

The background of the slide is a deep space scene. It features a dark blue and black sky filled with numerous bright stars of varying colors, including blue, white, and yellow. A prominent, reddish-brown planet, likely Mars, is visible on the right side of the frame, showing its characteristic surface features and polar ice caps. The overall atmosphere is that of a vast, starry universe.

**NASA/MARSHALL SPACE
FLIGHT CENTER**

JOINT COUNSELING SESSION

Paulo

Alex Janeway & Noel Brady

July 23, 2019

Background

COMPANY NAME:	Paulo	ADDRESS:	5711 W Park Ave St. Louis, MO 63110
OWNER:	Privately Held Family Owned Small Business	CONTACT NAME:	Alex Janeway
EMAIL:	ajaneway@paulo.com	YEARS IN BUSINESS:	76 years
CAGE CODE:	9S219, 0F623, 8G277, 2S200	DUNS NUMBER:	006267769
WEB SITE:	www.paulo.com	NAICS CODES:	332811, 332813

Business Size & Classifications

TOTAL EMPLOYEES:	~500
AVERAGE SALES:	\$85MM

CLASSIFICATIONS (select from list below):	Yes/No
SMALL BUSINESS	YES
SMALL DISADVANTAGED BUSINESS	NO
NATIVE AMERICAN-OWNED	NO
ALASKAN NATIVE CORPORATION	NO
WOMEN OWNED	NO
ECONOMICALLY DISADVANTAGED WOMEN OWNED	NO
VETERAN-OWNED	NO
SERVICE DISABLED VETERAN OWNED	NO
HUBZONE CERTIFIED	NO
8(A) CERTIFIED	NO
8(A) EXPIRATION DATE (if applicable)	

Quality Systems

- NADCAP
 - Heat Treatment, Brazing
- AS9100
- IATF16949
- CQI-9
- ITAR
- FFL
- PICS
 - In-house developed MRP & quality control software
- Pyrometry per AMS2750
 - 50+ furnaces
 - 4 Class 1
 - Up to 2425F

Skills & Processes

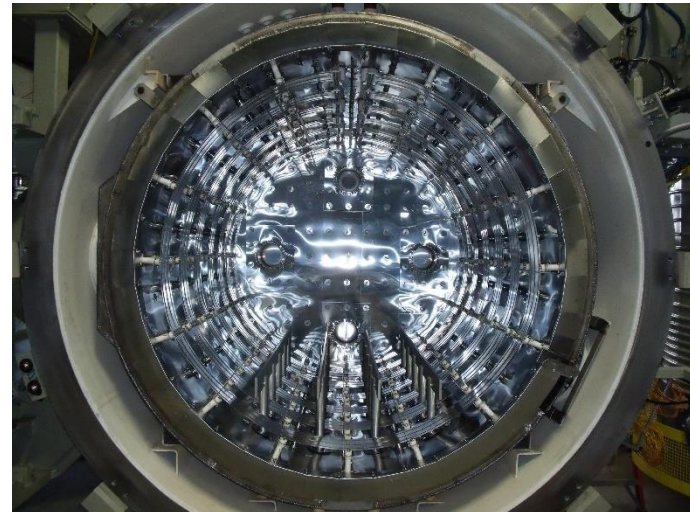
● Heat Treatment

➤ Materials

- Tool Steels
- Carbon Steels
- Alloys Steels
- Stainless Steels
- Nickel Based Super Alloys
- Titanium

➤ Atmospheres

- Vacuum
- Hydrogen
- Argon
- Nitrogen
- Endothermic



Skills & Processes (Cont.)

- Hot Isostatic Pressing
 - Vessel size 27" diameter
69" depth
 - 30,000psi max pressure
 - 2,552F max
temperature
 - 360F/minute cooling
rate
 - 3000kg max load



Skills & Processes (Cont.)

- Brazing
 - Both vacuum furnace and hydrogen belt brazing
 - Alloys include Nickel, Copper, Silver, Gold, Palladium





Customers

- Largest Commercial Heat Treater of turbine blades and vanes
- SpaceX Supplier
- NASA Lewis Space Center Supplier



Principle Points of Contact

NAME	TITLE	PHONE	EMAIL
Alex Janeway	Regional Sales Mgr	336-462-6397	ajaneway@paulo.com
Noel Brady	Metallurgist	440-510-4113	nbrady@paulo.com





Capabilities

		Cleveland, OH	Kansas City, MO	Murfreesboro, TN	Monterrey, Mexico	Nashville, TN	St. Louis, MO
HEAT TREATING	Annealing	✓	✓	✓	✓	✓	✓
	Austempering		✓	✓			
	Case Hardening		✓	✓		✓	✓
	Cryogenic & Deep Freezing	✓	✓			✓	✓
	Ferritic Nitrocarburizing		✓	✓	✓	✓	✓
	Flattening & Straightening	✓	✓			✓	✓
	Gas Nitriding					✓	✓
	Induction Heat Treating		✓				
	Low Pressure Carburizing					✓	
	Martempering		✓				
	Plug & Press Quench						✓
	Precipitation Hardening	✓	✓			✓	✓
	Precision Nitriding					✓	
	Through Hardening	✓	✓	✓	✓	✓	✓
Vacuum Heat Treating	✓		✓	✓	✓	✓	
THERMAL PROCESSING	Coming Soon Hot Isostatic Pressing	✓					
METAL FINISHING	Zinc Plating			✓			
	Zinc Phosphating			✓			
	Black Oxide Coating		✓	✓			✓
	Blasting	✓	✓	✓		✓	✓
BRAZING	Hydrogen Brazing	✓					
	Vacuum Brazing	✓			✓		
QUALIFICATIONS	AS9100	✓	✓				
	CQI-9	✓	✓	✓	✓	✓	✓
	ITAR	✓	✓	✓		✓	✓
	ISO14001		✓				
	ISO/TS 16949 (IATF)		✓		✓	✓	✓
	NADCAP	✓	✓				
	FFL					✓	✓