

HYDRAULIC CYLINDER GENERAL INFORMATION

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HANDLING OF HYDRAULIC CYLINDERS

- CARE SHOULD BE TAKEN AT ALL TIMES TO PREVENT DAMAGE TO CYLINDER OR INJURY TO PERSONNEL.
- WHENEVER POSSIBLE MAKE SURE THAT THE CYLINDER IS IN FULLY RETRACTED POSITION AND THAT THE PISTON IS RESTRAINED FROM EXTENDING BY GRAVITY OR OTHER MEANS.
- AVOID THE USE OF CHAINS WRAPPED AROUND THE CYLINDER AS THESE CAN SLIP AND CAUSE CONSIDERABLE DAMAGE, ESPECIALLY TO THE PISTON ROD.

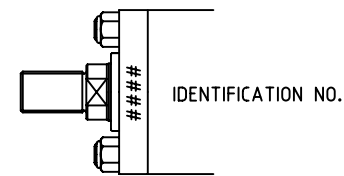
STORAGE OF HYDRAULIC CYLINDERS

WHEN STORAGE PERIODS ARE REQUIRED THE FOLLOWING PROCEDURES ARE RECOMMENDED :

- THE CYLINDER MUST BE STORED INDOORS IN A DRY AND NON-CORROSIVE ENVIRONMENT.
- PROTECTION PLUGS FITTED TO PORTS MUST BE LEFT ON AT ALL TIMES.
- PROTECT THE CYLINDER FROM INTERNAL CORROSION AND EXTERNAL CORROSION. IT IS RECOMMENDED THE CYLINDER BE FILLED WITH OPERATING FLUID.
- STORAGE IN A VERTICAL POSITION IS RECOMMENDED WITH THE PISTON ROD FACING UPWARDS. THIS WILL MINIMIZE STATIC SIDE LOADS ON THE SEALS AND CORROSION DUE TO POSSIBLE CONDENSATION IF THE CYLINDER IS NOT FILLED.
- IF VERTICAL STORAGE IS NOT POSSIBLE THEN THE CYLINDER CAN BE STORED HORIZONTALLY. HOWEVER FOR LONG PERIODS OF STORAGE THE CYLINDER MUST BE FILLED WITH THE WORKING FLUID AND ROTATION OF THE CYLINDER ON A FORTNIGHTLY BASIS IS RECOMMENDED.

IDENTIFICATION

- IN ALL CASES IDENTIFICATION OF THE CYLINDER IS STAMPED ON THE FRONT END, AS ILLUSTRATED. IN THE CASE THE CYLINDER IS SPECIAL THE IDENTIFICATION IS THE DRAWING NUMBER (H/L00####).



CYLINDER INSTALLATION

- ALL CYLINDERS ARE INDIVIDUALLY TESTED BEFORE SHIPMENT TO ASSURE FREEDOM FROM DEFECTS. IT IS RECOMMENDED THAT THE SHIPPING PLUGS IN THE CYLINDER PORTS NOT BE REMOVED DURING INSTALLATION UNTIL ACTUAL PIPING CONNECTIONS ARE TO BE MADE.

CYLINDER MOUNTING

- ALIGN THE CYLINDER CAREFULLY KEEPING MOUNTING SURFACES SQUARE, PARALLEL, CONCENTRIC AND TRUE (AS APPLICABLE) WITH THE WORK DIRECTION.
- TRUNNION AND PIVOT MOUNTED CYLINDERS SWIVEL IN ONE DIRECTION ONLY WITH TRUNNION PINS AND PIVOT PINS DESIGNED TO CARRY SHEAR LOADS ONLY. TRUNNION AND PIVOT BEARINGS MUST FIT CLOSELY FOR THE ENTIRE LENGTH OF THE PIN WITH TRUNNION BEARINGS HELD RIGIDLY AND IN ACCURATE ALIGNMENT.
- FLUSH MOUNTED CYLINDERS (TAPPED & LUG MOUNT) SHOULD BE PINNED OR KEYED TO PREVENT SHIFTING FROM LOAD APPLICATION.
- PIPE CONNECTIONS : ALL CONNECTING PIPES ENDS SHOULD BE DE-BURRED AND INSIDE SHOULD BE CLEANED OF SCALE, RUST AND DIRT. REMOVE SHIPPING PLUGS AND MAKE PROPER PIPE CONNECTION.
- CYLINDER OPERATION : OPERATE THE CYLINDER SEVERAL TIMES TO MAKE SURE IT IS FUNCTIONING PROPERLY. CHECK FOR LEAKS.

CUSHION ADJUSTMENT

- CUSHIONED CYLINDERS ARE ADJUSTED AND TESTED AT THE FACTORY, BUT MAY REQUIRE ADDITIONAL ADJUSTMENT AFTER CONNECTION TO THE WORK LOAD. TO INCREASE THE EFFECTIVENESS OF THE CUSHIONS TURN THE ADJUSTING SCREWS CLOCKWISE TO OBTAIN DESIRED CUSHIONING ACTION. TO DECREASE CUSHIONING ACTION, TURN THE ADJUSTING SCREW COUNTER-CLOCKWISE.

NOTE : IF INSTALLATION IS COMPLETE AND CYLINDER DOES NOT FUNCTION PROPERLY, CHECK THE FOLLOWING.

- (1) POOR ADJUSTMENT OF THE CYLINDER WITH ITS MATING PIECES.
- (2) INSUFFICIENT PRESSURE OR LEAKAGE.

CUSHION ADJUSTMENT

- CLEAN FLUID IS ESSENTIAL TO PROLONG THE SATISFACTORY OPERATION OF HYDRAULIC EQUIPMENT. KEEP OIL TANKS COVERED AND PROVIDE AN ADEQUATE FILTER.
- WITH A VERY MINOR AMOUNT OF ATTENTION AND UNDER ORDINARY CONDITIONS HYDROIL CYLINDER WILL EFFICIENTLY OPERATE FOR AT LEAST AS LONG A PERIOD AS IS GENERALLY REQUIRED OF THE EQUIPMENT OF WHICH IT IS A PART.
- SEAL REPLACEMENTS MAY BE REQUIRED AT INTERVALS ACCORDING TO THE MANNER IN WHICH THEY ARE USED.