



ADOR WELDING LIMITED



59th Annual Report
2011-12

INDIA'S WELDING POWER HOUSE



ADOR WELDING LIMITED

REGISTERED & CORPORATE OFFICE

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P L A N T S

CONSUMABLES

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EQUIPMENT

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Cover page photograph is of Ador Welding's offering to the Cross Country Pipeline Welding Fraternity, "The Orbital FCAW / MIG Welding System" - This & other Welding Automation set-ups are on display at the Welding Application & Technical Centre (WATC), recently set up at Chinchwad Plant, Pune.



BOARD OF DIRECTORS, EXECUTIVE MANAGEMENT TEAM, BANKERS, AUDITORS, SOLICITORS AND RTA

Board of Directors:

Ms. A. B. Advani
Executive Chairman

Mr. Raman Kumar
Managing Director
(upto 10th May 2012)

Mr. S. M. Bhat
Managing Director
(w.e.f. 11th May 2012)

Mrs. N. Malkani Nagpal
Director

Mr. R. A. Mirchandani
Director

Mr. A. T. Malkani
Director

Mr. D. A. Lalvani
Director

Mr. Anil Harish
Director

Mr. M. K. Maheshwari
Director

Mr. P. K. Gupta
Director

Mr. R. N. Sapru
Director

Mr. K. Digvijay Singh
Director

Mr. Vippen Sareen
Director

Executive Management Team:

Mr. S. M. Bhat

Mr. G. Banerjee

Mr. Joseph Mani

Mr. L. Sundar

Mr. V. M. Bhide

Mr. H. K. Bhatia

Mr. S. S. Bhoi

Mr. J. Rajagopalan

Mr. S. Ajay Kumar

Mr. M. G. Gadre

Mr. A. Vilekar

Mr. H. Venkataraman

Mr. M. Pandey

Mr. S. Ragit

Mr. N. Sankarasubramaniam

Registered & Corporate Office:

Ador House,
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Mumbai - 400 001-16,
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(effective 18th June, 2012)

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Web: www.adorwelding.com

Company Secretary:

Mr. V. M. Bhide

Bankers:

HDFC Bank Limited
Bank of Baroda

Auditors:

Dalal & Shah,
Chartered Accountants,
Mumbai

Solicitors:

Nanu Hormasjee & Co.,
Mumbai

Registrar & Share Transfer Agent (RTA):

Sharex Dynamic (I) Pvt. Ltd.
Unit No. 1,
Luthra Industrial Premises,
Andheri Kurla Road,
Safed Pool, Andheri (East),
Mumbai - 400 072,
Maharashtra, INDIA.

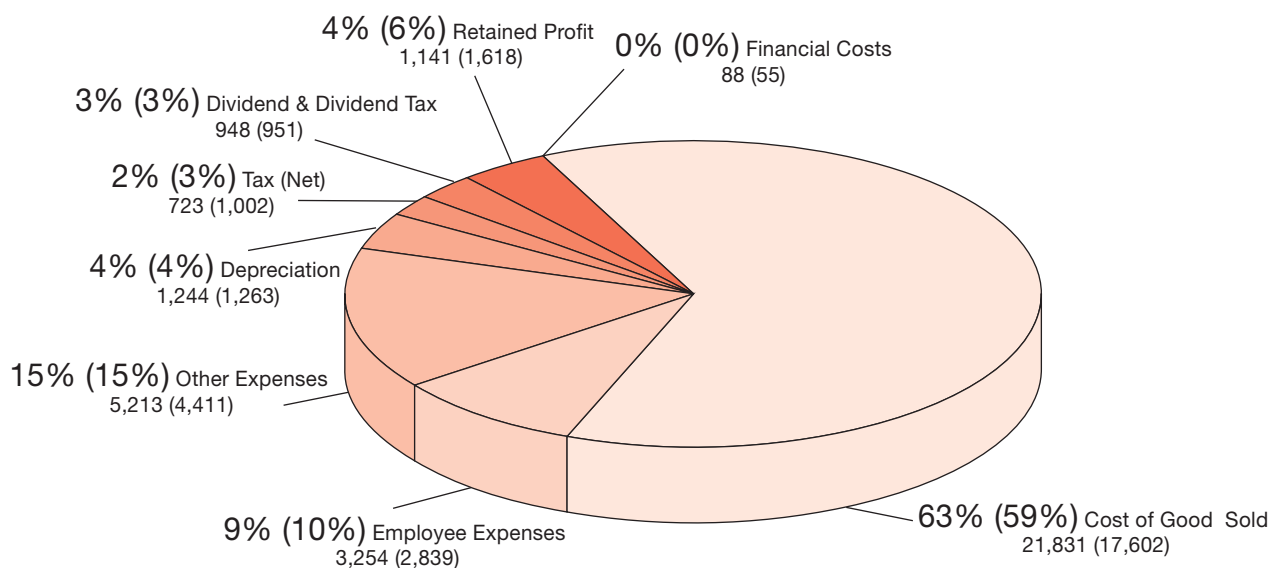
Tel: (022) 2851 5606 / 44,
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Fax: (022) 2851 2885

Web: www.sharexindia.com

DISTRIBUTION OF REVENUE

(Rupees in lacs)



(Figures in bracket indicate Previous Year)



WELDING CONSUMABLES

(NEW PRODUCT DEVELOPMENTS)

A. SMAW Electrodes:

1. Cromoten-992

AWS Classification: AWS A/SFA 5.5 E9015-B9 (Mod), E9015G

A non-synthetic, basic coated electrode to deposit Nb & V modified 9Cr-1.5W-Mo weld metal. The deposited weld metal gives strength upto 650°C service temperature. The electrode is suitable for welding similar composition creep resistant steels used for boilers, power plants, oil refineries, chemical plants, etc.

2. Zedalloy-650 (LH)

It is a heavy coated, basic type, Hydrogen controlled, iron powder type electrode developed for hardfacing application. It produces hard (appx. 650BHN) and sound weld which is non-machinable. The hydrogen controlled basic type coating enables the electrode to be used on high carbon and high sulphur steels without giving underbead cracking or porosity. It is suitable to use for hardfacing of parts, which are subjected to friction and abrasion, such as, rock drillbits, excavator parts, crane wheels, etc.

3. Superinox-347H-15

AWS Classification: AWS A/SFA 5.4 E347-15

It is a specially designed, moisture resistant, hydrogen stainless steel electrode suitable for qualified pipe work in 5G/6G position. The weld metal produced has excellent creep and corrosion resistance. It is used to weld Ti & Nb stabilized high carbon stainless steels like, 321H & 347H.

4. Nicalloy-Fe3 (Mod)

AWS Classification: AWS A/SFA 5.11 ENiCrFe3 (Mod)

It is a specially designed Nickel electrode suitable for joining identical or similar heat resistant Nickel based alloys, austenitic steels and austenitic ferritic joints. It is particularly used in petrochemical installations.

5. Superinox-383

AWS Classification: AWS A/SFA 5.4 E383-16

It is a medium heavy coated stainless steel electrode depositing 28/31.5/3.7Mo/1Cu weld metal with excellent resistance to hot cracking, fissuring and corrosion. It is suitable for welding similar material and other grades of stainless steels and especially recommended for Sulphuric and Phosphoric acid environments.

6. Zedalloy-430 Spl

It is a heavy coated, high alloy type hardfacing electrode which upon welding gives very good compressive strength. The distribution of chromium carbides in the matrix in the weld metal is uniform and even throughout. The deposit withstands temperature up to 650°C, mild impact and severe abrasion. It is suitable for applications where combination of toughness and hardness are desired. It is used for hardfacing of parts which are subjected to severe abrasive wear and moderate shock.

7. Betanox-2553

AWS Classification: AWS A/SFA 5.4 E2553-16

It is Rutile coated electrode depositing austenitic ferrite weld metal suitable for welding of Super Duplex stainless steels. It is suitable for welding of Super Duplex austenitic ferritic steels. It is particularly used for piping in gas or oil, offshore platforms, such as X2CrNiMo N 22 53. Duplex stainless steels 1.4417, 1.4460 & 1.4462.

8. Tendalloy-75G

AWS Classification: AWS A/SFA 5.5 E11018-G

It is a low-alloy, low hydrogen electrode depositing Ni-Cr-Mo type weld metal. It gives excellent mechanical properties in as welded condition with very good impact toughness even at -50°C. It is suitable for welding of heavy and highly restrained joints in grain refined steel and Ni steel. It is particularly suited to weld DMR 249B grade steel.

B. SAW Fluxes:

1. Automelt B41 (M)

AWS Classification: AWS A/SFA 5.23 F8P4-EA3-A3

Automelt B41 (M) is a special agglomerated highly basic, fluoride-basic type flux, especially developed to be used with Mo containing wires. It gives excellent mechanical properties including toughness even after PWHT, when used with EA3 wire. It behaves neutrally in terms of Silicon Pick-up and Burn-Out. Moisture pick-up and Hydrogen content are low. It is suitable for welding of High Tensile Fine grained structural steels, General structural steels, Heat Resistant Steels.

2. Automelt S76 Plus

Automelt S76 Plus is a special agglomerated fluoride-basic type flux for Welding of Stainless Steels and heat resistant steels. It is a high basic flux and gives excellent impact toughness at temperatures as low as -196°C. It behaves neutrally in terms of C, Si and Mn. It is intended to be used for joint welding large cross-sections. It deposits weld metal with low diffusible hydrogen content.

C. FCAW Wires:

1. Automig FC 121

AWS Classification: AWS A/SFA 5.20 E71T-1C

It is a rutile folded, Vacuum Packed flux cored wire for MAG welding. The welding can be carried out at relatively higher welding current density. Higher deposition rates are obtainable than solid wire electrodes. The weld metal is characterized by its smooth and excellent appearance. It is used for welding of structural and C-Mn steels with specific tensile strength up to 500MPa.

2. Automig FC 580

It is a basic, folded, low alloy flux cored wire for hardfacing application. The weld metal deposited is non-machinable, tough, crack resistant and highly resistant to abrasion and wear. It is moderately resistant to impact loading. It is suitable for surfacing of excavator pits, cutting edges, percussion and drilling bits, crusher jaws and cones, scrapper blades, etc.

WELDING EQUIPMENT GROUP (NEW PRODUCT DEVELOPMENTS)

1) CHAMP 250:



It is a light weight and compact IGBT inverter based MMA Welding rectifier, suitable for Medium duty shop floor and project site welding application. Apart from the energy efficient feature, following are the salient features of this rectifier:

- Three phase inverter based, high efficiency and high power factor DC Welder.
- Enhanced reliability due to SMD technology.
- Smooth and stable arc with minimum spatter.
- High frequency IGBT based Rectifier.
- Built in HOT START and ANTISTICK functions.
- Arc force adjustment on panel.
- TIG Welding possible with External HF Unit.
- Light weight, compact and portable for easy handling.
- Suitable for all types of electrodes including cellulosic type.

It has following protections with auto reset capability:

- Over Temperature.
- Protection against Single phasing.
- Input Supply Voltage protections for over and under voltage.

2) CHAMP 500 / CHAMP 600:



These are world class, high efficiency and high power factor, inverter based MMA DC heavy duty welders. These are suitable for gouging applications and can be used where long distance welding is required.

These power sources have the following salient features:

- Three phase inverter based, high efficiency and high power factor DC Welder.
- Enhanced reliability due to SMD technology.
- High frequency IGBT based Rectifier.
- Arc force adjustment on panel.
- TIG Welding possible with External HF Unit.
- Suitable for gouging and long distance welding application.

It has following protections with auto reset capability:

- Over Temperature.
- Protection against Single phasing.
- Input Supply Voltage protections for over and under voltage.



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3) CHAMPTIG 300P / CHAMPTIG 400P:



These are world class high efficiency and high power factor IGBT inverter based Pulsed TIG DC welding outfits suitable for heavy duty and precision TIG welding applications. These outfits are available with water cooling unit with water cooled torch.

Apart from the energy efficient feature, it has the following salient features:

- Three phase inverter based, high efficiency and high power factor PULSED TIG/MMA DC Welder.
- Useful for wide variety of material type and thicknesses.
- Full featured TIG controls possible.
- Power source with built in HF ignition.
- Intelligent protection: Over / Under voltage, Over current / temperature.
- Option of water cooled Torch with water cooling unit available.

4) CHAMP MIG 250 / CHAMP MIG 400:



These are new high efficient and high power factor IGBT based GMAW welding outfits, suitable for continuous wire welding application with various types of material and active and inert gases.

The complete system consists of power source, wire feeder, MIG torch and interconnecting cables.

These power sources have the following salient features:

- Digital Panel for adjusting the welding.
- Synergic mode of operation for single point control in GMAW welding for CHAMPMIG 400.
- 2T, 4T operating modes.
- Electronic choke adjustment for better arc control.
- Crater voltage and Crater current adjustment through digital panel.
- Unique feature of Fresh Tip Transfer (FTT) to avoid globule formation.
- Automatic "Weld Stop" facility.

5) CHAMP 160 / CHAMP 200:



These are world class, high efficiency inverter based MMA DC welders, operates on single phase input supply voltage. These are light weight, compact and portable welders, suitable for light duty general purpose production and maintenance welding applications.

These power sources have the following salient features:

- High operating frequency.
- High efficiency (upto 85%).
- Smooth and stable arc with minimum spatter.
- TIG welding operation possible with lift arc or scratch start technique without HF unit.

6) RANGER-403:



RANGER-403 is a thyristor based MIG / MAG outfit suitable for heavy fabrications like ship building industry. Power source of this outfit is a light weight and compact design in thyristorised models. It has wirespeed and voltage adjustment on the wire feeders which gives easy access to welders for parameter adjustment during welding.

The power source has the following salient features:

- Crater voltage & current control are provided on front panel. (Operate only in 4-track mode)
- CO₂ / Ar. selection switch as well as Gas Check toggle switch are provided on front panel.
- Swivel wheel & fixed wheels are provided for mobility on shop floor.
- 2-track / 4-track selection switch provided on front panel.
- Output Short circuit protection provides protection to power components.
- Power saving control.
- Gas Pre flow status selection.
- Fresh Tip Treatment function is available.
- Abnormal Temperature Rise Protection is provided.

7) SILENT CHALLENGER 400K3:



This is a new generation Engine Driven Welding set having higher fuel efficiency complying to CPCB norms.

Following are the salient features:

- **Virtually maintenance free** Engine driven set with Brushless Alternator and winding less Rotor.
- **Most fuel efficient** set designed and manufactured in India - Achieved saving of nearly ₹1.7 lacs per annum on fuel cost.
- **Most compact CPCB compliant** welding set designed and manufactured in India. Occupies only 60% floor space as compared to the conventional designs of CPCB compliant welding generator.
- **Well accepted and field tested** generator technology for versatile site welding applications including cross country pipeline, city gas pipeline and in-plant pipeline welding, etc.
- **Robust mechanical design with air cooled** engine for usage in hostile site conditions occurring in deserts, coastal areas & at high ambient temperatures.
- **This is the only CPCB compliant equipment** in India fitted with air cooled engine.
- **Specially proven with** cellulosic 6010, 7010G and 8010G and other special electrodes.



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- **Provided with built in engine protection** system to protect against adverse maintenance & misuse by untrained users.
- **Self regulated and self protected design of auxiliary** generator makes it most dependable and most reliable.

8) SILENT CHALLENGER MULTI 2X301:



This is a new generation engine driven welding set having capability of multi process multi operator complying to CPCB norms.

Following are the salient features:

- **First one to introduce** Multi Process Multi Operator, CPCB compliant Engine Driven Set in India.
- **Virtually maintenance free** Engine driven set since, Brushless Alternator and winding less Rotor.
- **It supports nearly all Welding / Cutting Processes** like SMAW, TIG, MIG / MAG, FCAW, SSPW, GOUGING.
- **High frequency Chopper Technology** for better Welding performance.
- **Arc Force is available** - To maintain the Arc stability between work piece and electrode.
- **Can deliver output at much higher Duty Cycle** (100% Duty cycle for 600A / 32VDC).
- **Well accepted and field tested** generator technology for versatile site welding applications including cross country pipeline, city gas pipeline and in-plant pipeline welding, etc.
- **Remarkable Fuel Saving (More than 2 lacs per Annum)** at Dual Operator Mode in compare to 2 individual Conventional Single Operator sets.
- **Self regulated and Self protected design of auxiliary** generator makes it most dependable and most reliable for safe operation.