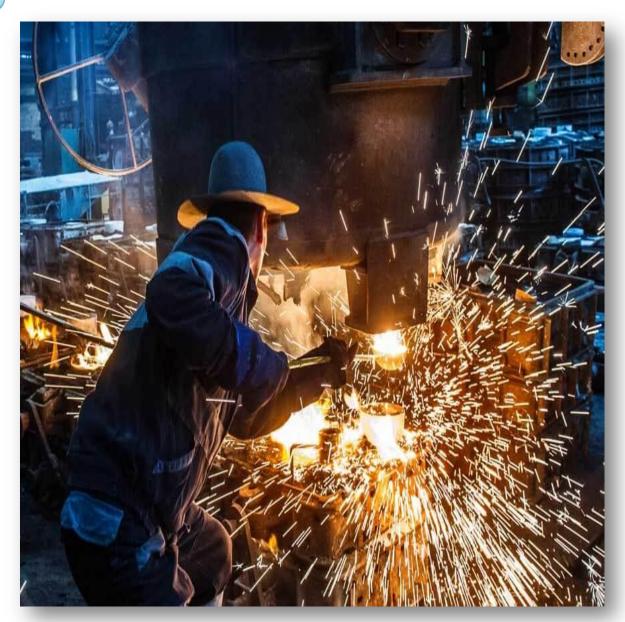


TECHOENTERPRISE An ISO 9001:2015 Certified Co.

Consulting Engineers & Manufacturers



A House of Industrial Support Service Provider



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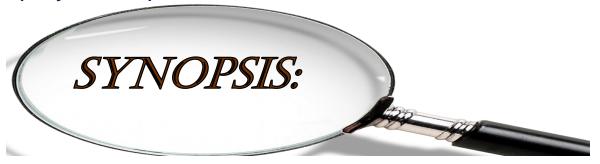
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INTRODUCTION:

TECHO ENTERPRISE, is an ISO 9001: 2015 certified MSME registered unit, by well experienced engineers trained in various reputed industries both India and Aborad.

TECHO ENTERPRISE, came into the effect in November, 1995 for design, manufacturing fabricating various products and items for Indian Defence, Air Force, Cement, Steel and other Govt., units and processing mote than 29 years in the respective field.

TECHO ENTERPRISE, has constant endavour to thrive for excellence as regards to quality service and price.



Our Activities:

Several decades of experience in developing critical spares & special purpose equipment for Blast furnace, Machine & Machine Tools for Steel Plants, Cement plants, DI Pipe Plants, Mining etc. Special emphasize given on developing Import substitution MECHANICAL SPARES, CHECKING INSTRUMENTS, TOOLINGS ETC. related to DEFENCE, STEEL INDUSTRIES, DI PIPE PLANTS ETC. ETC.

Vast experience in designing developing &, manufacturing of quality mould maintenance tools (like: Peening Tools, Peening Heads, Grinding Tools etc.) to increase life of costly moulds which helps in producing quality Ductile Iron Pipes.

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MANUFACTURING OF D.I PIPE MOULD MAINTENANCE EQUIPMENT:

We are engaged in designing and manufacturing of various types of Ductile Iron Pipe Mould Maintenance Equipment and Toolings which are very critical in nature to enhance the life of costly moulds by few folds & also to increase the productivity of pipe manufacture. As our designed products are robust in nature and have longer durability, therefore, these equipment and toolings are capable to work under adverse working condition also, atmosphere, which have been proved by serving various organizations in last 19 years.

Being confident with our TIME TESTED product quality, we are therefore, interested to expand our export market to the countries where cluster of Ductile Iron Pipe (DI Pipe) units are more.

TECHO ENTERPRISE (TE) has brought new & upgraded technological concept for mould maintenance for Ductile Iron pipe industries. Our product are as per following PEENING EQUIPMENT LIKE:

- Ductile/Round Peening Tools.
- Flat Peening Tools.
- > Peening Tool Profile Grinding Machine.
- > Single Peening Heads.
- Double Peening Heads.
- > Single & Double Wheeled Air Grinder.
- > Peening Depth Measuring Instrument.
- Spigot & Socket Checking go & no-go gauges.
- > Hand Peening Tools for Socket end & Runner Cleaning.
- Portable Peening Machine.
- > Tong Plate, Core Box, CPK Roller etc.

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Ductile/ Round Peening Tools:

KEY FEATURES:-

To get the proper round shaped impregnation on the mould surface under heavy impact load, we use, the Peening tool material (steel part) from ultrasonically tested alloy steel, finely machined, capable to withstand high wearrate and to maintain FORM STABILITY of the TIP of the tool for a longer period we use ultrafine T.C. TIPS OF REPUTED EUROPEAN MAKE.

Our Peening Tools are capable to work on D.I. PIPE moulds having hardness varying from 180 BHN - 268 BHN for getting recommended peening depth 0.35 -0.45 mm under working pressure of 6kg/cm²-9.5 kg/cm².

Flat Peening Tools:

KEY FEATURES:-

Flat Peening Tool are used either singly or in conjunction with round peenig tool to minimise the cracks (Netting) generated in mould surface due to repeated heating and cooling of the moulds during centrifugal casting, thru plastic deformation of mould material under heavy force in cold working process.

Flat Peening Tool having Tip radius varying from 7-18 mm depending upon mould dia., to be worked Under air pressure 6-9.5 Kg/cm². The manufacturing process of flat peening tools are same to the ductile Peening tools.

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Peening Tool Profile Grinding Machine

Extremely useful for restoration of worn out profile of both flat and round peening tools tips after long use and to maintain the centricity of the tool tip with respect to tool body centre line, for getting effective impression of peening and also to increase tool life.

KEY FEATURES:

TECHO - BRAND Profile Grinding Machine is available in two versions:

PRE-FORMED`GRINDING WHEEL TYPE MACHINE

In PRE-FORMED type, formed grinding wheels as per the required tip radius of peening tools will be supplied which are to be fitted to a motorised wheel head. The worn-out peening tool to be fitted to a separate motorised tool head and both the units are fitted on a common platform which in turn fitted on a rugged casting base.

TO-FORM`AS PER CHOICE' TYPE MACHINE

In TO-FORM type, a separate profile grinding attachment, with indications of sizes of tip radius can be formed, will be fitted on the common base of motorized grinding wheel head and tool holding head, as stated above. In this machine 150 x 25 mm, GC Wheels (2 Nos.) will be supplied.



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Single Peening Heads

TM

Single Peening Head for DN 200-350 & 400-750

INTRODUCTION:-

Single Peening Head to be used with either Ductile peening Tools or Flat Peening tools for peening on the inside surface of the mould. Each of these heads are manufactured from ultrasonically tested alloy steel with proper stress relieving process and heat –treatment process to give longer and effective life. Proper method has been adopted to prevent air leakage from the heads.



Single Peening Head for DN 1200-1400

KEY FEATURES:

Single Peening Heads are coated with DI- Chromatic solution to prevent rust and are available for DN 80, DN 100-150, DN 200-350, DN 400-750 and DN 800-1000 & DN 1100-1400 size moulds Peening Heads can be matched with the thread dia. Of any peening machine either by threaded joint or by flange joint.

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Double Peening Heads



Double Peening Head for DN 200-350 & 400-750

INTRODUCTION:-

Double Peening heads are designed and manufactured by us first in INDIA for carrying out both Ductile and flat peening operations at a time to increase productivity. Double Peening heads are user – friendly, ruggedly designed to operate under high impact load – developed during combined flat and round peening operation.



Double Peening Head for DN 800-1200

KEY FEATURES:

To work during peening operations (both flat and round at a time), it is necessary to maintain rigidity and balance for withstanding vibration during working. Therefore, design of the double peening heads have been made to withstand that load. Double Peening Heads are having system of Air Locking when any one operation is not required.

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INTRODUCTION:

TM



Single Wheel Air grinder

TECHO – BRAND Air Grinders are used for grinding of internal surface of the moulds to remove the residue of mould powders from the mould surface and also to reduce the depth of old impregnation and fine nettings developed inside the mould surface after centrifugal casting process to generate fresh surface for re-peening.

KEY FEATURES:

TECHO BRAND Air grinders are capable to withstand higher depth of cut under 14,000-18,000 RPM, thus reduces the average mould grinding time- 50% than that of commonly used AIR/ELECTRICAL GRINDERS by using larger dia x length grinding wheels. Air Grinder available for DN 80, DN 100-350, 400-700, 750-1000, 1100-1400 size mould.

Double Wheel
Air grinder



INTRODUCTION:

TECHO – BRAND Double wheeled Air Grinders are used for grinding of internal surface of the moulds to remove the residue of mould powders from the mould surface and peened depth and also to reduce the undulation inside the mould surface after centrifugal casting process due to larger wheel length.

KEY FEATURES:

TECHO BRAND Air grinders are capable to withstand higher depth of cut under 14,000-18,000 RPM, thus reduces the average mould grinding time 50% than that of commonly used single wheeled AIR/ELECTRICAL GRINDERS.

For Example: The time required to complete the grinding of DN 600 MM MOULD is 90 mins. With parallelity of 0.5 m over 6 meter length.

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INTRODUCTION:

Peening Depth Measuring Gauge equipment is designed in such a way that it can be placed on the inner wall of the peened mould without affecting the variation in depth measurement due to rough peened surface.

There is a provision of keeping record of the peened surface when the equipment is attached with computer.

INTRODUCTION:

TECHO – BRAND Go & NO-GO checking gauges are used for checking internal and external diameter of spigot and socket end of DI pipes as per BS, EN & IS STANDARDS. The checking gauges are made of alloy steel with duly, machined ,heat – treated and ground. On checking surface coating is applied to give longer life of the gauges.



Spigot & Socket Checking Go & No-Go Gauges



INTRODUCTION:

The HAND PEENING TOOLS are hand held type with air inlet passage (ON/OFF flow control regulator type) from handle side. The HAND PEENING TOOLS are robustly designed, user friendly, and capable for peening at socket end of moulds when peening impressions becomes invisible at that area due to repeated casting and friction generated during pipe extraction at the time of centrifugal casting.

INTRODUCTION:

Portable Peening Machine are used directly on CC MACHINE RAILS with air inlet passage (ON/OFF flow control regulator type) from rear end of the boom and tool head at other end. The portable peening machines are available for sizes DN 100 TO 400 Where probability of smearing off the peening impressions during pipe extraction is more – for which frequent mould peening is required, causing less productivity.



PORTABLE PEENING MACHINE

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Other Products used in D.I. Pipe Plants:

ORecently we have developed End Cap for DI Pipe plant for our esteemed customer at Gujarat, India.



End Cap for DN 700



End Cap for DN 450



End Cap for DN 700 Different View

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Other Products used in D.I. Pipe Plants:

 $_{0}$ We are also manufacturing the following items which was used in D.I. Pipe plant.



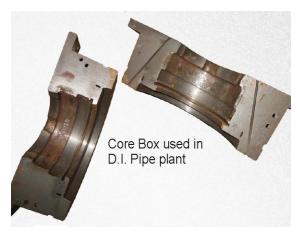
Tong Plate Front & Back View



DIE for Socket for DN 80-1200



External Splined Shaft with matching gear (internal Spline) (Module : 0.25)





CPK Roller



Internal gear with module 0.5 in two halves

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Certification:



CERTIFICATE

Techo Enterprise

32/2b, Rameswar Shaw Road, Entally, Kolkata, Pin Code- 700014, West Bengal, India

Has established and applies quality Management System for following scope of activities:

Design & Manufacturing of DI Pipe Mould Maintenance Equipment, Manufacturing of Spares & Equipment, For Indian Defence, Steel and Cement Industries, Manufacturing of Special Purpose Fixtures, Toolings, Ferrous, Non – Ferrous Items

The Management System of the above organization has been audited and found to be in accordance with the requirements of management system standards detailed below:

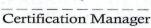
ISO 9001:2015

Certificate Number : 17077 Current Issue Date: 12th January 2022

Original Issue Date: 15th January 2021 Expiry Date: 16th January 2023 Recertification Date: 16th January 202

Recertification Date: 16th January 2024*
*Validity of certificate is subjected to successful surveillance audit

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Certification:

11/30/2020

Print: Udvam Registration Certificate





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