

VALGRO NEWS

Finishing Deburring Polishing

Tuesday, November 07, 2017 Volume 11

www.brushingmachine.com

www.ecopickledsurface.com

www.valgroabrasives.com

www.youtube.com/valgroabrasives

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Deburring
Finishing
Polishing
Degreasing
Cleaning
Sanding
Descaling
Washing
Brushing

We work with our customers to develop innovative products to increase the productivity with reduce rejection and rework. We provide proactive flexible and high performance approach to all task level from detail design to final assembly of surfacing solution.

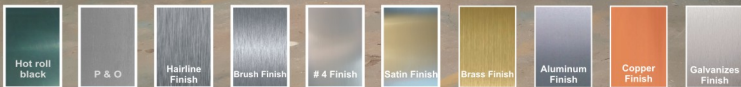
No matter, what sort of finishing problem you have, we are always ready with right solution, just a phone call distance.



Seamless
Solution...

Hello Friends,
To make machines and to bring desired results, both are different things. Our expertise in surface condition is the key factor in metal finishing success. There are several manufacturers of brushing & polishing machine, but lack of abrasive expertise they does not able to provide desired result to end user and the machine operator gets into trouble, whereas in our case total solution and customer satisfaction is guaranteed due to one roof seamless surface solution.

Visit us



Deburring

Valgro-Hyzer
Precision Brushing Machines

Ultimate solution for Deburring & Metal Finishing Operation in sheet metal processing fabrication



Sheet Edge Deburring Machine

It is usually an unwanted piece of material and when removed with a deburring tool in a process called 'deburring'. Burrs are most commonly created after machining operation, such as turning, punching, shearing, cutting, grinding, drilling, milling,

Burr Classification & Deburring Solution

Class of Burr	Definition of burr & Removing technique
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Class 1 : Microburrs

Microburrs can only be observed using magnification. To the unaided eye, they appear as sharp edges. Grinding operations are a common source of this type of burr

How to Remove deburr by nylox abrasives wire brush



Class 2 : Feather burrs

Feather burrs are readily visible without magnification and are characterized by extremely thin roots. They can be removed with a tip of a pencil

How to Remove deburr by abrasive brush



Class 3 : Attached Burr

Class 3 burrs, are well-attached. The primary difference is size and root thickness.

How to Remove Brushes can sometimes remove Class 3 burrs, but often a stock removal operation such as grinding is required for complete removal.



Class 4 : Root Burr

are very large with thick, right roots. Burrs in this class different than conventional burrs because they are comprised of displaced base material which is still fully-attached to the parent part.

How to Remove often a stock removal operation such as grinding or machining is required for complete removal.

LBF Series Plasma Oxy Burr removal Machine Long Belt Grinding & Finishing Machine

DuKlean
Clean & Sparkless



VALGRO-LBF Series long belt finishing machines have a flexible abrasive belt which enables finishing on flat surfaces of big dimensions. VALGRO-LBF machine is ideal for irregular shapes polishing as well as for weld removing. The flexible & adjustable table is useful when, because of the big dimension of the materials to be worked, you cannot move the piece.

Finishing Hot Rolled Sheet, Square and Rectangle Tube, Flat bar, Flat product for deburring and surface finishing of No. 4, Matt, Satin Finish tubular structures, corners, edges or removing welding from the surface is easy with VALGRO LBF machines.

VALGRO-LBF machines are available with different working width, with single and double abrasive belt or Belt and Scotch abrasives roller Brush for Matt and satin finishing



Mission statement

work together to enable our business to grow. Growth will be achieved by sharing our talents and resources to:

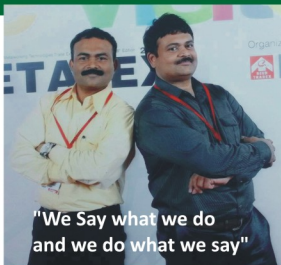
The performance spectrum

- Consulting & Planning
- Projection & Realization
- Assembly and start-up
- Training & Production assistance
- After-Sales-Service

YouTube /valgroabrasives LinkedIn /valgroabrasives Instagram /valgroabrasives

www.brushingmachine.com www.ecopickledsurface.com

"We Say what we do
and we do what we say"



Deburring brush for automobile and Engineering Parts

NILOX ABRASIVES WIRE BRUSH

Wide Face Cylinder Roller Brushes for steel plant



Nilox wide roller abrasives filament brush are widely used in steel plant for de-scaling, de-greasing and cleaning and grinding operation for better coating adhesion. Nilox filament bristle having 90% bend recovery with chemicals resistant power it can be used mild alkaline solution,

Circular abrasive wire Brushes



mainly used for cleaning, deburring for uneven component like, gears, chain sprocket, crank shaft, cam shaft, Engine block, Aluminum heat shrink, Aluminum engine cylinder, extrusion cut off burr.

PolyBond Unized Deburring Wheel & Mops

"Valgro-Fynex" Unitized mop & Wheel are made from the high durability unitized material, It can shaped or profiled for the finishing and deburring of precision parts and are perfect for those difficult to reach areas. That will improve the quality of finishing on any Metal without smearing.



Applications :

- Deburring and blending which requires high RPMs
- Decorative finishing which requires low RPMs
- Polishing which requires high speeds and low pressures

Nilox abrasive filament brush made with 100% dupont nylon 612 grade and mixture of abrasive grit. The abrasive grit is uniformly dispersed throughout the resulting filaments during extrusion process. Nilox brushes are safe, non reactive and offer an excellent alternative to traditional steel filament brushes. Good stiffness, wet or dry, lower moisture absorption, great bend recovery, better chemical resistance and longer brush life is other benefits.

VMC Deburring Discs Brush



Solve many deburring, edge radiouising, grinding and finishing problems. Their compliancy and filament nature accommodate part contours, prevent damage to value-added components, and make them ideal for robotic, semi and fully automated workstations.

Nilox End Brush



Deburring and Finishing Inner Dia. Or recesses of machine parts. Spot-facing drilled holes to remove burrs and edges, suitable for low speed CNC machining centers and portable tools.



VXL DEBURRING WHEELS

Excellent starting point for medium to heavy Deburring



Made with Valgro-Fynex heavy duty impregnated nylon fiber abrasives material wind on a resin core and bonding with together with high compress technology. Specially designed for medium to heavy deburring. High finishing and polishing effect on solid metal surface. We have three qualities of convolute wheels, Cut N Polish, Medium, Fine grade

Stainless steel Hairline Finishing brush

"Valgro-Fynex" Kombi Flap wheels are manufactured from closely packed strips of Valgro heavy duty material with the addition of a coated abrasive strip between each layer. The Valgro materials between the layers of coated abrasive provide a resilient backing that eliminates the layover effect encountered with conventional abrasives flap wheel.



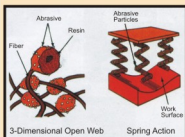
The Valgro-Fynex metal surface combination system is the most versatile method for all applications where a linear scratch pattern required with reduces finishing cost. Whether you work in stainless steel, aluminum, brass, copper or other alloys.

What is the Valgro-Fynex?

Valgro-Fynex is a three-dimensional non-woven abrasive material used in cleaning, finishing and general preparation of surfaces.

Valgro-Fynex material are converted into a range of different products, such as pads, rolls, discs, mops, wheels and brushes.

Each of these can be produced in a variety of grades, enabling a wide range of performance possibilities.



Valgro-Fynex®

FINISHING FLAP BRUSH Smooth and Superior Finish



It ensures a large variety of shadow-free finishes, ideal for polishing, blending, cleaning and brightening any metal surface for final operation. Provides uniform pressure to the entire surface for wonderful finishing.

SHAFT MOUNTED FINISHING WHEELS

Especially useful in cleaning & finishing inaccessible areas

Removal of surface contaminates and residue of all type, surface preparation prior to plating / coating, cleaning before welding, brushed line finish on soft metal / woods Finish, matt finish on plastic and dairy equipment, cleaning copper electrical bus bars, satin finish on cutlery & kitchen equipments.



"Valgro-Fynex" is manufactured from three components.

- * **The Fibre**, which constitutes the bulk of its body
- * **The Abrasive**, which provides the grit
- * **The Binding Resin**, which bonds the constituents together.

Why use Valgro-Fynex?

Valgro-Fynex offers optimal answers to a huge range of finishing & surface preparation problems.

They are being preferred by more and more industries as a superior alternative to traditional products in the field, owing to their technological efficiency and fineness.



Polishing

Valgro-Hyzer®
Precision Brushing Machines

Valgro abrasives is fast and emerging Polishing process preferred by stainless steel user

Polishing is value added operation in steel fabrications Industries. Uniform Surface finishing for Esthetic look, easy cleaning & Rust resistant surface is most important parameters.

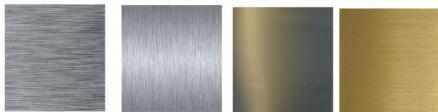
Valgro Scotch Brite roller polishing is

Widely used for restaurant and kitchen equipment, Pharma & food processing, dairy equipment. Architectural wall panels, Beverage equipment, Boat fittings, Bus shelters, Elevator doors and interiors, Escalator trim, Hospital Furniture, Mass transit equipment, Water fountains, Metro and Railways, Shipbuilding, Automobiles

Rust Free, Rust Resistant Surface



On the longer timescale – months and years, there is abundant evidence that the smoother the surface, the slower will be processes such as corrosion or tarnishing and also to deposit of fine airborne particulates, such as soot or dust. The smoother the surface, is easy to clean by water or wiping.



The polishing of coils and sheets is one of the most added-value operations offered by Valgro India. Valgro has developed various model for sheet polishing in configuration of flexibility and lower operating costs. Sheet Polishing machines are available in dry and wet processing.

The Valgro-Hyzer precision Polishing Machine is suitable for surfacing of nonferrous and ferrous metals. Provides good quality of polishing effect with removal of micro scratch, Acid layer & Oxide from the surface with safe and economical way.

Our expertise provides you a unique and uniform surface finish from start to end.

Available Model :

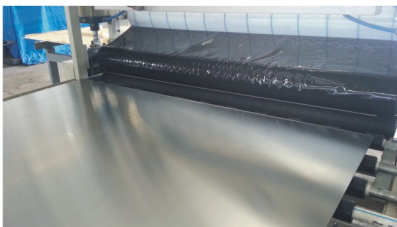
Fabrika Series: SP32-1, SP50-1, SP62-1 **Dry Polishing line**
SAMARTH Fabrika Series Stainless steel Sheet & Blank Polishing machine Suitable for Stainless steel Fabrication Industries for in-house Polishing work. Increase profit by reducing cost.

Project Series: SP50-4, SP 62-4 & **Wet or Dry High Speed Polishing Line**
SAMRTH Project series Sheet polishing machine is widely acceptable from Stainless Steel sheet and coil producer, service center and Big stainless steel products from a warehouse. **a**-Steel plant Service center **b**-Steel suppliers

Working thickness from 0.8mm to 3mm in single pass

Working speed: 0.5 mpm to 10 mpm

Finish: No.4, Hairline, Matt, Satin, 2J Finish



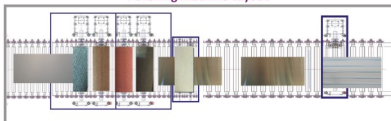
Benefits of VALGRO Sheet polishing machine

- Finish Achieve : #4, Matt, Satin, Hairline in one machine
- Save money and time by reduce inventory
- Stock only 2B sheet with any thickness
- Consistence uniform surface finish
- In-house polishing facility

Polishing Machine Technical Features & Function

1. Single & Multi head Scotch Brite Polishing station
2. Each Polishing station work Horizontal axis rotating with Oscillation system which will keep the brush surface free from embedment.
3. Auto feed sheet speed Transport System
4. Synchronise with Complete Polishing line at one place operating system .
5. Each electrical system will be work separate electrical control.
6. Wet / Dry operation with Easy abrasives Roller brush replacement
7. Abrasive Brush up and down control system to give desired pressure on the sheet at operating Panel.
8. Different brush grits combinations are possible to perform different surface treatment

Polishing Machine Layout



Polishing

Aluminum Sheet, Circle, Flat, Profile

Aluminum is VERY Soft metal, even though it is very durable and perfect metal for many products. So be careful during cleaning process not to scratch, dent, gouge or high concerted acidic cleaning your aluminum products.

Is used to have satin finish on aluminium extrusions prior to **anodizing**. Brushes made of waved metal wires clean the surface of aluminium and eliminate **extrusion lines, scratches, and marks**. The etching duration of satin brushed aluminium prior to anodizing is much less than the unbrushed counterparts resulting in less chemical consumption in etching and waste water treatment, therefore considerable decrease in production costs. The obtained finish is of fine mechanical satin type, with excellent appearance like Scotch-Brite. No polishing paste and no dust created during the work.

Before



After



Corrosion attack on aluminum surfaces is usually quite obvious, since the products of corrosion are white and generally more voluminous than the original base metal. Even in its early stages, aluminum corrosion is evident as general etching, pitting, or roughness of the aluminum surfaces.

Aluminium Profile Polishing Machine

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Features

Low Noise: Below permissible noise level

- High Filtering Efficiency.
- Cotton filter bags reducing fire hazards.
- Energy Saving: Less Power consumption.
- Standard Accessory: Flexible Pipe.

Copper Bus bar, Sheet, Strip

Tarnishing in copper is similar to rusting in iron. It's an electrochemical interaction between molecules on the surface of the metal and molecules in the surrounding air. This interaction forms a layer of chemical compounds over the metal that have a different color from the metal itself. Copper tarnish is a nuisance under some circumstances, but desirable in others, depending on what the copper is being used for.

Valgro-Hyzer Bus bar deburring and polishing machine is suitable for Copper and aluminium extrusion bus bar for removing of uneven colour tone, Oxide, peel off, Black Carbon, Scratch, Extrusion die line, press punch burr remove and offer Bright shine surface for better electrical conductivity.



DuKlean

Clean Air Equipments

Mobile Portable dust collector system

Valgro "DuKlean" dust collector system used to enhance the quality of air released from industrial and commercial processes by collecting dust and other impurities from air or gas. Designed to handle high-volume dust loads, a dust collector system consists of a blower, dust filter, a filter-cleaning system, and a dust receptacle or dust removal system. It is distinguished from air cleaners, which use disposable filters to remove dust. These Dust Collectors are specially designed for collection of dry ferrous dust generated from buffing and polishing and grinding process,



Kindly Note: The effectiveness of any type of Dust Collector depends on a number of factors such as the design of Suction Inlet, proximity of Suction Inlet to the point of dust generation & Suction in the direction of dust generation. The suction capacity of the Dust Collector viz: 1,2,3 HP as required. The efficiency available on Dust Collectors is 50 to 60% normally. — **Note** : Due to constant design improvement, we reserve the right to change design & specifications without prior notice.

Stainless Steel Metal Finish Kit

Mobile linear polisher - Fight to Finish in 3 Step

Introductory Pack

Work step -1

Machining Surface :

Removing of a welded seams, Handling scratch or require light machine on flat metal surface , you have to fulfill first coated abrasives grinding belt with expandable roller,



Rough Material sanding / removal

Sanding Sleeves with grain of 36, 40, 60, 80,120 offer effective surface grinding with very good surface result. This surface is basic surface of subsequent grinding pattern. Require 2500 RPM for high sanding operation(Level 5-6)



Result :

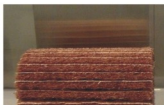
Surface grinding with a grain of 120 prior to satin-finish with the stainless steel set Rough – deep Hairline Finish on metal

Belt : 115 x 100 Grit 40, 60, 80, 120 Expander balloon

Work Step -2

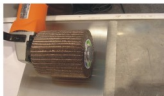
Scratch pattern Surface:

220% more volume of abrasive material in comparison with current wheels. Require 900-1200 RPM for grain finishing operation (Level 1-2)



Hairline Surface:

Combination brush with Coarser and Finer grade provide uniform texture finish, Require 1200-1500 RPM for fine grainning operation (Level 2-3)



Result :

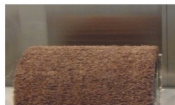
Kombi fine grade brush provide smooth hairline finish after sanding process

Brush : 115 x 100 Grit / grade KCR, KSM with accessory

Work Step -3

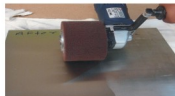
Matt Finish :

Pharma, Food, dairy and commercial Kitchen equipment manufacture demand matt finish, by use of plain Coarser wheel, Require 900-1200 RPM for Matt operation (Level 1-2)



Satin Finish :

Stainless steel surface get rusty due effect of weather, and regular use. Smooth satin finish provide rust resistance surface on stainless steel. Mostly use in architect fabrication. Require 2500-2800 RPM for Satin finishing operation (Level 5-6)



Result :

Valgro rust resistant flap brush provide smooth satin finish on stainless steel and protect the surface from rust and dust from the weather effect and regular use.

Brush : 115 x 100 Grit / grade PCRS, PSM with accessory



Result

Work step -1

Work step -2

Work step -3

Power Input : 900 w	Brush Size : 115 od x 100 width x 19ID
NO load RPM : 900-2800RPM	Brush Grade : KCRS, KSM, PCRS, PSM/PFN
Voltage : 230/50HZ.110V/60HZ	Belt Grit : 36, 60, 80, 120

Mobile Round Tube Polisher

There are many types of tube fabrication. Tight radius bends, wide sweeping curves or simple long lengths. Whatever the type of tube or pipe you need to finish, achieving a consistent high quality finish is always the challenge.

This powerful tube polishing machine with an extremely high torque ensures amazing power transmission. The adjustable speed guarantees comfort and is user-friendly.

The ingeniously placed handle ensures 100% controllable working pressure. The result is an uniform and flawless finish in less time and using less material on round tubes.

Overview of the round Tube polishing machine



Electronic Speed control, Marathon Heavy Duty motor Double Reduction Gear system, Precisely Guiding of belt Mobile & light weight, Tube, Pipe, Solid rods



Sliding ON Off switch



Speed wheel for setting belt speed



Grip Handle



Tensioner arm for replacing the sanding belt



Marathon Electronic Motor with Double reduction gear system



Belt Driven wheel

Power Input : 900 w
NO load RPM : 900-2800RPM
Voltage : 230/50HZ.110V/60HZ

Max. Belt Length : 760mm
Max. Belt width : 40mm
Grit : 80, 120, 220, ALO



The Brush Factory

**India's #1 Application & Innovation Service Facility
For Metal Finishing business**

Install Machinery

- Sheet Polishing Machine
- Strip Polishing Machine
- Flat Bar Polishing Machine
- Deburring Machine
- Hot Roll Plat polishing Machine
- Vacuum Sheet Loading Machine
- Surface Protection Lamination
- Long Belt Polisher
- Anti Finger coating System

Provides high quality metal polishing services through Automatic and Semi-Automatic Polishing processes.

Whether it is your material or we source for you. We polish all types of stainless steel, Ferrous and non-ferrous metals. As per customer Specialty finishes and exacting requirements are rooted in the foundation of our reputation.

Available Finish: No.4, Satin, Smooth Hairline, Dip Hairline, Matt, Duplo and Gloss Mirror etc. Special Ra finish.

Capabilities / Services

1. Finishes available to be applied on all stainless steel 200, 300 & 400 series metal,
2. Finishes from No. 2B to no. 6 Satin,
3. Certified to specific Ra readings with special request
4. Capacity 1.5 mtrs wide X 4 Mtr length thickness up to 3mm for cold rolled sheet
5. Capacity 2.5 mtr wide x 10.5 mtr. thickness up to 25mm for Hot rolled plate
5. Capacity of vacuum lifting system 250 Kg for metal sheet to avoid further scratch during handing.
6. 5 ton lifting capacity of overhead crane for loading and unloading material from the truck
7. 18000 Sq feet working Space

Material To be process :

Cold rolled Stainless steel:

Finishing, Polishing, laser cut deburring , mirroring

Hot rolled Stainless steel :

Grinding, Finishing, Polishing, laser cut deburring, mirroring

Aluminum:

Finishing, Polishing, laser cut deburring

Copper and Brass Metal:

Finishing, Polishing, laser cut, deburring

Other alloy steel and special metal:

rust and oxide cleaning, washing, finishing, deburring, Digressing

Application & Innovation Facility
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Odhav Ring Road, Ahmedabad - 382 410
Gujarat, India

VALGRO INDIA LIMITED



Acid Free Eco Pickled Metal Surface

Technology develop By Arvind Patel, Founder and CEO, Valgro India

A novel invention of environment-friendly replacement for acid pickling process, which produce lustrous rust-resistant metal surface in hot and cold rolled material

Valgro India develop patented innovation in Green Steel, especially when compared to acid pickling process. The Valgro EPMS working system is a mechanical brushing system combination with flexible abrasives roller wire brush, Water base non-hazardous cleaning solution and normal hot and cold water. That improves hot rolled black strip, making it a better base material for fabrication and OEMs.

Valgro EPMS is a novel method for removing annealed scale, rust, oxide, mill scale, and oil patch, black spot/patch from hot rolled and cold rolled strips. This process creates an ideal surface for paint adhesion especially on CRC and stainless steel. In addition, it prep the steel better than any acid chemicals currently available for wash systems. The said method is also used for the deburring, cleaning, washing, graining, de-greasing, de-scaling, finishing and surface preparation of different kinds of ferrous and non-ferrous material by wet and dry processing.

Background

During the hot rolling process a layer of oxide forms on the surface of the steel. This layer, commonly called 'scale' is formed when iron in the steel reacts with oxygen in the air.

Thickness and chemical composition of the scale is a function of the hot strip temperature and the availability of oxygen to the strip surface while it is hot. Hot rolled and cold rolled steel, stainless steel and other ferrous and non-ferrous metals are currently de-scaled by acid pickling process, shot blasting process or slurry blasting process. Each of these three processes may have certain advantages, but also many distinct disadvantages, with which users in industry are not unfamiliar. The main dis-advantage of acid pickling process is highly corrosive chemical used in this process. It damages other equipment, building, land, environment, and human assets as well.

Rust-resistant Metal Surface

The most amazing property of surface condition steel is its ability to resist rusting without protective oil or coatings. After ordinary hot band has been surface condition processed, existing rust is removed and it will not rust again if stored in a dry indoor environment.

Such corrosion resistance will extend the 'self life' of steel and, combined with the absence of an oil coating, offer:

- ◆ Reduced paint preparation
- ◆ Cleaner work environment
- ◆ Reduced welding fumes
- ◆ No skin irritation from oil
- ◆ No need to grind off rust
- ◆ No more rejects for rust.

Research Results for Surface Finish

The EPMS brushing technology proved to be capable of not only producing Ra values in this desired range, it demonstrated that surface roughness can be "managed" by selection of the brush and speed. The nominal Valgro EPMS-processed strip has a uniform surface texture, as shown in brush polish sample. The surface smoothness, as measured by Ra, is comparable to that of acid-pickled strip

Research Results on Saving in Chemical for Retrofit Pickling Line

Through continuous research and development efforts in current pickling line through retrofitted cleaning equipment, we are able to remove/reduce the black carbon suits and oil patch which is normally removed with the use of hazardous pickling process.

Field trial by the company has proved that saving on pickling chemical cost reduction to the tune of 70% to 75% can easily be obtained by reducing concentration of chemical. Again the total process becomes environmental friendly as you are working with less concentration, which reduces chemical hazards to considerable extent.

Also, the hazardous waste is not easily disposable, besides the fact that hazardous chemicals require special storage and restrictions from Environment Pollution Control Board.

Summary of the Invention

The main objective of the present invented method is mechanical scrubbing with wet process. This technology is invented on the basis of shot or slurry blasting process. With the high RPM horizontal axis rotating and oscillating system is propelled on to the strip in a uniform stream that removes surface scale without removing the base steel.



Figure: The photographs above are of three different surface treatments applied to hot rolled strip (L to R: Hot Roll Black, Pickled & Oiled and Valgro EPMS)

Valgro EPMS advantages compared to a traditional acid pickled (P&O) or conventional shot and slurry blasted product:

Valuable Advantages

- ◆ Improved surface quality
- ◆ Smoother, more resilient paint finish
- ◆ No more rust
- ◆ Reduced paint preparation
- ◆ Smoother paint finish
- ◆ Reduce dimples on painted surface
- ◆ Cleaner work environment
- ◆ Less rework, fewer rejects, and
- ◆ Faster laser/plasma cutting.

Value-added Advantages

- ◆ Delay rusting process time on mild steel
- ◆ Batter surface finish
- ◆ Consistent cleaning effect

No disposal restriction for hazardous waste

Surface Finishing: Study Report

Pickling Process

Figure A: Surface Roughness Distribution, Acid Pickled process 200X Magnification



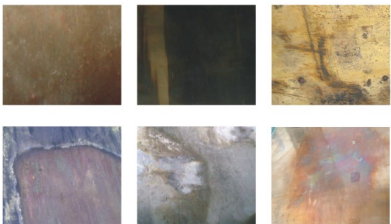
Surface Finishing: After EPMS Process

Figure B: Surface Roughness Distribution, Valgro EPMS process 200X Magnification



Help to remove most Historical Problems

1. Un-pickled Patch
2. Depth Oxide in Raw Material
3. Carbon Suit after Rolling
4. Oil Patch / Black Spots
5. Rusty Surface
6. Mill Mark/Pitch Mark
7. Scratch
8. Rolled in Scale



(Due to constraints of space it is not possible to well on this part in the present article, but the complete article may be provided on request to those who are interested, or accessed at www.ecopickledsurface.com)

Large Metal Finish Abrasive brush

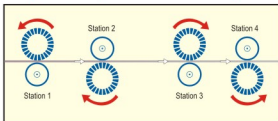
For metal strips, sheets, stainless steel coils, cotters, sheet metal components and Stainless Service Center

De-Scaling, De-Greasing, Washing, Cleaning and Pickling & Polishing Operation

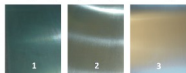
Blank & Coil Washing / Cleaning / Brushing

Valgro-Fynex abrasive brush can be used in a variety of application to clean and finish HR - CR metal strip, sheet, and coil in pickling, de-greasing, de-scaling, rinsing and washing sections. After brushing the blank or Strip is flushed again with washing medium on both sides.

Perceptible Quality Enhancement in Cleaning / Finishing Operations



Surfacing... Step by Step on Metal Strip



Through our continues research and development efforts we are able to make Heavy-duty cleaning machine. With the use of VALGRO brushing technology, we have been able to remove debris and contamination from surface to create a clean surface and generate consistent anchor pattern to improve the metal surface for better coating adhesion.

Our Field trial has proved that saving on pickling chemical cost reduction to the tune of 70% to 75% can easily be obtained by reducing concentration of chemical. Help to reduce the black carbon suits, Oil patch and other surface related problem which is normally try to removed with the use of hazardous pickling process.



Advantages :

- * Increase surface value with Uniform cleaning Quality
- * Consistent scratch pattern for coating operation
- * Rust and Oxide free Surface
- * Self dressing throughout the brush life
- * Saving 70% to 75% on pickling chemical cost by reducing PH concentration
- * Due to less chemical concentration reduce waste disposal
- * Perfectly fit at de-greasing, de-scaling brushing station
- * All these, in turn, **increases productivity and reduces costs.**



Blank & Coil De-greasing, De-scaling, Washing, Cleaning, Brushing

Valgro-Fynex High performance brush provide outstanding surface quality for the brushing process.

Valgro brush effectively remove un-pickled patch, Depth oxide, Rust, Oil Patch and any type of residue from sheet and coil lines. After brushing the blank or Strip is flushed again with washing medium on both sides.

- * Excellent grinding effect
- * Good brightness
- * Uniform surface quality
- * Bright finish in single operation
- * Self dressing effect throughout the brush life

Deburring / Finishing

Laser Cutting, Punching, Shear Cutting, Laser Oxide, Rust removal etc.

Polishing / Finishing / Brushing

Flat Sheet, Strips and coils,

Brush Finish:

MATT, SATIN finish achieved by Valgro Non-Woven abrasive brush

Duplo Finish:

Developed by Valgro Combi Kat brush with abrasive belt and Non-Woven material.

NO. 4 Hairline Finish:

Achieve by Valgro combi brush with 120, 150 grit abrasives grit.

Greatly improves your surface treatment operation



AntiStain Coat, No finger mark



STAYKLEAN XS-05

DESCRIPTION : STAYKLEAN XS-05 is translucent water based single component and multipurpose coating liquid to give crystal clear non-yellowing coating over most surfaces to protect the surface from getting stain.

The uniquely blended STAYKLEAN XS-05 prevents tarnish, water stains for both oxide/tarnish and scale/deposit as well as finger print over metals surface too. The physical properties and chemical resistance of the crystal clear thin film form strong bonds integrated with the surfaces, providing long-term protection. The non-yellowing film formed will suit the outdoor surfaces too.

APPLICATION : STAYKLEAN XS-05 is ready to use. It is spray-able, paintable over contour surface or wipe-able over flat surface properly cleaned, degreased, dried without dust, grease, oil and tarnish-free neutralized surfaces.

Coating layer is readily dried to touch at room temperature within 15 minutes. Hot air blower or drying in oven at 50°C for few minutes can be applied for faster drying, but matured coat properties achievable after leaving to cure further at room temperature for 48hrs.

P2 BrighteX

THICK PICKLING & PASSIVATION GEL FOR STAINLESS STEEL

P2 Pickling GEL is Used To Remove The Black Oxide Marks or Burn Scale Left During Welding of Stainless Steel.



P2 Pickling Gel which is used to clean weld seams and surrounding areas and is applied with brush. It is used to remove heavy scales, discolouration, annealing colours, rust particles near weld and welding affected area by heat without grinding or wire brushing or buffing. It helps in detecting pinholes after welding



Contents: Hydrofluoric Acid Max 35gpl, Nitric Acid Max 275Gpl

DIRECTIONS FOR USE:

- Brush Weld Area with Stainless Steel Brush.
 - Apply P2 Pickling Gel With Bristle Brush.
 - After 10-45 minutes Rinse Water.
- Application Time Will Depend Upon Grade and Thickness Of Stainless Steel.

NOTE:

- Wear All Safety gear, Avoid Spillage or Splashes.
- Replace Lid on the Container and Store Upright In A Cool, Dry Area.
- Away From Direct Sun and Heat.

COPPER BRIGHT Tarnish Free Surface

Water based, human safe, green environments materials

COPPERBRIGHT #25 is a powdered concentrate, which is mixed with water to form a solution used for cleaning metal surface and alloys especially Copper, Brass and Bronze. It will selectively remove light Oxides, light Soils, Tarnishes, Fingerprints, etc. effectively without any attack on the base metal. Specially to be used on the exposed area of properly cured resins/inks, photoresists as well as it is organic based chemicals. It is harmless and low inherent toxicity upon direct contact to skin and poses no serious disposal problems in contrast to the conventional pickling solutions.



Application

- Concentration 80-120gms / liter
- Temperature ; Room Temperature

While the above may be considered typical condition. It can be a broad range of conditions, the concentration may vary from 50gms / liter upto 300 gms / liter the temperature may range from ambient up to 60°C. Immersion time can be from few seconds to several minutes or longer depending on difficulty of Soils/Oxides removal. Application methods can be simply dipping, conveyitized immersion or spraying.





Technological Advance

Valgro is the only company that provide total surface treatment solution. With a high-tech manufacturing facility. The company has consistently set standard in technology, innovation and products quality. They have continually set toughest of target and achieved high growth by keeping a tab on market and technological trends.

Total Surface treatment Solution

About Valgro

Valgro India engaged in manufacturing of surface conditioning abrasives brush & SCS Brushing machine. It has carved a niche in the competitive market place the years. The company is distinguished due to it's adherence to high quality standard and ensuring complete client satisfactions. Valgro is renowned for its master workmanship.



Services & Experiment Center

Valgro has establish dedicated application experiment center to select the right products for specific need. Solving your deburring and Finishing problems is a matter of pride as well as a matter of professional honour for us.



Total Solution

Valgro provide professional and honest advice, tailored to your needs. Whatever your requirements, we will find a solution. Valgro has one of the best-performing and best-equipped factories in Asia for surface conditioning segment .



Undisputed Brand

Through continuous innovation and product developments, the company is poised to acquire leadership position in the industry. It ensures that you receive products of the highest quality and technical design. Moreover, the ISO certificate guarantees your immaculate and valued service.

Comparison of current surface finish codes with BS 1449 (obsolete) and grit finish

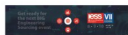
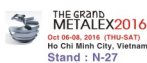
The table gives an indication of how different surface finish specifying systems define similar finishes, in relation to BS EN 10088-2.

Description	Most Common name	BS 1449-2	DIN / En 1088-2 German	ASTM (A480)	Grit Finish	Definition	Ra (µm)	Rt (µm) ²	RMS (in.) ¹
Mill Finish									
Hot rolled, heat treated, pickled	HRPO	1	1D	1					
Cold rolled, heat treated, pickled, skin passed	CRPO	2B	2B	2B		A bright cold rolled mill finish with skin passed	0.1-0.5		
Cold rolled, heat treated, pickled	CRPO	2D	2D	2D		A Uniform, dull silver gray mill finish on thinner coil, thickness reduced by cold rolling.	0.4-1.0		
Cold rolled, bright annealed	CRBA	2A	2R	BA		A uniform Gloss mill finish produce by control atmosphere furnace during annealing process	0.05-0.1		
Mechanical Brush Finish - Valgro-Fynex SCS Process									
Cold rolled, ground	Commercial #4 Finish	3A	2G	No.4	80-120	A semi polished surface achieved by finishing with 80-120 grit abrasives. This finish pronounced Hairline. Not very reflective	1.8 to 1.32	9.0 to 6.6	78 to 58
Cold rolled, brushed or dull polished	Biotech Finish	3B / #4	2J	No.4 S	150- 220	Called brush finish, directional or satin matt. This general-purpose finish is widely used for restaurant, kitchen equipment, food processing & dairy equipment.	1.06 to 0.48	5.3 to 2.4	46 to 21
Cold rolled, satin polished	Satin Finish :	5	2K	No.6	240-320	Finer grit lines and higher reflectivity then No. 4.	0.38 to 0.30	1.9 to 1.5	17 to 14
Cold rolled, satin brush polished	Super Satin Finish :	7	2K	#7	400-600	Smoothest of the special non-reflective finishes with corrosion resistance suitable for most external applications.	0.2 to 0.05	1.2 to 0.8	12 to 4.4
Cold rolled, high gloss	Mirror Finish	8	2P	No.8	800	Produce by 600 grit then sial and color buffed to achieve mirror like finish	0.02 to 0.01	0.8 to 0.3	4 to 1

Table 1. Conversion chart for equivalent expressions of roughness.

Notes: 1. A factor of 1.1 X CLA is used throughout this table to calculate RMS(in.) 2. Typically, for values of Ra from 50µm to 3.2µm, the conversion factor for Rt (µm) is 4. As surface roughness decreases from 3.2µm, the conversion factor increases, reaching 12 at 0.025µm. This is reflected in the table above. 3. **Finishing is slow and step-by-step process. Always select suitable wheels from rougher grade to gradually finer abrasive grade for batter polishing effect.** 4. Finish described by a particular industries designation. I.e No.4 Finish, may still vary from supplier to supplier and even from batch to batch from same supplier. This may be the result of differing manufacturing condition at mill finish. 5. The customer should define and agree acceptable levels of variations from the standard to minimize the problems caused by mill finish or semi finishing of base metal surface.

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Acknowledge

ISO 9001:2008

Do not work with Confidence

India Stainless Steel Development Association

HOTREMAI The Heat & Industrial Equipment Manufacturer's Association of India

EPCINDIA Engineering Promotion Council