

### SUPER ANCHOR SAFETY®

# SAS Lifting/Hoisting D-Plate Anchors Instruction Manual 2021

### ENGLISH VERSION

!WARNING TO USER!
You are required to read and use the Instruction/
Specification manual supplied at the time
this device was shipped. Improper use and
installation can result in serious injury or detail.

Allow inspection requirements before a cell use.

### D-Plate Model Specifications No.1037-G5M HDG Steel, See Fig.1

Material: HDG Q235/A-36 steel No.1090 Q-235 cast loop top

Min. Breaking Strength: MBS 12,000lb with load applied at angles "A"/"B"/"C" as specified in Lifting/Hoisting Angles pg.2.

Load Safety Factor: 3/1 Max. Live Load: 4,000lb

#### No.1037-S5M

Material: 304 sst base plate

No.1090-S 316sst cast loop top

Min. Breaking Strength: MBS 12,000lb with load applied at angles "A"/"B"/"C" as specified in Lifting/Hoisting Angles pg.2.

Load Safety Factor: 3/1 Max. Live Load: 4,000lb

#### No.1301-G10M HDG Steel. See Fig.3

Material: HDG Q235/A-36 steel

No.1093 Q-345 cast loop top

Min. Breaking Strength: MBS 15,000lb with load applied at angles "A"/"B"/"C" as specified in Lifting/Hoisting Angles pg.2.

Load Safety Factor: 3/1 Max. Live Load: 5,000lb

#### No.1301-S10M

Material: 304 sst base plate

No.1093-S 316sst cast loop top

Min. Breaking Strength: MBS 15,000lb with load applied at angles "A"/"B"/"C" as specified in Lifting/Hoisting Angles pg.2.

**Load Safety Factor:** 3/1 **Max. Live Load:** 5,000lb

#### Lifting Hooks/Rigging

All connectors and rigging components attached to the D-plate loop top must be rated for the intended use.

#### **D-Plate Position/Loop Top Orientation**

The orientation of the D-Plates loop top onto the equipment or structure it is installed, is required to be specified by a certified engineer or "Qualified Person"\*. See Figs. 7 for loop top loading angles.

Note: The end user is responsible for how the D-Plate is attached to the equipment, device or structure it is installed on.

#### **D-Plate Attachment**

**Bolt Attached:** Requires 4 ea 1/2" grade 8 or 18-8 type stainless steel hex head bolts and lock nuts. Flat washers are optional. **Weld Attached:** Welding is required to be specified by a certified engineer or "Qualified Person"\* and the welding performed by a certified welder.

#### **Backer Plate Installation**

Backer plates are specified for applications where direct bolt attachment is not possible. Use for concrete bolt-thru or wood framed structures. See Fig.11.

#### **Lifting/Hoisting Compliance:**

ASME B30.20-2013

#### **Fall Protection Compliance:**

OSHA 1925.502

ANSI Z359.18 Type A/T

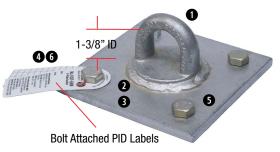
ANSI/IWCA I-14.1-2001

\*"Qualified Person" see OSHA definition

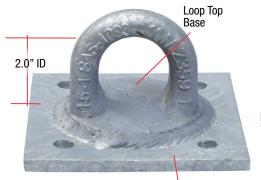
**SAS** -= Super Anchor Safety

Inspection Points

Fig.1 No.1037-G5M



### Fig. 3 No.1301-G10M



D-Plate Base Plate

### Fig.5 Compatible Connectors

Hooks, shackles and connectors used for lifting must rotate freely inside the loop top to avoid binding. There should be a margin between the

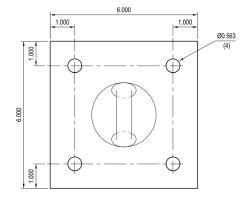
crown and loop top base.



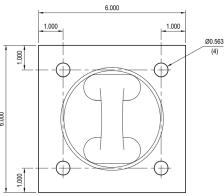
#### **Tensile Test Reports:**

No. 1037 Models: Request Intertek Report 08-2020 No 1301 Models: Request Intertek Report 12-2019 The above reports were for CRA and CRO commercial anchors with 1090 and 1093 loop tops.

Fig.2 Top View Dimensions 3/8"x6"x6" Base Plate



### Fig.4 Top View Dimensions 3/8"x6"x6" Base Plate



### Fig.6

#### **Non-Compatible Connector**

The lift hook crown is too large to rotate freely inside loop top.



#### **WARNING!**

Avoid non-compatible connections as shown at Fig. 6. Lifting hooks must be sized to fit the Loop Top ID and are required to rotate freely.

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#### **Lifting/Hoisting Angles**

D-Plates are specified for the lifting angles shown at Figs. 7. Lifting at angles not shown here or exceeding the D-Plates specified max. live load, may damage the D-Plate resulting in serious injury, death or damage to equipment and property.



Fig.7.1 Zone **Load Angle** 



No Load Zon DO NOT LOAD at this Angle

Fig.7.3

Fig.7.4



No Load Zone

No Load Zone

Fig. 9 Temporary Zip-Tied PID Labels

Factory supplied D-Plate PID labels require permanent installation. See Fig.1.



Fig. 10 Tapped Bolt Attachment

Specify at time or ordering

Fig.8

**Stamp Mark Example** 



Inspection

Inspect prior to each use and annually by a qualified person. The following are recommended inspection points. End users are required to draft their own inspection program.

#### $\boxtimes$ = Remove From Service $\boxtimes$ = Repair

- Loop Top deformation or fracture at the base plate. 🗵
- Cracked loop top base plate weld.
- Red rust or abrasions. Clean and paint. <a></a>
- PID labels not readable or missing, Replace 🗹
- 6 Missing or damaged attachment bolts.⊠ Replace ✓
- **6** Annual inspection not recorded on inspection label. 

  Until inspected. Return to service after inspected.



1/4"-20 X 1/2" sst Hex Tap Bolt

#### Fig.11 **Backer Plate**

Example of wood framed installation



## **SUPER ANCHOR SAFETY®** 17731 - 147th St. SE. Monroe, WA 98272 USA Pg. 1.0 D-Plate 3,600lb Proof Load Certification Tensile Test Program: Maximum Force: 3,600lb @ 2cm/mi Force Duration: 2 minutes

included with each order. Testing is performed with current

Fig. 12 D-Plate Factory Certified Proof Loading D-Plates are factory proof loaded to 3,600lb at angle "B" and "C". Certification reports are archived at SAS factory and

year calibrated CSA certified test equipment.

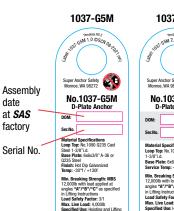
#### Product ID(PID) Label Attachment to D-Plate

As shown at Fig.9, remove the PID labels and attach to the D-Plate as follows:

Bolt Attached D-Plates: Shown at Fig.1, attach PID labels to one of the D-Plate corners with an attachment bolt. Weld Attached D-Plates: Shown at Fig. 10, attach grommeted label pack with a 1/4" hex bolt to the threaded bolt hole after welding.

Note: At time of ordering specify if D-Plates will be bolt or weld attached. PID labels are replaceable upon request.

#### **Primary Labels**











RNING TO USER!



