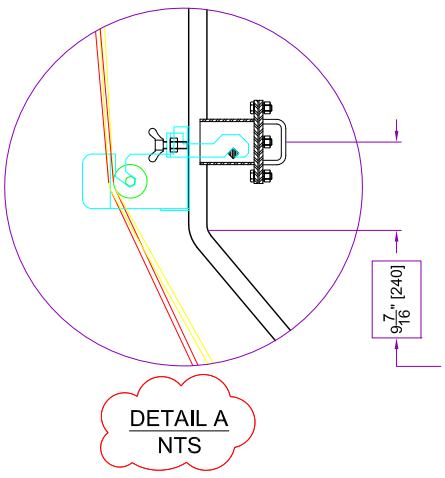
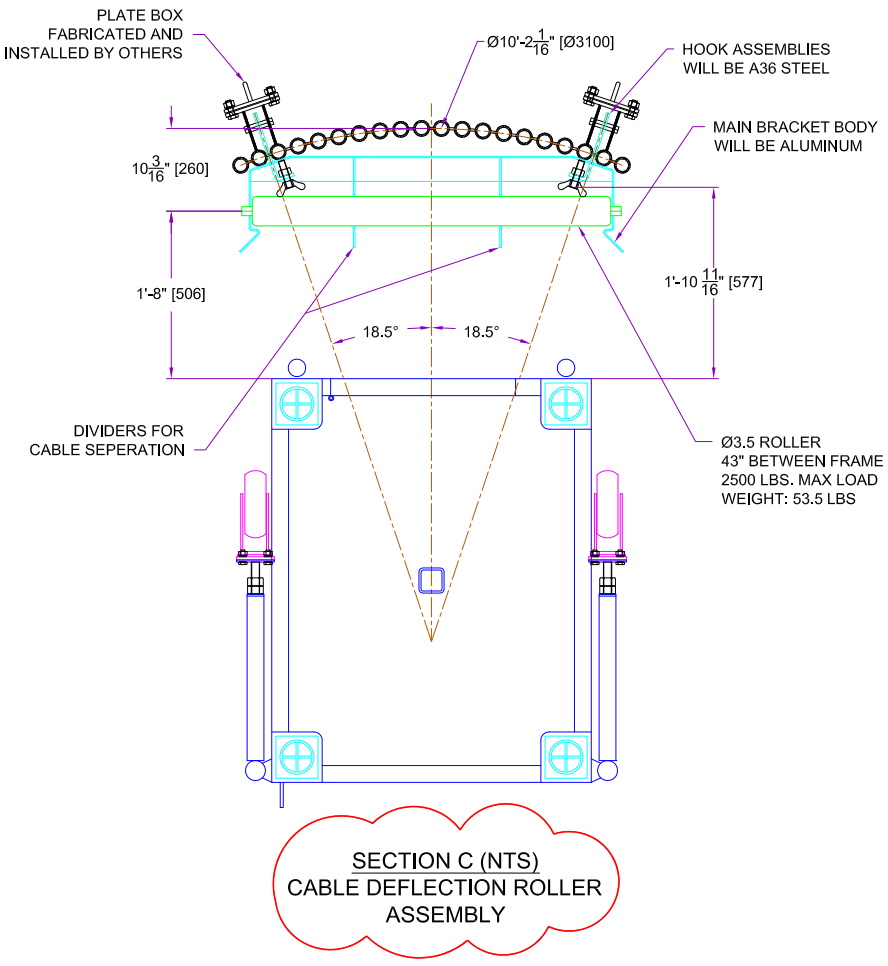


DETAIL A
NTS

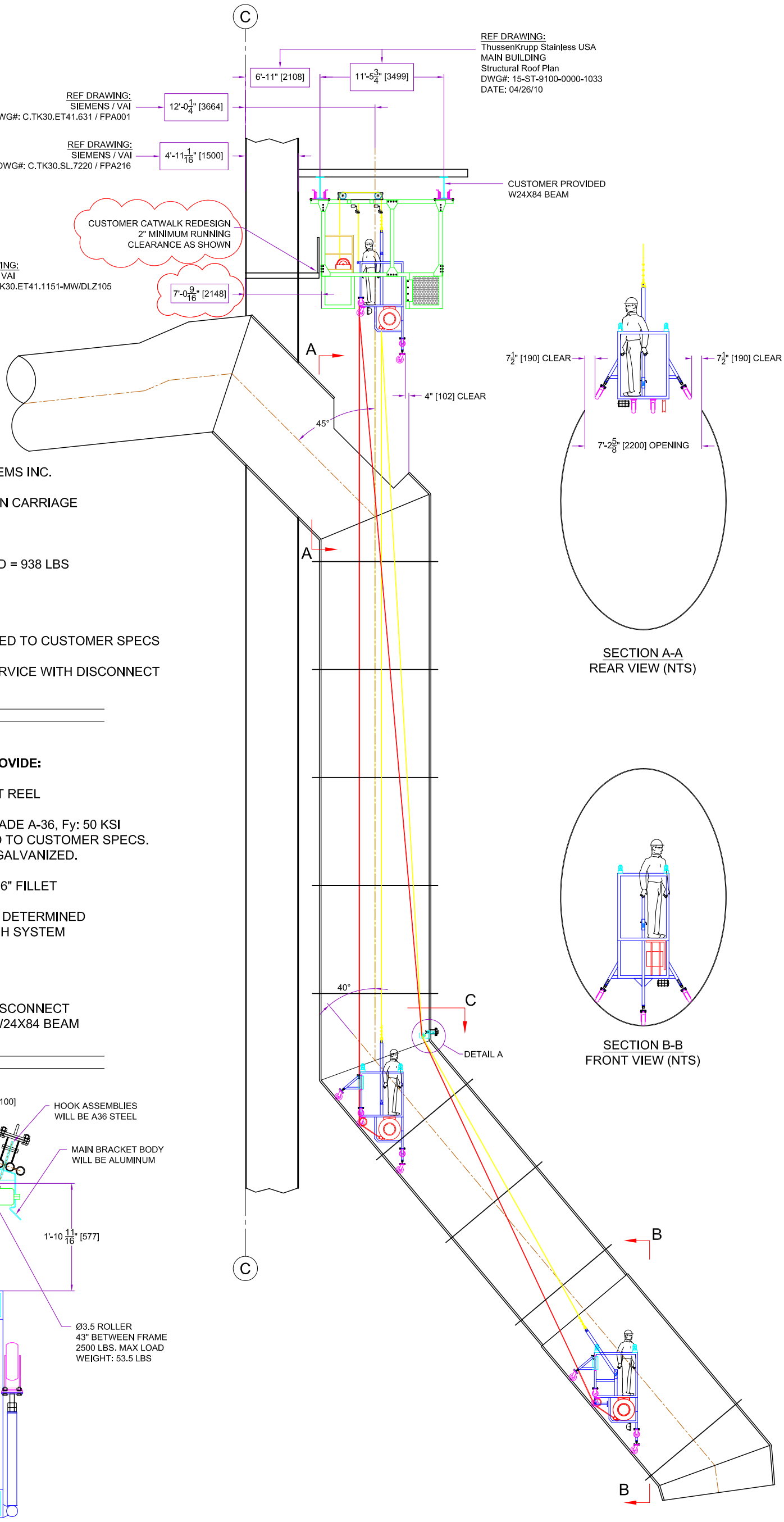
PROJECT SPECIFICATIONS
CUSTOMER: JBS CRANES
CUSTOMER JOB/P.O. 8881
LOCATION: ALABAMA
MANUFACTURER: TOWER ELEVATOR SYSTEMS INC.
TESI JOB#: 10-1105
TYPE: TROLLEY PLATFORM AND INSPECTION CARRIAGE
ENVIRONMENT: INDOOR
MODEL: CUSTOM INSPECTION RIG
MAN CAGE RATED LOAD: 750 LBS.
TEST WEIGHTS: 125% OF CAGE RATED LOAD = 938 LBS
UTILITY WINCH RATED LOAD: 1500 LBS.
PLATFORM SIZE: 8'-6"W X 10'-11"L X 10'-0"H
CAGE SIZES: 4'-0" X 3'-2" (OPEN TOP)
CORROSION PROTECTION:
ALL STRUCTURAL COMPONENTS - PAINTED TO CUSTOMER SPECS
ELECTRICAL AREA: NOT CLASSIFIED
ELECTRIC SERVICE: 480 VAC 3P, 60 AMP SERVICE WITH DISCONNECT (by others)

GENERAL NOTES:
1.) TOWER ELEVATOR SYSTEMS INC. TO PROVIDE:
a) (2) UNDERHUNG END TRUCKS
b) (2) WINCHES, (2) POWER UNITS, SMART REEL PERSONNEL CAGE
c) ALL TESI STRUCTURAL MATERIALS GRADE A-36, Fy: 50 KSI UNLESS OTHERWISE NOTED. PAINTED TO CUSTOMER SPECS.
d) BOLTING & ASSY/GRADE A325/FINISH-GALVANIZED. UNLESS OTHERWISE NOTED.
e) ALL TESI STRUCTURAL WELDS ARE 3/16" FILLET UNLESS OTHERWISE NOTED.
f) FINAL ELECTRICAL ROUTING SHALL BE DETERMINED AT INSTALL TO ACCOMMODATE THE OH SYSTEM

2.) OTHERS TO PROVIDE:
a) LOAD BEARING W- BEAMS
b) ELECTRICAL SERVICES AT L-1
480-VAC 3 PHASE @ 60 AMP w/DISCONNECT
c) FABRICATION AND INSTALLATION OF W24X84 BEAM RAIL SYSTEM



SECTION C (NTS)
CABLE DEFLECTION ROLLER ASSEMBLY



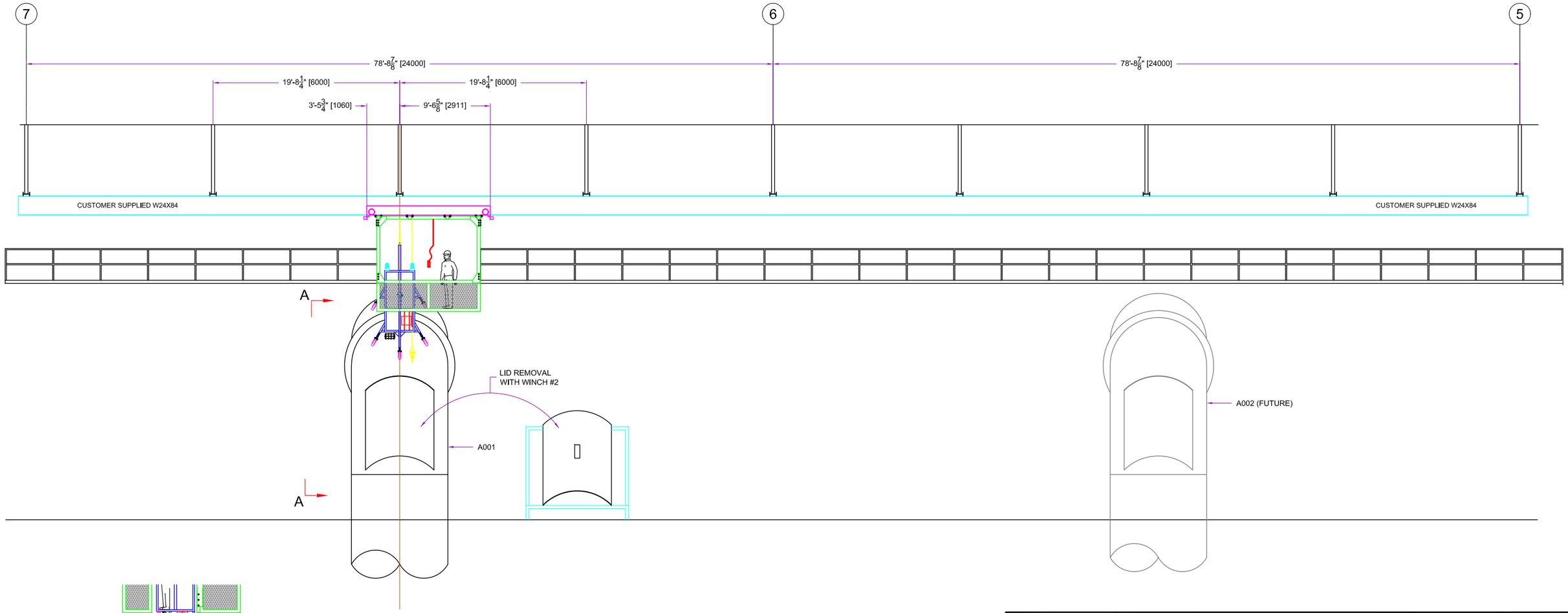
SECTION A-A
REAR VIEW (NTS)

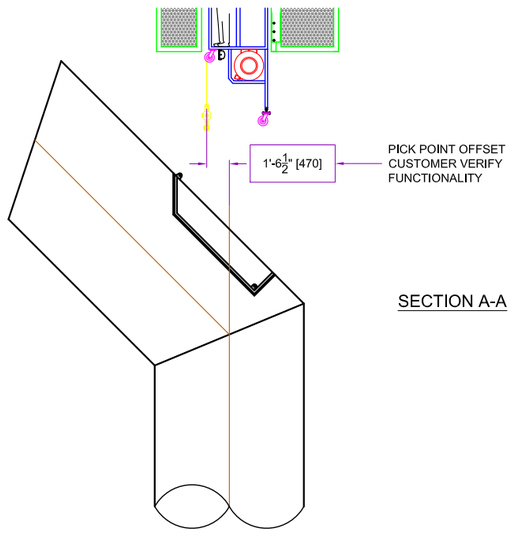
SECTION B-B
FRONT VIEW (NTS)

Change by	Date of Change	Reason of change	Approved by	Date of Approval

ThyssenKrupp Stainless USA LLC

Scale: NONE	Subtitle		
Paper Size: A1	Short description: COOLING STACK INSPECTION DEVICE SIDE ELEVATION		
Design level: PRELIMINARY			
Date of issue: 08/26/2011	Substitute for		
Document identification no.: 15-6000-0115-0001	Document Revission: C	Page: 1	of Page: 4
Manufacturer: TESI	Manufacturer document no.: PRELIMINARY-082611-R3	Contract Number: 8881	





SECTION A-A

Change by	Date of Change	Reason of change	Approved by	Date of Approval

ThyssenKrupp Stainless USA LLC

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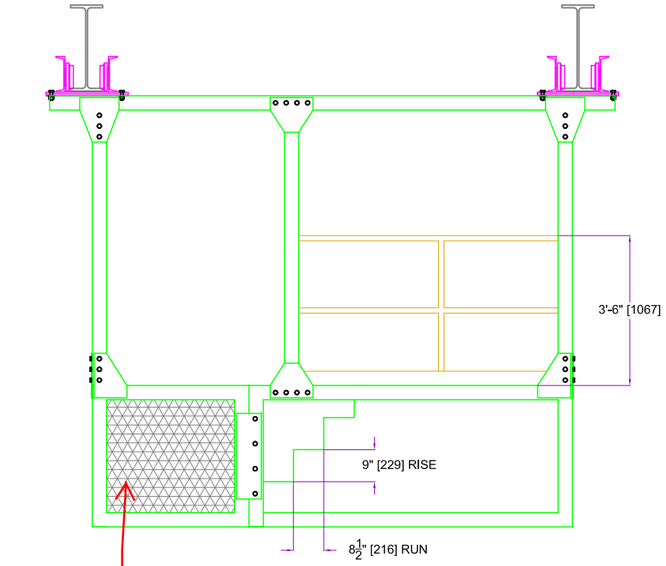
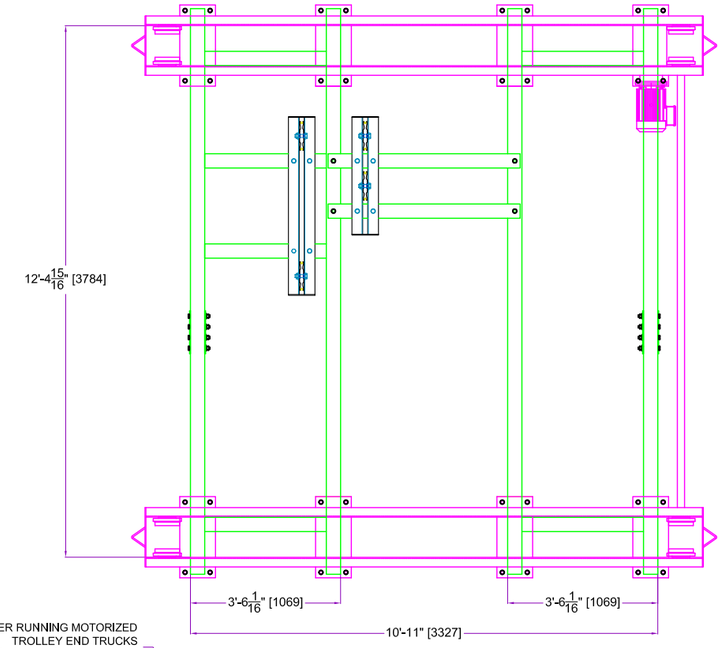
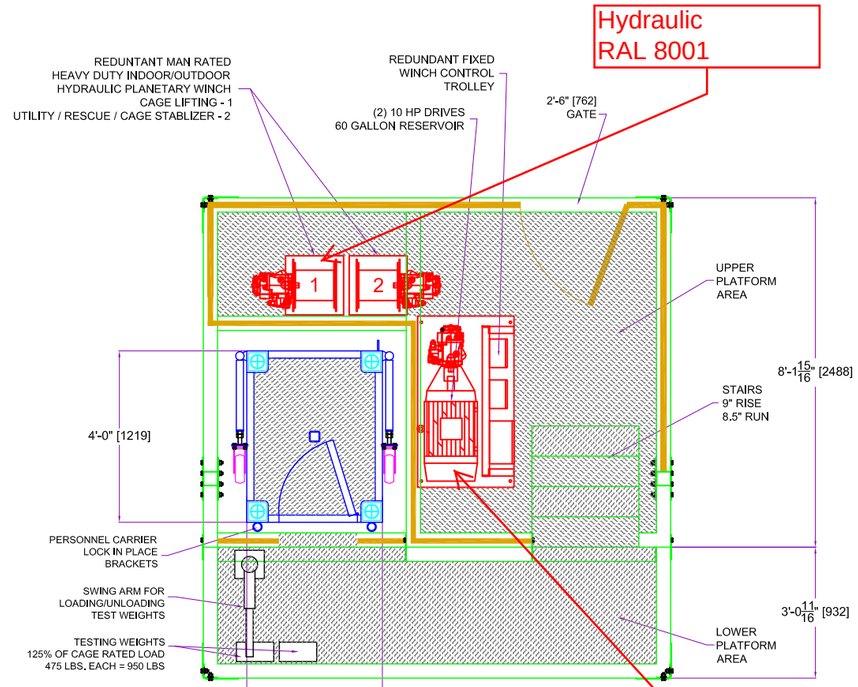
Design level: PRELIMINARY			
Date of issue: 08/26/2011	Substitute for		
Document identification no.: 15-6000-0115-0002	Document Revission: C	Page: 2	of Page: 4
Manufacturer: TESI	Manufacturer document no.: PRELIMINARY-082611-R3	Contract Number: 8881	



RAL 9005

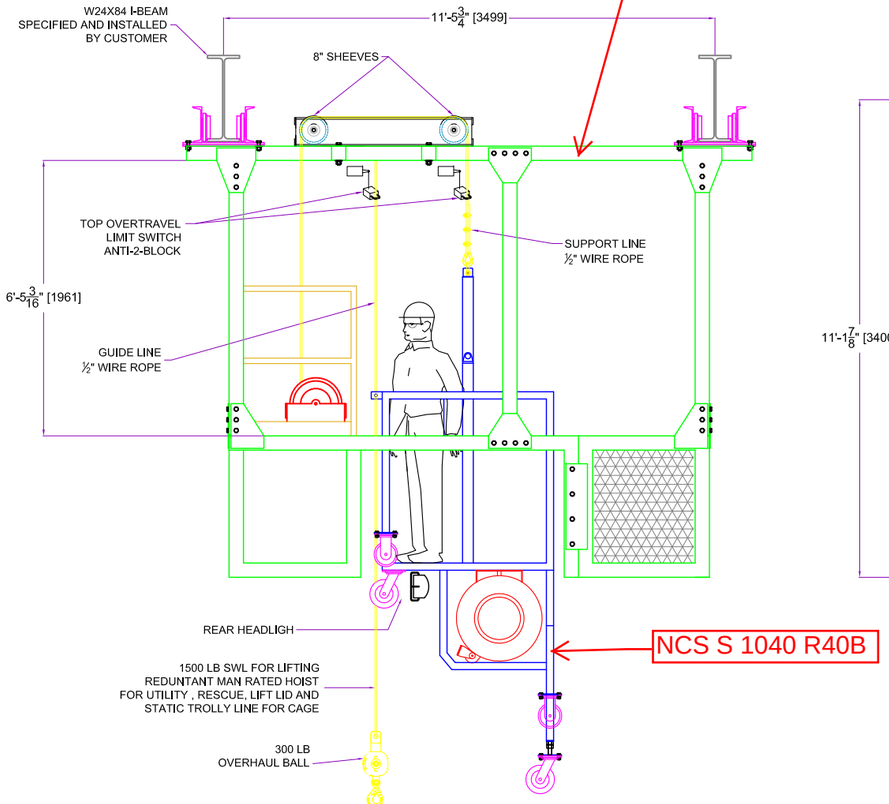
VIEW B-B





SECTION A-A

NCS 0550 Y30R



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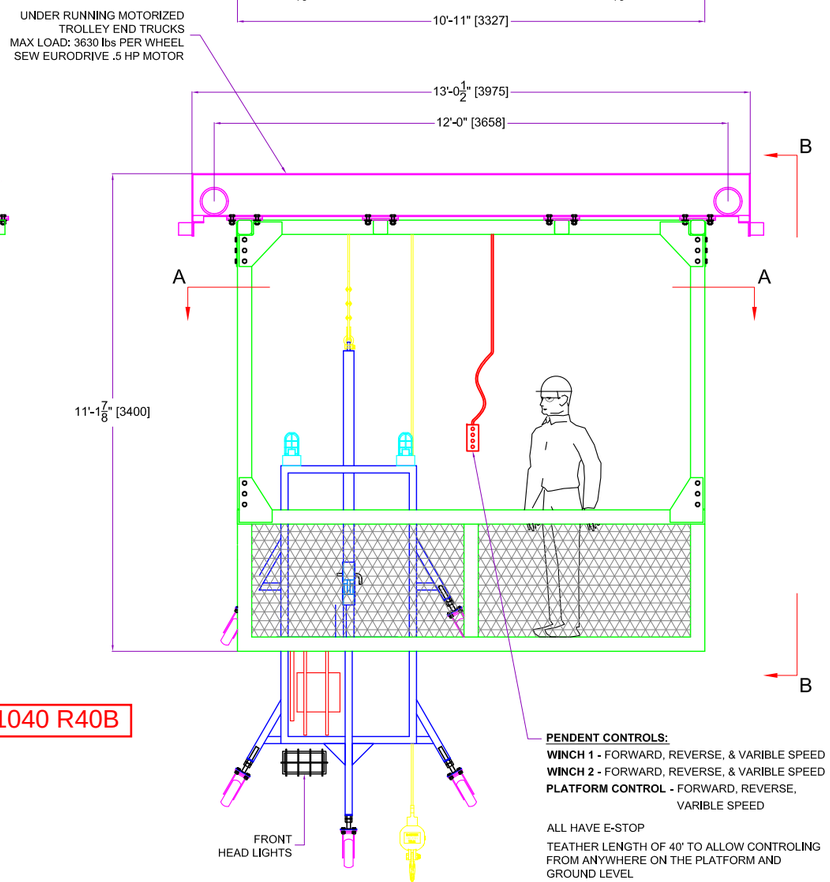

PENDENT CONTROLS:
WINCH 1 - FORWARD, REVERSE, & VARIBLE SPEED
WINCH 2 - FORWARD, REVERSE, & VARIBLE SPEED
PLATFORM CONTROL - FORWARD, REVERSE, VARIBLE SPEED

ALL HAVE E-STOP

TEATHER LENGTH OF 40' TO ALLOW CONTROLING FROM ANYWHERE ON THE PLATFORM AND GROUND LEVEL

Electrical Panels: RAL 7035

Handrails: RAL 1023

Change by	Date of Change	Reason of change	Approved by	Date of Approval

ThyssenKrupp Stainless USA LLC

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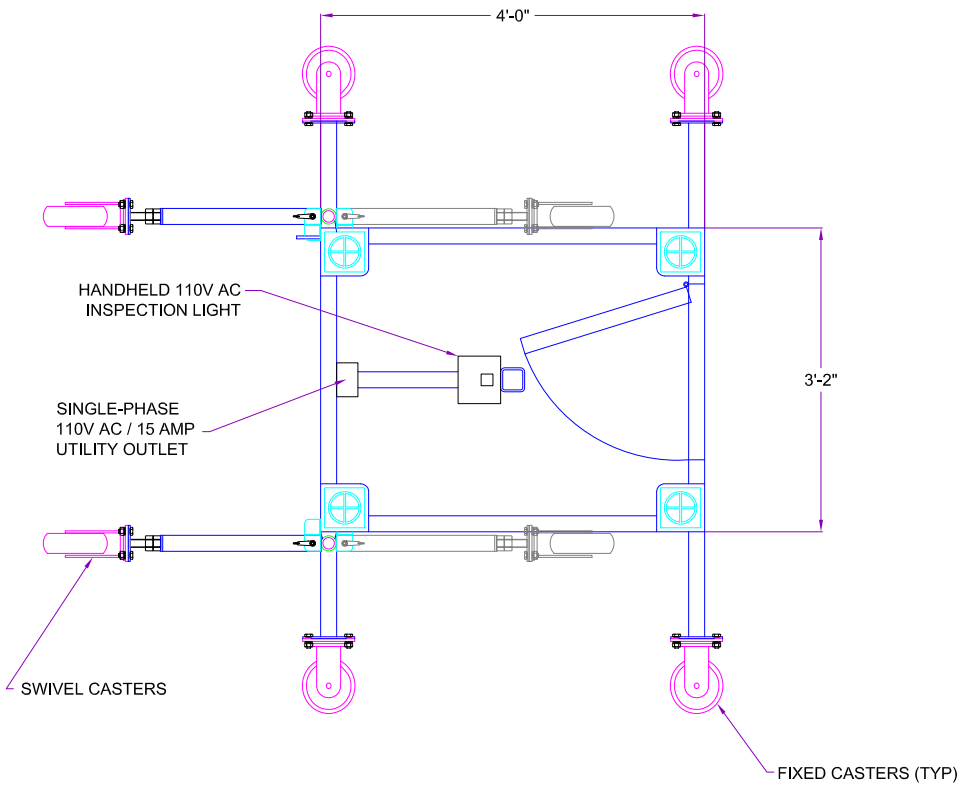
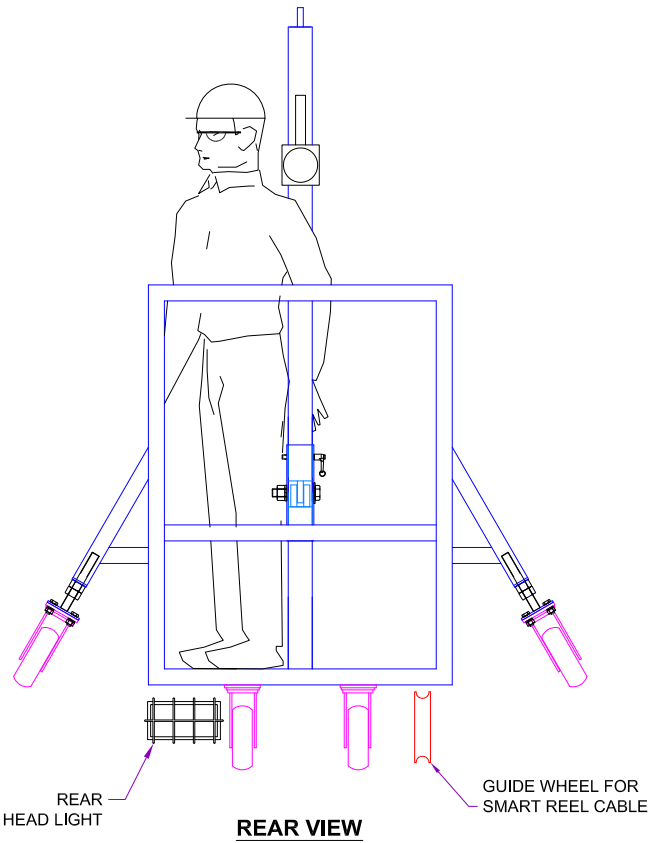
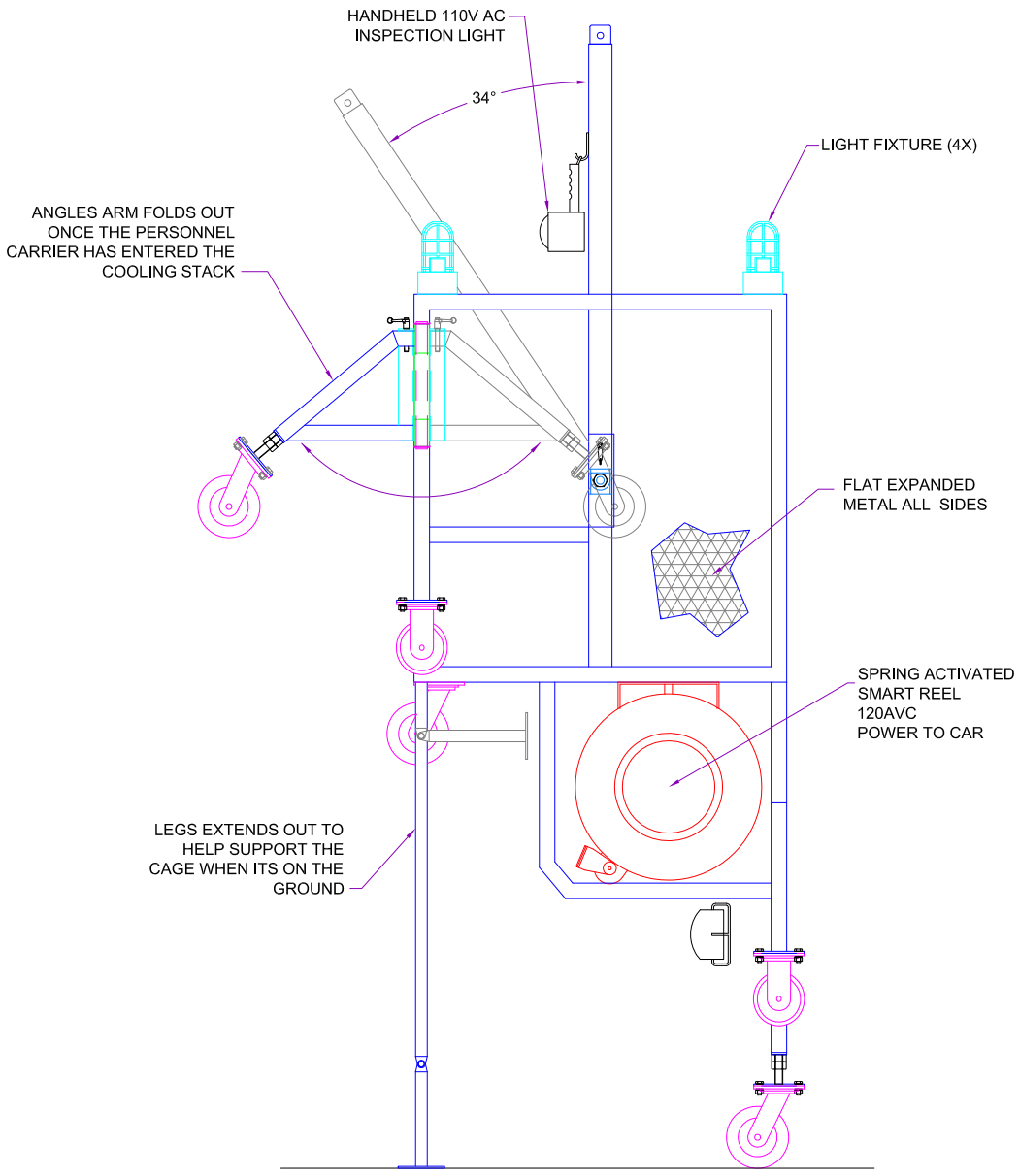
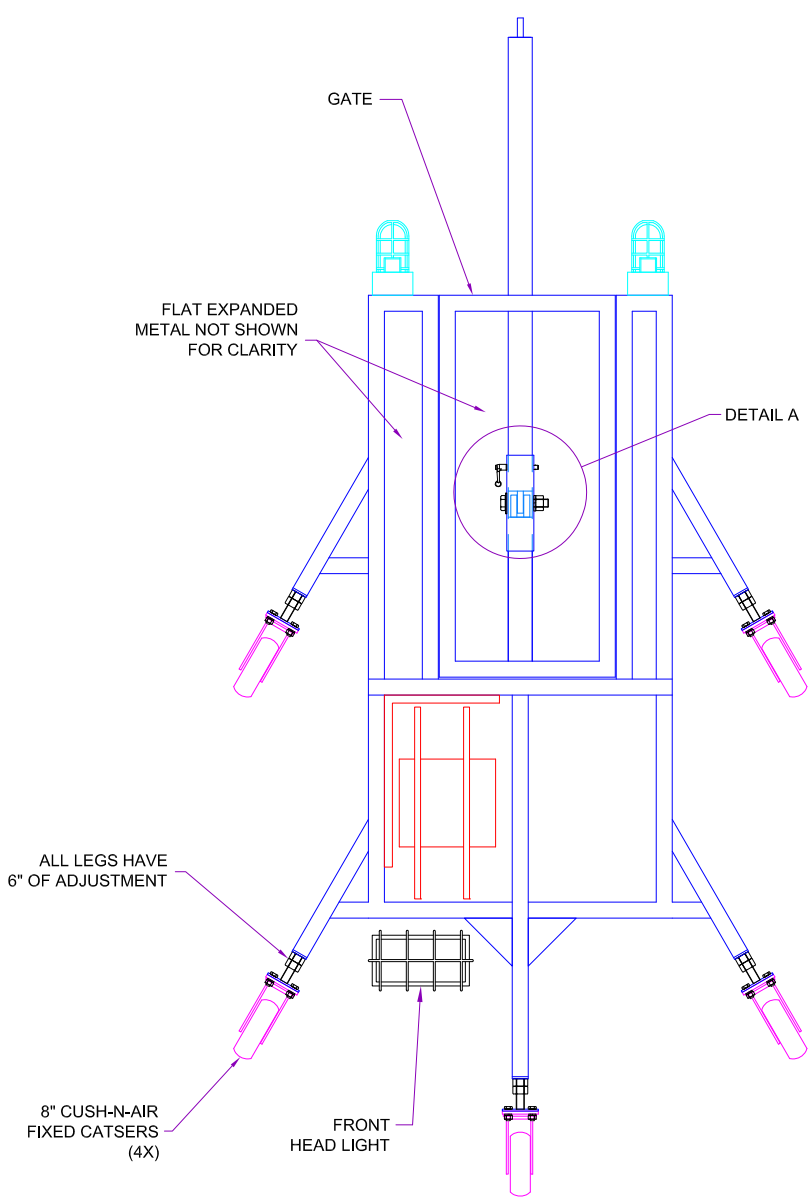
Document identification no.: 15-6000-0115-0001		Document Revission: C	Page: 3	of Page: 4
Manufacturer: TESI	Manufacturer document no.: PRELIMINARY-082611-R3		Contract Number: 8881	



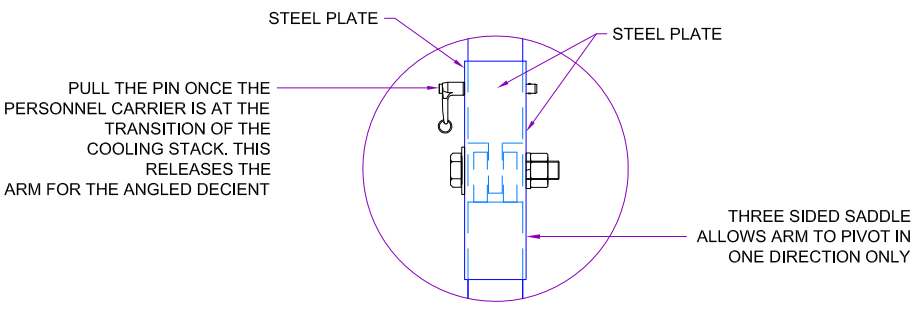


REAR VIEW





FRONT VIEW



DETAIL A

ARTICULATED CAGE LIFTING POINT:

THE INSPECTION CAGE IS LIFTED VIA A PINNED AND HINGED VERTICAL BAR, THAT ALLOWS FOR MAXIMUM STABILITY WHILE THE CAGE IS BEING LOWERED DOWN THE VERTICAL SECTION OF THE CHIMNEY AND A LOWER CENTER OF ATTACHMENT WHILE IN THE INCLINED CHIMNEY SECTION.

THIS ALLOWS THE CAGE PICKING POINT AND CENTER OF GRAVITY TO BE EFFECTIVELY TRANSFERRED ABOVE THE RIDERS HEAD FOR STABILITY WHILE THE CAGE IS HANGING VERTICALLY IN THE CHIMNEY. AND PROVIDES FOR A LOWER ATTACHMENT ONCE TRANSITIONED TO THE INCLINED PORTION OF THE CHIMNEY, WHERE THE CAGE IS ROLLING ON THE WHEELS AND THE WINCH CABLE WILL BE PULLING UP AND BACK ON THE CAGE.

IF THE CAGE WERE PULLED FROM THE ELEVATED PICK POINT IN THE INCLINED SECTION THERE WOULD BE A TENDENCY FOR TIPPING OVER BACKWARD. TO ADDRESS THIS CONDITION WE HAVE DEVISED THE ARTICULATED LIFTING SYSTEM THAT USES A HINGE WITH A 3 SIDED "SADDLE" AND PIN TO ALLOW FOR BOTH A RIGID AND ARTICULATED LIFTING BAR.

IN THE VERTICAL LIFT THE HINGE IS PINNED AS A FIXED BAR. TO TRANSITION THE SYSTEM, THE OPERATOR WILL PULL THE PIN JUST BEFORE LANDING THE CAR ON THE INCLINE, WHICH WILL MAKE THE CAGE READY FOR INCLINED DESCENT. THIS WILL EFFECTIVELY LOWER THE CAGE ATTACHMENT POINT AND REDUCE THE TENDENCY FOR OVER-TURNING THE CAGE ON THE INCLINE OF THE CHIMNEY. THE PROCEDURE WILL BE REVERSED ON THE WAY BACK UP.

Change by	Date of Change	Reason of change	Approved by	Date of Approval

ThyssenKrupp Stainless USA LLC

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Manufacturer: TESI	Manufacturer document no.: PRELIMINARY-08/26/11-R3		Contract Number: 8881	