HYDRAULIC HOSE MANUFACTURING – CRIMPING (MANULI HOSE ASSEMBLIES)

2	App	APR 14, 2022	Approved	A. Brule	J. Owens	T. Siver
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Rev	**Status**	**Rev. Date**	**Status Description**	**Prepared by**	**Reviewed by**	**Approved by**

The following is a step-by-step procedure on how to complete a specific task or meet a facility specific requirement. Standard Operating Procedures (SOPs) are written for all identified critical tasks. By virtue of the hazard or complexity associated with critical tasks it is paramount that the SOP be followed as written. SOPs contain a listing of high-level hazards associated with the task, for detailed hazard analysis reference the applicable Task Hazard Assessments. SOPs do not replace the requirements contained in the company Standards, Codes, and Processes nor does it replace the need to comply with required legislation. Section 8.0 references documentation that the worker shall understand before work commences.

1.0 PURPOSE

- To establish a Company standard to safely and effectively carry out work as it applies to the manufacturing of hydraulic hoses, so it is done in a manner that minimizes risk to people, equipment, production, and the environment.

2.0 SCOPE AND APPLICATION

- This document applies to all Company Heavy Construction and Mining operations. Ensure all site-specific requirements are being met or exceeded before performing the task

3.0 HAZARDS AND CONTROLS

- Pinching or crushing fingers and hands
    - Keep body parts out of the pinch zones of the moving parts on the hydraulic hose press.
    - Do not hold on to parts in the pinch zones while the press is being powered,
- Components of the press assembly blowing apart, harden crimping dies can fracture during crimping process, die springs could fracture during crimping process.
    - Where eye protection, gloves, and coveralls stand to the side of machine whenever possible.
- Straining the upper limbs, shoulders, or back
    - Support and move heavy hose by; establishing good body positions and utilize proper lifting mechanics

4.0 CHECKLIST

- ☐ Attend all preparatory meetings (IE: daily PSI; job scope; review of JSA's and SOPs for the job)
- ☐ Complete FLRA cards before starting the work.
- ☐ Ensure all personnel involved in the task are aware of the hazards and the controls to be used, as identified in the SOP's; JSA's; and FLRA's
- ☐ Conduct a pre-job inspection of all equipment to be worked on and tools to be used.
- ☐ **Standard of Training required for working on this job: On-the job training.**

5.0 DEFINITIONS

5.1 Company

North American Construction Group (NACG) divisions, departments, or subsidiaries.

5.2 Company Personnel

Includes the Company's employees, officers, directors, agents, associates, consultants/contractors, temporary employees, and third-party processors.

5.3 HSE

Refers to the Health, Safety & Environment department

6.0 PROCEDURE

1. Retrieve the machine setting as per the Production Instruction Tag
2. Change crimping die according to the machine setting.
3. Place Fitting A into hose crimping machine, make sure that the fitting is position so that the entire length of the fitting will be crimped by the crimping dies. Make sure to hold onto the hose assembly well back from the crimping dies so that there is no chance of your hand coming into contact with the crimping dies or any moving part of the hose crimping machine. Push the die closing button until the finished crimp light comes on and the machine stops crimping. If at any time you wish to stop crimping, simply stop pushing the die closing button.
4. Once the finished crimp light has come on you can push the die opening button to retract dies and remove the hose from the machine. Measure fitting "A" with digital calipers and record the measurement on the Production Instruction Tag. Make sure that the measurement is within the tolerance of the finished crimp diameter as per the Production Instruction Tag.
5. Repeat steps 3, 4, for fitting B

7.0 NOTES

If this task is to be done by a method different than described in this SOP, the work must STOP, and the alternate method must be documented with an adequate hazard assessment tool such as a JSA or Management of Change process.

8.0 REFERENCES

- Manufacturer's Operation Manual
- Alberta Occupational Health and Safety Act, Regulation and Code 2009 Part 3 Section 12
- OEM Parts Manufacturer's (i.e., Manuli) repair and service manuals
- 950C-C-025 – Hand Tools Code
- 950C-C-050 – PPE General Code
- 960C-SOP-504 – Hand Tools; Use of
- 960C-SOP-505 - Hand Tools Powered Use
- 960C-SOP-112 - Air Line Control and Dangers

9.0 APPENDICES

- No appendices.