

## **1 Purpose and Scope:**

This document defines the packaging requirements to include material handling and preservation for suppliers to H&S.

1.1 The Sourcing Manager is responsible for this procedure and the activities described herein.

## **2 Definitions:**

2.1 Buyout - Includes bearings, pumps motors, seals and complete gearbox assemblies.

2.2 Hardware - Includes anti-rotation pins, nuts, bolts, fitted studs, lube components and super nuts.

2.3 Finished Machined - Includes retaining plates, spacers, keys, geared elements, shafts, sleeves, couplings, housings and any rough turned parts with finished dimensions.

2.4 Raw Material - Includes as forged rings, bar stock, rough turned shafts, web sets (rims, plates & pipes), castings (as-cast or rough turn), rough turned rings, housing fabrication, weldment and bronze.

## **3 References:**

3.1 This document is referenced by PUPR 1.0 Purchasing Procedure

## **4 Instruction:**

4.1 All material linked to sales orders purchased by H&S is broken down into four product types buyout, hardware, finished machined and raw material.

4.2 The packaging and material handling requirements apply to all product types. The preserving requirements are broken down by product type.

4.3 These requirements are to be followed unless specific instructions are provided on the purchase order.

## **5 Packaging Requirements**

5.1.1 Less than 150 lbs. – Parts are to be supplied in a corrugated box as a minimum. Parts that are over 25 lbs/pc must have adequate space between them and must be protected using corrugated plastic or cardboard to prevent damage in transit. All external threads require a protective sleeve over them. Pipe threads on gages and other instrumentation shall be protected against contact with other metals.

5.1.2 Up to 5000 lbs. – Parts are to be skidded or crated such that they do not hang over the skid or crate. Four by four runners are to be attached under the crates for ease of transport using a tow-

motor. Parts are to be secured by means of blocking, banding or shrink wrapping to prevent movement during transport.

- 5.1.3** Over 5000 lbs. - Special crating is required. Industry standards are to be followed unless specific instructions are provided on the purchase order. Parts are to be packaged such that they have crane accessibility.

## **6 Preserving Requirements**

- 6.1.1** Rust preservative used shall be suitable for short term storage with 60 day minimum corrosion protection unless specified differently on the purchase order.
- 6.1.2** Rust preservative is not required on raw materials unless it is rough machined such as bar stock, rough turned shafts and rough turned rings.
- 6.1.3** Rust preservative must be applied on all machined surfaces irrespective of surface finish. All finished machined bearing journals are to be sprayed with a rust preservative and then wrapped with a material that has corrosion inhibiting properties.
- 6.1.4** All hardware components that have a non-coated surface must have a rust preservative applied.
- 6.1.5** All buyouts must have a rust preservative applied per the machined surface requirements as above.

## **7 Material Handling Requirements**

- 7.1.1** No wood contact with bare metal surfaces permitted during transport and storage of parts. A material with corrosion inhibiting properties must be used between metal surfaces and wood.
- 7.1.2** No metal to metal contact is permitted. If chains are used for lifting, protective sleeves must be used.
- 7.1.3** The dimension of the skid shall be bigger than the outside diameter / length of the part.

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Thom Lowe	-	-	7/19/2011
Kavita Krishnamurthy	6.1.2 – Clarified requirement	Dean McClelland	10/10/2011