent intervals provide ample paint clearance between hinge knuckle and adjoining abutted parts.

Weld Guide® Brand Continuous Hinge makes possible fast and accurate alignment...reduces costs in your spot welding department...eliminates scraping of paint from the hinge knuckle...prevents friction and binding...makes your product better working and more attractive.

Weld Guide® Brand Continuous Hinge is furnished with pins staked into place unless otherwise specified. **Weld Guide®** Brand Continuous Hinge and staked pins are optional and available at no extra cost.



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In looking back over the 75 year history of Stocker Hinges we have seen a small business blossom into a world class leader in the continuous hinge market. Our evolution has gone from “mom & pop” shop to an ever expanding domestic manufacturing facility complete with engineering services, a complete tool room and fully integrated press room. Our catalog of tooling, developed over these many years, is the largest in the industry allowing us to rapidly prototype and develop any product needed no matter the size, function or complexity. Couple our experience with that of E.R. Wagner overall and we offer the widest range of hinge options and solutions in the industry today.

Many manufacturing operations have moved overseas in the past twenty years or have been shuttered due to economic factors. We had a contrarian view of the future and heavily invested in all our factories. The Stocker facility has become more vertically integrated than ever before. Our recent investments include modernization of the tool room with state of the art grinders, EDM machines and machining centers. The press room has seen many presses replaced or rebuilt to modern standards. Our reliance on outside sources has also reduced by investing in equipment and people to perform washing, welding, polishing and buffing. Combined, these additions make us ready to meet the challenges of a lead-time and cost competitive world economy head on in a place that remains the most productive country in the world.

The Stocker difference has always been marked by the tradition of incredibly high standards, exceptional quality, knowledgeable staff and on-time delivery. We endeavor to do more than satisfy; we are driven to exceed expectations.

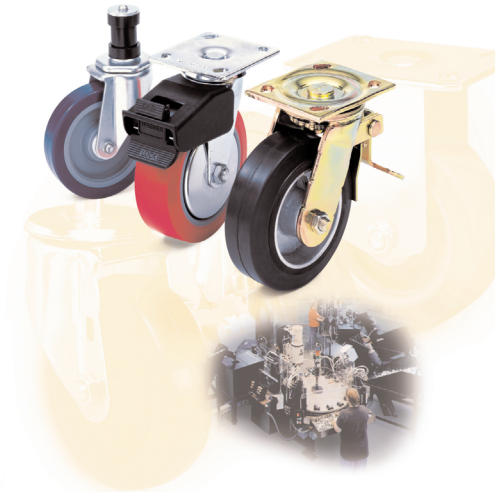
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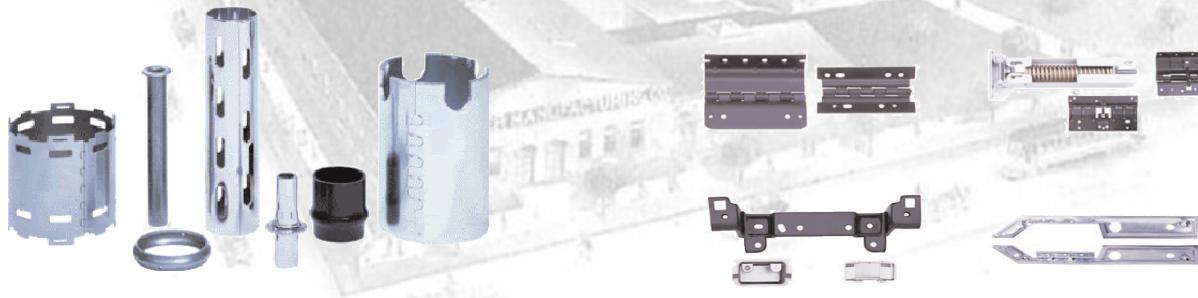
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