



## COMPANY INTRODUCTION

[www.alborztc.com](http://www.alborztc.com)

 [@alborzturbocompressor](https://www.alborztc.com)

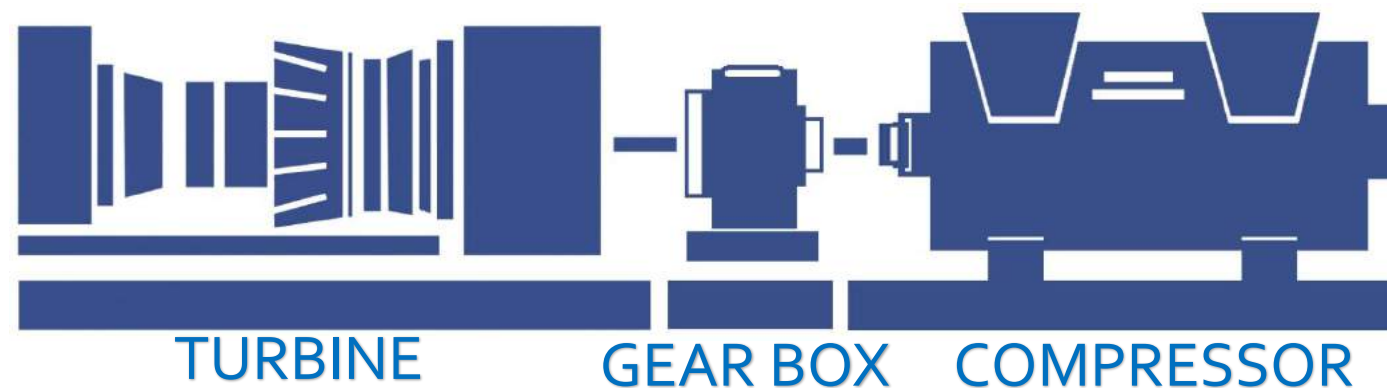
# Company Structure:

AlborzTC is a privately owned **independent services provider** for rotary equipment, namely Gas and Steam turbines, Axial and Centrifugal compressors and power transmission gearboxes:

## Company Divisions:

- Engineering, Fabrication of Rotary Equipment Major Parts
- Maintenance & Overhaul + Revamping of Oil units
- Procurement of Units and Spare parts

Our main focus is on a train of turbo compressors



# EQUIPMENT WE WORK ON

- **Gas Turbines**

- Blades, Disks, shafts, combustion chambers, nuzzles, veins, bearings etc.



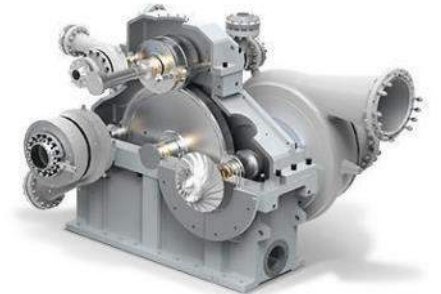
- **Steam Turbines**

- Wheels, shafts, blades, diaphragms, bearings, etc.



- **Axial and Centrifugal Compressors**

- Impellers, bundle assemblies, shafts, bearings, seals, etc.



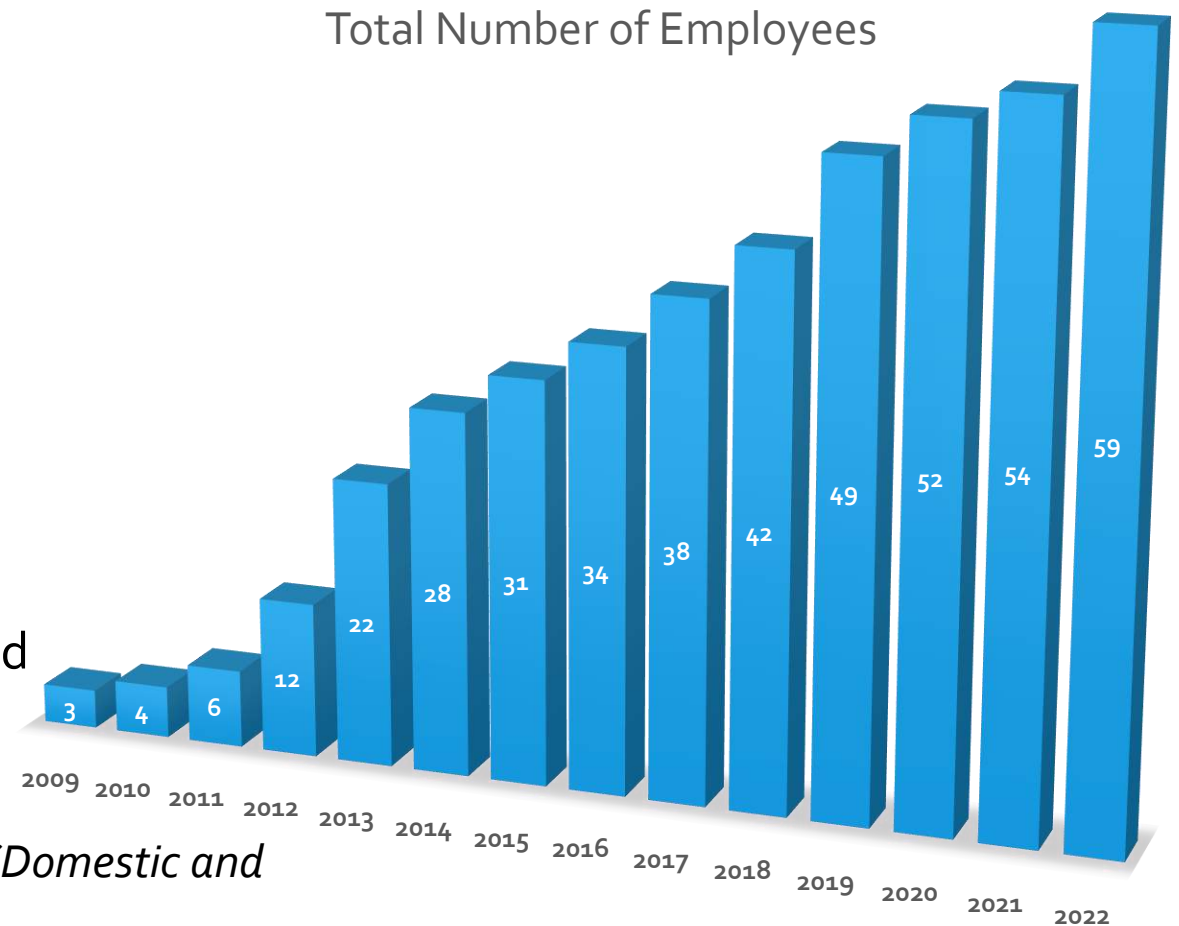
- **Power Transmission Gearboxes**

- Gears (helical, bevel, ...), Pinions, bearings, lubrication auxiliaries, etc.



# ABOUT ALBORZTC

- Stablished in 2009
- Family Business & Privately Owned
- Factory 1800 sqm.
- Considers among 300 Knowledge-based Companies
- Utilizing more than 45 subcontractors (*Domestic and EU supply Chain*)



# CERTIFICATES & AUTHENTIFICATIONS

[illegible][illegible][illegible]

**ALLIANCE**  
Registrar & Inspection Services-ARIS

**Quality Management System**

Certificate of Registration

This is to certify that the

**Alborz Turbocompressor Co**

مؤسسه توربو کمپرسور  
توربو کمپرسور

Located at:

Central Office: No 89, West Nahid St., Albra Blvd., Tehran, Iran.  
Factory: No 2, Poorsina Alley, 22<sup>nd</sup> Km of Tehran-Karaj Express Way, Tehran, Iran.

for

Designing and Manufacturing of Major Mechanical Components and Parts for Gas and Steam Turbines, Axial and Centrifugal Compressors, and Also Power Transmission Gearboxes, as well as Maintenance, Overhaul and Troubleshooting of Those Equipment Exclusively Used in Oil, Gas, Refinery and Petrochemical Industries.

Has been assessed and registered against the provisions of

**ISO9001:2015**

International Standard

With

IAF Code: IR  
Certification Number: QA/TC1999  
Current Date: December 23, 2019  
Valid Until: N/A

NACE Code: EN293  
Original Date: April 23, 2006  
Expiration Date: November 22, 2021

*Denise Russell*  
Denise Russell  
Certification Director  
Toronto, Canada  
[www.arisrvi.com](http://www.arisrvi.com)

**NAB**  
ACCREDITED

Registration is subject to the management system being continuously maintained to these standards and regular surveillance audits conducted by this group. Management shall respond. This certificate is the property of Alliance.

**ALLIANCE**  
Registrar & Inspection Services-ARIS

Certificate of Registration

This is to certify that the

**Alborz Turbocompressor Co**

موسسه توربو کمپرسور آلبرز  
Turbocompressor Alborz Co

Located at:  
Central Office: No.89, West Nahid St., Africa Blvd., Tehran, Iran.  
Factory: No.2, Pourshin Alley, 22<sup>nd</sup> Km of Tehran-Karaj Express Way  
Tehran, Iran.

for  
Designing and Manufacturing of Major Mechanical Components and Parts for Gas  
and Steam Turbines, Axial and Centrifugal Compressors, and Also Power  
Transmission Gearboxes, as well as Maintenance, Overhaul and Trouble-shooting  
Those Equipment Exclusively Used in Oil, Gas, Refinery and Petrochemical  
Industries.

Has been assessed and registered against the provisions of

**ISO14001:2015**

International Standard  
With


IAF Code: IR  
Certification Number: IR02002  
Current Date: November 23, 2008  
Modification Date: N/A

NACE Code: 28209  
Original Date: November 23, 2008  
Expiration Date: November 23, 2012

*Dennis Russell*  
Dennis Russell  
Certification Director  
Toronto, Canada  
[www.ariscert.com](http://www.ariscert.com)

**NIRB**  
ACCREDITED

Registration is placed in the management system being continually maintained in the above standard under regular surveillance.  
ثبت گردیده است در سیستم مدیریت که به طور مستمر در این استاندارد تحت نظارت منظم قرار دارد.



**NAB**  
REGISTRATION

# ALLIANCE


Registrar & Inspection Services-ARIS

**Occupational, Health and Safety  
Management System**

Certificate of Registration

This is to certify that the

## Alborz Turbocompressor Co.



آلبرز توربو کمپرسور

Located at:

Central Office: No.89, West Nahid St., Africa Blvd., Tehran, Iran.

Factory: No.2, Poursina Alley, 22<sup>nd</sup> Km of Tehran-Karaj Express Way,  
Tehran, Iran.

for

Designing and Manufacturing of Major Mechanical Components and Parts for Gas  
and Steam Turbines, Axial and Centrifugal Compressors, and Also Power  
Transmission Gears, as well as Maintenance, Overhaul and Troubleshooting of  
Those Equipment Exclusively Used in Oil, Gas, Refinery and Petrochemical  
Industries.

Has been assessed and registered against the provisions of

## ISO45001:2018

International Standard

Which

(AP Code): 18

Certification Number: 19177013


Current Date: November 23, 2020

Modification Date: N/A



NACE Code: DR20.5

Original Date: November 23, 2002

Expiration Date: November 22, 2022



Dennis Kowal  
Certification Director  
Toronto, Canada  
[www.ariscert.com](http://www.ariscert.com)

Registration is subject to the management system (s) continuously and accurately comply above standard (s) under regular surveillance.  
 The validity of the registration and the scope of the certification is dependent on the success of the above (s).



# OUR MAJOR CLIENTS

- National Iranian Oil Co. (**NIOC**)
  - National Iranian South Oil Co. (**NISOC**)
    - Aghajari Oil and Gas Producing Co.
    - Gachsaran Oil and Gas Producing Co.
    - Karoun Oil and Gas Producing Co.
    - Maroun Oil and Gas Producing Co.
- National Iranian Gas Co. (**NIGC**)
  - South Pars Gas Complex (**SPGC**)
  - National Iranian Gas Transmission Co. (**NIGTC**)
  - Gas Refineries (Fajr-Jam GR, Sarkhon GR, Bidboland GR, etc..)
- National Iranian Oil Refining & Distribution Co. (**NIORDC**)
  - Most of the 12 major refineries in Iran
  - National Iranian Oil Pipeline and Telecommunication Co. (**IOPTC**)
- Iranian Offshore Oil Co. (**IOOC**)
- Most of 43 Private and state owned **Petrochemical Companies**
- National Iranian Copper Industry Co.
- Etc...

# OUR CORE COMPETENCIES

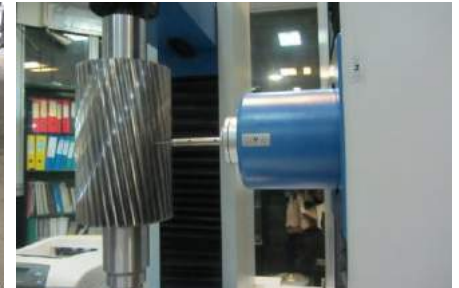
- **Engineering Know-how** (Based on most up-to-date industry standards)
- **Lower Cost in comparable quality** (compared to OEMs)  
10 years of manufacturing knowledge and state of the art supply chain allows AlborzTC to provide comparable quality products with much lower cost comparing to OEMs
- **Shorter Delivery time** (Compared to OEMs)  
Nimble facility procedures along with fast engineering response allows AlborzTC to provide service in much faster past comparing to that of OEMs

# OUR DIVISIONS

## 1. Engineering and Design Dep.



## 2. Preseason Measurement QC/QA & CMM



## 3. Metallurgy Dep. & Testing Laboratory





# OUR DIVISIONS

## 4. Machine Shop & Manufacturing



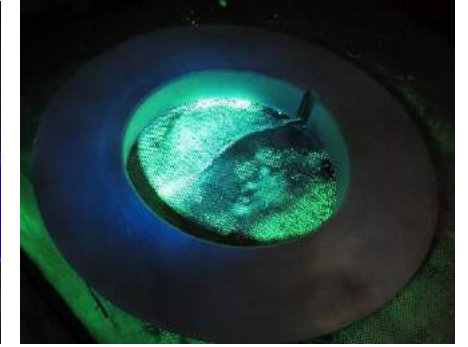
## 5. Project Management & Scheduling



# OUR DIVISIONS

## 6. NDI Shop

*Clean, UT, PT, MT*



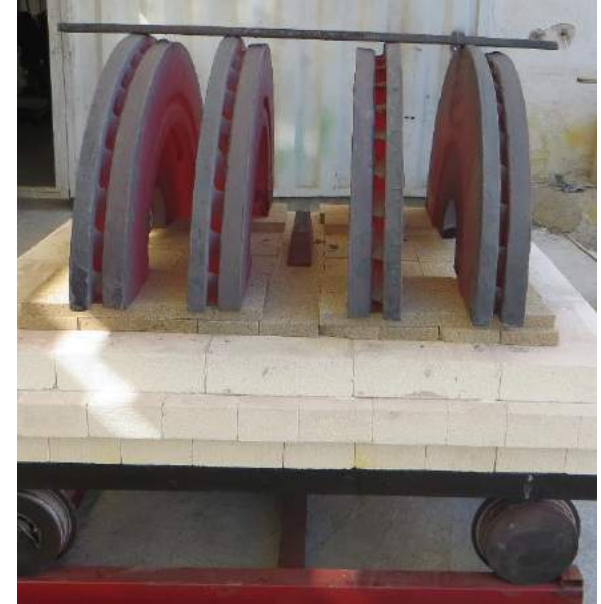
## 7. Overhaul & Maintenance Shop





# OUR DIVISIONS

## 8. Heat Treatment & Brazing



## 9. Coating



# Major Brands we have experience on:

## ❖ GAS TURBINES

- SOLAR® (Saturn, Centaur, Mars)
- RUSTON® (TA, TB, TD) / SGT100-300
- ROLLS ROYCE® (AVON® 1533, 1534, 1535)
- GE/NUOVO PIGNONE® (MS5000, PGT)
- Dresser Clark® / GEC® / COOPER®
- WERKSPOOR® (W72M)



## ❖ STEAM TURBINES

- ELLIOTT®
- DRESSER RAND®
- SIEMENS® KK&K
- SKODA®



## ❖ COMPRESSORS

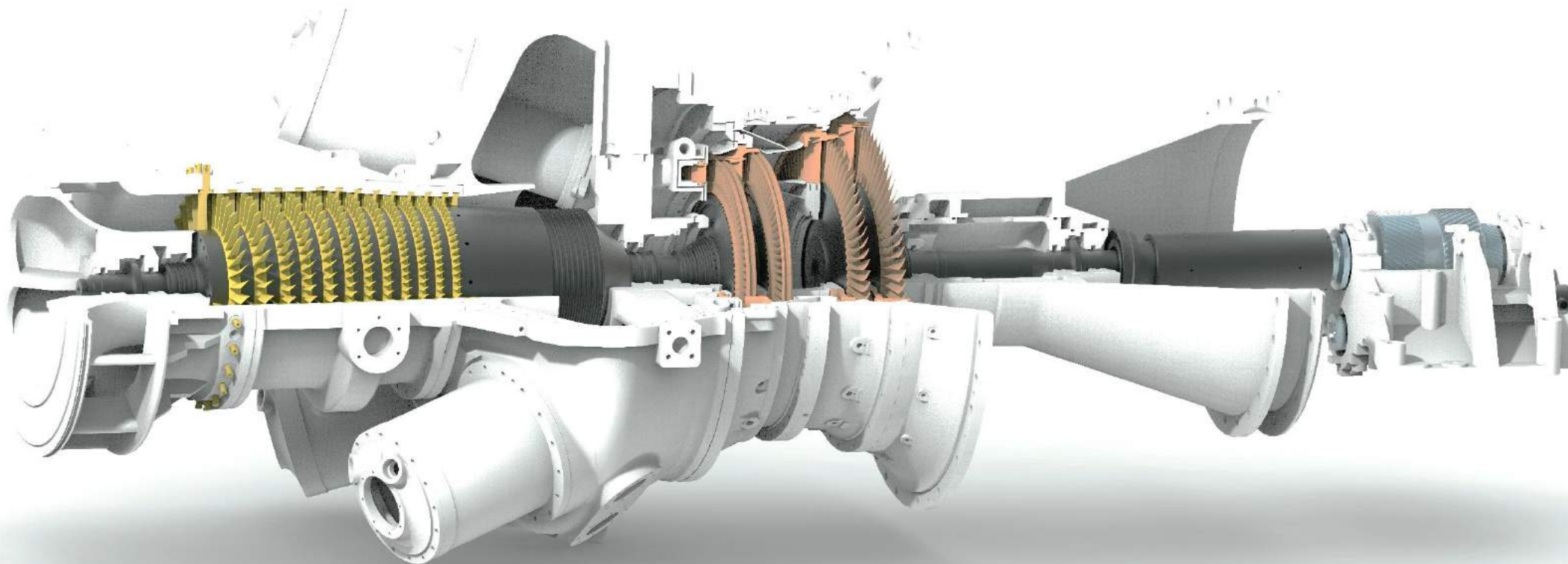
- ELLIOTT® (MB series)
- CLARK®
- SOLAR® (C16, C33 Series)
- NUOVO PIGNONE® (BCL Series)
- BORSIG® (GC388, Reciprocating)
- COOPER BESSEMER®
- SIEMENS®



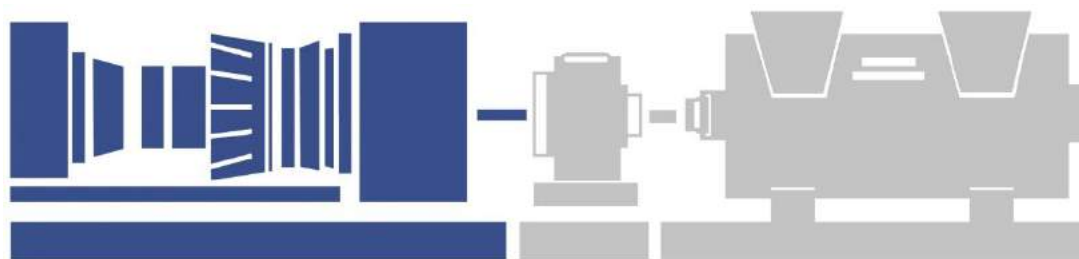
## ❖ GEARBOXES

- PHILADELPHIA®
- RENK® (TA-50-X)
- FLENDER-GRAFFENSTADEN®
- DAVID BROWN®





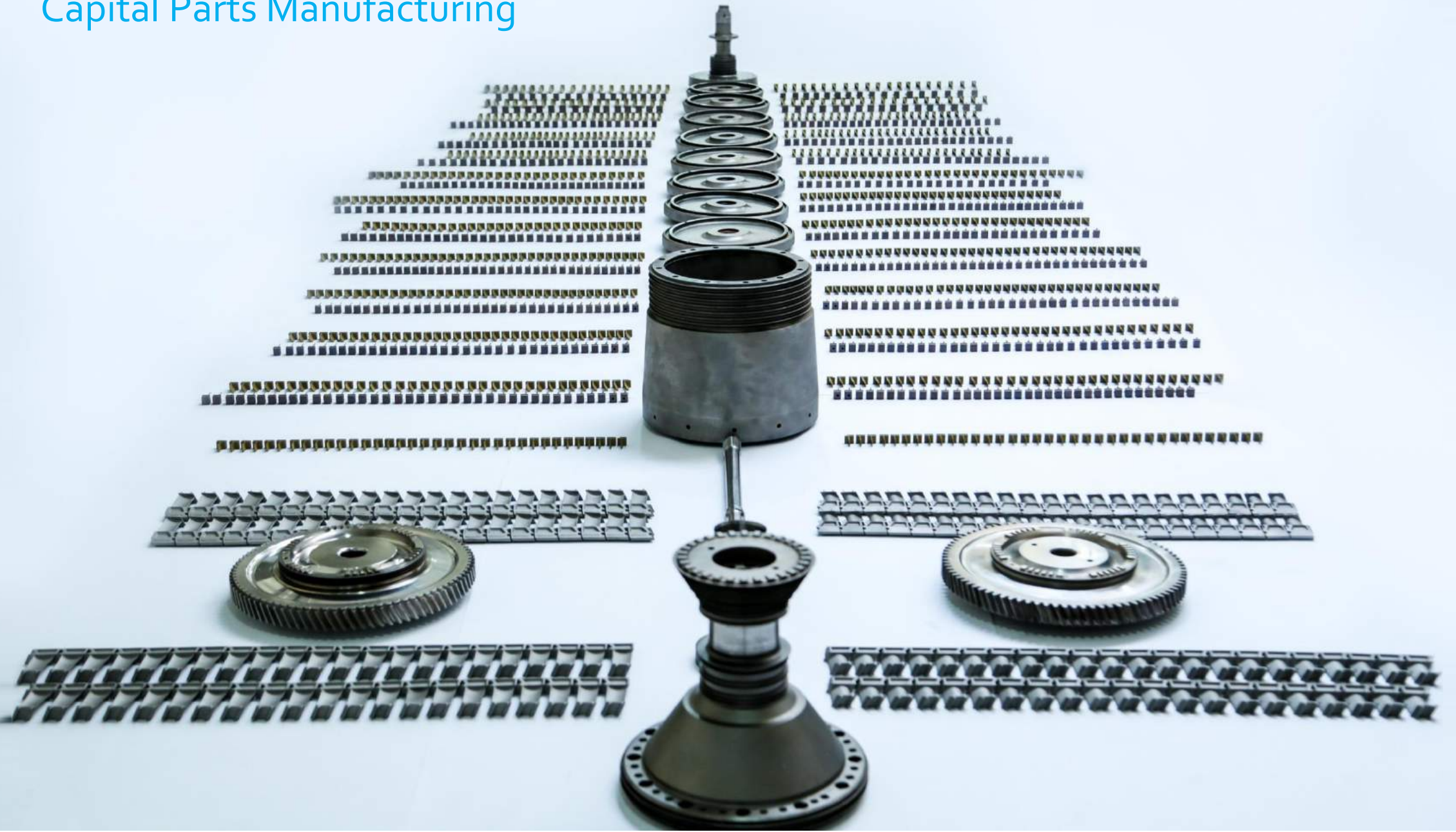
# GAS TURBINES





# *Industrial Gas Turbines*

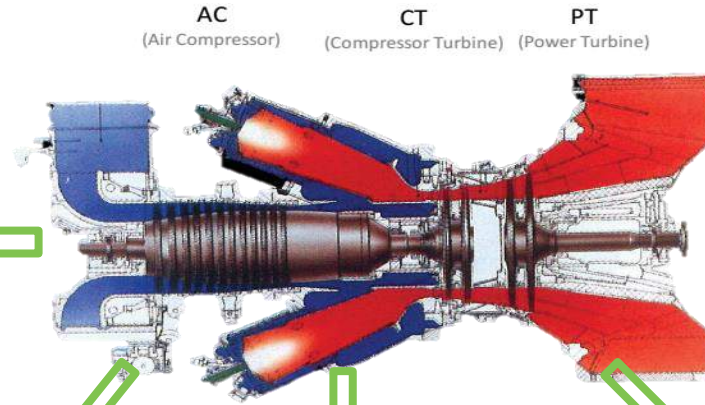
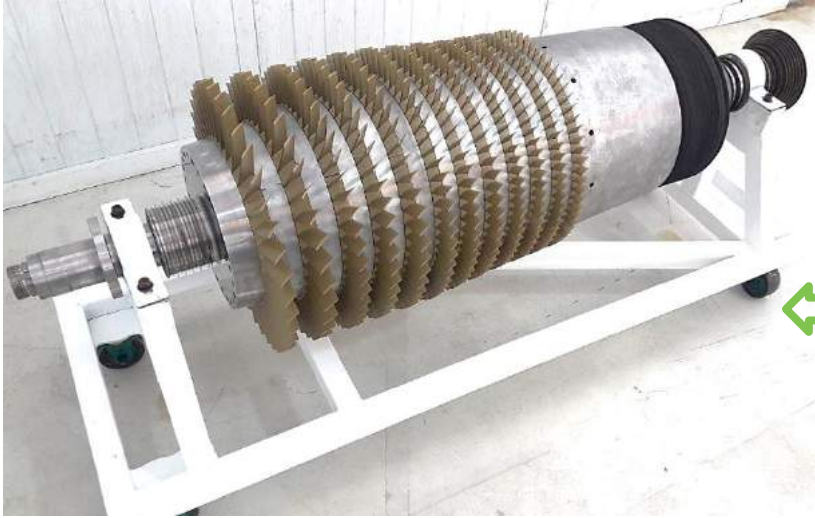
## Capital Parts Manufacturing





# Gas Turbine Capital Parts Manufacturing & Repair

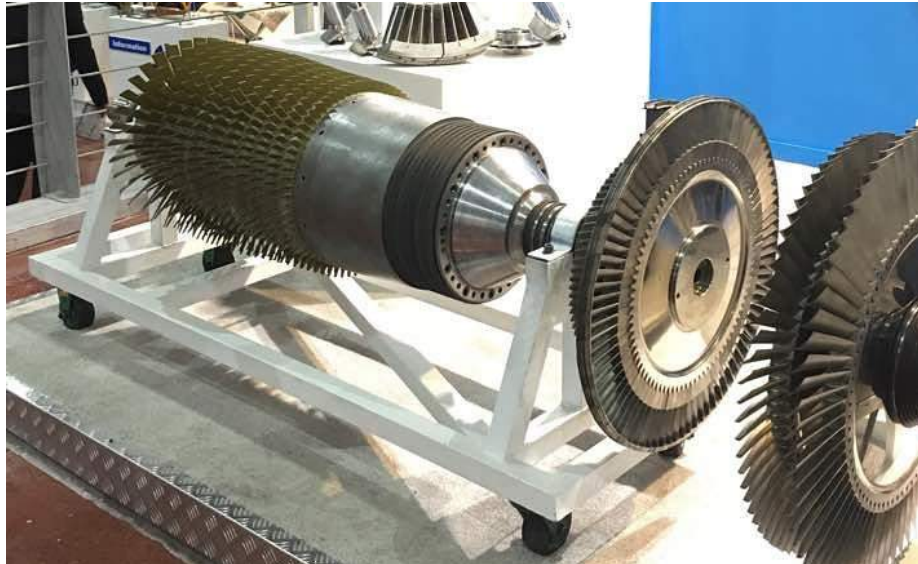
**Air Compressor (AC) Rotor**



**Power Turbine (PT) Rotor**



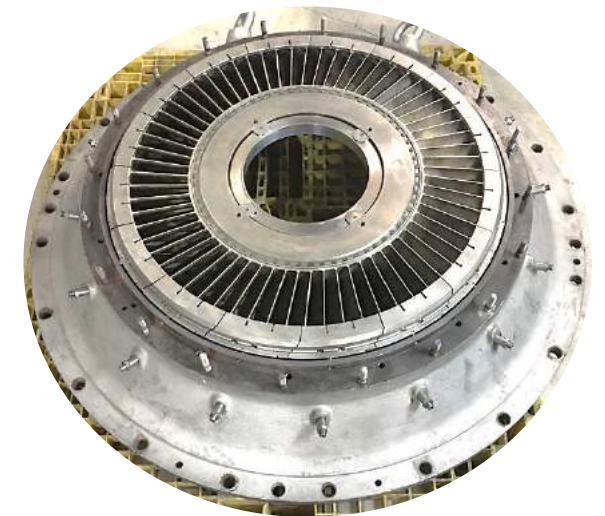
**Gas Generator (GG) Turbine Rotor**



**Combustion Liner**

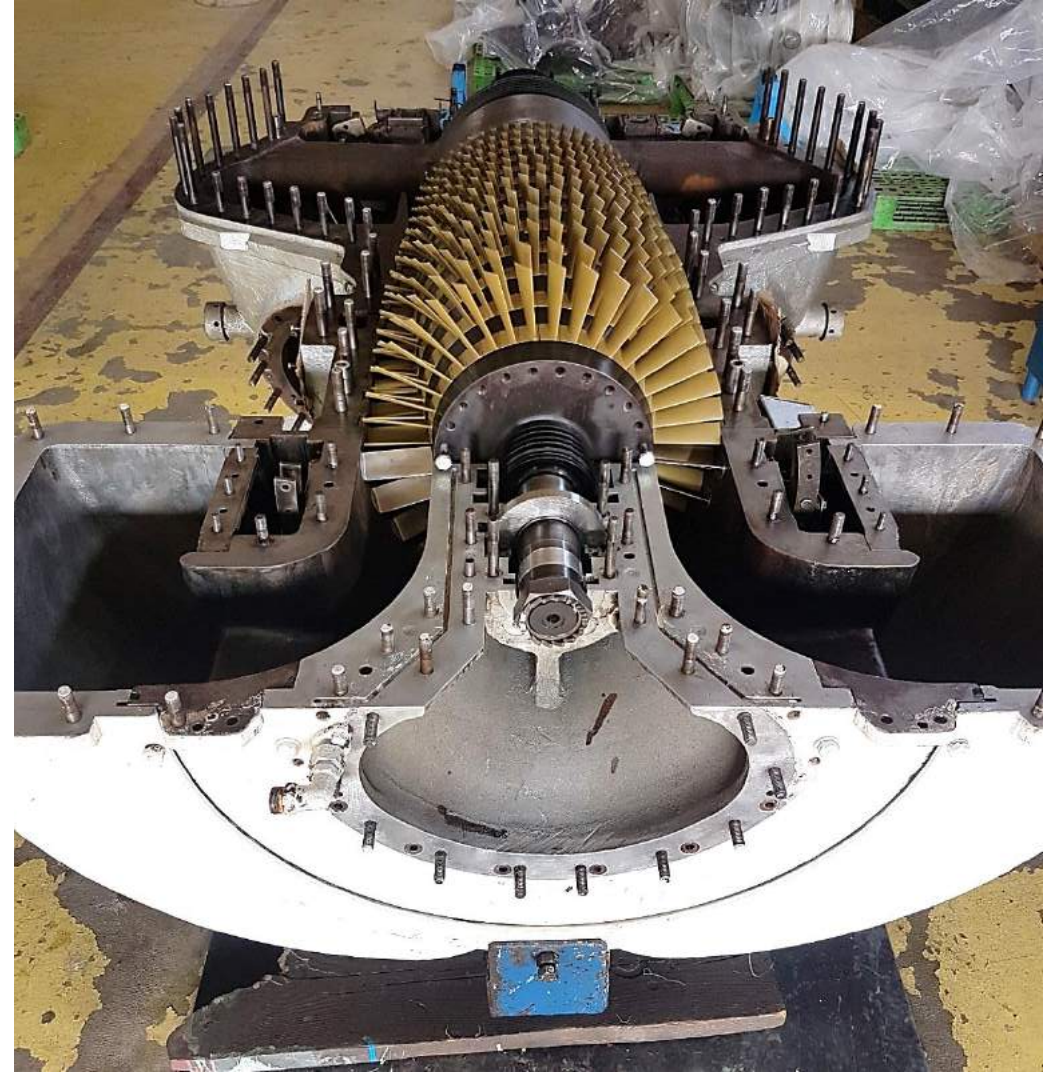


**Power Turbine (PT) Stator Assembly**





## RUSTON® TB4000: Installation





## RUSTON® TB4000 Overhaul :

Level D Major Overhaul, Unit is Installed



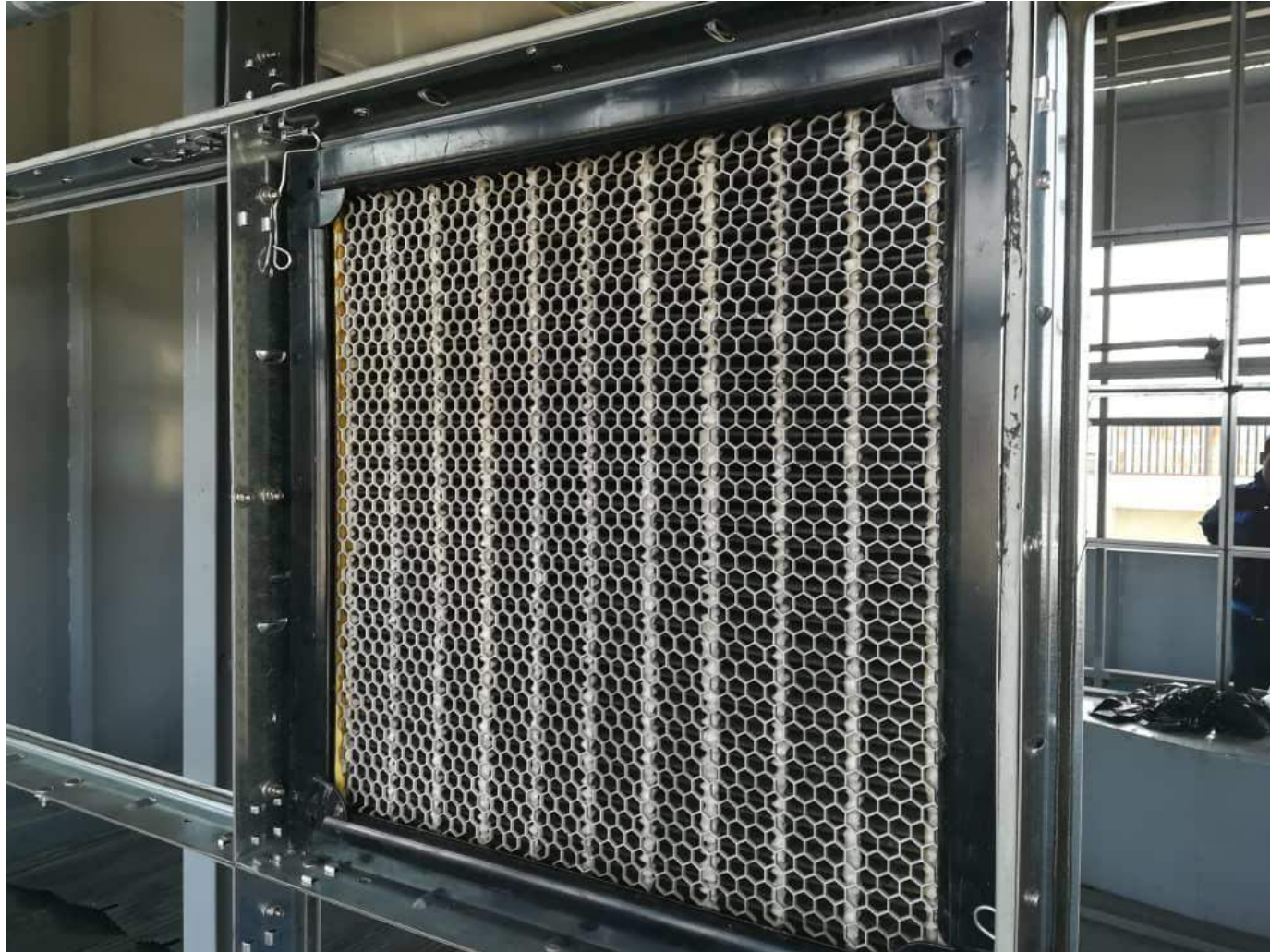


ROLLS ROYCE  
DRESSER CLARK® DJ16o (PT)





## Filter Room and Exhaust Revamping





## SOLAR® Saturn:

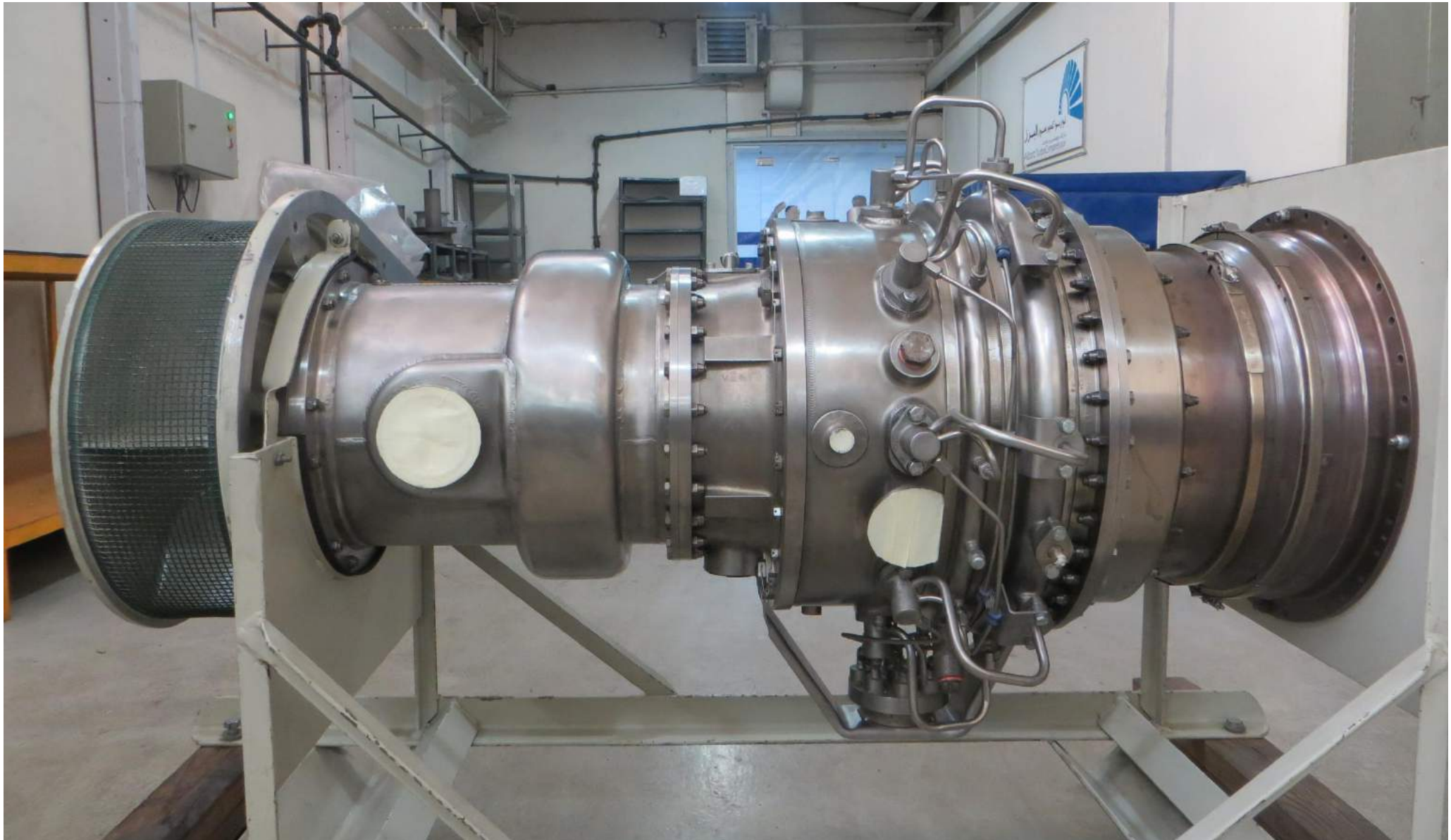


**Complete Level C Overhaul  
Major Components Manufactured  
Retrofitted**

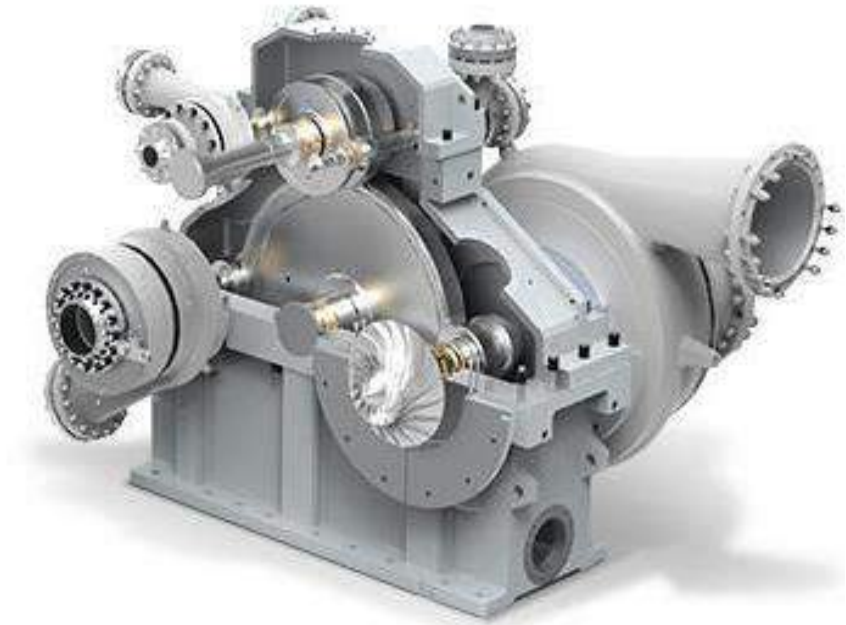
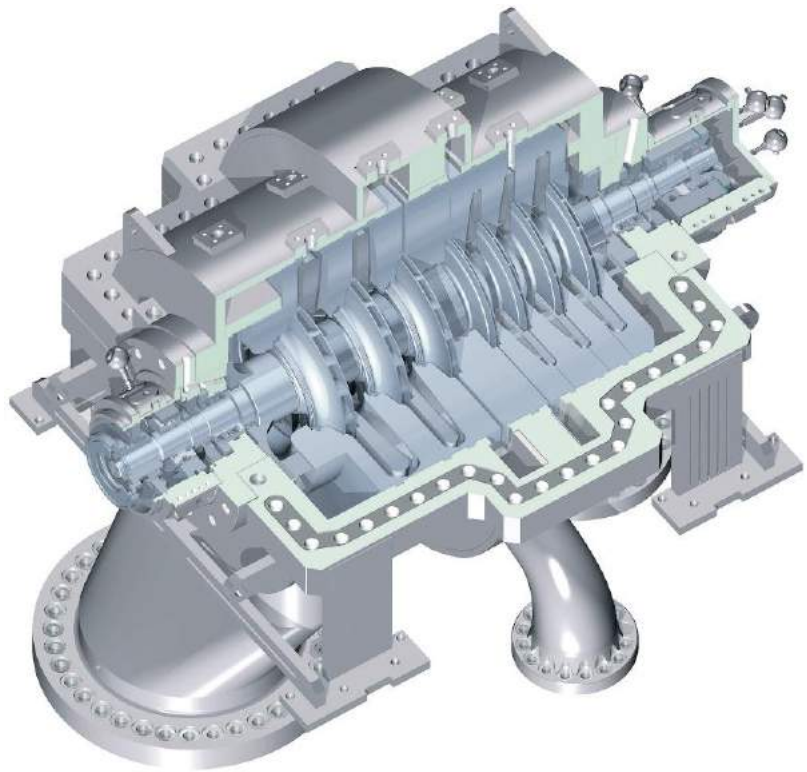


**SOLAR® Saturn:**

**Overhauled Package  
Ready for Installation.**

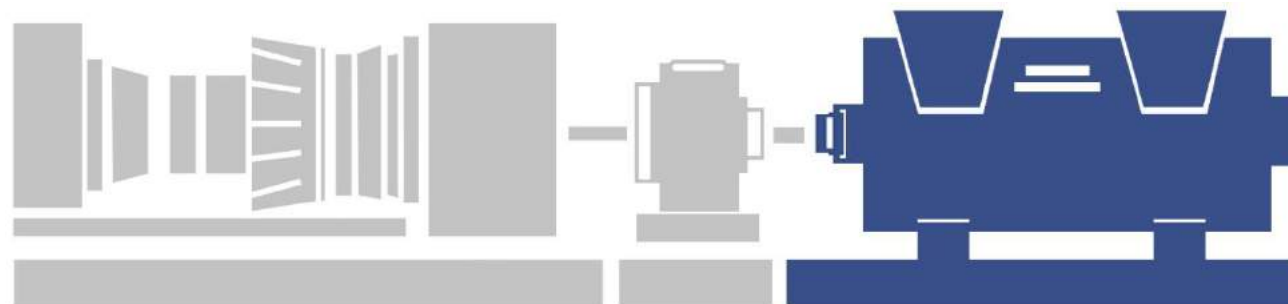




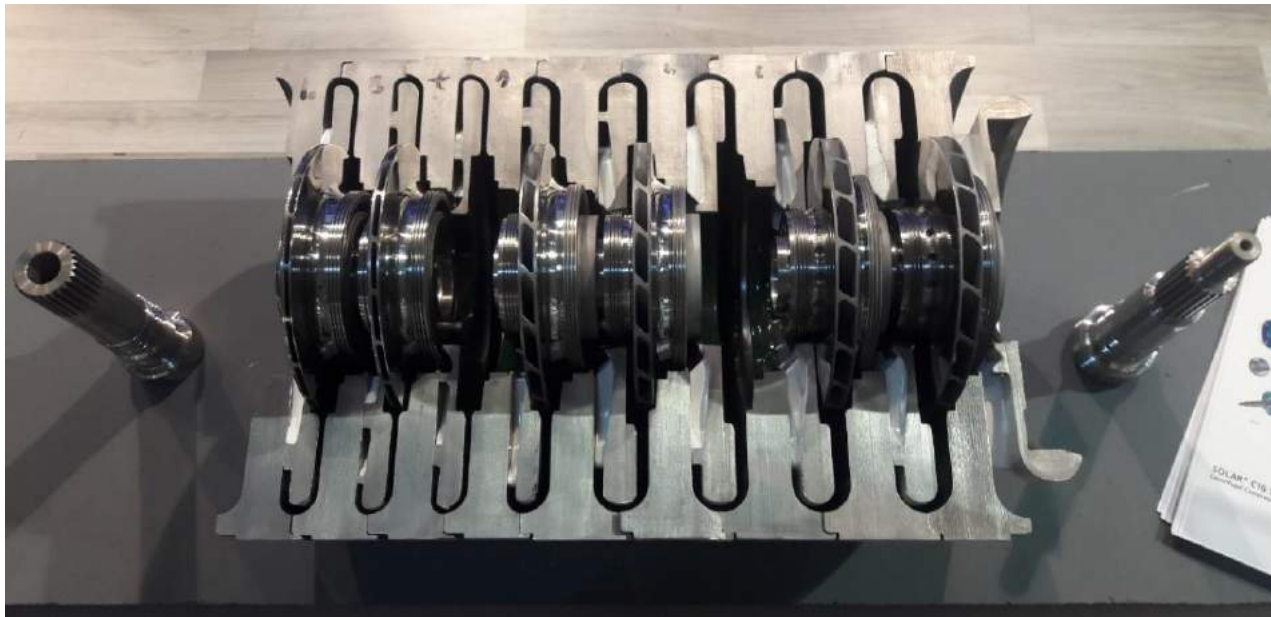
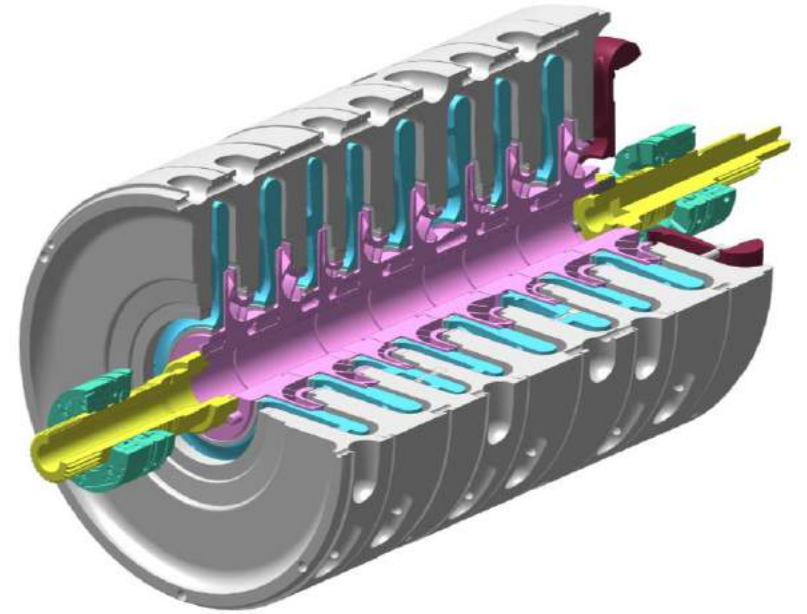
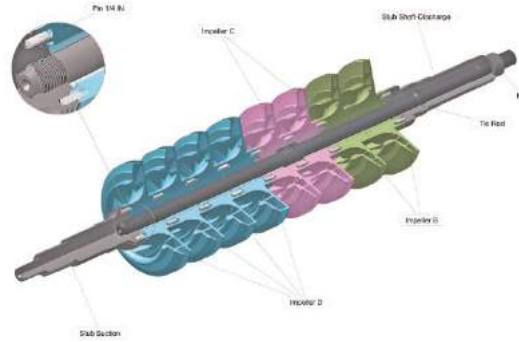


## **CENTRIFUGAL COMPRESSORS**

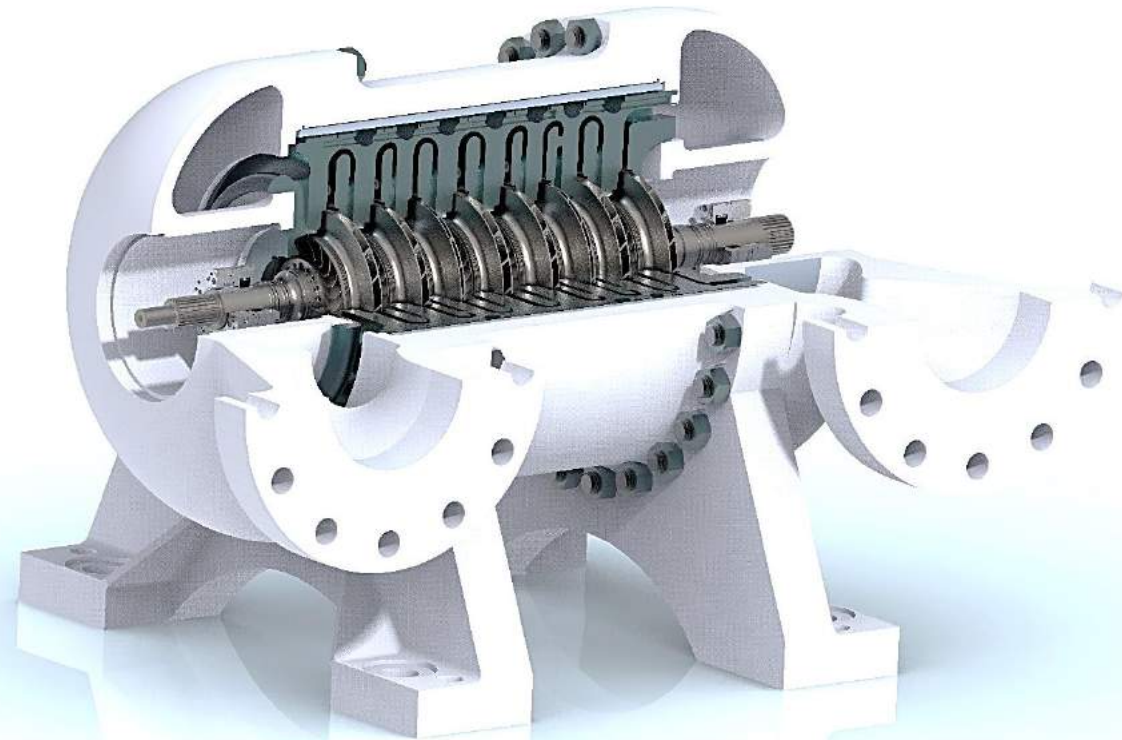
Single Shaft Barrel type - Integrally Geared



## ROTOR **Balanced**



**SOLAR® C16 Series**  
**Natural Gas Compressor**  
Pipeline Application





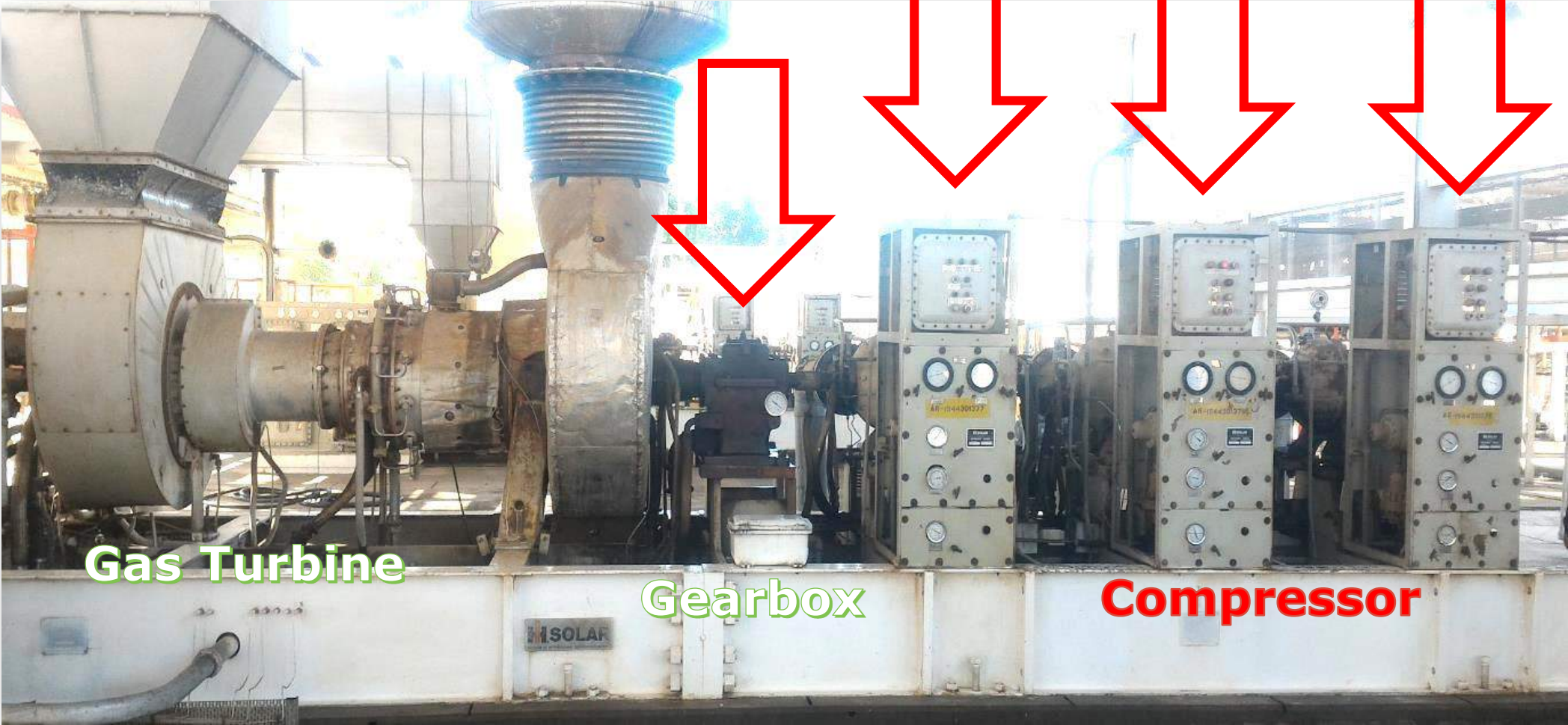
# Site Installation

Philadelphia, 206HS

LP Compressor

MP Compressor

HP Compressor



Gas Turbine

Gearbox

Compressor

# **BORSIG® GC 355/8**

## **Natural Gas Compressor**

Pipeline Application



**FULL REVAMP:**  
All Mechanical items  
Bundle Assembly + Rotor are  
manufactured

Compressor Installation

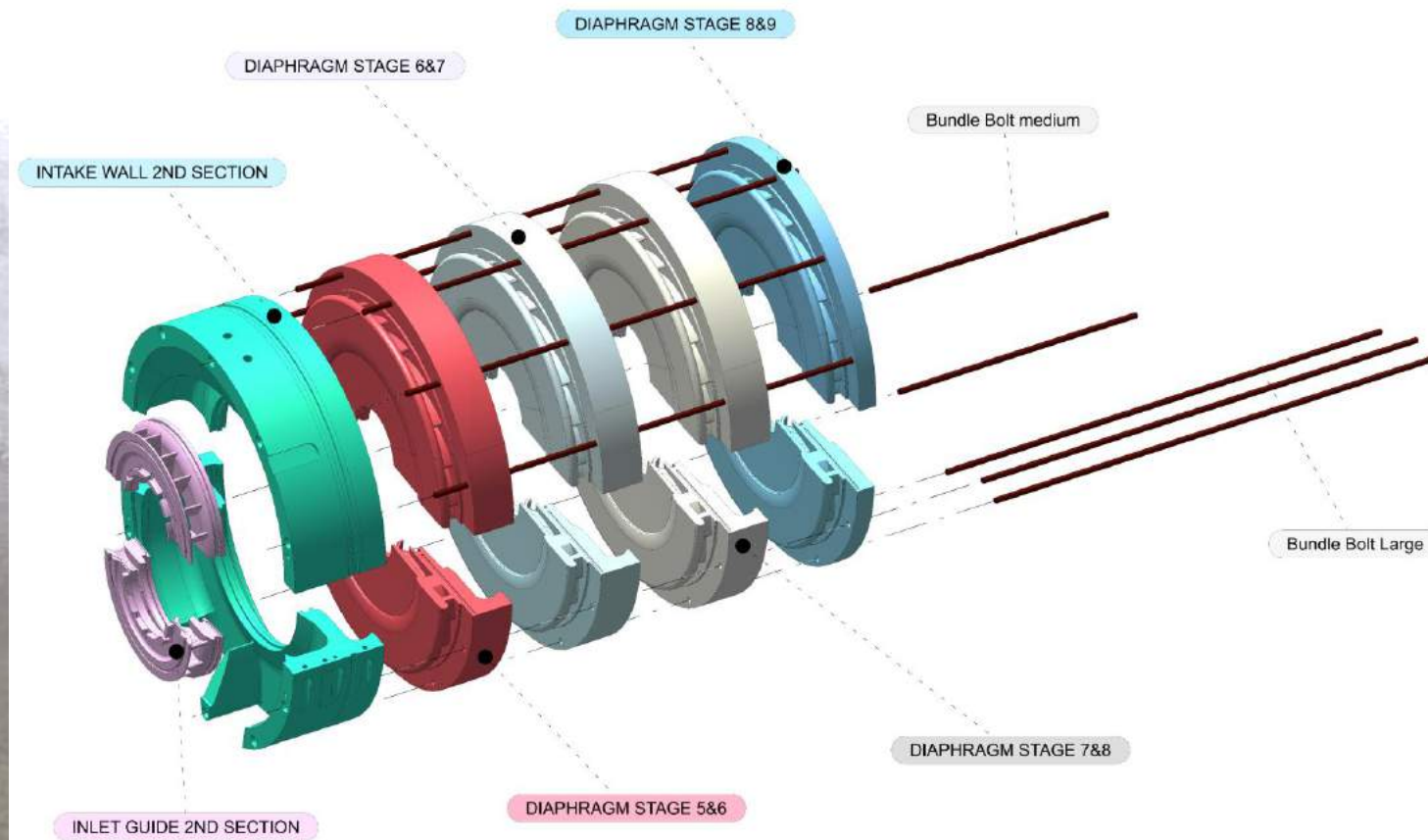


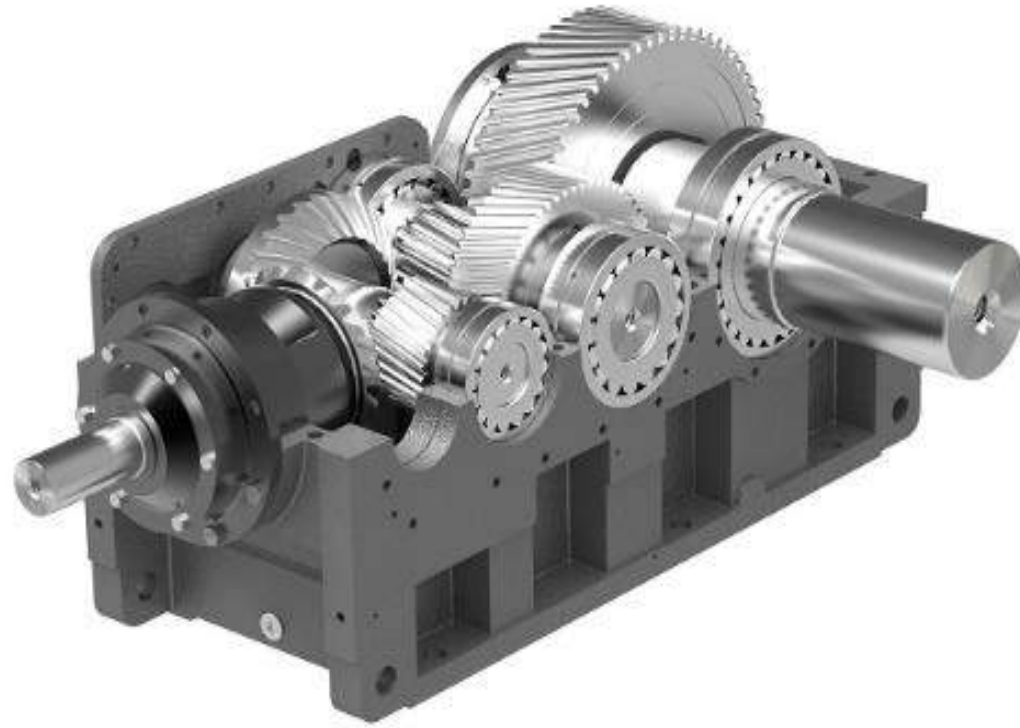


# DRESSER CLARK® B4.5

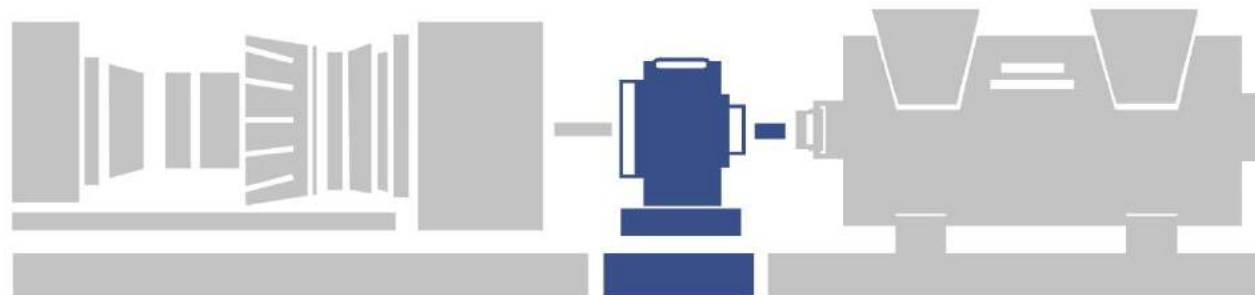
## Natural Gas Compressor

Pipeline Application





# INDUSTRIAL GEARBOXES

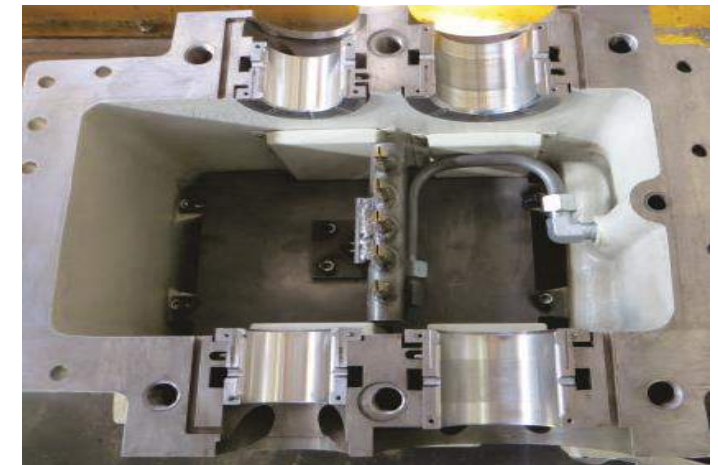
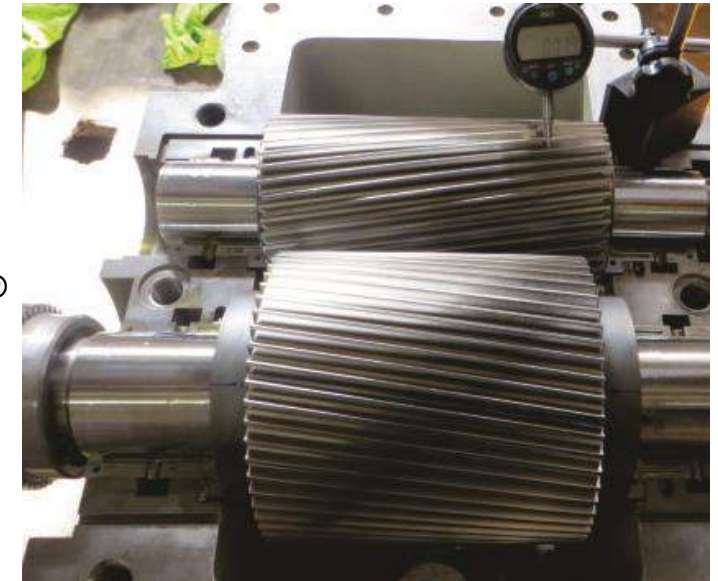
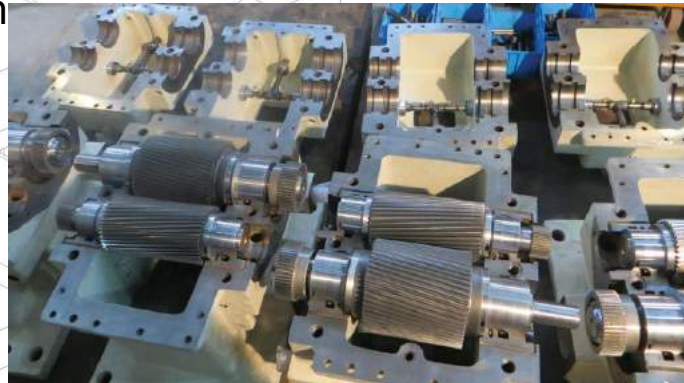
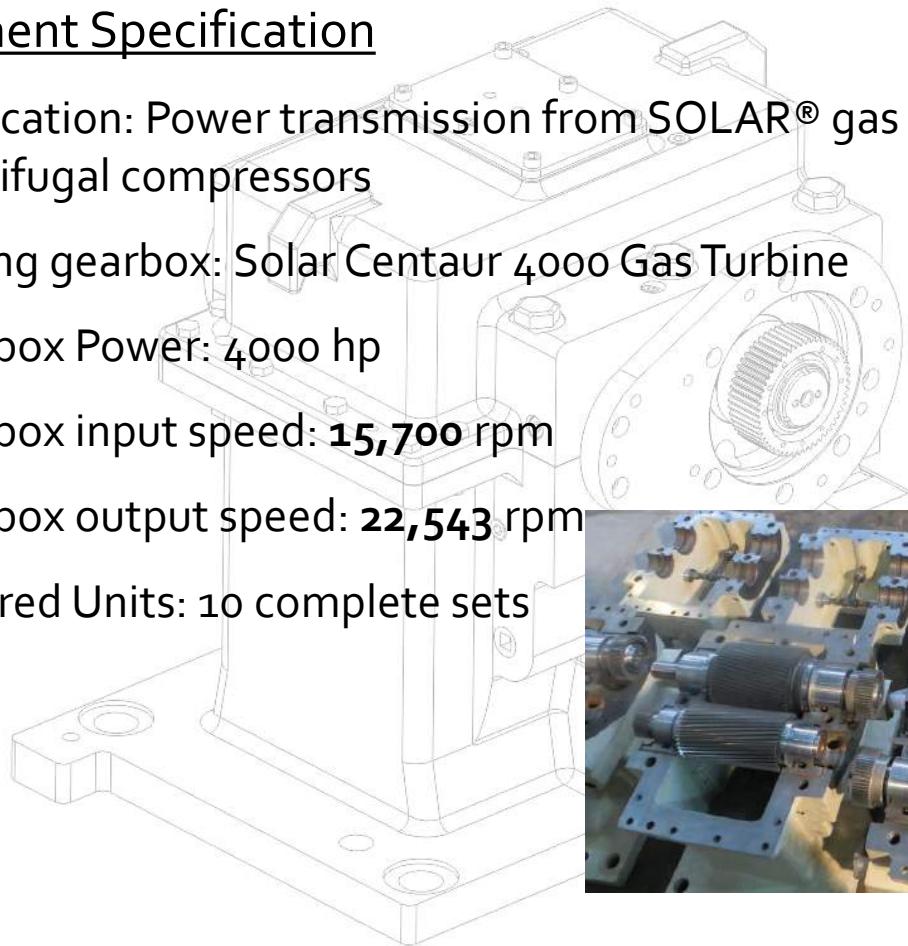


## Finished Projects

# Manufacturing of PHILADELPHIA® speed increasing gearbox, type 206HS

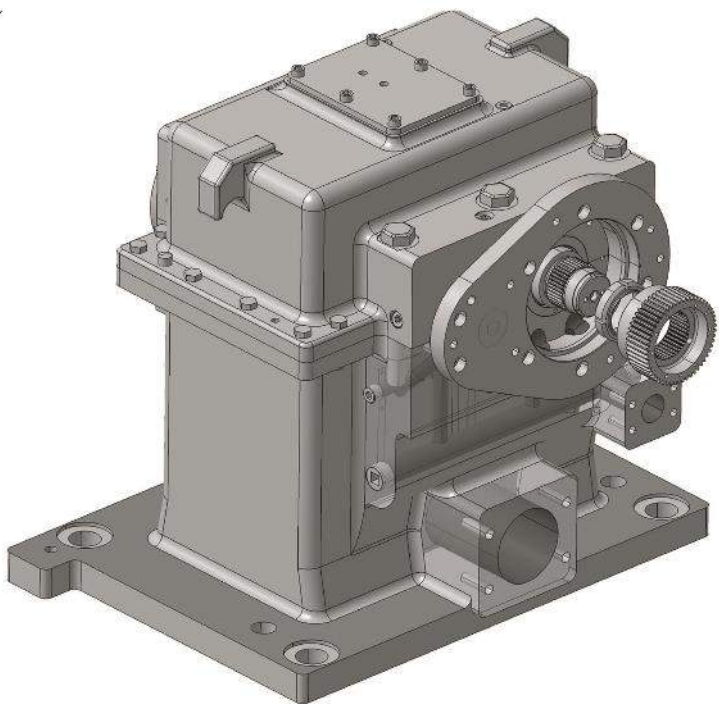
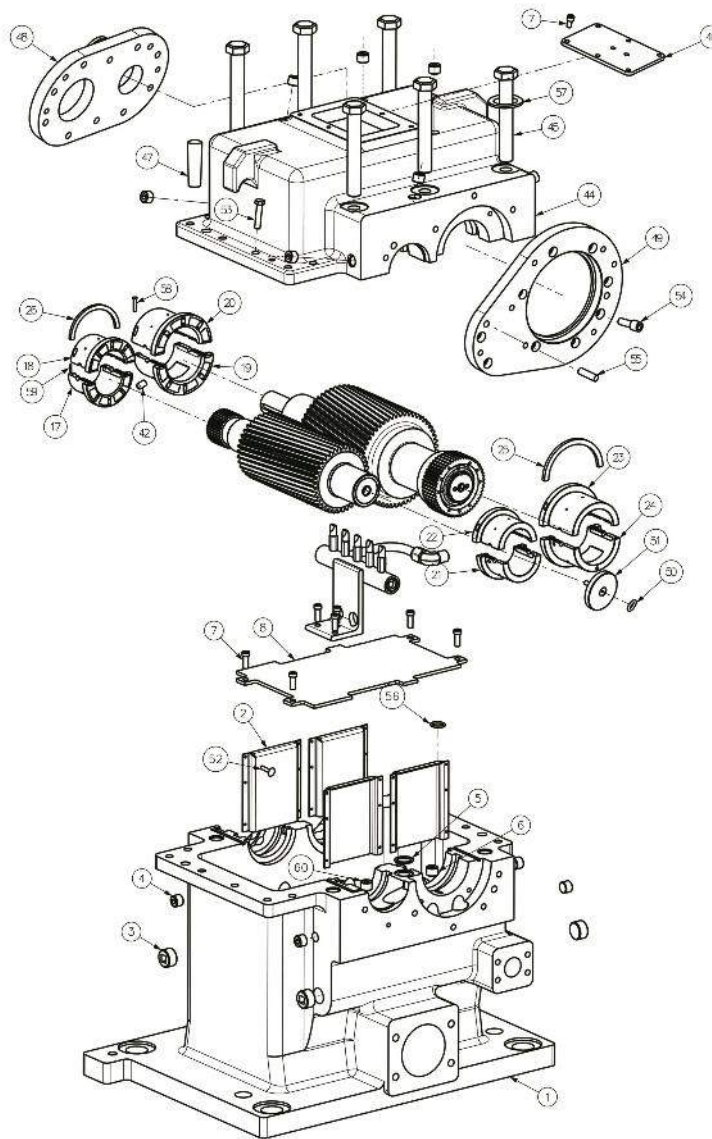
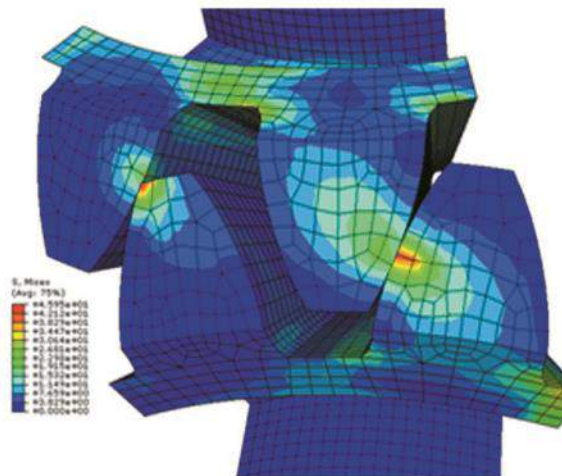
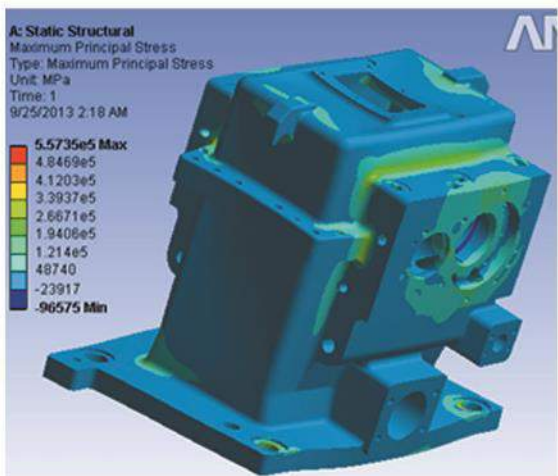
### Equipment Specification

- Application: Power transmission from SOLAR® gas turbine to SOLAR® centrifugal compressors
- Driving gearbox: Solar Centaur 4000 Gas Turbine
- Gearbox Power: 4000 hp
- Gearbox input speed: **15,700 rpm**
- Gearbox output speed: **22,543 rpm**
- Ordered Units: 10 complete sets





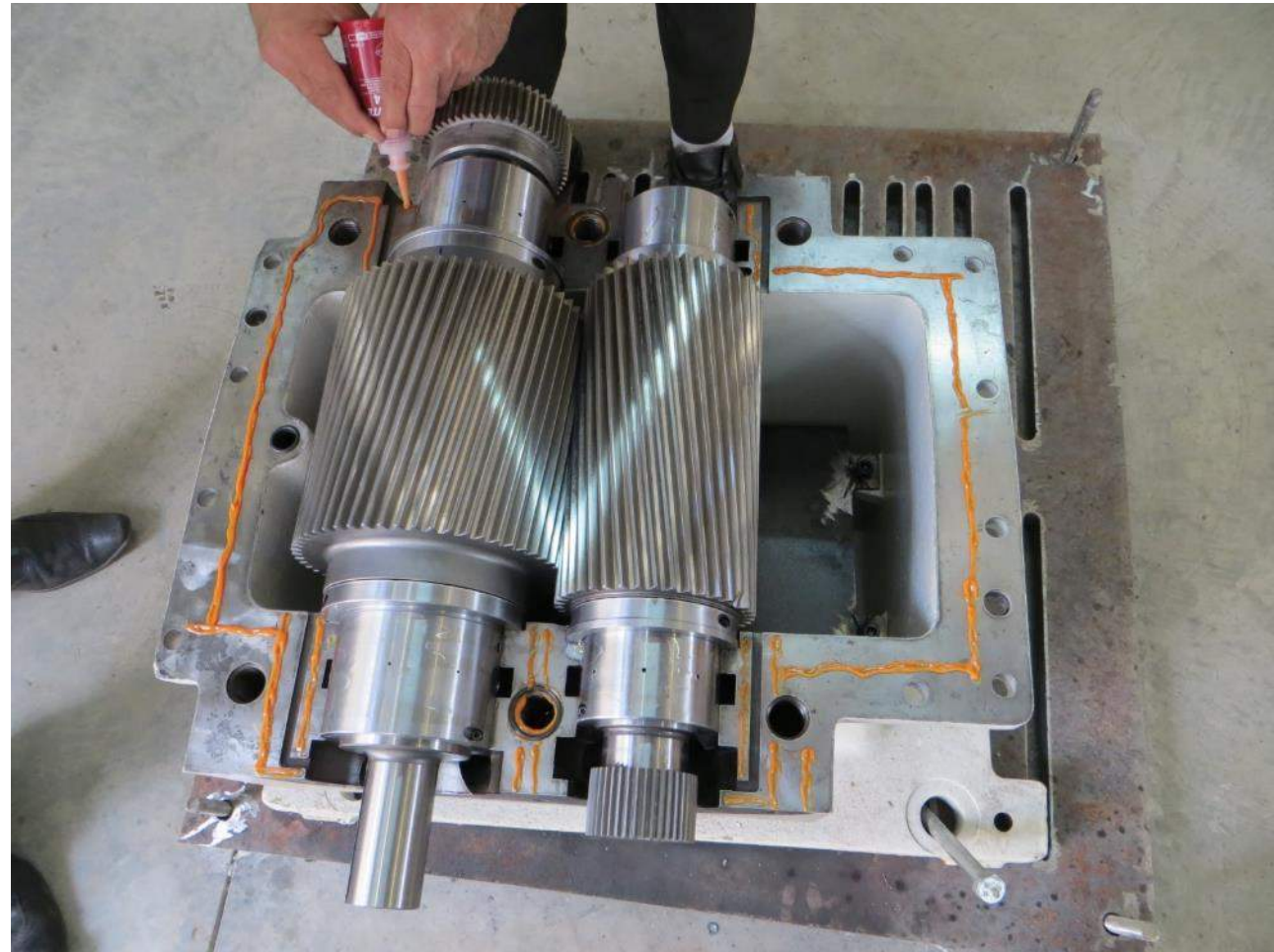
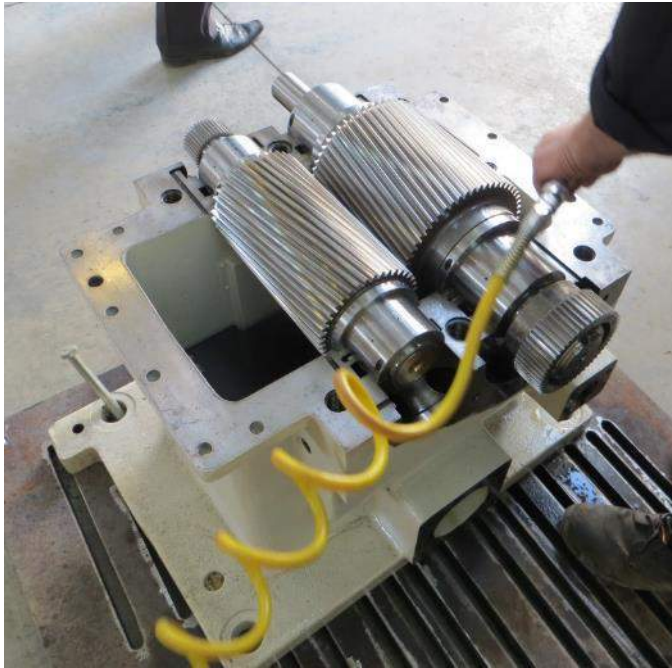
# PHILADELPHIA® 206HS:



## PHILADELPHIA® 206HS:

Package Assembly

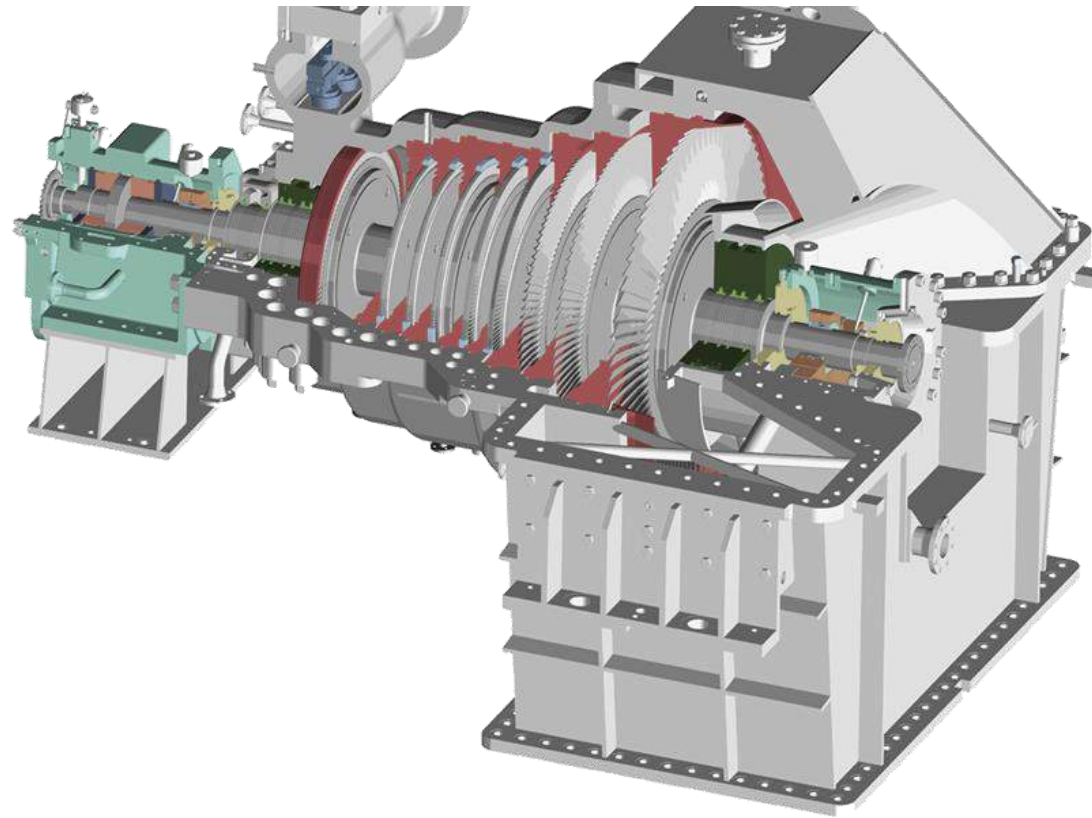
**Vertical & Axial**



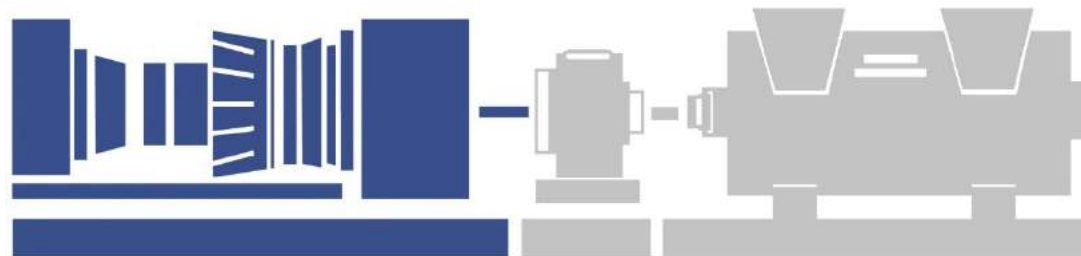


## PHILADELPHIA® 206HS:



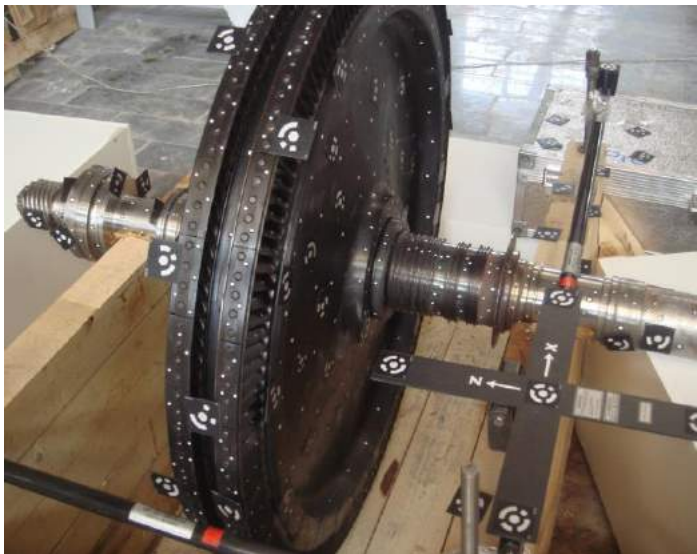


# STEAM TURBINES





Manufacturing & Repair Steam Turbine Components:







Gas  
Generator

Power  
Turbine

Transmission  
Gearbox

Centrifugal  
Compressor



# THANK YOU



**[www.alborztc.com](http://www.alborztc.com)**

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