

GROUP OF COMPANIES

(AN ISO 9001: 2008 Certified Company)



WELDING CATALOG







A.K.INDUSTRIES(Manufacturer / Exporter/ Supplier Of All Types
Welding Electrodes, Industrial & Medical Gases,



A.K.INDUSTRIAL CORPORATION (INDIA) PVT.LTD

Manufacturer Of Wear Plates, Boiler,
Tube Coating, ARC SPRAY Services



A.K.MILK PRODUCT PVT.LTD

Non Chemical and Non Human Touch
Milk Products Lowest bacteria and Baby Products.



RANDHWA ENGINEERING ENTERPRISES

Heavy Fabrication Job Works

Welcome to A.K Group Of Companies

(Manufacturer / Exporter/ Supplier Of All Types Welding Electrodes, Industrial & Medical Gases, Boiler Tube Coating/ ARC SPRAY Services) Manufacturer Of Wear Plates

A.K. Industries is one of the Celebrated & Successful Manufacturer, Supplier and Exporter all types of WELDING ELECTRODES & WELDING WIRES. An Established Supplier in the Industry, We can Provide the Best Products And Services to Meet All needs. We also have good infrastructure from Machineries, Chemical lab, Mechanical Testing facilities and Effective Team Work, Enjoys the loyalty And Good Reputation Among Our Clientele Worldwide For Good Quality Products.

A Wide Range of Low Heat Input, "Welding Electrodes to Serve Maintenance & Reclamation need of end users. Our low heat Input Consumables Used by a Number of Industries like the Cement, Thermal Power, Mining, Steel, Sugar, Railways, Transportation And Fabrication Industries and Now days in ARC SPRAY(Boiler Tube Coating) Service as well. We are capable to Develop New Types of Special and ultra- special Electrodes As Per Need of Customers in India & Abroad.In the Past Years of Service, We Have Earned an Unmatched Reputation in the Industry, Under the Incomparable Leadership in of Mr. Anil. V. Kadam. (Chairman & Managing Director)







web site: www.akgind.com

WELDING CONSUMABLES

DESCRIPTION

CHEMICAL COMPOSITION

C:0.10max

Mn: 0.35-0.60 Si: 0.30 max

S: 0.03 max

P: 0.03 max

C:0.10max

C:0.10max

Mn: 0.40-0.60

Si : 0.30 max

S: 0.03 max

P · 0 03 max

C 0.10 max

C 0.10 max

Si 0.60 max S 0.03 max

P 0.03 max

C 0.10 max Mn 0.90 max

Si 0.60 max Mo 0.40-0.65

S 0.03 max P 0.03 max

Mn 1.30-1.60

APPLICATIONS

MILD STEEL ELECTRODES

AK Weld-6013 classification

S:814:2004 : EC4211 AWSA/SFA.5.1: E6013

A Medium coated, all Position, Electrode for General Purpose fabrication in

Mild steel. Excellent Strike and e-striking characteristics

DUROARC -6013

IS:814-2004 : ER4211 X AWS/A.5.1: E6013

A medium HeavyCoated, Rutile Electrode Intended for Welding Medium Sections In Mild steel Suitable for all Position, t gives Radiographic quality Welds in Ideal Conditions.

DUROARC - 6013 S

Classification

IS:814-2004 : ER4221 X AWS/A.5.1: E6013

Mn: 0.35-0.60 A medium Heavy Coated, rutile type Si: 0.30 max electrode, designed for adiographic quality S: 0.03 max welds with a very stable ard and absolutely minimum P: 0.03 max of spatter. The bead surface is very smooth and finely rippled.

DUROARC - 6013 SS Classification

IS:814-2004 : ERR 4221 X AWS/A.5.1 : E6013

A Heavy Coated, rutile type electrode for achieving Weld of sxcellent finish with radiographic quality welds. It is ideal or butt and fillet welding of sheet metal work

Cutting Electrode: DUROCUT

A special flux covered rapid action cutting electrode which can be used for cutting and piercing all ferrous and non-ferrous materials

C :0.10max Mn : 0.35-0.55 •Structure and Construction Work Steel furniture

Si : 0.30 max Truck bodies Tanks and barges P: 0.03 max

Steel Structure

•Ships, Storage Tanks •Railway Coaches

•Bridges, Boilers •Pipe Lines

•Structural Work

Ship Building, Storage Tanks

•Pressure Ve •Bridges, Boilers

•Pipe Lines

•Boilers, Rail Coaches

•Automobile Frames & Bodies

Locomotive Fire Boxes

 Storage Tanks Sheet Metal Work

•Remove flash and risers

•Piercing holes

 Cutting of farrous & non-ferrous materials including CI.

LOW HYDROGEN ELECTRODES

DUROARC - 7016

Classification:

IS:814-2004 : EB5424 H3X : : E6013 AWS/A 5.1

a basic coated iow hydrogen electrode producing aradiographic fveid, tough, ductile weld metal for welding heavy sections in mild teel, medium high tensile steels subjected to dynamic loading.

DUROARC - 7018

Classification:

Mn 1.00-1.40 Si 0.60 max S 0.03 max IS:814-2004 : EB 5426 H3JX AWS/A.5.1 : E7018 A heavy coated low hydrogen iron powder type electrode ideally P 0.03 max

suited or producing tough and ductile welds of radiographic, quality, 110 ecovery for welding heavy structures subjected to dynamic loading.

DUROARC - 7018 - 1

Classification:

IS:814-2004 : EB 5626 H3JK AWS/A.5.1 : E7018-1 In iron powder low hydrogen type electrode producing A very tough and cuctile, Weld with radiographic metal for

welding heavy and rigid structures subjected to dynamic loading.

DUROARC -7018 - A1

Classfication: IS:-1395-82

: E49B-A-I 26 Fe AWS/A.5.1 : E7018-AI

An low hydrogen iron powder type electrode for weiding of 0.5 Ao steels and other low alloy steels for elevated service

temperatures. Ap to 525 'C Welds are of radiographic quality with 110 recovery

Heavy Duty Structures Mn 0.90-1.30 Si 0.60 max

Standard Structures
 Used as buffer Layer before hard surfacing
 Earth Moving machinery
 Joining MS with Cl
 Welding of HT52W and High
 Tensile Steels

•Earth Moving machinery

Pressure Vessels
 Storage Tanks
 Pipe Lines

Penstocks

Welding of carbon steels
 Pressure Vessels
 Hardenable low alloy steels

Equipment subjected to severe stress and dynamic loading
 Heavy and rigid structures

High temperature boilers

Welding of 0.5 Mo steels
 Pripes and tubes
 Pressure vessesls

WELDING CONSUMABLES

DESCRIPTION

CHEMICAL COMPOSITION

APPLICATIONS

WELDING STAINLESS STEEL ELECTRODES

DUROINOX - 308

0.08 max Classfication: Mn 0.50-2.50 Cr 18.0-21.0 Ni 9.00-11.0 : E 19.9 R26 : E 308-16 IS:-5206-83 AWS/A5.4 A rutile type stainiess steel electrode for welding of Mo 0.75 max Cu 0.75 max Si 0.90 max 18Cr-8Ni, grade stainless Steels. Weld metal displays

•Welding of AISI 301, 302, 304 and 308 grades
•Surfacing of 18/8 and clad steels of similar composition.

DUROINOX - 308 L

Classfication:

IS:-5206-83 : E 19.9 LR26 AWS/A5.4 : E 308L-16 A advanced rutile type electrode with an extra low carbon 19Cr-10Ni weld metal. Weld metal has excellent resistance to intergranular corrosion, cracking, oxidation and scaling at elevated temperature upto 800'C.

C 0.04 max Mn 0.50-2.50 Si 0.90 max Cr 18.0-21.0 Ni 9.00-11.0 Mo 0.75 max

302L 304 Land 308 L grades
Normal carbon grades
like 302, 304 and 308. Welding of clad steels of similar composition.

•Welding of AISI 301 L,

DUROINOX - 309 Classfication:

IS:-5206-83 E 23.12 R26 AWS/A5.4

A rutille type stainless steel electrode Depositing 24Cr-12Ni which has excellent Corrosion and oxidation resistance in Continuous service upto 11 OO'C

Good Resistance to cracking, corrosion and scaling,

•Welding of AISI 309 type. C 0.10 max Mn 0.50-2.50 Si 0.90 max

joining stainless steel to low alloy steels or carbon steels.
 Depositing of buffer layer on carbon

steel or low alloy steels before deposition of 18/8 type of weld metal.

DUROINOX - 309 L Classfication:

: E 23.12 L R26 : E 309-16 IS:-5206-83 AWS/A5.4

An extra low carbon electrode to deposit 24Cr-Ni weld metal which has excellent corrosion and oxidation Resistance at elevated temperature upto 11 OO'C

C 0.04 max Mn 0.50-2.50 Si 0.90 max Cr 22.0-25.0 Ni 12.0-14.0 Mo 0.75 max

Cu 0.75 max

Cu 0.75 max

Cr 22.0-25.0 Ni 12.0-14.0

Mo 0.75 max

Cu 0.75 max

steels or carbon steels Deposition of buffer layer on carbon steel of low alloy steels before deposition fo 18/8 type of weld metal.

Welding of AISI 309 L type.
 joining SS to low alloy

DUROINOX - 309 Mo Classfication:

IS:-5206-83 E 23.12.2 R2 E 23.12.2 R26 AWS/A5.4

A rutile type stainless steel electrode to Deposit 24Cr-12Ni-2.5 Mo, which has Excellent corrosion resistance up to 11 OO'C

C 0.10 max Mn 0.50-2.50 Si 0.90 max Cr 22.0-25.0 Ni 12.0-14.0 Mo 2.00-3.00 Cu 0.75 max

•joining of 309 Mo, 316 type stainless steels joining SS (316 type) to low alloy steels or carbon steels.
 Deposition of buffer layer on

carbon steel or low alloy steels before deposition of 316 type of weld metal.

·Heavy cast iron sections. Joining cast iron to steels
 Machine bases, cast iron dies

oil & chemical soaked castings •Gear box housings

Welding of all types of cast iron.Joining of cast iron to steels

sulphurphosphorous castings.

•Machine bases, transmission housing, gear boxes, engine blocks, pump bodies etc.

CAST IRON ELECTRODES

DUROCAST- NM CLASSIFICATION:

new economical, non machineable, high Strengths electrode for welding of oil soaked and dirty cast irons, Weld deposit is porosity free deposits with superior crack resistance and has good color match with cast iron.

DUROCAST- FeNi CLASSIFICATION: AWS/A5.15

An electrode with Ferro-Nickel core wire designed to produce a higher matching strength weld metal for joining malleable, nodular and S.G. iron, Weld metal has good ductillity and machineabillity.

DUROCAST-Ni CLASSIFICATION: AWS/A5.15

An electrode with pure Nickel core wire designed for welding cast iron, the cold way. The Nickel deposit does not pickup carbon from the base metal and hence remains ductile soft, machineable.

DUROCAST- Cu CLASSIFICATION: AWS/A5.15

An electrode with Nickel copper alloy wire for welding cast iron without preheating and for obtaining machineable weld which ensures minimum dilition of the weld metal by the base metal. The weld deposit has good colour match with parent metal.

C: 0.80-1.50 Si: 0.90 max Ni: 55.0-60.0 Fe: Balance

Repair of broken casting.

- Correcting machining errors on Castings.
- Joining cast iron to steel.Filling up small cavities.

Can be used on high

- •Building up a non-corrosive surface nickel on cast iron parts exposed to corrosive liquids.
- Joining cast iron to steels
- ·Well suited for gears.
- Machining errors on castings.Rebuilding worm surfaces.
- ·Machinery parts, pump bodies etc.
- C: 0.35-0.55 Mn: 2.00-3.00 Ni: 60.0-70.0 Cu: 25.0-35.0 Si: 0.75 max

WELDING CONSUMABLES

DESCRIPTION

CHEMICAL COMPOSITION

APPLICATIONS

HARD SURFACING ELECTRODES

DUROHARD -250

An electrode depositing air hardening type of weld metal, which dilplays excellent toughness and abilty to withstand heavy impact. loads and has excellent resistance to rolling and sliding friction. Weld metal is machineable.

Hardenss: 250-300 BHN

- •Gear Shafts, Pulleys
 •Pinion teeth, Couplings
 •Sugar cane rollers
 •Rolling stock tyres
 •Axles, Wheel Rim

DUROHARD -350

A rutile type electrode to deposit air hardening type of weld metal for hard surfacing of carbon and low alloy steels. Weld metal is machineable with carbide tools and is highly resistant to abrasive wear and has a fair degree of toughness.

Gear, Cams
 Sprockerts, Brake Shoes
 Punching dies, Steel Casting
 Shovels, Pulleys

DUROHARD -550

A semi basic type electrode depositing air hardening type of weld metal having excellent resistace to severe abrasion and moderate impact. The deposit is non-machineable.

Hardenss: 500-500 BHN (On Single and Multi Layer

Crusher jaws and hammers Cane and paper cutting knives Shear blades, conveyor parts Heavy earth moving equipments Punches, Dies

DUROHARD -550 LH

A basic coated electrode depositing weld metal which is highly resistant to cracking and exhibits excellent resistance to tempering upto 500°C.

Hardenss: 550-650 BHN (On Single and Multi Layer) Crusher jaws Cane cutting knives Conveyor buckets Oil Expeller Worms Mine rails, Crane Wheels

DUROHARD-V

A basic coated electrode depositing alloyed cast iron which is hard and extremely resistant to abrasion and metal to metal wear.

Hardenss: 500-500 **BHN** (On 3Layer deposit)

Oil Expeller Worms Concrete mixer blades
Muller tyres, Plough shares
Excavator teeth, Scraper blades

DUROHARD-Mn

A basic coated electrode deposit work Hardenable weld metal having typically 12 Mn. Weld metal is extremely hard and non machineable after work hardening.

Hardenss: As Welded: 170-220 BHN Work Hardness 400-500

Mn Steel Rail crossings
 Austenitic Mn Steel Castings
 Rock crusher jaws

Crusher hamm

Bucket teeth & Lips

CO2 MIG & TIG WELDING WIRES

AK- Co2 MIG WELDING WIRES

Size (mm): 0.60, 0.80, 0.90, 1.00,

1.20, 1.40, 1.60, 2.00

Grades : AWS-5,18er 70s6,DIN-SG2

IS-6419-S4 & AWS- ER 90SR

OTHER Grades Available.

AK-TIG WELDING WIRES

Size (mm): 1.20, 1.60, 2.00, 2.40, 3.15 MM

: AWS ER 70S2 & AWS ER 70S6 Grades

All SIZES CUTTING & GRINDING WHEELS

AVAILABLE AK CUT & AK GRINDING



Co2 Mig Wires



Tig Wires



Grinding Wheel

State Of The Art Testing Facilities









