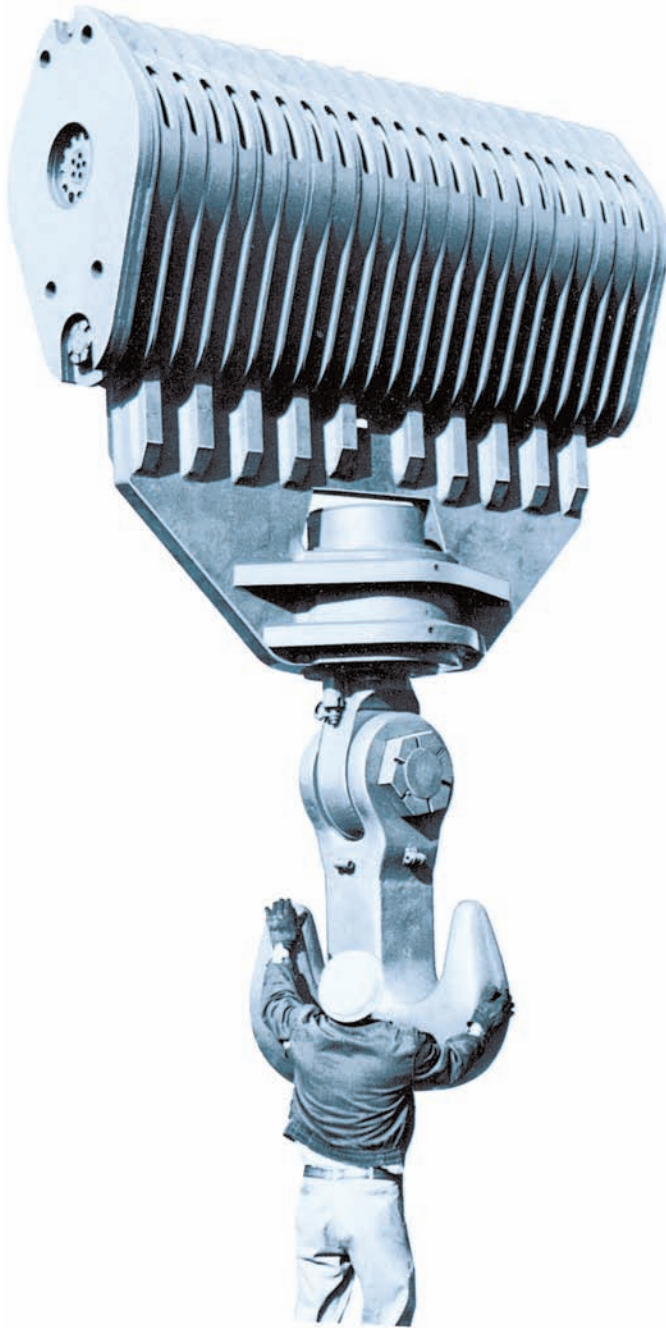


Special Products



52113

30" 20 Sheave Block with 600 Ton Capacity.



5022

40 - 48" Sheave Tandem Block.
Quadrex Hook 1000 Ton Capacity

Glossary Of Terms For Testing And Third Party Certification

American Bureau of Shipping - (ABS)

American Bureau of Shipping is a third party certification agency. ABS publishes several guidelines for various lifting applications. Some of the most common “lifting” guidelines include the following.

- *Guide for Certification of Cranes*
- *Requirements for Certification of Construction and Survey of Cargo Gear on Merchant Vessels*
- *Guide for the Certification of Drilling Systems*

(This is not intended to be a complete list of guidelines published by ABS.)

A common request is for ABS third party witness of proof test and magnetic particle inspection after proof test.

Depending on the type of certification, requirements may include design review, materials testing, non destructive testing, proof load and special packaging.

When specifying ABS certification, it is necessary to know to which guideline the product is to be certified (i.e., Guide for Certification of Cranes, etc.).

Det Norske Veritas - (DNV)

Det Norske Veritas is an independent foundation established in 1864 for safeguarding life, property and the environment. Along with inspection and advisory services, DNV provides the following three types of certification services.

Classification - Certification based on DNV Rules or Certification Notes.

Statutory Certification - Certification under authority granted by National Authorities (i.e., NPD,UK-HSE, Canada, Australia, etc.) according to acts, regulations, statutory instruments given by Statutory Authorities.

Conformity Certification - Certification to client specifications, National Standards or recognized codes. Some of the most common DNV certification rules for lifting are:

- *Rules for Certification of Lifting Appliances*
- *Certification Notes No. 2.7-1 Offshore Containers*
- *Rules for Classification of Mobile Offshore Units Part 6, Chapter 5.*

(This is not intended to be a complete list of DNV Rules.)

Lifting products may require design review, materials testing, non destructive testing, DNV issued Proof Test Certificate (CG3) and DNV issued Certificate of Conformity (C of C).

Type approved products with a Manufacturer’s Survey Agreement (MSA), require all the above except: Design Review, DNV issued Proof Test Certificate (CG3) and DNV issued Certificate of Conformity (C of C). For products certified to 2.7-1 Specification (Offshore Containers), DNV witnesses proof test and issues their Proof Test Certificate (CG3) and Certificate of Conformity (C of C) to the distributor responsible for building the container set. It is the distributor’s responsibility and cost to contact DNV.

When specifying DNV certification, always specify one of the three types of services, and if it is a DNV Rule, which Rule is applicable (i.e., Rules for Certification of Lifting Appliances, etc.).

American Petroleum Institute - (API)

Established in 1919, API writes specifications that are published as aids for the procurement of standardized equipment and materials, as well as instructions to manufacturers of equipment or materials covered by an API specification. Some of the common specifications written by API for “Lifting” are:

- *Specification for Drilling and Production Hoisting Equipment (API Spec 8A)*
- *Specification for Drilling and Production Hoisting Equipment (API Spec 8C)*
- *Specification for Offshore Cranes (API Spec 2C)*
- *Specification for Wire Rope (API 9 Spec A)*
- *Specification for Quality Programs (API Spec Q1)*

A standard to which a manufacturer’s quality system must comply in order to state that products are manufactured to API requirements, resulting in permission to apply the API monogram.

When specifying API, it is necessary to know to which API Specifications the product is to be certified (i.e., Specification for Drilling and Production Hoisting Equipment (API Spec 8A), etc.).

Lloyd’s Register of Shipping

A society established in 1760 and recognized under UK laws and to provide third party assurance of compliance to plans, specifications, rules, codes and fitness of use by approving designs, surveys and reports. Lloyd’s Register acts on behalf of clients and governments to verify products conform to statutory requirements and provides inspection and advisory services to clients. Some of the most commonly used Lloyd’s Register certification types include the following.

- *Code for Lifting Appliances in a Marine Environment*
- *Rules and Regulations for the Classification of Ships*
- *Rules and Regulations for the Classification of Mobile Offshore Units*
- *Container Certification Scheme*

Crosby® Testing

Glossary Of Terms For Testing And Third Party Certification

Lloyd's Register of Shipping continued

A common request is for Lloyd's Register Witness Proof Test and Magnetic Particle Inspection with Certification. However, certification may require design review, material tests or product verification to statutory or customer requirements.

When specifying Lloyd's Register of Shipping certification, know the code, standard, statute or customer requirement (i.e., Code for Lifting Appliances in a Marine Environment, etc.).

Federal Specifications & Military Standards

The Federal Specifications & Military Standards' documents specify dimensional, performance and test requirements for products. Some specifications define particular testing that is not normally performed on standard items. Crosby products, when identified in the latest Crosby General Catalog, will meet the requirements when tested by the party awarded the government contract. Certification is usually covered by a Crosby Standard Certificate of Conformance.

ISO 9001

A standard defining a manufacturer's or service organization's Quality Management System requiring third party certification. ISO 9001, the most comprehensive ISO certification level, involves the design, development, production and shipping of products. ISO 9001 requires that all procedures, work instructions, processes and additional activities be documented.

Attainment of ISO 9001 forms the basis for meeting other world standards and provides customers with documented proof of Crosby's ability to consistently provide product quality and performance.

National Association of Chain Manufacturers (NACM)

A U.S. Standard specifying dimensional and performance criteria for graded chain.

American Society for Testing and Materials (ASTM)

American Society for Testing and Materials, established in 1898, is the largest voluntary standards development system in the world. ASTM Standards cover:

Inspection Methods (Certificates Required) — i.e., Magnetic Particle, Ultrasonic, Dye Penetrant, X-Ray, Hardness, etc.

Processes (Standard Certificate of Conformance) — i.e., Hot Dip Galvanizing, Electroplate, Mechanical Galvanizing, etc.

Material Properties (Tensile Test Report Required) — i.e., Specification for Steel Forging, Carbon and Alloy for General Industrial Use (A668), Specification for Steel, Closed-Impression Die Forgings for General Industrial Use (A521), etc.

Material Test Methods — Covers Tensile and Charpy impact test specimens and test methods. i.e., Test Methods of Tension Testing of Metallic Materials (E8), A370 Test Methods and Definitions for Mechanical Testing of Steel Products (A370), etc.

American National Standards Institute (ANSI)

American National Standards Institute established in 1916 develops product specific performance standards for items such as cranes, hooks, slings, screw threads, etc., usually covered with a standard Certificate of Conformance.

Crosby Standard Testing Upon Request

***Crosby Proof Test with Third Party Witness** — Receive load test certification signed, documented and serial number traceable to these agencies: ABS, DNV, Lloyds, B.V., RINA, Germanischer Lloyd, etc.

***Crosby Proof Test with I.L.O. Certificates** — Standard load test performed and documented on International Labor Organization Form 4 (I.L.O. Form 4). Certified and traceable by serial number. The certificates are maintained at Crosby.

Crosby Standard Certificate of Conformance — Part number, description, date and statement of conformity to Crosby literature available at time of manufacture.

***Crosby Magnetic Particle Inspection with Certification** — ASTM E-709 wet or dry method standard at Crosby. Customer can require other types. Certified and traceable to serial number.

***Crosby Ultrasonic Inspection with Certification** — ASTM A-609 for castings, ASTM A-388 for forging standard at Crosby. Customer can require other types. Certified and traceable to serial number.

***Crosby X-Ray with Certification** — Customer provides x-ray technique and level of acceptance.

***Crosby Dye Penetrant Inspection with Certification** — A liquid penetrant examination to ASTM E-165. Other types of Dye Penetrant certification is available at time of order. Certified and traceable to serial number.

***Crosby Material Tensile Test with Certification** — Tensile test performed per ASTM A370. Test report documents Tensile strength, Yield Strength, Elongation, and Reduction of Area.

Crosby Material Chemical with Certification — Chemical certification provided by steel mill or foundry. Traceable to heat number, heat letters and PIC code.

***Crosby Charpy Impact Test with Certification** — Impact Test per ASTM A370 or ASTM E8 at temperature, location, and energy absorbed requirement as defined by customer or applicable specification.

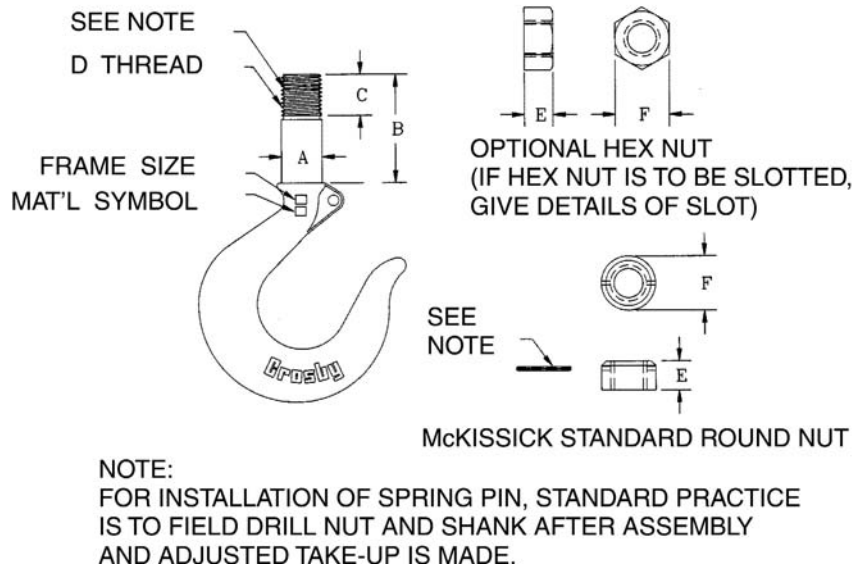
*A charge will be applied. Crosby certification is available when requested at time of order.

The items listed above are for standard certification. Additional certification is available and must be requested at time of order.

Crosby® Custom Design Hooks

CROSBY CUSTOM MACHINED SHANK HOOK & NUT QUOTATION REQUEST FORM

Customer Name:		Date:
Address:	City, State, Zip:	
Phone:	Fax:	
Customer Contact Name:		
Quotation Due Date:	Product Delivery Date:	
Crosby / McKissick Proposal Number:	Quantity:	



Dimensions:

Frame Size and material Symbol:

Working Load Limit (tons)

A.	Round or Hex Nut
B.	E.*
C.*	F.
D.	
	Hook Latch Kit <input type="checkbox"/> SS-4055 Flipper latch <input type="checkbox"/> PL Flapper latch <input type="checkbox"/> 4320 Latch

* The minimum thread length engaged in the nut should not be less than one (1) thread diameter.

For additional information concerning customer design products, contact:
In U.S.A. - Crosby's Special Engineered Products Group at 1-800-777-1555
In Canada - Crosby Canada at (905) 451-9261
In Europe - N.V. Crosby Europe at 32-15-757125 (26)

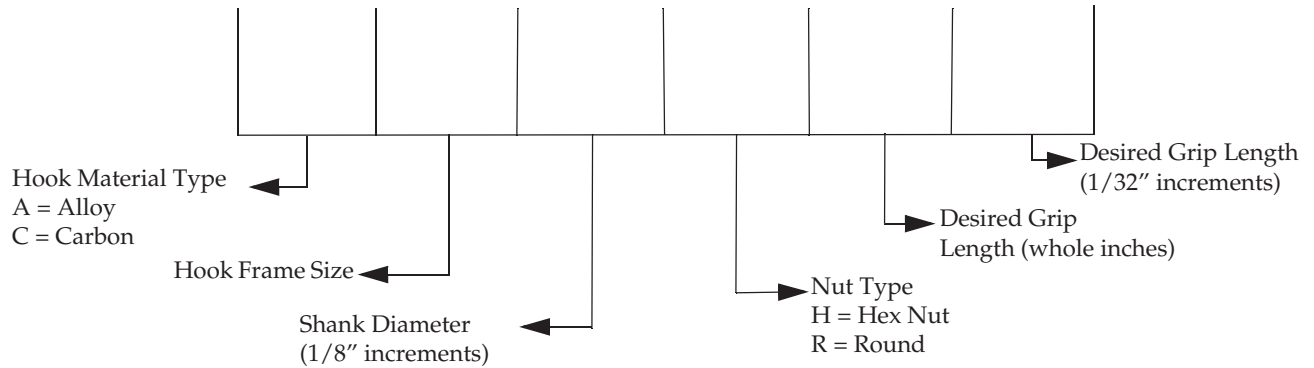
Crosby® Machined Shank Hooks

Crosby® Machined Shank Hook Configurator Worksheet

Customer Name:			Date:		
Address:					
City:	State:	Zip Code:	Country:		
Phone:			Fax:		
Customer Contact Name:				Quantity:	
E-mail address:					

Crosby, please quote me the following machined shank hooks

ALL SPACES MUST BE COMPLETED



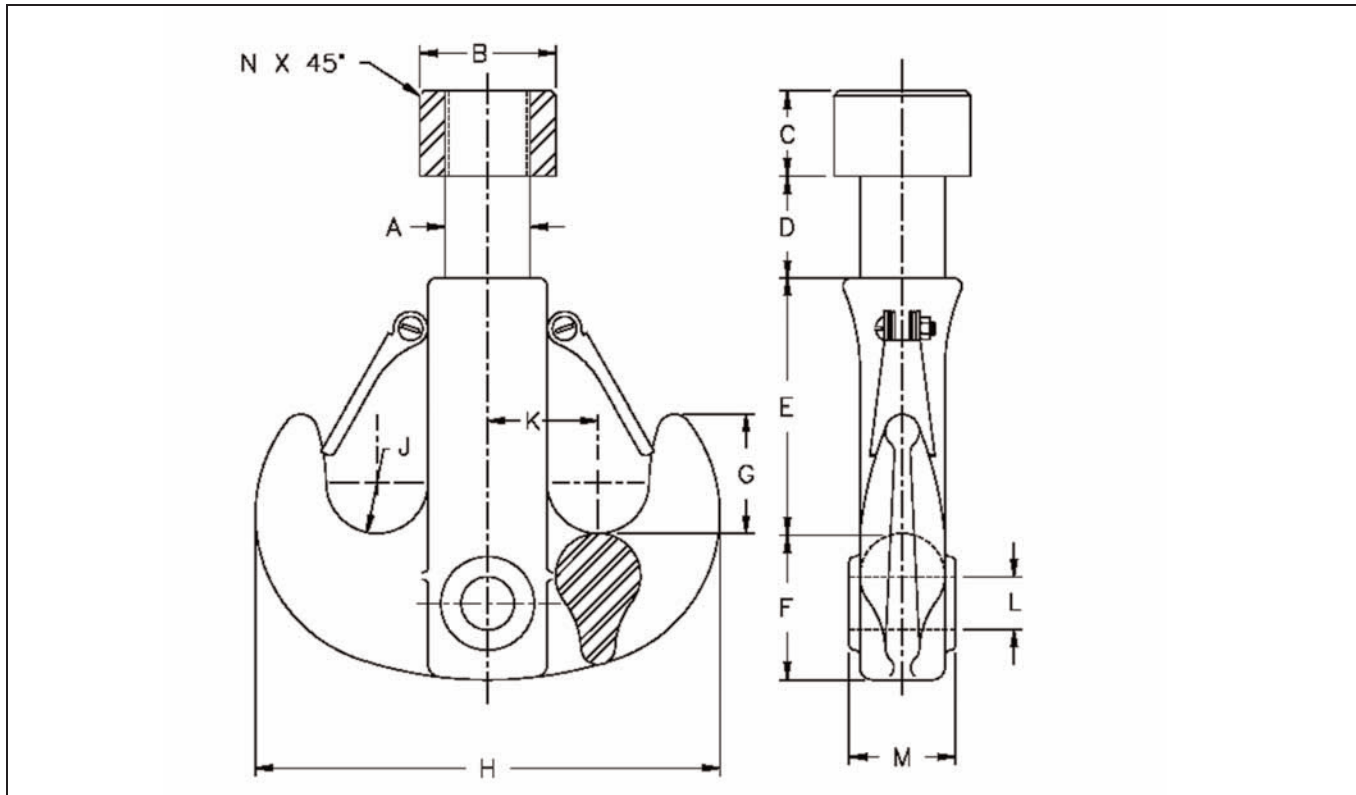
Contact your Crosby Distributor for more information

Special
Products

McKissick® Custom Design Hooks

McKissick® Duplex Hook Assemblies

- Cast alloy steel.
- Available in forged steel upon special request.
- Can be machined to optional dimensions upon request.
- Furnished complete with two flipper latches.



Duplex Hook with Nut and Latches Dimensions (in.)																Weight Each (lbs.)	Replacement Latch Kit Stock No.
Stock No. Hook Assembly	Size (tons)	A	B	C	D	E	F	G	H	J	K	L	M	N			
127384	25	2.50	4.00	2.50	3.00	7.50	4.31	3.50	13.75	1.50	3.25	2.06	2.75	.12	62	1090143	
126802	50	3.00	4.88	3.00	3.25	10.00	5.50	5.00	18.50	2.00	4.25	2.81	3.75	.25	136	1090189	
137373	75	4.00	7.50	4.00	4.00	13.50	8.00	6.50	25.00	2.50	5.50	3.31	4.62	.25	311	1090223	
137364	100	5.00	9.00	5.00	5.50	16.00	9.00	9.00	30.00	3.00	6.75	3.81	5.00	.25	532	1090223	
137266	125	5.00	9.00	5.00	5.50	19.00	10.00	9.00	31.50	3.00	7.50	4.31	5.25	.25	844	1090223	
137355	150	6.00	10.00	6.00	6.00	19.00	10.00	9.00	31.50	3.00	7.50	4.31	5.25	.12	844	1090223	
137346	200	7.00	12.00	6.00	8.25	20.50	12.75	10.50	36.50	3.50	8.00	4.81	6.75	.25	1085	1090241	
137337	250	8.00	14.00	7.00	9.00	23.75	14.00	11.75	40.00	3.75	8.75	5.12	8.00	.25	1635	1090241	
137328	350	8.00	15.50	8.00	10.00	24.00	16.00	12.00	45.25	4.25	10.25	7.16	9.50	.25	2423	143080	
2022897	500	10.00	18.00	8.25	16.75	26.50	18.50	12.25	45.00	4.50	10.00	7.16	9.50	.25	3300	8022575	
137319	600	10.00	18.00	8.25	8.75	25.00	18.00	14.00	51.00	5.00	11.00	7.94	9.75	.25	3120	143071	

Ultimate Load is 4 times the Working Load Limit.

For additional information concerning custom design products, contact:
 In U.S.A. — Crosby's Special Engineered Products Group at 1-800-777-1555, Fax (918) 834-5035.
 In Canada — Crosby Canada at (905) 451-9261.
 In Europe — N.V. Crosby Europe at 32 15 757125 (26).

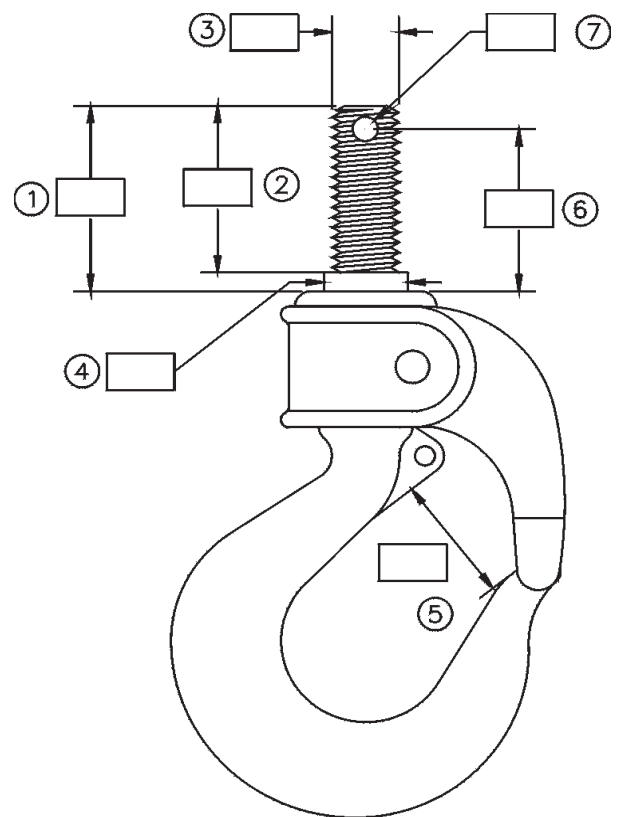
Crosby® / Bullard® Golden Gate® Hook

HOOK DATA FORM

Hook Size:	Name of Person Completing Form:
Sales Order:	
Working Load Limit (Tons)	Telephone:
Hoist Name and Model:	Distributor:
Top Hook <input type="checkbox"/> Bottom Hook <input type="checkbox"/>	Distributor P.O.:
Is Self-Closing Gate Required? Yes <input type="checkbox"/> No <input type="checkbox"/>	Accurate dimensions are important. If you have any questions, contact your authorized Crosby Distributor.

Shank Length

1. Measure total USABLE shank length from top of hook shank to top of gate assembly. Gate assembly is not considered part of the USABLE shank. When measuring other manufacturer's hooks, measure from the top of the hook shank to the hook shoulder.
2. Measure threaded portion (enter BLANK if threads not required).
NOTE: Hook is supplied with Steel Hex-Load Nut and Bronze Load Washer. Hook and Nut threads are National Coarse. If a SPECIAL Load Nut or Load Washer is required, attach a drawing to this form.



Shank Diameter

3. Measure width of threaded portion.
4. Measure width of blank portion.

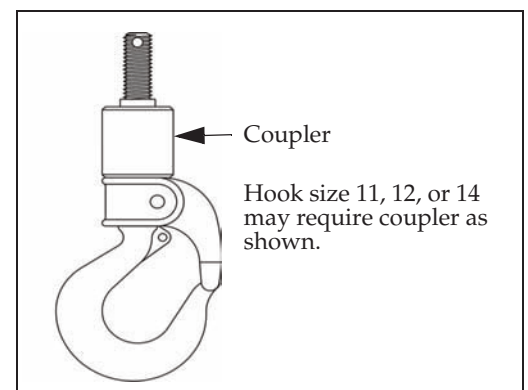
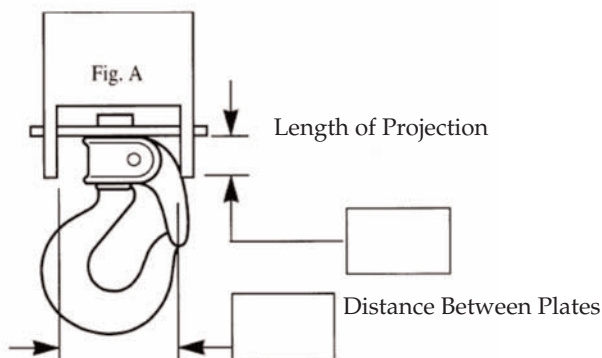
Throat Opening

5. ONLY measure throat opening if this distance is critical to customer's operation.

Cross Hole in Shank Hooks

(complete only if required)

6. Measure shank length from center of hole to top of gate assembly.
7. Measure diameter of hole.



Crosby® Swivel Hoist Ring Data Form

Specification sheet for Crosby HR125 & HR125M Hoist Rings
with optional bolt lengths.

Date:	
CG #:	Crosby Quote Number:
Customer #:	Contact:
Distributor's Names:	Distributor's Fax Number:
Distributor's Phone Number:	Quantity Requested:
Distributor's P.O. #	Crosby Representative:

1. Determine the *Type of Threads* required on the Hoist Ring - Metric or UNC, UNF, Etc. **NOTE - NOT DESIGNED FOR PIPE, ACME OR TAPEREDS THREADS.**

1. → **Thread Type** (Circle One)
U.N.C. Thread
Metric Thread
Other
(NOT DESIGNED FOR PIPE, ACME, OR TAPERED THREADS)

2. Determine the *Working Load Limit* of the requested Hoist Ring.

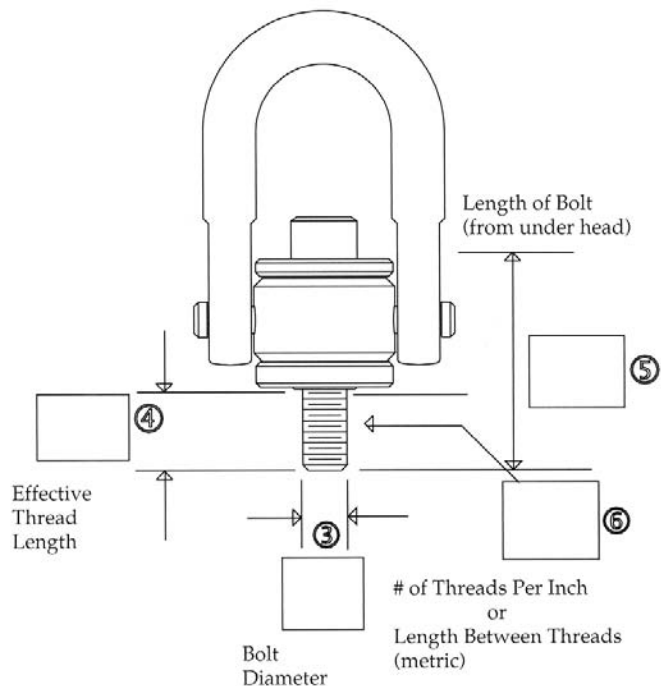
2. → Hoist Ring Capacity
(Working Load Limit) _____ lbs. Kgs.

3. Determine *Bolt Diameter* - The diameter of the required bolt.

4. Determine *Effective Thread Length* - This is the length the threads must be in order to fully engage, or project through, the work piece. **NOTE; If the Effective Thread Length is not known, the Length of Bolt is required.**

5. Determine *Length of the Bolt* - The over all length of the bolt as measured from under the head of the bolt. **NOTE: If the Effective Thread Length is not known, the Length of the bolt is required.**

6. # of *Thread Threads per Inch* (Length Between Threads for Metric threads) - This information is required to ensure we ship proper bolt size (i.e., 1/2 - 13, 7/8 - 9, 8 x 1.25, etc.).



McKissick® Custom Lead Sheaves

Customer Name:		Date:
Address:	City:	State, Zip:
Phone:	Fax:	E-Mail:
Customer Contact Name:		Quantity:

SHEAVE INFORMATION

Sheave Diameter: _____ Wire Rope Size: _____ Number of Sheaves: _____

BEARING TYPE

- Bronze Bushing Roller Bearing
 Tapered Roller Bearing Other

BLOCK INFORMATION

Style: Vertical Horizontal
 Dimensions: A. _____ B. _____ C. _____ D. _____

APPLICATION INFORMATION

Line Speed: _____ Single Line Pull: _____ Degree of Wrap: _____
 Environment: _____

FREQUENCY OF USE:

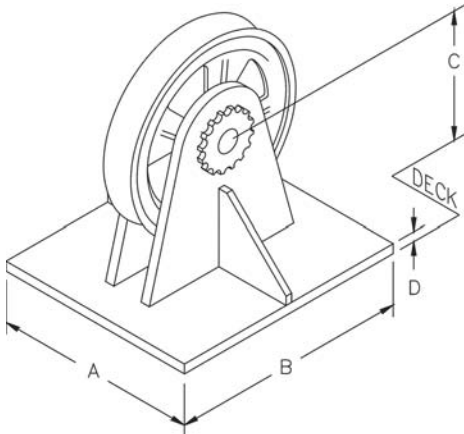
Continuous: _____ Intermittent: _____ One Time: _____

SPECIAL REQUIREMENTS

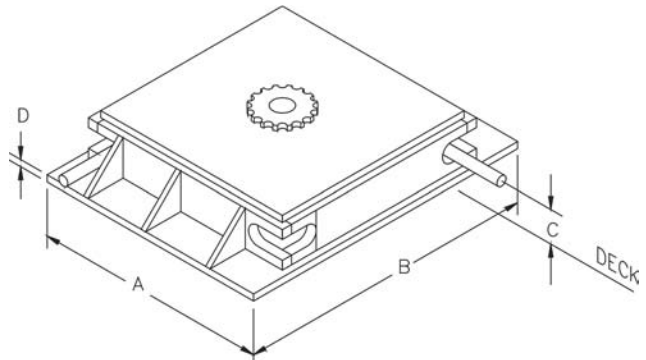
Special Testing: _____

Finish: _____

Third Party Inspection / Approval:
 (If 3rd Party Inspection or Approval is required, please refer to page 371.)



Vertical Deck Guide

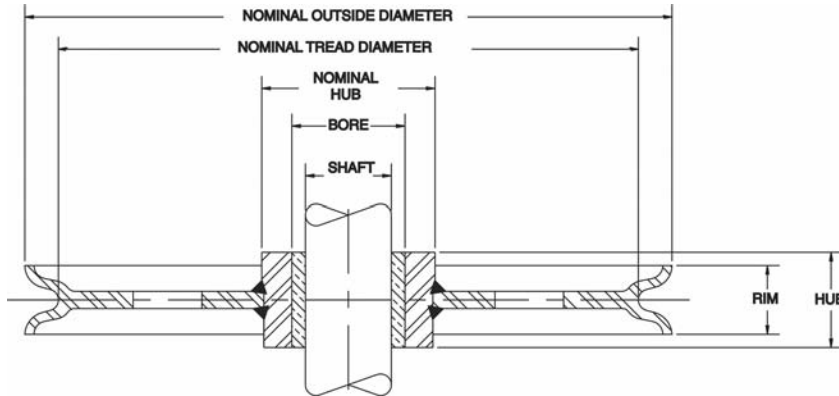


Horizontal Deck Guide

Special Products

McKissick® Custom Sheaves

Customer Name:		Date:
Address:	City:	State, Zip
Phone:	Fax:	E-Mail:
Customer Contact Name:		Quantity:



DIMENSIONAL INFORMATION

Nominal Outside Diameter: _____ Wire Rope Size: _____ Rim Width: _____

+ Shaft Size: _____ * Hub Width: _____

Nominal Tread Diameter (Optional): _____ Nominal Hub Diameter (Optional) _____

* Hub width is measured over the cone of the Tapered Bearing Sheaves.
 + Shaft Size is Bore Size on Plain Bore Sheaves.

BEARING TYPE

- Bronze Bushing
 + Roller Bearing
 Tapered Roller Bearing
 Finish / Plain Bore
 Other

+ Requires hardened and ground shaft

MATERIAL TYPE

- Roll Forged (Flame hardened 14" and larger)
 Forged Steel
 Cast Steel
 Other

APPLICATION INFORMATION

Line Pull: _____ Fleet Angle: _____ Degree of Wrap: _____

Line Speed: _____ Environment: _____

SPECIAL REQUIREMENTS

Special Testing: _____

Finish: _____

Third Party Inspection / Approval:

(If 3rd party Party Inspection or Approval is required, please refer to page 371).

NOTE: Crosby manufactures sheaves in a wide array of style and sizes. See page 247 to 258.

McKissick® Roll Forged™ Sheaves

ROLL FORGED™ SHEAVE CONFIGURATOR WORKSHEET

Customer Name:			Date:		
Address:					
City:	State	Country	Zip		
Phone:			Fax:		
Customer Contact Name:				Quantity:	
E-Mail:					
<p>Crosby, please quote on the following McKissick® Roll Forged™ Sheave ALL SPACES MUST BE COMPLETED</p>					
Please provide additional information below:					
Application Information					
Line Pull:	Fleet Angle:	Degree of Wrap:			
Line Speed:	Environment:				
Special Requirements					
Special Testing:					
Finish:					
Third Party Inspection / Approval:					

Contact your Crosby Distributor for more information

McKissick® Custom Bridge Crane Blocks

Customer Name:		Date:
Address:	City:	State, Zip
Phone:	Fax:	E-Mail:
Customer Contact Name:		Quantity:

SHEAVE INFORMATION

Sheave Diameter: _____ Wire Rope Size: _____ Number of Sheaves: _____

BEARING TYPE

- Bronze Bushing Roller Bearing
 Tapered Roller Bearing Other

BLOCK INFORMATION

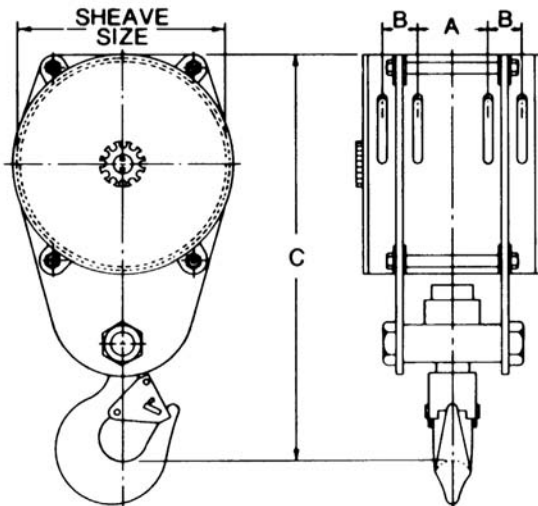
Dimensions : A: _____ B: _____ C: _____

Working Load Limit: _____

CMAA Rating: _____

LOWER FITTING TYPE

- Single Point Hook
 Duplex Hook
 Swivel Hook Latch
 Other



APPLICATION INFORMATION

Overhaul Weight Requirements: _____

Lead Line Speed: _____

Environment: _____

SPECIAL REQUIREMENTS

Special Testing: _____

Finish: _____

Third Party inspection / Approval: _____

(If 3rd party Inspection or Approval is required, please refer to page 371)

- Four Position Locking Mechanism
 Other (Specify) _____

Approval/Inspection Requirements

Third Party Requirements Form

Customer Name:		Date:	
Address:	City:	State, Zip	
Phone:	Fax:		
E-Mail:			
Customer Contact Name:			
Crosby Proposal Number:		Quantity:	
Equipment Description:		Customer P.O.	
Type of Application:			
End Users / Operator:		Rig/Vessel Name or I.D.	
Geographical Location:			
REGULATIONS / CODES / STANDARDS			
American Bureau of Shipping	Det Norske Veritas	Lloyds Register	Other
<input type="checkbox"/> Certification of Construction and Survey of Cargo Gear	<input type="checkbox"/> Rules of Certification of Lifting Appliances	<input type="checkbox"/> Lifting Appliances in a Marine Environment	<input type="checkbox"/> API 8 A
<input type="checkbox"/> Certification of Drilling Systems	<input type="checkbox"/> Classification of Mobile Offshore Units Part 6, Chpt. 5.	<input type="checkbox"/> Other LR	<input type="checkbox"/> API 8 C
<input type="checkbox"/> Certification of Cranes	<input type="checkbox"/> 2.7-1 Offshore Containers		<input type="checkbox"/> API 2 C
<input type="checkbox"/> Other ABS	<input type="checkbox"/> Other DNV		<input type="checkbox"/> Other
Other:			
OPERATING CONDITIONS			
Minimum Design Temperature:		Working Load:	
Load Conditions:			
EXTENT OF THIRD PARTY INVOLVEMENT:			

McKissick® Custom Design Blocks

