



electroplating services



to engineer solutions that shape the future

about us

Blue Light Industry is a leading provider of engineered electroplating and casting services in the UAE. For over 25 years, Blue Light has been committed to offer quality services to diverse industry requirements.

Blue Light - Chrome, a division of Blue Light Industry, specializes in electroplating of Hard Chrome, Low-stress Nickel Chrome, Electroless Nickel and in Phosphating that render corrosion and wear resistance to metals and alloys. The facility houses a process control laboratory and offers a variety of industrial coatings for various applications, whether small, one off jobs or larger production runs.

quality engineering

Blue Light - Chrome has qualified and experienced engineers and a well equipped laboratory for conducting in-house testing and analysis at all phases of the electroplating process. The facility is ISO 9001: 2015 certified and the processes are periodically qualified by independent testing laboratories to meet the international standards and requirements of oil field companies. Blue Light - Chrome is a WAM approved copper plating facility.

ISO 9001: 2015



industry focus

With extensive experience across multiple industries, Blue Light consistently delivers quality coatings that meet stringent customer requirements. The industries or sectors served include, but are not limited to, oil & gas, marine, construction, power generation, manufacturing, dredging, paper, transport and general engineering. Looking forward, the company aims to take up the challenges posed by diverse industries by ways of process improvement, facility ramp-up and customer orientation.

shipyards **marine** general engineering
offshore hydraulics **power generation**
transport **oil field operation** construction



plating services

Blue Light is a leading plating facility in the UAE which is capable of providing Hard Chrome plating to components up to 12 meters in length. The services offered also include Low-stress Nickel, Electroless Nickel, Copper, Zinc and In-situ plating. The processes result in components with higher corrosion resistance and wear resistance.

benefits of electroplating

- 0 Refurbishment & restoration
- 0 Corrosion protection
- 0 Resistance to wear & abrasion
- 0 Friction reduction
- 0 Enhanced appearance
- 0 Anti-galling properties

“A dedicated workforce, customer orientation and advanced process control have contributed to faster turn-around time, leading to increased customer satisfaction.”

reconditioning
surface treatment
protective coatings
refurbishing



Down-hole tools



Had chrome plated mud rotor motor



Refurbished hydraulic cylinder

hard chrome plating

Hard Chrome coating is a desirable solution due to its inherent protective and corrosion resistant characteristics. A major application of Hard Chrome is in the salvaging of worn components to restore them to original dimensions.

Application

Oil field equipment

- Ø Mud motor rotors
- Ø Frac pump plungers
- Ø Drive shafts

Marine & hydraulic components

- Ø Ram shafts
- Ø Plungers & Piston rods
- Ø Telescopic cylinders

nickel chrome plating

Components that are exposed to corrosive marine environments such as those on ships, dredgers and oil drilling platforms are electroplated with an undercoat of low-stress Nickel, followed by the application of a layer of Hard Chrome. The dual layer offers high degree of corrosion protection to components of large lengths that are exposed to marine environments.

Application

- Ø Hydraulic rods and hydraulic cylinders

internal diameter (ID) coating

Blue Light is capable of applying internal coatings on components with diameters ranging from 2 inches to 1 meter. ID coating gives a thick layer of Hard Chrome or Nickel Chrome, offering excellent corrosion resistance. The components are ground internally on precision grinding machines before and after plating.

Application

- Ø Drilling jar parts (mandrels, cylinders & housings)
- Ø Shock tool parts including housings & barrels
- Ø Various down-hole tool connections
- Ø Rotary cylinders
- Ø Hydraulic cylinders



Mud rotor motor



QC inspection of hydraulic piston rods



Nickel-chrome plated plungers



Internally plated shock tool

electroless nickel plating

This is used in both internal and external plating applications to give hard, smooth and corrosion-resistant Nickel coatings. The process allows the plating of otherwise hard to reach areas such as recesses, cross holes, grooves, etc. with a uniform layer of Nickel.

Application

- ◌ Down-hole tools
- ◌ Internal parts of ball valves

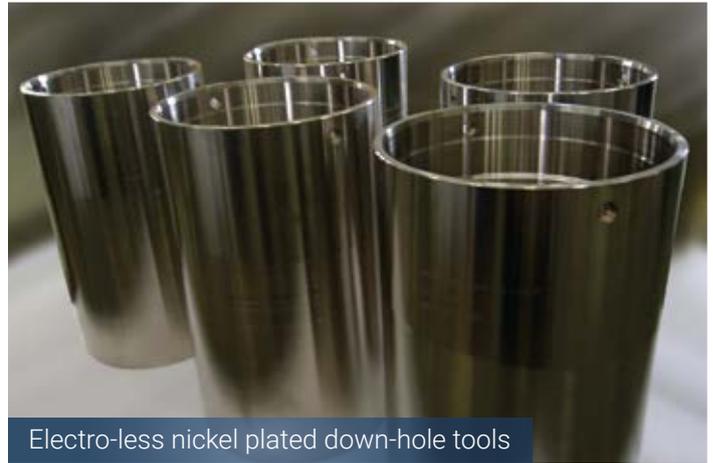
zinc plating

Components that are exposed to corrosion and weathering require an economical anti-corrosion coating that lasts relatively longer than paint. Zinc coating is applied through an electro-galvanizing process which provides substantial corrosion resistance.

anti-seizure coatings

Rotary shouldered connections and premium connections are suitably plated to prevent galling and seizure. Blue light provides both Phosphating and Copper Plating services. Copper Plating is particularly beneficial for SS and Chrome based materials.

Blue light is a VAM approved copper plating facility for brush copper plating as well as immersion copper plating of the premium VAM connection.



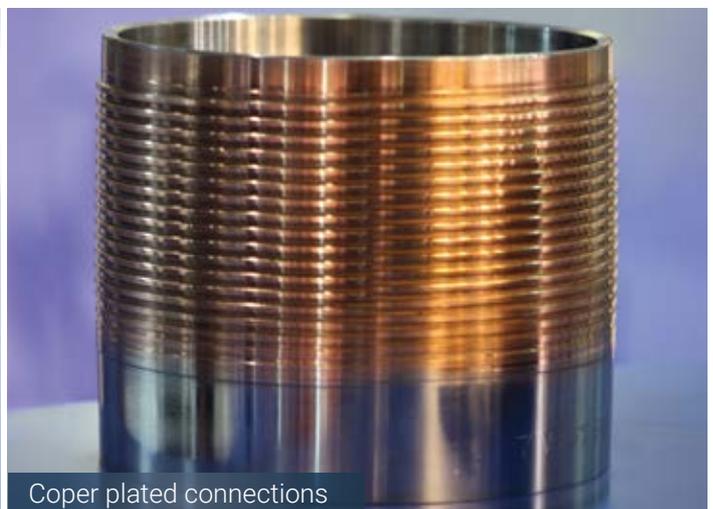
Electro-less nickel plated down-hole tools



Zinc plated adapter



Coper plated connections



Coper plated connections



Photostatted tools



specialized services

machining

Blue Light offers complete machining and engineering services from the simple turning and grinding of components to complex CNC machining. The machines include 8-meter-long crank shaft grinders and 10-meter-long floor borers that are among the largest in the region.

protective coatings

Blue Light offers following specialized coatings for the power generation and oil & gas industry:

- Thermal spray processes such as High Velocity Oxy Fuel (HVOF), Plasma Transferred Arc (PTA) and Twin Arc spray
- Licensed SermeTel® and SermaLon® protective coatings for industrial gas turbines & compressors

castings

Industrial castings are done in a foundry that houses induction furnaces, PLC controlled automated sand mixer, CNC pattern shop and a metallurgical laboratory. Blue Light produces sand castings of following materials:

- Cast iron -Ductile iron -Steel -Alloy steel -Copper
- High chrome -Duplex & super duplex stainless steel
- Aluminum bronze



Crankshaft grinding

heat treatment

Blue Light provides a variety of heat treatment services for components that operate for an extended period of time in corrosive environments. Heat treatment processes available are:

- Gas carburizing -Gas nitriding -Liquid nitriding
- Induction hardening
- TRIBOX (equivalent to Quench, Polish, Quench)
- Flame hardening -Stress relieving -Annealing
- Hardening -Normalizing -Tempering

white metal bearings

Blue Light manufactures and reconditions white metal bearings for OEMs and operators of rotary equipment. Industries served include:

- Hydrocarbon processing -Power transmission
- Power generation Turbo-machinery
- Steel rolling mills -Aerospace

in-situ services

Components with damaged internal bearing bores are refurbished on-board with relatively faster turnaround time.



CNC Machine Component



White metal trust bearings



a member of



trinity holdings



blue light

blue light industry llc
p.o.box 8807, dubai, uae
t: +971 4 339 4438
f: +971 4 339 0030
e: blic@trinityholdings.com

www.bluelight.ae