



MEA The Expert Eye

General Presentation Who we are!











THE AGENDA

CEO Message, Vision & Strategy

Partners & Stakeholders

Understand Failures

Business lines setup

A Spot light on Partners



Dear Valuable Customers and Business associates

We have incorporated more than 200 years of experiences into **MOT-GEN MEA** In which your call of service has become under a click of a button.



CEO MESSAGE There would be many rainy days during operations where your Turbomchinary transformers, motors, and generators are gone beyond the control. Therefore, it has been very demanding to join the forces in a purpose-built organization in order for us to offer our clients a second to none, unprecedented perceived value proposition that eventually maximizes the return on the customer's assets . Together with world best, proven experienced market leaders from the east and west milted on MOT-GEN MEA, have one mission, to fix our customer problems Right first time.

We're experts enough to cover a big range of rotating machines & wide though to extend to the most of the middle east and African countries.

It's nothing but evolution in equipment life assessment, repairing, upgrading, replacing and parts supply.

MOT-GEN MEA the expert eye at your fingertip

Mot-Gen MEA Corporate MGMT



CFO - Sales Dir.

Eng. Ehab ElNaggar



Factory Director

Eng. Sami Atta



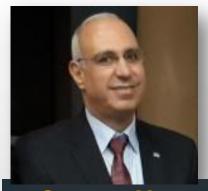
Operations Mgr

Mrs. Ghada Nour



Administration Mgr

Mr. Youssef Atta



Corporate Mgr turbo machinery

Eng. Hatem Sherby



Corporate Mgr Alex

Dr. Yasser Kamshoushy



Corporate Mgr Power

Eng. Youssef Gebaly



Financial Mgr Corporate

Mr. Rasmy

Channel Mgr Tunis

Channel Mgr Egypt

Channel Mgr Morocco

Channel Mgr Iraq

Channel Mgr Cot'd voir

Channel Mgr Saudi

Channel Mgr Pakistani



Mot-Gen Co-founders

CEO. Ehab El-Naggar





BIO

One of the Globally known rotating machines service leaders, 24 years of techno-management leadership track records. Was heading the MEA region & the global O&G service for a world best service organization for almost 2 decades of time before he runs Mot-Gen MEA.. He has not only accumulated a wealth of knowledge but also earned a solid reputation as a leader since he was globally awarded of being "the best" when we talk achievements.

5 main W.shops, 3 service vans, 10 life assessment

hubs were one-side of a long list of accomplishments



Director of board. Sami Atta





BIO

The first setup of Atta sons in Egypt was in 1947 with a bit of focus on maintaining the construction equipment and related parts. When the pair of brother Sami & Youssef took over, The business grew larger to position Atta sons as "the largest" regional machine shop of 21000 sqm to include all to do with machining and dynamic balancing of mostly all heavy equipment and shaft repair techniques

35 laths, 8 horizontal & 6 vertical hydraulic pistons and 30 ton schenck balancing machines are one side of long list of eqpts.



Mot-Gen MEA Board Vision

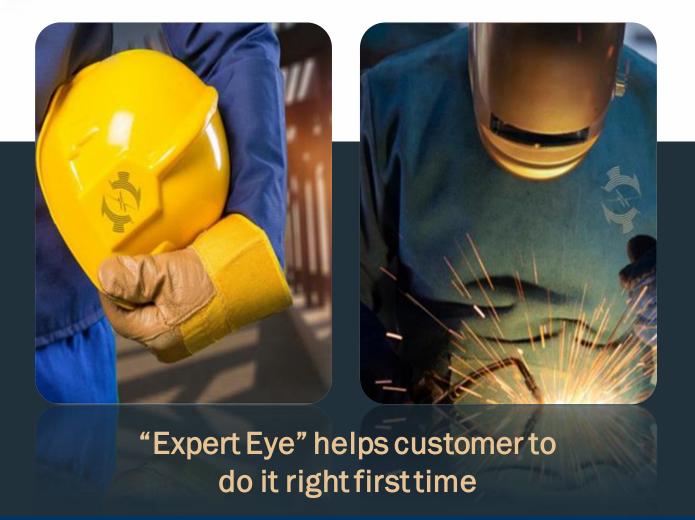


The Vision

Creating our own iconic brand value in servicing Customer assets throughout deploying "The Expert Eye" strategy to deliver our customer, the best-in-class one of a kind service, that Customer never thought is ever existed



"The Expert-Eye" is the main corner stone of our holistic strategy

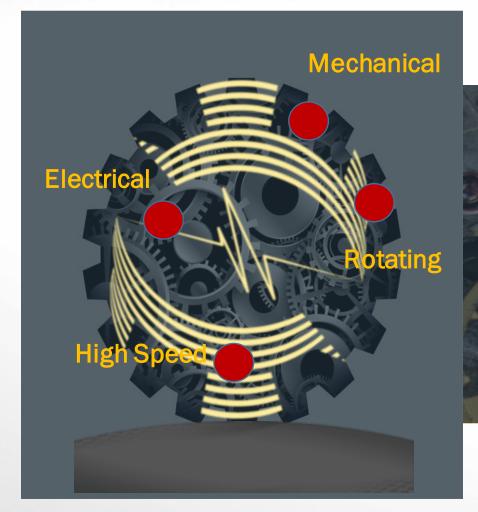


The Strategy

Incorporating over 200 years of
experiences of local partners,
corporate team and world's best
global service organizations, all into
MOT-GEN MEA one stop shop to make
"the expert-eye" nothing but
available at a call-distant.



Mot-Gen Mea logo spells it all loudly



What Mot-Gen MEA and its partners are good at

we cover all

Electrical & Mechanical Rotating
equipments with a specialty on
the high speed turbomachinery
such as Turbines, compressors
and turbo-generators



Mot-Gen MEA is the exclusive Partner of world class, global service org.'s



ELEKTROMOTOREN





Zwijndrecht, January 13, 2021

Subi: Official Representation Letter

To whom it may concern

I, undersigned Ludovic Thybergin, Chief Financial Officer, declare that the company Mot-Gen MEA,

10th El-Hegaz St. Ground Floor, Misr El Gedida, Cairo, Egypt Registered in Egypt under the number of 157103

... is the exclusive sales representative in the territory of Egypt for the company Maintenance Partners Belgium NV. located at:

Vitshoekstraat 6, Haven 1035 2070 Zwijndrecht

Registered in the Belgian registry of Legal Entities under the number 0414.445.663

For the maintenance, repair and reconditioning of all electrical and mechanical rotating machines (generators, turbines, turbocompressors, reciprocating compressors and expanders/companders)

Maintenance Partners Belgium NV commits to support Mot-Gen MEA, LLC with technical services for the equipment listed above (including skilled manpower, testing equipment, engineering and state of the art workshops), this allows Mot-Gen MEA, LLC to offer clients in Egypt a world-class

Maintenance Partners Belgium nv

Site Zwiindrecht Vitshoekstreat 6 - B-2070 Zwijndrecht

Maintenance Partners Belgium nv

. +32 (03 541 71 40 + +32 (03 542 30 36

PARTZSCH AUTHORIZATION LETTER This letter is being issued to declare that MOT-GEN MEA, LLC - Egypt 10th El-Hegaz St., Ground floor, Misr Elgedida Registered in Egypt as a Legal Entities under the number 157103 epresented by General manager : Ehab mahmoud Einaggar is our exclusive agent and is solely authorized to represent products, services and solutions of our company **PARTZSCH Group of Companies** Daniel-Withelm-Beck Street 13, 04720 Döbeln, Germany Registered in the German Registry of Legal Entitles under the number HRB 32817 In Egypt and valid from **NOVEMBER 01, 2020** The following are activities listed: Components for electrical machines, coils, windings, cores, etc. Service repair and maintenance on motors and generators On-Site service on air cooled disgned machines incl. turbo generators Reproduction of old markings New synchronous Generators We commit to provide MOT-GEN MEA, LLC - Egypt with complete technical support in terms of quality products, skilled manpower, test equipment, quality execution, analytical expertise and world class facility required for above products and services, to be able to provide comprehensive support to customers in Egypt, with international quality as expected from global service providers. ARTZSCH Elektromatoren Gmbi Daniel-Withelm-Beck-Straffe 13





Atta Sons



Mot-Gen Co-Founder





Mot-Gen role, is to inspect, discuss and repair what went wrong causing the failure





Compressor rotor failure



Turbine blades failure



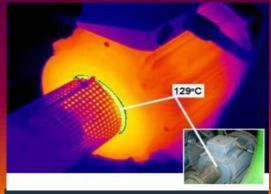
Transformer failure



Bearing failure



Rotor Rubbing failure



Overheating failure



Coils ground failure



PD signs of failure



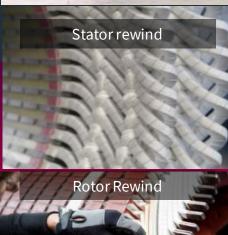


Mot-Gen has 4 service Product lines structure



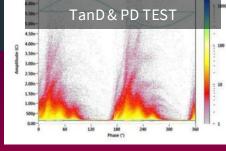
Rotating machines Motors, pumps,





Testing & condition assessment







New products and parts







Turbomchinary Turbines &







Repairing would need to join forces The Expert Eye: MPB / PARTZSCH / Atta Sons / PE





One-to one replacement



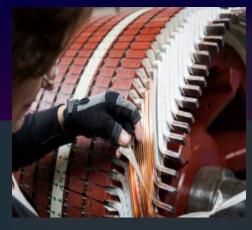
S. turbine repair



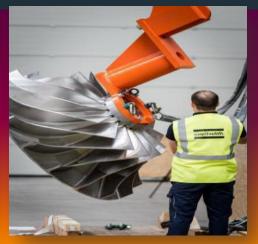
Salient pole rewind



Compressor repair



Slip ring Rotor Rewind



Parts Reverse Eng.



MV Stator Rewind



Vacuum balancing



Division of work matrix between Mot-Gen MEA and the Partners

MPB: Maintanance Partners Belguim

ATTA: Atta Sons for machining, EGY.

PE: Power Electrical for testing& life assess

PARTZSCH: Coils supplier Germany

Business line / Scope of work	BL: Rotating	BL: Turbomchinary	BL: Testing & life assessment	BL: New machines/Coils
Field Service	₹ Mot-Gen/MPB	☑ Mot-Gen / MPB /PARTZSCH	॒ Mot-Gen / PE	N/A
Workshop Mechnical	? ATTA / MPB	॒ ATTA/ MPB /PARTZSCH	₽ MPB	N/A
Workshop Electrical	☑ MPB /PARTZSCH	PARTZSCH/ MPB		N/A
Engineering New parts New machine	☑ MPB /PARTZSCH	₽ MPB	PE/PARTZSCH/ /MPB	☑ MPB /PARTZSCH





Machining and balancing at Atta Sons plant



Atta Youssef Sons is one of the largest integrated equipment service centers in terms of maintenance with a highly skilled work team and provide the original spare parts suitable .. Taking into account the factor of time and achievement

- machining & More than 70 years of balancing experience.
- Purpose built facility with state of art equipment resulted in customer appreciation being the preferred Heavy duty machine shop and manufacturing plant in Egypt
- 160 Technicians including foremen
- 100 tons lifting capacity.
- 21000 halls area at Cairo-Ismalia road.
- 16 no. of laths and boring machines.
- 8 horizontal & 6 vertical hydraulic pistons
- 30 ton schenck balancing machine & 2 others fit for purpose





MACHINING & BALANCING AT ATTA SONS

SHARE HOLDER AND FOUNDER OF MOT-GEN MEA





BALANCING



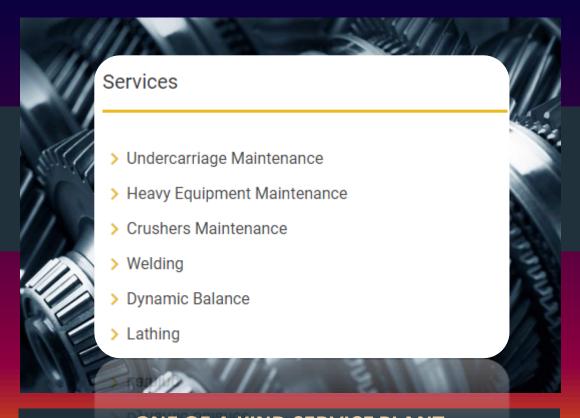
MACHINING



WELDING



TURNING



ONE OF A KIND SERVICE PLANT

PARTNERS & CLIENTS OF ATTA SONS









Power Electronical is a global leader in motors, Gen's, transformers and cables diagnosis, analysis & Life assessment







We start the journey from the machine failure analysis station in Mot-Gen





Why diagnose?

Single Test or Package?

Which Tests?

Why?

AC power

source

Site testing incorporated with our partner Power Electronical





LIFE ASSESSEMNT FOR INSULATION SYSTEM (RLA)

Data base of 15000 motors Generator & Transformer

- PE uses best in class test equipment by reputed brands with superior software to guarantee safe tests and accurate results.
- PE provide better technologies than conventional tests from standards or guidelines (eg. PDCA/NLIC)
- PE has trained and experienced team
- PE has a backend expert analysis team
- PE implies best services at affordable rates
- One stop shop for diagnostic assessment of all your electrical assets (generator, LT/HT motors, transformers, LA, CB,CT/PT relays.)



Global clients of Power Electronical





























AND MANY MORE.....





MPB Workshop Belgium





- 20 000 m² total floorspace
- Overhead cranes up to 110.000 KG
- Lathes
- Milling machines
- Horizontal bore
- Welding equipment
- Coating applications
- Climate controlled measuring room
- 3D measuring equipment
- Atos triple scan
- Material analyser
- Welding robot
- Electric test facilities
- Non and destructive test equipment
- Glass blast facilities 8000 x 3000 x 3000 mm



MPB, The largest repair and engineering Service Facility in Europe



- Over 20000 sqmt
 Shop and field activities
 Standardization
 - All brands
- All rotating machines
- Rewinding E motors
- Welding repairs
- Major and minor overhauls
- High and low speed balancing
- Part refurbishment
- Parts supply:
- O.E.M or by reverse engineering
- Revamps and upgrades
- Failure analysis
- Vibration analysis
- Reliability audits and programs
- Second hand equipment
- New equipment





MPB, field service







Our highly skilled field service employees provide services such as minor and major overhauls, including commissioning and start-up assistance. This service can be performed on scheduled or non scheduled maintenance.

Our field service team is fully equiped with:

- Tool and hoisting containers
- Hytorc
- Laser alignment
- Condition monitoring
- Field balancing
- 3D scan
- Atos triple scan
- Non destructive testing



MPB, Engineering capabilities



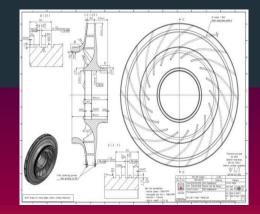
MP's Engineering team consists of 30 specialists

- Material Engineer
- Design Engineer
- Process Engineer
- Technical Specialists (Electrical, Mechanical, Welding & Diagnostics)
- CAD Drawers
- Project Managers
- Reliability team (vibration, electrical analysis, infrared, ultrasound, dielectric measurements
- MP connectivity
- P4A



Main capabilities

- 3D Scanning of spare parts Re-
- engineering of spare parts
- Remodeling damaged spare parts
- Improving of efficiency (redesign & upgrades)
- Improving of durability (materials & upgrades)







GLOBAL CLIENTS OF MPB







AZOMURES













Partzch, the largest coils, motor Parts, replica motors in Europe



ELEKTROMOTOREN



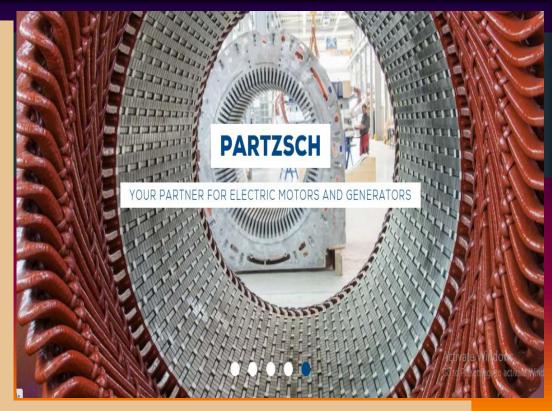
Today, PARTZSCH has become Europe's largest manufacturerindependent repair plant with more than 600 employees and 40,000 m2 of production space.



We install and supply all coils up to 250 MVA from PARTZSCH



PARTZSCH produces from components to Whole machine in one place







Partzch close up for the coils production Using robot for the roebel bars

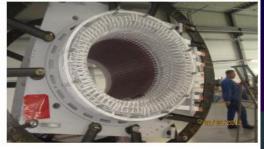


ELEKTROMOTOREN

























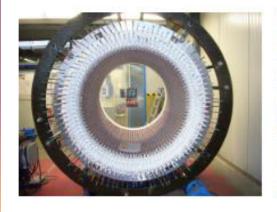
Partzch, reproduction of 1 to 1 large motors & Gen.'S replacement With higher effeciency



ELEKTROMOTORE

Depending on the repair expenses or the availability of spare parts in some cases machines are no longer worth repairing. And for customized electric motors there is usually no alternative in place.

With PARTZSCH you can benefit from an identical reproduction of your electric machine, regardless of age and type. You can thus receive a completely identical new machine in exchange for your existing machine. The reproduction is realized on the basis of existing drawings / documentation or the temporary provision of a sample machine.











Partzch, the largest capacity in Eourpe Testing – vaccum balancing – lamination stacking..etc



ELEKTROMOTOREN



PYROLYSIS

Temp. up to 400°C Length up to 5,50 m Capacity up to 50 t



TEST FIELD POSSIBILITIES

electrical (AC/DC),

Mechanical test

Machine test,

Sheet metal package test,

Special tests



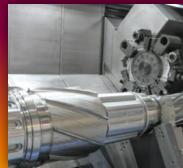
IMPREGNATION

Polyesterimide resign Epoxy Vacuum-Pressure process, Current-UV



HIGH SPEED BALANCING AND SPIN MACHINE

Rotor weight up to 32 t Length machine bet 8000 mm



MECHANICAL PROCESSING

Components, assemblies, complex machine parts



ON-SITE SERVICE FINDINGS/ REPAIR

Repair up to 120 t piece weight Repair of all electrical and mechanical components



Partzch, field service operation for large generators up to 250 MVA







Partzch, turbo generator full picture Roebel bars is a top class service



















GLOBAL CLIENTS OF PARTZSCH



ELEKTROMOTOREN



