

Super Anchor Safety 2024 Quick Reference

HLL Lifeline Systems

Horizontal Lifelines w/Pass-Thru System
Fully engineered HLL systems feature SAS intermediate anchors that allow for a unique pass-thru top. No. 10510-SM connector ring allows travel along the entire length of the HLL cable without disconnection.

HLL Specifications

- Min. tensile strength 5,000lb
- ANSI Z359.18 and CSA Z259.15 2nd party certified.
- 100' and 150' cast steel loop tops unless tensile strength of 10,000lb
- Person HLL lengths up to 240'
- SAS compatible HLL components.
- 2nd party engineering by CH2M Hill & Assoc.
- Report available on request.
- Contact SAS sales team for custom rigging and lead times.

Pass-Thru System

- Compatible with several anchor models.
- Consent SAS sales team for custom rigging and lead times.

HLL End Anchors
HLL are specified for use with SAS base plate or field welded anchors only with cast loop tops. HLL systems are attached to a supporting structure with field welded, concrete embeddings, expansion bolts or field welded.

End Anchor Examples

- CRA/CRO Anchors
- RLT/CRO Field Weld Risers
- CRZ Anchors
- C-Plate Anchors
- Pass-Thru System

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CRA HLL Rigging

CRA Standard Rigging
CRA 21' or 30' steel intermediate rigging accessories with special configurations designed to fit No. 1009/1005-S loop tops with 1.5" x 12" opening. SAS HLL intermediate rigging includes: "A" and "B" ends to specify the position of rigging accessories. Turbulence are used at the "A" end to tension the cable and are coupled to a spring EIA tension gauge when fully developed turbulence is visible. The spring EIA tension gauge when fully developed turbulence is visible. The "B" end allows intermediate with eye/tensioning information. 4-Way anchors are rigged the same way using intermediate rigging accessories.

Compliance Certification
SAS anchor and accessory components are 2nd party certified to comply with current ANSI and CSA standards.
• CRA/CRO Internal Lab Reports
• Engineering by CH2M Hill & Assoc.
• HLL report on request.
• Report available on request.

CRA Standard Rigging Example

Standard Rigging Specifications:

- Anchor Attachment to Structure:**
 - Field welded
 - Concrete embeddings
 - Concrete expansion bolts
 - Personnel using abseiler required for each position
- Min. HLL Length 240'**
- Min. HLL Anchor Spacing 8' @ 30'**
- "A" and "B" ends:** 1.5" x 12" top or 4-Way anchor
- Intermediate Anchor:** 30" x 30" x 12" w/4-Way anchor
- "A" end:** Turbulence and 1" spring EIA
- "B" end:** Cable termination

Alternate Rigging
Turbulence and spring EIA may be attached to opposite end of HLL length using special application couples.

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CRA HLL Rigging Specifications

HLL Standard Rigging
HLL Anchor will not connect to HLL system full end and HLL anchor only with 1.5" x 12" cast steel loop top. HLL anchor only with 1.5" x 12" cast steel loop top. HLL anchor only with 1.5" x 12" cast steel loop top. HLL anchor only with 1.5" x 12" cast steel loop top.

Specifications

- Person full end and HLL anchor only with 1.5" x 12" cast steel loop top.
- Min. HLL lengths 240'
- Min. and intermediate anchor spacing 8'
- 3.0" w/4-Way anchor and 4-Way anchor.
- Report available on request.
- Contact SAS sales team for custom rigging and lead times.

HLL Standard Rigging End/Intermediate Anchors
Models only with 1.5" x 12" cast steel loop top. HLL anchor only with 1.5" x 12" cast steel loop top. HLL anchor only with 1.5" x 12" cast steel loop top.

HLL Standard Rigging w/4-Way Anchors
HLL are specified for connecting additional HLL anchor or extending HLL length per the 240'.

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CRA 4-Way HLL Rigging

CRA Standard Rigging Example w/4-Way End Anchor

CRA Standard Rigging Example w/4-Way Intermediate

4-Way Rigging Examples

- Intermediate or End Anchor
- 90° Corners
- 40° Junctions
- 3-Way HLL
- 4-Way HLL

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CRA HLL Rigging Kits

HLL rigging kits for CRA and other anchors with No. 1009/1005-S loop tops. Supplied with 18-8 316 stainless steel and 304 stainless steel. HLL rigging kits for CRA and other anchors with No. 1009/1005-S loop tops.

No. 1050-G Galvanized Rigging Kit

- 1050-G 304 Steel Cable
- 1050-G 304 Steel Turnbuckle
- 1050-G 304 Steel Eye Thimble
- 1050-G 304 Steel Spring Energy Absorber
- 1050-G 304 Steel Eye Thimble
- 1050-G 304 Steel Spring Energy Absorber
- 1050-G 304 Steel Eye Thimble
- 1050-G 304 Steel Spring Energy Absorber

No. 1051-S SST Rigging Kit

- 1051-S 316 Steel Cable
- 1051-S 316 Steel Turnbuckle
- 1051-S 316 Steel Eye Thimble
- 1051-S 316 Steel Spring Energy Absorber
- 1051-S 316 Steel Eye Thimble
- 1051-S 316 Steel Spring Energy Absorber
- 1051-S 316 Steel Eye Thimble
- 1051-S 316 Steel Spring Energy Absorber

No. 1050-G Galvanized Rigging

| Riser Height | Part No. | Material | Loop Top | Base Plate | Anchor | Riser |
|--------------|----------|-----------|----------|------------|--------|-------|
| 8 | 1050-G | 304 Steel | 1091 | 1045 | 1091 | 190 |
| 12 | 1050-G | 304 Steel | 1091 | 1045 | 1091 | 270 |
| 18 | 1050-G | 304 Steel | 1091 | 1045 | 1091 | 360 |
| 24 | 1050-G | 304 Steel | 1091 | 1045 | 1091 | 450 |
| 30 | 1050-G | 304 Steel | 1091 | 1045 | 1091 | 540 |
| 36 | 1050-G | 304 Steel | 1091 | 1045 | 1091 | 630 |

No. 1051-S SST Rigging

| Riser Height | Part No. | Material | Loop Top | Base Plate | Anchor | Riser |
|--------------|----------|-----------|----------|------------|--------|-------|
| 8 | 1051-S | 316 Steel | 1091 | 1045 | 1091 | 190 |
| 12 | 1051-S | 316 Steel | 1091 | 1045 | 1091 | 270 |
| 18 | 1051-S | 316 Steel | 1091 | 1045 | 1091 | 360 |
| 24 | 1051-S | 316 Steel | 1091 | 1045 | 1091 | 450 |
| 30 | 1051-S | 316 Steel | 1091 | 1045 | 1091 | 540 |
| 36 | 1051-S | 316 Steel | 1091 | 1045 | 1091 | 630 |

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CRO Loop Top Anchors

4.5" Cast Steel Anchors
ANSI Z359.18 Certification
ANSI Z259.15

Specifications

- Min. tensile strength 5,000lb
- ANSI Z359.18 and CSA Z259.15 2nd party certified.
- 100' and 150' cast steel loop tops unless tensile strength of 10,000lb
- Person HLL lengths up to 240'
- SAS compatible HLL components.
- 2nd party engineering by CH2M Hill & Assoc.
- Report available on request.
- Contact SAS sales team for custom rigging and lead times.

Compliance
ANSI Z359.18 Type A1
ANSI Z259.15 Type A1
Witness Witness: ANSIRWCA-14.1
CSA/CAN: CSA-10
CRA/CRO Lab Reports
*Request Internal CRA Lab Reports

Request Lead Pricing

| Riser Height | Part Name | Part No. | Material | Loop Top | Base Plate | Anchor | Riser |
|--------------|-----------|----------|----------|----------|------------|--------|-------|
| 8 | CRO-8 | 1201-PC | HDC | 1091 | 1045 | 1091 | 190 |
| 12 | CRO-12 | 1202-PC | HDC | 1091 | 1045 | 1091 | 270 |
| 18 | CRO-18 | 1203-PC | HDC | 1091 | 1045 | 1091 | 360 |
| 24 | CRO-24 | 1204-PC | HDC | 1091 | 1045 | 1091 | 450 |
| 30 | CRO-30 | 1205-PC | HDC | 1091 | 1045 | 1091 | 540 |
| 36 | CRO-36 | 1206-PC | HDC | 1091 | 1045 | 1091 | 630 |

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CRR Loop Top Field Weld Risers

4.5" Cast Steel Anchors
ANSI Z359.18 Certification
ANSI Z259.15

Specifications

- Min. tensile strength 5,000lb
- ANSI Z359.18 and CSA Z259.15 2nd party certified.
- 100' and 150' cast steel loop tops unless tensile strength of 10,000lb
- Person HLL lengths up to 240'
- SAS compatible HLL components.
- 2nd party engineering by CH2M Hill & Assoc.
- Report available on request.
- Contact SAS sales team for custom rigging and lead times.

Compliance
ANSI Z359.18 Type A1
ANSI Z259.15 Type A1
Witness Witness: ANSIRWCA-14.1
CSA/CAN: CSA-10
CRA/CRO Lab Reports
*Request Internal CRA Lab Reports

Request Lead Pricing

| Riser Height | Part Name | Part No. | Material | Loop Top | Base Plate | Anchor | Riser |
|--------------|-----------|----------|----------|----------|------------|--------|-------|
| 8 | CRR-8 | 1201-PC | HDC | 1091 | 1045 | 1091 | 190 |
| 12 | CRR-12 | 1202-PC | HDC | 1091 | 1045 | 1091 | 270 |
| 18 | CRR-18 | 1203-PC | HDC | 1091 | 1045 | 1091 | 360 |
| 24 | CRR-24 | 1204-PC | HDC | 1091 | 1045 | 1091 | 450 |
| 30 | CRR-30 | 1205-PC | HDC | 1091 | 1045 | 1091 | 540 |
| 36 | CRR-36 | 1206-PC | HDC | 1091 | 1045 | 1091 | 630 |

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CRO-PT Pass-Thru Anchors

4.5" Cast Steel Anchors
ANSI Z359.18 Certification
ANSI Z259.15

Specifications

- Min. tensile strength 5,000lb
- ANSI Z359.18 and CSA Z259.15 2nd party certified.
- 100' and 150' cast steel loop tops unless tensile strength of 10,000lb
- Person HLL lengths up to 240'
- SAS compatible HLL components.
- 2nd party engineering by CH2M Hill & Assoc.
- Report available on request.
- Contact SAS sales team for custom rigging and lead times.

Compliance
ANSI Z359.18 Type A1
ANSI Z259.15 Type A1
Witness Witness: ANSIRWCA-14.1
CSA/CAN: CSA-10
CRA/CRO Lab Reports
*Request Internal CRA Lab Reports

Request Lead Pricing

| Riser Height | Part Name | Part No. | Material | Loop Top | Base Plate | Anchor | Riser |
|--------------|-----------|----------|----------|----------|------------|--------|-------|
| 8 | CRO-PT-8 | 1201-PC | HDC | 1091 | 1045 | 1091 | 190 |
| 12 | CRO-PT-12 | 1202-PC | HDC | 1091 | 1045 | 1091 | 270 |
| 18 | CRO-PT-18 | 1203-PC | HDC | 1091 | 1045 | 1091 | 360 |
| 24 | CRO-PT-24 | 1204-PC | HDC | 1091 | 1045 | 1091 | 450 |
| 30 | CRO-PT-30 | 1205-PC | HDC | 1091 | 1045 | 1091 | 540 |
| 36 | CRO-PT-36 | 1206-PC | HDC | 1091 | 1045 | 1091 | 630 |

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CRR-PT Field Weld Risers

4.5" Cast Steel Anchors
ANSI Z359.18 Certification
ANSI Z259.15

Specifications

- Min. tensile strength 5,000lb
- ANSI Z359.18 and CSA Z259.15 2nd party certified.
- 100' and 150' cast steel loop tops unless tensile strength of 10,000lb
- Person HLL lengths up to 240'
- SAS compatible HLL components.
- 2nd party engineering by CH2M Hill & Assoc.
- Report available on request.
- Contact SAS sales team for custom rigging and lead times.

Compliance
ANSI Z359.18 Type A1
ANSI Z259.15 Type A1
Witness Witness: ANSIRWCA-14.1
CSA/CAN: CSA-10
CRA/CRO Lab Reports
*Request Internal CRA Lab Reports

Request Lead Pricing

| Riser Height | Part Name | Part No. | Material | Loop Top | Base Plate | Anchor | Riser |
|--------------|-----------|----------|----------|----------|------------|--------|-------|
| 8 | CRR-PT-8 | 1201-PC | HDC | 1091 | 1045 | 1091 | 190 |
| 12 | CRR-PT-12 | 1202-PC | HDC | 1091 | 1045 | 1091 | 270 |
| 18 | CRR-PT-18 | 1203-PC | HDC | 1091 | 1045 | 1091 | 360 |
| 24 | CRR-PT-24 | 1204-PC | HDC | 1091 | 1045 | 1091 | 450 |
| 30 | CRR-PT-30 | 1205-PC | HDC | 1091 | 1045 | 1091 | 540 |
| 36 | CRR-PT-36 | 1206-PC | HDC | 1091 | 1045 | 1091 | 630 |

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