

S1100 TOP LOADING ARM - SHORT RANGE

Top Loading Arms are articulated, self-supported pipelines used to transfer fluids from stocking depots to road or railway tankers through the manhole on the top of the tank. Short range type is used where the cars can be accurately spotted.



Components description (standard version)

- Right-hand layout, bottom inlet, ANSI 150 inlet flange
- Double swivel style F-50 in 42CrMo4 carbon steel + FKM seals
- Compression spring balancing unit
- Loading valve in aluminum alloy, stay-open type
- Loading valve remote control lever
- Main pipe in aluminum alloy
- Drop pipe swivel style F-40 in aluminum alloy + FKM seals
- Drop pipe in aluminum alloy
- Drip bucket in aluminum alloy



Standards and Regulations

- 94/9/EC Directive (ATEX)
- 2006/42/EC Directive (Machinery)
- 97/23/EC Directive (PED)
- API - ASTM - ANSI – TTMA standards

Technical specifications

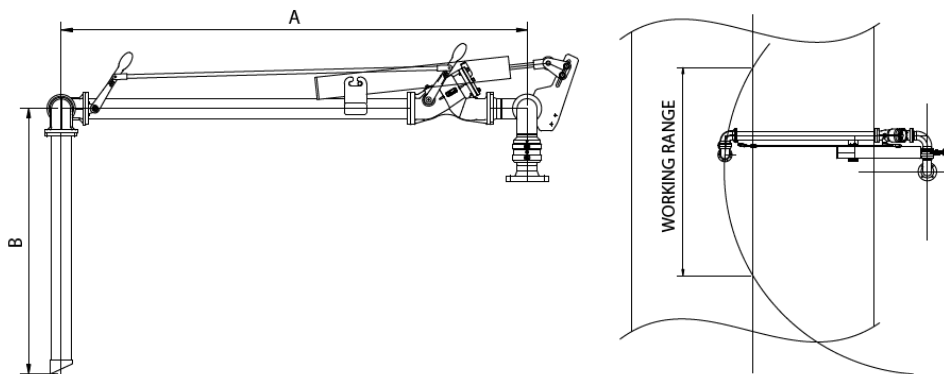
- Design temperature:
-15 / +65°C
- Design pressure: 10 bar
- Test pressure: 15 bar
- Max flow rate (*):
 - 2" 830 l/min
 - 3" 1900 l/min
 - 4" 2400 l/min
 - 6" 3500 l/min



S1100 TOP LOADING ARM - SHORT RANGE

Options

- Different pipes length
- Diameters: from 2" to 6"
- Other materials: CS (42CrMo4) - KCS - SS
- Other seals: HNBR - FFKM - PTFE
- Base flange: PN16 or other standards
- Layout: Left-hand
- Inlet: Top vertical
- Hold-open loading valve
- Telescopic main pipe
- Telescopic drop pipe
- Drop tube with "T" or flow deflector
- Split type swivels
- Special configurations for extended temperature
(-60/+200 °C)
- Fluid heating systems
- Custom color coding



Accessories

- Check valve
- Vacuum breaker valve
- Sight glass
- Loading valve switch
- Vertical position switch
- Parking position switch
- Mechanical lock in working position
- Mechanical lock in parking position
- Overfill sensor with handle
- Pump start/stop button
- Up-down pneumatic actuation
- Valve pneumatic actuation
- Standpost
- "High-flow" drop pipe as per CLC/
TR 50404 Standard (prevention of electrostatic discharge)

Standard documentation

- Declaration of conformity to applicable directives
- Final Test report
- Owner manual including BOM and spare part lists

Documentation on request

a) Welding book (WB) including:

- Welding Map (WM)
- Welding qualifications (PQR)
- Welding Procedures (WPS)
- Welder Qualification (WQ)
- Dye penetrant test on socket welds
- X-ray on butt welds

b) Material Identification Map (MIM) including:

- 3.1 EN 10204 Certifications for steel
- 2.2 EN 10204 Certifications for aluminum and rubber materials

c) Complete Quality Control Plan (QCP) including:

- Welding book (WB)
- Material Identification Map (MIM)
- Manufacturing Plan



S1200 TOP LOADING ARM - VARIABLE RANGE

Top Loading Arms are articulated, self-supported pipelines used to transfer fluids from stocking depots to road or railway tankers through the manhole on the top of the tank. Variable range type allows a higher loading coverage.



Standards and regulations

- 94/9/EC Directive (ATE X)
- 2006/42/EC Directive (Machinery)
- 97/23/EC Directive (PED)
- API - ASTM - ANSI - TTMA Standards

Technical specifications

- Design temperature:
-15 / +65°C
- Design pressure: 10 bar
- Test pressure: 15 bar
- Max flow rate (*):
 - 2" 830 l/min
 - 3" 1900 l/min
 - 4" 2400 l/min
 - 6" 3500 l/min

Components description (standard version)

- Right-hand layout, bottom inlet, ANSI 150 inlet flange
- Double swivel style F-50 in 42CrMo4 carbon steel + FKM seals
- Compression spring balancing unit
- Loading valve in aluminum alloy, stay-open type
- Loading valve remote control lever
- Main pipe in aluminum alloy
- Intermediate swivel style F-40 in aluminum alloy+ FKM
- Intermediate pipe in aluminum alloy
- Drop pipe swivel style F-40 in aluminum alloy + FKM seals
- Drop pipe in aluminum alloy
- Drip bucket in aluminum alloy



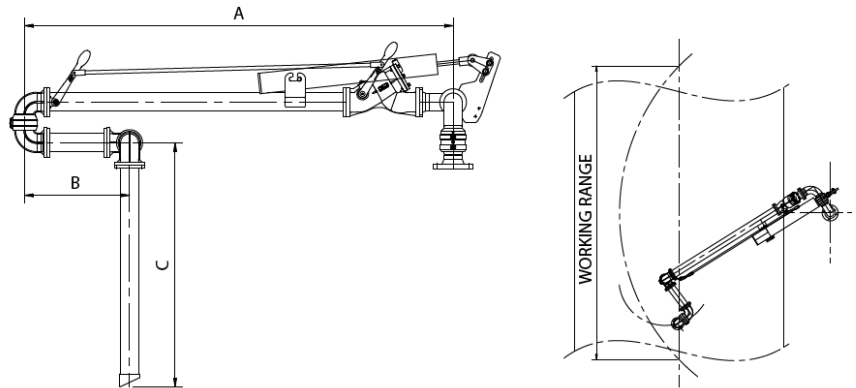
S1200 TOP LOADING ARM - VARIABLE RANGE

Options

- Different pipes length
- Diameters: from 2" to 6"
- Other materials: CS (42CrMo4) - KCS - SS
- Other seals: HNBR - FFKM - PTFE
- Base flange: PN16 or other standards
- Layout: Left-hand
- Inlet: Top vertical
- Hold-open loading valve
- Telescopic main pipe
- Telescopic drop pipe
- Drop tube with "T" or flow deflector
- Split type swivels
- Special configurations for extended temperature (-60/+200 °C)
- Fluid heating systems
- Custom color coding

Accessories

- Check valve
- Vacuum breaker valve
- Sight glass
- Loading valve switch
- Vertical position switch
- Parking position switch
- Mechanical lock in working position
- Mechanical lock in parking position
- Overfill sensor with handle
- Pump start/stop button
- Up-down pneumatic actuation
- Valve pneumatic actuation
- Standpost



Standard documentation

- Declaration of conformity to applicable directives
- Final Test report
- Owner manual including BOM and spare part lists

Documentation on request

- Welding book (WB) including:
 - Welding Map (WM)
 - Welding qualifications (PQR)
 - Welding Procedures (WPS)
 - Welder Qualification (WQ)
 - Dye penetrant test on socket welds
 - X-ray on butt welds
- Material Identification Map (MIM) including:
 - 3.1 EN 10204 Certifications for steel
 - 2.2 EN 10204 Certifications for aluminum and rubber materials
- Complete Quality Control Plan (QCP) including:
 - Welding book (WB)
 - Material Identification Map (MIM)
 - Manufacturing Plan



S1300 TOP LOADING ARM - LONG RANGE

Top Loading Arms are articulated, self-supported pipelines used to transfer fluids from stocking depots to road or railway tankers through the manhole on the top of the tank. Long range type allows the maximum loading coverage.



Standards and regulations

- 94/9/EC Directive (ATE X)
- 2006/42/EC Directive (Machinery)
- 97/23/EC Directive (PED)
- API - ASTM - ANSI – TTMA standards

Technical specifications

- Design temperature:
-15 / +65°C
- Design pressure: 10 bar
- Test pressure: 15 bar
- Max flow rate (*):
 - 2" 830 l/min
 - 3" 1900 l/min
 - 4" 2400 l/min
 - 6" 3500 l/min

Components description (standard version)

- Right-hand layout, bottom inlet, ANSI 150 inlet flange
- Swivel style F-20 in 42CrMo4 carbon steel + FKM seals
- Boom pipe in carbon steel
- Double swivel style F-50 in 42CrMo4 carbon steel + FKM seals
- Compression spring balancing unit
- Loading valve in aluminum alloy, stay-open type
- Loading valve remote control lever
- Main pipe in aluminum alloy
- Drop pipe swivel style F-40 in aluminum alloy + FKM seals
- Drop pipe in aluminum alloy
- Drip bucket in aluminum alloy



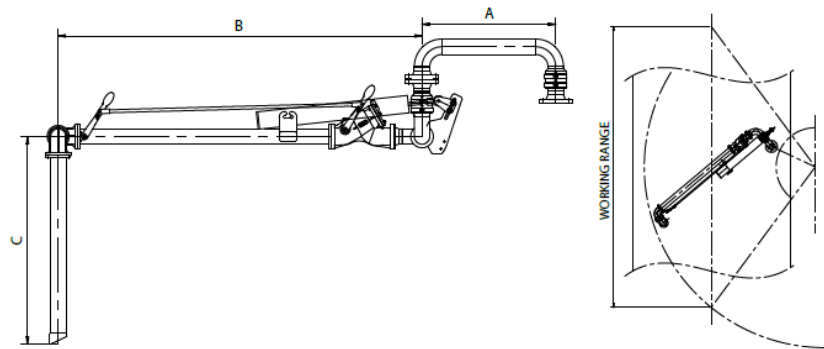
S1300 TOP LOADING ARM - LONG RANGE

Options

- Different pipes length
- Diameters: from 2" to 6"
- Other materials: CS (42CrMo4) - KCS - SS
- Other seals: HNBR - FFKM - PTFE
- Base flange: PN16 or other standards
- Layout: Left-hand
- Inlet: Top vertical
- Hold-open loading valve
- Telescopic main pipe
- Telescopic drop pipe
- Drop tube with "T" or flow deflector
- Split type swivels
- Special configurations for extended temperature (-60/+200 °C)
- Fluid heating systems
- Custom color coding

Accessories

- Check valve
- Vacuum breaker valve
- Sight glass
- Loading valve switch
- Vertical position switch
- Parking position switch
- Mechanical lock in working position
- Mechanical lock in parking position
- Overfill sensor with handle
- Pump start/stop button
- Up-down pneumatic actuation
- Valve pneumatic actuation
- Standpost
- "High-flow" drop pipe as per CLC/TR 50404 Standard (prevention of electrostatic discharge)



Standard documentation

- Declaration of conformity to applicable directives
- Final Test report
- Owner manual including BOM and spare part lists

Documentation on request

a) Welding book (WB) including:

- Welding Map (WM)
- Welding qualifications (PQR)
- Welding Procedures (WPS)
- Welder Qualification (WQ)
- Dye penetrant test on socket welds
- X-ray on butt welds

b) Material Identification Map (MIM) including:

- 3.1 EN 10204 Certifications for steel
- 2.2 EN 10204 Certifications for aluminum and rubber materials

c) Complete Quality Control Plan (QCP) including:

- Welding book (WB)
- Material Identification Map (MIM)
- Manufacturing Plan



S1300V TOP LOADING ARM - LONG RANGE VAPOR RECOVERY

Top Loading Arms are articulated, self-supported pipelines used to transfer fluids from stocking depots to road or railway tankers through the manhole on the top of the tank. Long range type allows the maximum loading coverage, while vapor recovery system enables vapor return via a dedicated line to the platform.



Components description (standard version)

- Right-hand layout, bottom inlet, ANSI 150 inlet flange
- Swivel style F-20 in 42CrMo4 carbon steel + FKM seals
- Boom pipe in carbon steel
- Pillow block to reduce the twisting moment on the inlet flange
- Double swivel style F-50 in 42CrMo4 carbon steel + FKM seals
- Compression spring balancing unit
- Loading valve in aluminum alloy, stay-open type
- Loading valve remote control lever
- Main pipe in aluminum alloy
- Drop pipe swivel style F-40 in aluminum alloy + FKM seals
- Drop pipe in aluminum alloy with sealing cone coated with Hypalon rubber
- Overfill vibrating level sensor with rigid protection
- Drip bucket in aluminum alloy



Standards and regulations

- 94/9/EC Directive (ATEX)
- 2006/42/EC Directive (Machinery)
- 97/23/EC Directive (PED)
- API - ASTM - ANSI - TTMA standards

Technical specifications

- Design temperature:
-15 / +65°C
- Design pressure: 10 bar
- Test pressure: 15 bar
- Max flow rate (*):
 - 2" 830 l/min
 - 3" 1900 l/min
 - 4" 2400 l/min
 - 6" 3500 l/min

(*) As per CLC/TR 50404 recommendation



S1300V TOP LOADING ARM - LONG RANGE VAPOR RECOVERY

Options

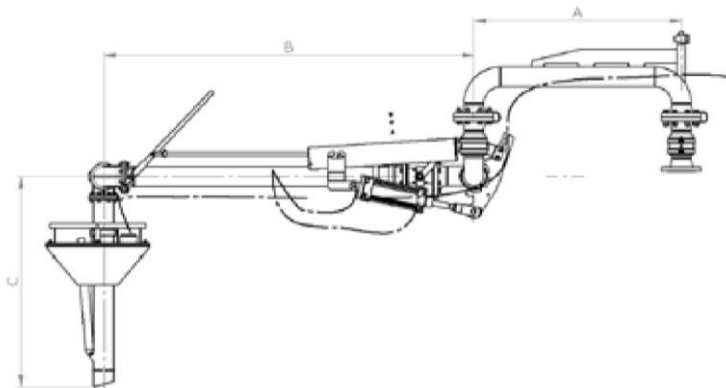
- Different pipes length
- Diameters: from 2" to 6"
- Other materials: CS (42CrMo4) - KCS - SS
- Other seals: HNBR - FFKM - PTFE
- Base flange: PN16 or other standards
- Layout: Left-hand
- Inlet: Top vertical
- Hold-open loading valve
- Telescopic main pipe
- Telescopic drop pipe
- Drop tube with "T" or flow deflector
- Split type swivels
- Special configurations for extended temperature (-60/+200 °C)
- Fluid heating systems
- Custom color coding

Dimensions in mm

A = 1000 - 2500 mm (std 1200)
B = 1000 - 3000 mm (std 2100)
C = 1000 - 2500 mm (std 1200)

Accessories

- Check valve
- Vacuum breaker valve
- Sight glass
- Loading valve switch
- Vertical position switch
- Parking position switch
- Mechanical lock in working position
- Mechanical lock in parking position
- Overfill sensor with handle
- Pump start/stop button
- Up-down pneumatic actuation
- Valve pneumatic actuation
- Standpost
- "High-flow" drop pipe as per CLC/TR 50404 Standard (prevention of electrostatic discharge)



Standard documentation

- Declaration of conformity to applicable directives
- Final Test report
- Owner manual including BOM and spare part list



Documentation on request

a) Welding book (WB) including:

- Welding Map (WM)
- Welding qualifications (PQR)
- Welding Procedures (WPS)
- Welder Qualification (WQ)
- Dye penetrant test on socket welds
- X-ray on butt welds

b) Material Identification Map (MIM) including:

- 3.1 EN 10204 Certifications for steel
- 2.2 EN 10204 Certifications for aluminum and rubber materials

c) Complete Quality Control Plan (QCP) including:

- Welding book (WB)
- Material Identification Map (MIM)
- Manufacturing Plan