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### Coronet Scaffold Group Suzhou Co., Ltd. TEST CER SIFC SIP, Suzhou City Jiangsu Province, China Date:

**TEST CERTIFICATE — EAR-CONTROLLED DATA** 

Date: P.O. No.: W/O No.:

01/15/2013 EHO0006255Q/0 COR006-12-12-09676-1

 Sample Information:
 3 Tier Cup-Lock System

 Part No.:
 3 Meter Vertical CV910, 5' Horizontal CH5, 7' Horizontal CH7

### LOAD TEST RESULTS 3 TIER CUP-LOCK SYSTEM TOWER

### Load Method: ANSI/SSFI SC100-5/05

Set #	Max Load (lbs)	Load (Ibs) per Leg	Load (lbs) per Leg at 4:1 Safety Factor	Deviation from Average (%)
1	127,230	31,810	7,950	< 1%
2	127,960	31,990	8,000	< 1%
Average:	127,585	31,900	7,975	



Representative view of system setup



Typical deflection of leg at failure

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Respectfully Submitted

Terry Wilt Department Manager, Metals & Product Testing



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# TENSILE TEST RESULTS

### **Cup-Lock CV910 Verticals**

Specifications: N/A Test Method: ASTM A370

Direction: Longitudinal / Full Section

Specimen Identification	Dimensions OD x Wall Thk. (in.)	Total Load (Ibs)	Yield Strength (psi)	Ultimate Tensile Strength (psi)	
1	1.928 x 0.130	58,900	68,000	80,200	
2	1.924 x 0.130	60,000	70,000	81,900	
3	1.922 x 0.130 🕖	57,900	71,000	79,200	
4	1.928 x 0.130	50,300	57,000	68,500	
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# **AXIAL LOAD TEST RESULTS**

# Using CV910 Verticals with CH5 and CH7 Horizontals

A ledger was connected to the cup assmebly, and the ledger was pulled at a 90 degree angle away from the vertical leg to create an axial loading test on the ledger blade and cup-lock connection.

Specimen Identification	Dimensions OD x Wall Thk. (in.)	Total Load (Ibs)	Failure
1	1.925 x 0.130	17,920	Cup-Weld
2	1.925 x 0.130	17,320	Cup-Weld
3	1.925 x 0.130	19,910	Blade/Cup-Weld
4	1.925 x 0.130	21,500	Cup-Weld



Cup-Weld Failure



Blade-Weld Failure

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### CUP-LOCK SYSTEM CV 910 Verticals

Two separate verticals were tested

# CHEMICAL ANALYSIS RESULTS

2	Specification: Q345A						
Element		Result %	Min. %	Max. %			
*C	ľ	0.16	0.02	0.20			
Mn 🔪	-	1.34	1.00	1.60			
Р	=	0.015	-	0.045			
*S		0.005	-	0.045			
Si	=	0.31	-	0.55			
Cr	=	0.10	-	NS			
Ni	<	0.01	-	NS			
Fe	=	Balance	Balance	Balance			

Element		Result %	Min. %	Max. %	
*C	=	0.16	0.02	0.20	
Mn	=	1.32	1.00 🥥	1.60	
Р	=	0.015	-	0.045	
*S	=	0.004	-	0.045	
Si	=	0.30	-	0.55	
Cr	=	0.10	-	NS •	
Ni	<	0.01	-	NS 🍼	
Fe	=	Balance	Balance	Balance	

Chemical Analysis Performed by Optical Emission per SOP 30.01 • \*Carbon and Sulfur were determined by Infrared Combustion per ASTM Method E1019

The samples tested conform to the specification requirements.

Respectfully Submitted

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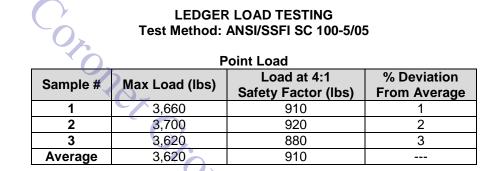
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Date: P.O. No.: W/O No.: 01/15/2013 EHO0006255Q/0 COR006-12-12-09676-2

# Sample Information:Cuplock Horizontal 5'Part No.:CH5





Point Load Test Setup



Typical Deflection at Maximum Load

**Respectfully Submitted** 

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# Sample Information:Cuplock Horizontal 5'Part No.:CH5

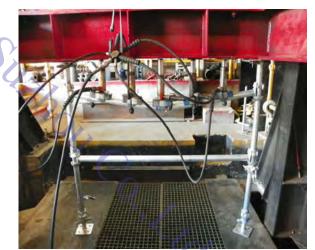
### LEDGER LOAD TESTING Test Method: ANSI/SSFI SC 100-5/05

Uniform Distributed Load

Sample #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average
1	6,230	1,560	2
2	6,130	1,530	0
3	6,030	1,510	2
Average	6,130	1,530	



**Distributed Load Test Setup** 



Typical Deflection at Maximum Load

**Respectfully Submitted** 

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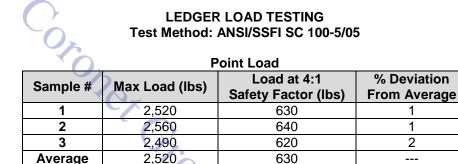
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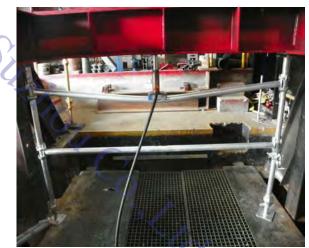
# Sample Information: Part No.:

Cuplock Horizontal 7' CH7





Point Load Test Setup



Typical Deflection at Maximum Load

**Respectfully Submitted** 

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Sample Information: Part No.:

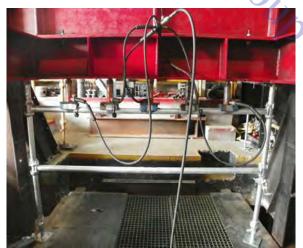
LEDGER LOAD TESTING

Cuplock Horizontal 7'

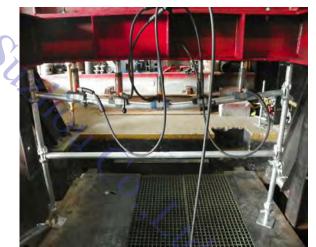
CH7

Test Method: ANSI/SSFI SC 100-5/05

Sample #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average	
1	4,220	1,060	2	
2	4,320	1,080	1	
3	4,320	1,080	1	
Average	4,290	1,070		



**Distributed Load Test Setup** 



Typical Deflection at Maximum Load

**Respectfully Submitted** 

Terry Wilt Department Manager, Metals & Product Testing



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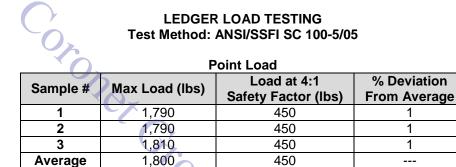
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Date: P.O. No.: W/O No.: 01/15/2013 EHO0006255Q/0 COR006-12-12-09676-2

### Sample Information: Part No.:

Cuplock Horizontal 10' CH10





Point Load Test Setup



Typical Deflection at Maximum Load

Respectfully Submitted

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Sample Information: Part No.: Cuplock Horizontal 10' CH10

# LEDGER LOAD TESTING Test Method: ANSI/SSFI SC 100-5/05 Uniform Distributed Load

% Deviation Max Load (lbs) Sample # Safety Factor (lbs) From Average 4,020 1,010 2 1 3,920 980 0 2 950 3 3,820 3 Average 980 3.920 ---



**Distributed Load Test Setup** 



Typical Deflection at Maximum Load

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Date: P.O. No.: W/O No.: 01/15/2013 EHO0006255Q/0 COR006-12-12-09684-2

# Description:Hollow Screw JacksPart No.:SJB

### LOAD TEST RESULTS

### Test Method: ANSI/SSFI SC100-5/05

Sample #	Extension (in.)	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation from Average
1	6	48,100	12,025	3
2	6	48,800	12,200	1
3	6	51,500	12,875	4
Average	\	49,470	12,370	



6" extension setup



6" typical deflection

Respectfully Submitted

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Hollow Screw Jacks SJB

### LOAD TEST RESULTS

LOAD TEST RESULTS						
Test Method: ANSI/SSFI SC100-5/05						
Sample #	Sample #         Extension (in.)         Max Load (lbs)         Load at 4:1         % Deviation from Average					
1	12	44,310	11,080	9		
2	12	38,240	9,560	6		
3	12	37,710	9,430	7		
4	12	42,130	10,530	4		
Average		40,600	10,020			



12" extension setup



12" typical deflection

**Respectfully Submitted** 

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Hollow Screw Jacks

### LOAD TEST RESULTS

Test Method: ANSI/SSFI SC100-5/05

Sample #	Extension (in.)	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation from Average
1	18	41,650	10,710	5
2	18	39,220	9,805	1
3	18	38,440	9,610	3
Average		39,770	9,940	



18" extension setup



18" typical deflection

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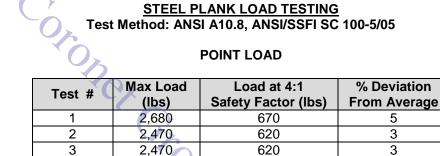
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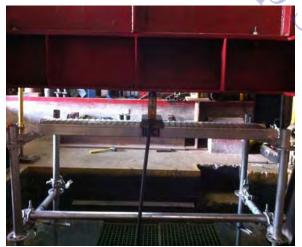
640

01/15/2013 EHO0006255Q/0 COR006-12-12-09684-1

Description:5' Steel PlankPart No.:SSP5



2,540



Average

5' point load setup



Typical 5' point load deflection

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Terry Wilt

Department Manager, Metals & Product Testing



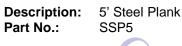
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Coronet Scaffold Group Suzhou Co., Ltd.



STEEL PLANK LOAD TESTING Test Method: ANSI A10.8, ANSI/SSFI SC 100-5/05

### UNIFORMLY DISTRIBUTED LOAD

Test #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average
1	4,820	1,210	3
2	5,030	1,260	1
3	5,030	1,260	1
Average	4,960 🤇	1,240	



5' UDL setup



Typical 5' UDL deflection

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**Description:** Part No.:



Coronet Scaffold Group Suzhou Co., Ltd.

### STEEL PLANK LOAD TESTING Test Method: ANSI A10.8, ANSI/SSFI SC 100-5/05

### POINT LOAD

Test #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average
1	2,060 🤇	520	2
2	2,060	520	2
3	1,950	490	4
Average	2,020	510	



7' point load setup



Typical 7' point load deflection

**Respectfully Submitted** 

Terry Wilt

Department Manager, Metals & Product Testing



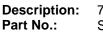
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7' Steel Plank SSP7

Coronet Scaffold Group Suzhou Co., Ltd.

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### STEEL PLANK LOAD TESTING Test Method: ANSI A10.8, ANSI/SSFI SC 100-5/05

# UNIFORMLY DISTRIBUTED LOAD

Test #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average
1	3,520	880	5
2	3,770 🤇	940	2
3	3,770	940	2
Average	3,680	920	



7' UDL setup



Typical 7' UDL deflection

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Terry Wilt

Department Manager, Metals & Product Testing

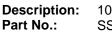


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Date: P.O. No.: W/O No.: 01/15/2013 EHO0006255Q/0 COR006-12-12-09684-1



10' Steel Plank SSP10

STEEL PLANK LOAD TESTING Test Method: ANSI A10.8, ANSI/SSFI SC 100-5/05 POINT LOAD					
Test #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average		
1	1,340	340	0		
2	1,340	340	0		
3	1,340 🤇	340	0		
Average	1,340	340			



10' point load setup



Typical 10' point load deflection

Respectfully Submitted

Terry Wilt Department Manager, Metals & Product Testing



Jiangsu Province, China

Coronet Scaffold Group Suzhou Co., Ltd.

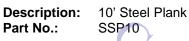
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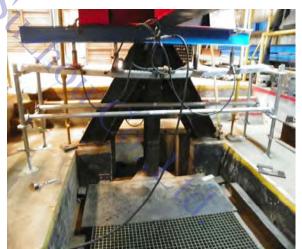
#### **STEEL PLANK LOAD TESTING** Test Method: ANSI A10.8, ANSI/SSFI SC 100-5/05

### UNIFORMLY DISTRIBUTED LOAD

Test #	Max Load (lbs)	Load at 4:1 Safety Factor (Ibs)	% Deviation From Average
1	2,310	580	1
2	2,310	580	1
3	2,210	550	3
Average	2,280 🦕	570	



10' UDL setup



Typical 10' UDL deflection

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