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INTER PLANT STANDARD - STEEL INDUSTRY



SPECIFICATION FOR WELD - FLUX CHIPPER AND SCALING HAMMER

TPSS: 1-07-058-95

Corresponding IS does not exist

0. FOREWORD

This Interplant Standard prepared by the Standards Committee on Paints 0.1 and Portable Maintenance Equipment, IPSS 1:7 with the active participation of the representatives of all the steel plants and established manufacturers of Weld Flux Chipper & Scaling hammer, was adopted in January 1995.

1. SCOPE

- This Standard specifies the requirements of pneumatic flux chipping and 1.1 scaling hammer operated manually at an air pressure of 6.33 Kgf/cm2 used for general scaling application, such as removal of splatter and excess metal after welding, removal of rusts, scale, paint and soot from metal surfaces on which weld has to be deposited.
- This tool can also be used for removal of flash and sand from castings. 1.2

2. REQUIREMENTS

2.1 The technical requirements of the weld-flux chipping and scaling hammer are as follows:

> a) Blows per minute 4200 (max) b) Bore and stroke 23.8 mm x 25.4 mm c) Overall length 257 mm (max)

d) Approx weight of the 2 kgs . hammer without chisel

e) Air inlet thread size - 1/2" BSP MALE with thread nipple

1/2" BSPT f) Chisel shank type Chisel shank of B17, IS 7446:1987

g) Style of handle Body grip

Lever (Open type outside trigger) $0.59 \text{ m}^3/\text{min}$ at 6.33 kgf/cm^2 (max) $4.5-7 \text{ kg/cm}^2$ h) Throttle control j) Air consumption

k) Operating pressure

- The tool shall be fitted with an air strainer or screen, which shall be 2.2 effective against ingress of dust and shall be easy to clean.
- 2.3 The tool shall be provided with a jet blowing device for cleaning work surfaces using a lever throttle by blowing high velocity air.
- 2.4 The air inlet nipple shall be properly protected to avoid damage to the threads and to prevent entry of dust into the machine
- Provision shall be made on the tool to lubricate the piston & cylinder 2.5 and to fill in oil as and when required.

NOTE: Lubricant shall be specified by the manufacturer.

- 2.6 The tool shall be capable of holding firmly, angle scaling chisel or straight narrow blade chisel depending on application.
- 2.7 The Chisel shall be suitably located with the chipper body so that it does not get ejected out if the air inlet handle gets pressed accidentally when the chipper is actually not being used but the air-hose has been connected.

3. WORKMANSHIP AND FINISH

- 3.1 The tool shall be of rugged construction so as to withstand the rough usage likely to be encountered in steel plants and shall be free from imperfections which may affect serviceability of the machine:
- 3.2 The handle shall be smooth, free from burrs, sharp edges or any other manufacturing defects. It shall be so designed, that the operator gets a firm grip. The throttles shall work freely allowing smooth operation of the throttle valve.

4. TESTING

4.1 The tool shall be tested in accordance with IS 7605:1986 *Specification for Portable Pneumatic Chippers (first revision)'.

5. INFORMATION TO BE FURNISHED BY THE MANUFACTURER

- 5.1 The manufacturer shall furnish the following:
 - a) A lubrication to be used (refer clause 2.5).
 - b) Operation and Maintenance manual.
 - c) Technical specification of the tool.

6. GUARANTEE

6.1 The tool shall be warranted by the manufacturer against defective material, poor workmanship and improper design for one year after been placed into operation or 18 months from date of supply whichever is earlier.

7. MARKING

- 7.1 The tool shall be fitted with a name plate at a suitable place so that in the course of normal usage it does not get damaged. The name plate shall be legibly and indelibly marked with:
 - a) Manufacturer's name or trade mark
 - b) Serial number of the machine
 - c) IPSS number.