GENERAL

CONGRATULATIONS ON HAVING BOUGHT OSWAL VALVE. WE ASSURE THE SATISFACTORY PERFORMANCE OF OUR VALVE. HOWEVER PROPER STORAGE, NEAT INSTALLATION, GENTLE OPERATION & TIMELY MAINTENANCE ENHANCES VALVE PERFORMANCE AND LIFE.

UPON RECEIPT, INSPECT THE VALVE FOR ANY SHIPPING DAMAGE.

AS PER THE PACKING SLIP PLACED INSIDE THE BOX, VERIFY THE GOODS RECEIVED ITEMS PACKED LOOSE WITHIN THE BOX ARE IDENTIFIED IN THE PACKING SLIP. CHECK FOR SHORT SUPPLY IF ANY.

STORAGE AND PRESERVATION

VALVE IS GENERALLY WRAPPED AND PROTECTED FROM DAMAGE DURING SHIPMENT. THIS WRAPPING & PROTECTION SHOULD BE LEFT IN PLACE UNTIL THE VALVE IS TO BE INSTALLED. VALVES SHOULD, WHERE POSSIBLE, BE STORED IN A CLEAN, DRY ENVIRONMENT.

CAUTION: - AVOID THE ENTRY OF DIRT, SEDIMENTATION GRIT & OTHER FOREIGN PARTICLES ON SEATING & SEALING SURFACE, FLANGE FACE OR THREAD SURFACE.

VALVE MARKING

EACH VALVE HAS THE IDENTIFICATION INFORMATION PLATE RIVETED / FASTENED ON THE FLANGE / TO THE SIDE OF THE VALVE BODY. MATERIAL TRACEABILITY MARKING ARE MARKED ON THE VALVE BODY.

GENERAL INSTRUCTION

WEAR ALL NECERRARY PERSONAL PROTECTIVE EQUIPMENT.

NEVER REMOVE OR MAINTAIN A VALVE OR JOINT UNLESS THE LINE HAD BEEN FULLY DRAINED OR DE-PRESSURISED

ALWAYS OPERATE THE VALVE TO THE OPEN POSITION TO ENSURE THAT NO TRAPPED PRESSURE EXISTS WITHIN THE CAVITY.

NEVER HANDLE THE VALVES THAT HAVE BEEN USED ON HARMFUL SUBSTANCES UNLESS THEY HAVE BEEN

COMPLETELY DECONTAMINATED AND & CERTIFIED SAFE TO HANDLE. ALWAYS USE CORRECT LIFTING METHODS & EQUIPMENTS WHEN INSTALLING, REMOVING & MAINTIANING THE PRODUCT.

VALVE CAN BE INSTALLED IN ANY POSITION. HOWEVER AVOID STEM POSITION DOWNWARD. IT IS RECOMMENDED TO MOUNT THE VALVE STEM IN VERTICLE POSITION

PRIOR TO INSTALATION, PIPELINES SHOULD BE THROUGHLY FLUSHED, CLEANED FREE FROM WELD SLUGS, RUST, SCALES & OTHER DUST INSIDE PIPING & ON FLANGE SURFACE.

PIPELINE SHOULD BE ALIGNED PROPERLY SO THAT PIPELINE WEIGHT & STRESSES ARE NOT TRANSFERRED TO THE VALVE. VALVES SHOULD BE THOROUGHLY CLEANED AT FLOW PASSAGE, STEM PORTION BEFORE INSTALLATION. IF THE VALVES ARE STORED FOR LONG TIME, THEY MUST BE CLEANED, LUBRICATED, & TESTED PRIOR TO INSTALLATION. TIGHTEN THE GLAND PACKING UNIFORMLY BEFORE INSTALLING & AFTER TRIAL OPERATION.

QUALIFIED WELDER MUST PERFORM WELDING OPERATION & THE WELDING PROCEDURE IN ACCORDANCE WITH ASME BOILER & PRESSURE VESSEL CODE.

SITE STANDARDS FOR INSTALLATION OF THE VALVES MUST BE FOLLOWED WHERE SUCH STANDARDS DO NOT EXIST, THE FOLLOWING GUIDELINES MUST BE USED,

FLANGED END VALVES

PIPEWORK SHOULD HAVE CORRECT GAP TO ALLOW THE VALVE FACE TO FACE LENGTH PLUS ASSEMBLED GASKET MATERIAL THICKNESS. BE SURE THAT FLANGE GASKET & FASTENERS ARE SUITABLE FOR OPERATING CONDITION.

INSERT THE VALVE (FULLY OPEN) ALONG WITH GASKET BETWEEN MATING FLANGE, ALIGN THE FLANGE BOLT HOLES & HOLD IT IN PLACE, HOLD THE NUT FIRST, INSERT BOLT & FINGURE TIGHT FIRST.

USE TWO SPANNERS TO TIGHTEN THE JOINT IN SEQUENCE AS SHOWN

BUTT WELD END

KEEP THE VALVE IN OPEN POSITION SPACE THE JOINT APART. CO-AXIAL WITH 2-3 mm GAP AFTER FINISHING WELDING CLEAN THE PIPELINE & VALVES BY FLUSHING OR PIGGING TO REMOVE IMPURITIES.

WARNING

ALL INSTALLATIONS SHALL BE PROVIDED WITH PRESSURE RELIEF DEVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE PRESSURE EQUIPMENT DIRECTIVE 97/23/EC. PROPER INSTALLATION PRIOR TO INITIAL OPERATION IS THE USERS RESPONSIBILITY. THE INSTALLATION SHALL ALSO BE PROTECTEDAGAINST EXCESSIVE PRESSURE WHERE HAZARD DUE TO FIRE EXISTS.

OPERATION, INSPECTION & MAINTAINANCE

OPERATION

FLUSH THE PIPE LINE CAREFULLY WHEN VALVE IS MOUNTED TO REMOVE ALL POSSIBLE IMPURITIES. BEFORE FLUSHING KEEP THE VALVE OPEN FULLY.

VALVES SHOULD BE OPENED & CLOSED SLOWLY TO AVOID HAMMERING EFFECT ON THE VALVE AND PIPELINE.

VALVES SHOULD BE USED IN ACCORDANCE WITH THE PRESSURE / TEMPERATURE CHART.

ANY MEDIA WHICH MAY SOLIDIFY, CRYSTALLIZE OR POLYMERIZED SHOULD NOT BE ALLOWED TO STAND IN THE CAVITY SINCE THIS MAY DETRIMENTAL TO VALVE PERFORMANCE

PERIODIC INSPECTION AND MAINTAINANCE

ANNUAL INSPECTION SHOULD BE MADE TO CHECK UP VALVE BODY, DISC, AND STEM IF WORN OR PITTED, SUBSTITUTE NEW ONE.

IT IS RECOMMENDED TO REPLACE SEAT, BODY GASKET, STEM PACKING, WASHERS, UNLESS THE PARTS ARE IN GOOD CONDITION.

BONNET JOINT

BONNET GASKET IS PROPERLY TIGHTENED IN THE FACTORY TO AVOID ANY JOINT LEAKAGE.HOWEVER BEFORE APPLYING PRESSURE, ENSURE THAT ALL BOLTS ARE PROPERLY TIGHTENED. IF LEAKING, UNIFORMLY TIGHTEN THE STUD/NUT.

GLAND PACKING

GLAND PACKINGS ARE PROVIDED TO AVOID LEAKAGE THROUGH THE STEM. WHEN LEAKAGE IS DETECTED FROM THE GLAND AREA WHILE THE VALVE IS BEING IN SERVICE, THE GLAND SHOULD IMMEDIATELY RETIGHTENED. TIGHTEN THE GLAND SLOWLY AND GRADUALLY UNTILL THE LEAKAGE STOPS. WHILE ROTATING THE VALVE HANDWHEEL DO NOT OVER TIGHTEN THE PACKING.

EVEN THOUGH VALVES ARE PROVIDED WITH BACK SEATING FEATURE, IT IS NOT RECOMMENDED TO CHANGE THE PACKING WITH LINE PRESSURE.

LUBRICATION

WHEN LUBE FITTINGS ARE PROVIDED, VALVE SHOULD BE LUBRICATED PERIODICALLY. STEM THREADS MUST BE BRUSHED WITH LUBRICANTS TO AVOID DAMAGE AND EXCESSIVE TORQUE FROM DEVELOPING. VALVE SHOULD NEVER BE OPERATED WITHOUT LUBRICATED STEM THREAD OR YOKE SLEEVES

DISASSEMBLY

FOR SAFETY & PROTECTION, IT IS IMPORTANT THAT THE FOLLOWING PRECAUTION BE TAKEN PRIOR TO REMOVING THE VALVE FROM SERVICE OR BEFORE DISASSEMBLY OF THE VALVE.

DISASSEMBLY

WEAR ANY PROTECTIVE CLOTHING OR EQUIPMENT NORMALLY REQUIRED WHEN WORKING WITH THE MEDIA INVOLVED.

DE-PRESSUIREIZE ALL THE LINES & DRAIN THE SYSTEM FLUID. CYCLE THE VALVE SEVERAL TIMES TO RELIEVE ANY STRESS OR PRESSURE INSIDE THE VALVE

KEEP THE VALVE IN FULL OPEN POSITION. REMOVE THE VALVE & PLACE IT ON A LEVEL SURFACE IN VERTICLE POSITION.

CAUTION :- VALVES SHOULD NOT BE DISMANTLED IN CLOSED POSITOIN.

DISASSEMBLY OF THE VALVE

FLUSH THE VALVE TO REMOVE THE RESIDUALS IF ANY.

REMOVE THE COVER (02) BY LOOSENING THE STUD/NUT (11) (12).

“MATCH MARK” THE ORIENTATION OF THE BODY (01) & COVER (02).

LOOSEN THE PIN PLUG (N.S).

REMOVE THE HINGE PIN (08) BY HOLDING THE DISC SUBASSEMBLY BY PROPER EQUIPMENT.

REMOVE THE SPLIT PIN FROM THE DISC

LOOSEN THE DISC NUT (06) & WASHER (07)

DISMENTLE THE DISC (05) FROM THE HINGE (03). AND PLACE IT ON A CLEAN SOFT NON METALIC SURFACE

CAUTION: - DISC LAPPED SURFACE MUST BE PROTECTED FROM DAMAGE AND PLACED ON A SOFT NON METALIC SURFACE AFTER DISASSEMBLY.

REMOVE THE BODY GASKET (10) FROM THE BODY GROOVE.

REMOVE THE DRAIN PLUG (13) IF ANY.

NOTE.

CHECK WHETHER THE SEALING SURFACE OF THE DISC OR THE SEATRING IS DAMAGED. IF ONLY SEATRING IS DAMAGED REPLACE THE SEATRING. MINOR SCRATCH OR FLASHES ON THE DISC OR THE SEATRING CAN BE SMOOTHENED WITH HELP OF GRINDING CLOTH.

CHECK IF THE BODY GASKET IS IN PROPER CONDITION.

ASSEMBLY.

BEFORE ASSEMBLY ENSURE THE COMPONENTS USED ARE SUITABLE FOR THE VALVE REQUIREMENT. DURING ASSEMBLY CLEANLINESS IS ESSENTIAL FOR LONG LIFE

FOLLOW THE REVERSE SEQUENCE OF DISASSEMBLY.
IF PRACTICLE, LEAK TIGHTNESS & OPERATING TORQUE SHOULD BE CHECKED PRIOR TO REFITING THE VALVE IN LINE

RECOMMONDED SPARES FOR 2 YEARS OF TROUBLE FREE OPERATIONS

VALVE QTY IN EACH SIZE	RECOMMENDED SPARES SEAT / BODY GASKET / HINGE PIN
UP TO 10	01
11 TO 25	02
26 TO 50	05
51 TO 100	10

IF OTHER PARTS ARE REQUIRED, IT IS USUALLY RECOMMENDED THAT THE COMPLETE VALVE IS REPLACED. ALTHOUGH PIECE PARTS ARE AVAILABLE PARTS FROM DIFFERENT SIZED/RATED VALVES MUST NOT BE INTERCHANGED.

ONLY OSWAL AUTHORISED SPARE PARTS SHOULD BE USED. IF THE VALVE IS ALTERED IN ANY WAY, NO LIEBILITY CAN BE ACCEPTED BY OSWAL

WARNING

BEFORE USING THE VALVES READ IOM MANUAL AND OBSERVE SAFETY REGULATION, AND CURRENTLY APPLICABLE LAWS

INSPECT FOR POSSIBLE TRANSPORT DAMAGE .DAMAGED VALVES MIGHT NO LONGER COMPLY WITH THE SAFETY REQUIREMENTS AND MUST NOT BE INSTALLED TRANSPORT, INSTALLATION, COMMISSIONING, MAINTENANCE OR REPAIR MUST ONLY BE PERFORMED BY TRAINED PERSONNEL

- **WARNING:**

FAILURE TO OBSERVE THE OPERATING MANUAL CAN RESULT IN SERIOUS INJURIES OR DAMAGE TO PROPERTY (EG. DUE TO MECHANICAL, CHEMICAL, OR ELECTRICAL EFFECTS)

- **DANGER:**

WHEN USING UNINTENDED MEDIA, THE MATERIAL MAY BE ATTACKED WITH FATAL CONSEQUENCES. FOR THIS REASON, ONLY USE MEDIA FOR WHICH THE VALVE HAS BEEN APPROVED.

FLOW DIRECTION: VERIFY THAT THE DIRECTION OF THE FLOW IN THE LINE CORRESPONDS TO THE ARROW INDICATED ON THE VALVE BODY.HOWEVER STANDARD VALVES ARE BIDIRECTIONAL HEALTH AND SAFETY

WHEN INSTALLING OR MAINTAINING VALVES:

CONDUCT A RISK ASSESSMENT AND ELIMINATE OR REDUCE HAZARDS TO AN ACCEPTABLE LEVEL.

WORK IN ACCORDANCE WITH SAFE SYSTEMS OF WORK.

OBSERVE ALL SITE HEALTH AND SAFETY RULES IN PARTICULAR PERMIT TO WORK AND HOT WORK

NEVER MODIFY OR ALTER VALVES UNLESS THE MANUFACTURER HAS BEEN CONSULTED

DUE TO THE VARIETY OF DUTIES ON WHICH THIS PRODUCT CAN BE EMPLOYED, IT IS THE END USER RESPONSIBILITY TO ENSURE THE COMPATIBILITY OF THE MEDIA WITH THE MATERIALS OF CONSTRUCTION OF THE PRODUCT FOR EACH SPECIFIC APPLICATION

REGULARLY CARRY OUT INSPECTIONS TO DETERMINE THE TECHNICALLY SAFE CONDITIONS OF THE INNER WALL.

THE PRESSURE PEAKS OCCURRING DURING CLOSING THE PIPELINE CAN BE VERY MUCH HIGHER THAN THE OPERATING PRESSURE. THE VALVE SHALL BE SELECTED FOR NOT EXCEEDING THE PERMISSIBLE OPERATING PRESSURE.

DANGER :

OPENING PRESSURIZED VALVES CAN BE FATAL.

DANGEROUS SUBSTANCES CAN LEAK FOR INSTANCE FROM RELIEF BORES OR WHEN DISASSEMBLING THE VALVE. COLLECT AND DISPOSE SUCH LEAKAGE SO THAT PERSONS AND THE ENVIRONMENT ARE NOT ENDANGERED OBSERVES THE LEGAL REGULATIONS.

GENERAL INSTRUCTION FOR THE OPERATION OF THE VALVE

DO NOT USE THE VALVE FOR PRESSURE & TEMPERATURE HIGHER THAN SPECIFIED IN THE NAME PLATE

PROVIDE SUITABLE DRAINING & VENTING IN PIPELINE IF SERVICE CONDITION DEMANDS

IF OVER PRESSURE IS EXPECTED, INSTALL PRESSURE RELIEF VALVE IN THE PIPELINE

IF SYSTEM DEMANDS VALVE POSITION, USE PADLOCK ARRANGEMENT TO AVOID RISK & MISUSE.

ESSENTIAL SAFETY REQUIREMENTS – WHICH ARE NOT CONSIDERED

TRAFFIC WIND, EARTH QUAKE LOADING

PROTECTION AGAINST EXCEEDING THE ALLOWABLE LIMITS OF PRESSURE EQUIPMENT

ESSENTIAL SAFETY REQUIREMENTS – WHICH ARE NOT APPLICABLE

DANGEROUS DISCHARGE OF PRESSURE RELIEF BLOW-OFF

DEVICES TO PREVENT PHYSICAL ACCESS WHILST PRESSURE SAFETY ACCESSORIES

TEMPERATURE MONITORING DEVICE

PRESSURE LIMITING DEVICES

EXTERNAL FIRE