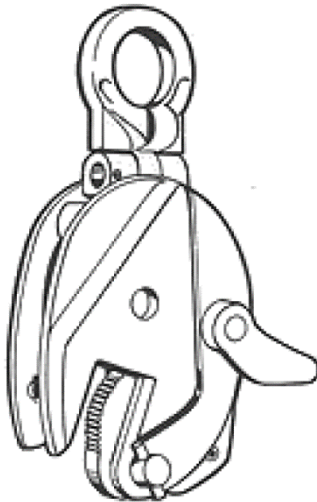




VULCAN
HOIST - PALAN

OPERATOR`S MANUAL

NOVA NUC Universal Plate Clamp



WARNING

DO NOT INSTALL, USE OR REPAIR THIS EQUIPMENT BEFORE READING THIS MANUAL IN ITS ENTIERETY. FAILURE TO READ AND FOLLOW THE INSTRUCTIONS DESCRIBED IN THIS MANUAL COULD RESULT IN SERIOUS INJURY, DEATH AND/OR MATERIAL DAMAGES

WARNING

All persons involved in using, inspecting, maintaining or repairing this equipment must be thoroughly familiar with the contents of this manual and follow the recommended instructions and procedures to avoid injury or property damage.

WARNING

The equipment described in this manual is not designed to lift or move people nor to lift or move loads over people and must therefore not be used for such means.

WARNING

Do not use this clamp in areas containing flammable vapors, liquids, gasses or combustible dust or fibers. Do not use this clamp in highly corrosive, abrasive, wet environments or in temperatures below -40°C or above 80°C .

Safety and Warnings

Dangerous Practices to be Avoided
DO NOT use the clamp before reading the manual
DO NOT let an unqualified person use or repair the clamp
DO NOT exceed the rated capacity of the plate clamp
DO NOT user damaged or malfunctioning plate clamp
DO NOT lift people nor carry loads over people
DO NOT stay in the “fall zone” when lifting the plate
DO NOT lift load if clamping jaws are not fully engaged
DO NOT lift unbalanced loads
DO NOT leave the load supported by the clamp unattended
DO NOT lift more than one plate at a time
DO NOT use the clamp on thinner plates than the minimum specified thickness
DO NOT use the clamp on thicker plates than the maximum specified thickness
DO NOT use the clamp on plates with surface hardness higher than 30 HRC / 300 Brinell
DO NOT do not lift loads lower than 20% of the rated capacity (do not underload the plate clamp)
DO NOT shock load
DO NOT allow a welding electrode to touch the plate clamp
DO NOT use the clamp as ground for welding
DO NOT remove or obscure labels
DO NOT use if nameplate or safety and warning labels are missing or illegible

WARNING

Use only Vulcan authorized replacement parts in the service and maintenance of this equipment. Failure to comply with the above limitations may result in property damage, injury or death.

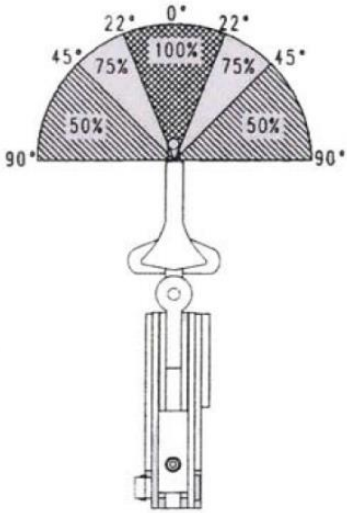
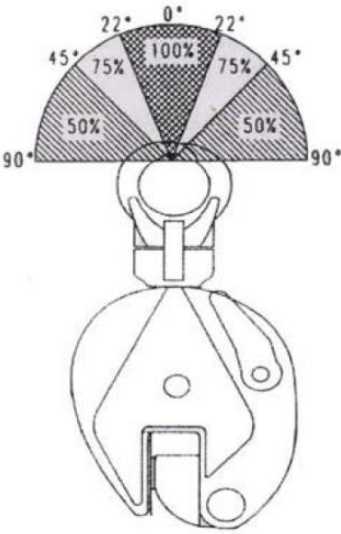
Installation and Operation

ATTENTION

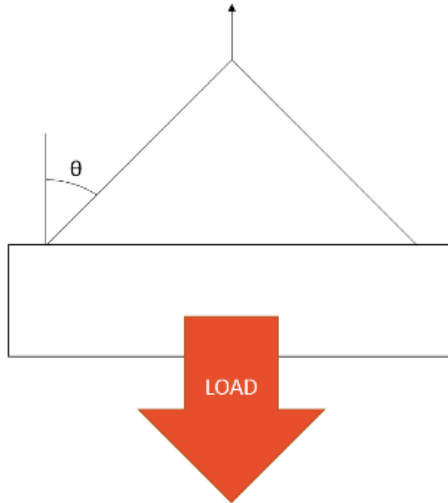
Make sure the surface hardness of the plate is below 30 HRC / 300 Brinell. Make sure the plate weights at least 20% of the rated plate clamp capacity. If the above conditions are not met, the clamp may not grip properly.

Operation Procedures	
1	Prior to lifting, make sure the lift can be performed safely and the lift path is clear
2	Turn the function lever clockwise to disengage the jaws
3	Check if the plate clamp for any loose components
4	Check the teeth and the jaws for excessive wear and make sure they are clean
5	If the clamp is in proper working order, insert the plate to the end of the clamp mouth
6	Turn the function lever counter-clockwise to grip and lock the plate
7	While performing the lift, do not let people to stay or cross the “fall zone” under the clamp. Beware of high lifts as the wind may cause the plate to swing increasing the size of the “fall zone”

When lifting at an angle, the NUC plate clamp capacity is reduced. Always respect the adjusted capacities in diagram below. The clamp may not be loaded in any other angle.



When lifting with TWO plate clamps as seen in the diagram below



the maximum allowable plate weight is:

$$\text{Max Weight} = WLL_{\text{clamp}} * C$$

Where C is the load correction factor selected from the table below as a function of the angle θ :

θ	0°-15°	15°-30°	30°-45°	45°-60°
C	2	1.7	1.4	1

*DO NOT USE WHEN $\theta \geq 60^\circ$

Example calculation for two 1T clamps with $\theta = 30^\circ$:

$$WLL_{\text{clamp}} = 75\% * 2200 = 1650 \text{ lb (from diagram)}$$

$$C = 1.7 \text{ (from table)}$$

$$\text{Max Weight} = WLL_{\text{clamp}} * C = 1650 * 1.7 = 2800 \text{ lb}$$

Inspection

ATTENTION

The plate clamp must be inspected by the operator daily. If any deficiencies are noted, stop using the plate clamp until it is repaired or replaced.

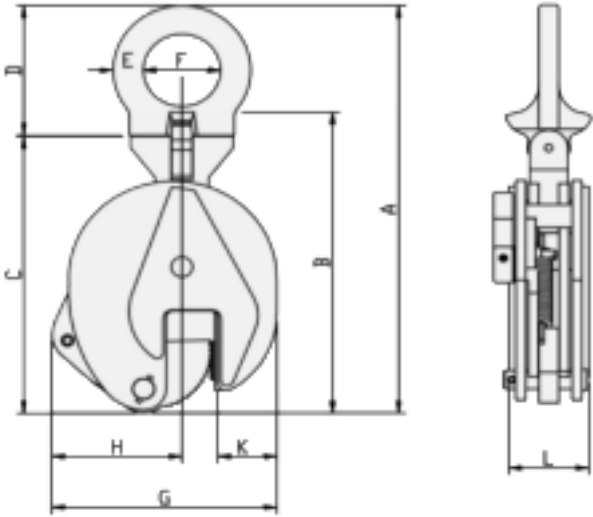
Daily Inspection

1	Check for cracks or distortions in the structural frame, welds or mechanical components
2	Check for loose fasteners or other clamp components
3	Verify the clamping mechanism operates properly, pay close attention to the spring mechanism
4	Check for signs of heat damage or weld splatter
5	Check for excessive wear on load bearing parts like, but not limited to: the lifting eye, the clamp mouth, the jaws, the jaw teeth, etc.
6	Make sure the nameplate and the warning labels are present and legible

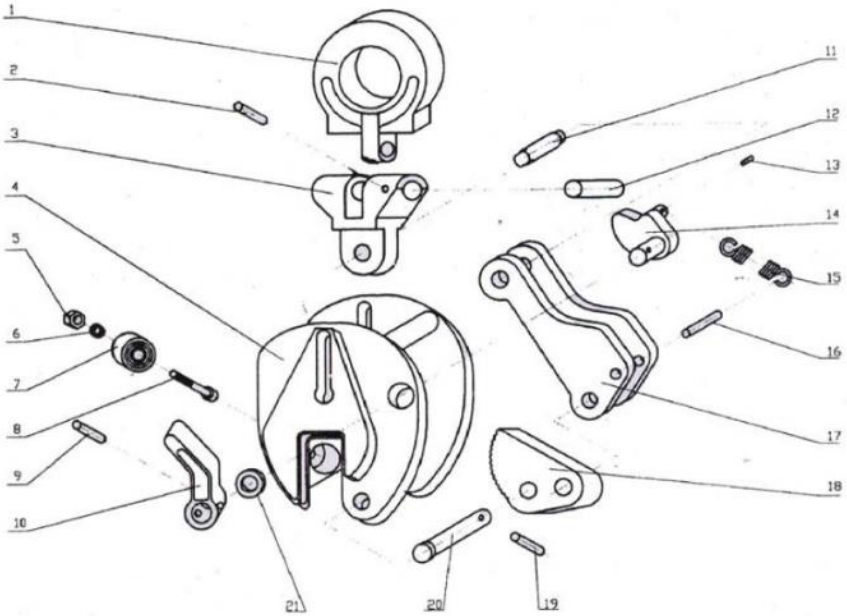
ATTENTION

An in-depth inspection of the equipment must be carried out on a regular basis by a qualified person. The plate clamp and its components are examined to ensure the equipment is safe for use. The periodic inspections vary in frequency and details according to the intensity of the equipment use but must include at least the daily inspection procedure.

The client is responsible for keeping dated records of all periodic inspections and maintenance procedures as means of continuously monitoring the condition of the equipment.



Model	NUC0.8T	NUC1T	NUC2T	NUC3T
WLL	1750	2200	4400	6600
Opening (in)	0.59	.79	.98	1.18
A (in)	7.29	11.23	13.00	15.76
B (in)	6.51	8.28	11.63	13.20
C (in)	5.91	8.87	10.45	11.82
D (in)	2.17	3.27	4.14	5.13
E (in)	.48	.63	.71	1.30
F (in)	1.19	1.90	2.37	2.57
G (in)	4.14	5.72	6.90	8.08
H (in)	2.37	3.31	3.87	5.13
K (in)	1.26	1.66	2.17	2.17
L (in)	1.58	2.13	2.21	3.08



Item	Description	Qty
1	Pivoting Shackle	1
2	Roll Pin	1
3	Connecting Block	1
4	Body	1
5	Lock Nut	1
6	Lock Washer	1
7	Round Jaw	1
8	Screw	1
9	Roll Pin	1
10	Function Lever	1
11	Connecting Block Pin	1

Item	Description	Qty
12	Pivoting Shackle Pin	1
13	Roller Pin	1
14	Function Block	1
15	Pulling Spring	1
16	Roll Pin	1
17	Connecting Plate	1
18	Clamping Jaw	1
19	Rolling Pin	1
20	Jaw Pin	1
21	Shim Washer	1

BEAM CLAMP

Beam Clamp (NBC)

1T to 10T



NOVA LIFTING CLAMPS

CDE Vertical Clamp (NVC)

0.8T to 5T



Lifting Clamp (NLC)

1T to 5T



Universal Clamp (NUC)

0.8T to 5T



Horizontal Plate Clamp (NHJ)

1T to 2T



Horizontal Plate Clamp (NHP)

0.75T to 2T



Drum Lifter (NDL)

1T



* Nova lifting clamps and beam clamp have a 1-year warranty.

SUPER LIFTING CLAMPS

Screw Cam Clamp (SCC)

0.5T to 3T



Screw Cam Clamp Double Eye (SDC-S)

0.5T to 5T



Screw Cam Clamp with Universal Shackle (SUC)

0.5T à 3T



Lateral Lifting Clamp (HLC-H)

1T to 6T



Vertical Lifting Clamp (SVC-H)

0.5T to 5T



Vertical Lifting Clamp with Universal Shackle (SVC-E)

0.5T to 2T



Vertical Lifting Clamp with Remote Control (SVC-L)

0.5T to 3T



Vertical Lifting Clamp with stopper (SVC)

1T to 5T



* Super lifting clamps have a 2-year warranty.

SERVICES



RENTAL



TESTING AND CERTIFICATION



MAINTENANCE AND REPAIR



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