



Officine Meccaniche Aeronautiche

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1.0 INTRODUCTION

OMA SpA is a privately held Italian aerospace company, established in 1948 and located in Foligno.

OMA has a workforce of about 650 employees with revenues in the order of 75 million euros.

OMA core competencies are based on three lines of business:

- Design, development and manufacturing of hydraulic mechanical, pneumatic and electro-mechanical actuation components, equipment and systems, for use on commercial and military aircraft and helicopters.
- Manufacturing, assembling and integration of aero-structures made of machined and sheet metal parts, for commercial and military aircraft and helicopters
- MRO of light civil and military aircraft, hydraulic, electro-mechanical and pneumatic equipment, APUs, gearboxes and piston engines.

OMA participates to the main Italian and international aerospace programs in partnership with the main players worldwide.

The Company has capabilities for full development of its products, including design, concurrent engineering, manufacturing, inspection, assembling and testing.

The product manufacturing is based on the most advanced technologies for conventional and CNC machining, inspection and assembling.

OMA is certified according to the following standards:

- Quality System:
 - ISO 9001:2008
 - AS/EN 9100:2009
 - AER-Q-2110 (AQAP-2110)
- OEM:
 - EASA Part 21 (POA)
- Maintenance:
 - AER(EP).P-145 (EMAR-145)
 - EASA Part 145 (MOA)
 - FAA - 14 CFR Part 145
 - TCCA CAR 573
- Manufacturing special processes:
 - NADCAP (Chemical / Heat treating / NDT / Welding)
- HSE:
 - OHSAS 18001



This document presents the OMA machinery list in order to provide an overview of the company capabilities in supporting the manufacturing activities.

2.0 OMA PLANTS

The activities of OMA take currently place on four sites:

- 1) Main Site of Foligno (Via Cagliari 20), where is the “head quarter” of the company including the General Management, Commercial Dept., Technical Engineering Dept., Purchasing Dept., Quality Assurance, Financial Dept.
This site contains also the main offices of the Production: (Production Engineering, Production Planning, Production Control and Expediting), Manufacturing Shops (NC and conventional Machining, Sheet Metal parts, Heat Treatments, Galvanic Processes, Painting, Welding, Assembly and Testing, Aircraft’s Overhaul), Quality Control (dimensional controls, NDT, hardness and conductivity test, chemical laboratory).
- 2) Site of S.Eraclio (located at about 3,0 kilometers south from the main site of Foligno), where are located the Structural Assembly Shop (and in addition some cabins for final painting of structures) and the APUs and Gearboxes Overhaul shop.
- 3) Site of Paciana (located at about 4,0 kilometers north from the main site of Foligno) where is located a “carousel” Painting Plant (for painting of loose parts and small assembled structures).
- 4) Site of S. Eraclio (Via Bianca 21, located at about 3,0 kilometers south from the main site of Foligno), where is located the raw materials warehouse and the CN for the preliminary machining operations.



3.0 MECHANICAL PARTS MANUFACTURING

3.1 MILLING MACHINES

3.1.1 FM SYSTEMS

OMA has established FMS lines with an installed capacity of 7000 hours per machine with 21 shift per week of out of which 10 supported by human presence.

Qty	Manufacturer	Model	Axis n°	Tools	Axial strokes (mm)	Speed (rpm)	Pallets	Notes
2	MCM	"CLOCK 1000" MACHINING CENTER	4	350 TOOLS – AUTOMATIC EXCHANGE	X = 1200 Y = 687 Z = 800	8000	15	
1	MCM	"CLOCK 700" MACHINING CENTER	5	435 TOOLS – AUTOMATIC EXCHANGE	X = 700 Y = 715 Z = 850	20000	23	
2	MCM	"iTANK 1600" MACHINING CENTER FOR TITANIUM	4	200 TOOLS – AUTOMATIC EXCHANGE	X = 1600 Y = 1400 Z = 1500	6000	88	
3	MCM	"iTANK 1600" MACHINING CENTER FOR TITANIUM	5	200 TOOLS – AUTOMATIC EXCHANGE	X = 1600 Y = 1200 Z = 1500	10000	88	

1	MCM	"iTANK 1600" MACHINING CENTER MULTIPURPOSE	5	200 TOOLS – AUTOMATIC EXCHANGE	X = 1600 Y = 1200 Z = 1500	16000	88	
1	MCM	"iTANK 700" MACHINING CENTER MULTIPURPOSE	4	250 TOOLS – AUTOMATIC EXCHANGE	X = 700 Y = 875 Z = 860	10000	64	
1	MCM	"iTANK 700" MACHINING CENTER MULTIPURPOSE	5	250 TOOLS – AUTOMATIC EXCHANGE	X = 700 Y = 865 Z = 780	15000	64	
1	MCM	"iTANK 1600" MACHINING CENTER FOR TITANIUM	4	200 TOOLS – AUTOMATIC EXCHANGE	X = 1600 Y = 1400 Z = 1500	6000	60	
2	MCM	"iTANK 1600" MACHINING CENTER FOR TITANIUM	5	200 TOOLS – AUTOMATIC EXCHANGE	X = 1600 Y = 1200 Z = 1500	10000	60	

3.1.2 STAND ALONE MILLING MACHINES

Qty	Manufacturer	Model	Axis n°	Tools	Axial strokes (mm)	Speed (rpm)	Pallets	Notes
1	KYTAMURA	KYTAMURA 4X - VERTICAL SPINDLE	3	40 TOOLS – AUTOMATIC EXCHANGE	X = 1100 Y = 500 Z = 500	20000		
1	DMG	DMC 160 U duo BLOCK	5	120 TOOLS	X = 1600 Y = 1250 Z = 1100	12000		
1	MIKRON	Mod. "HPM 1350 U"	5	92 TOOLS	X = 1350 Y = 1150 Z = 895	15000		

3.1.3 STAND ALONE MILLING MACHINES

Qty	Manufacturer	Model
1	LAGUN	FU-TV 1250 with "Wizard" dimension detector
1	GUALDONI	FUC50
1	ITAMA	FV 30 CNC

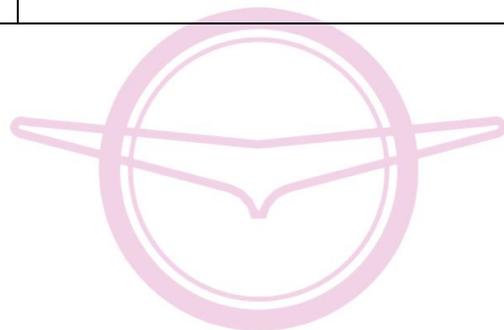


3.2 LATHING MACHINES
3.2.1 NC LATHES

Qty	Manufacturer	Model	Axis n°	Tools	Axial strokes (mm)	Speed (rpm)
1	MAZAK	NEXUS 250 MY		12	X = 180	4000 (main spindle) 3000 (turret)
					Y = +/-50	
					Z = 575	
1	MAZAK	INTEGREX i-100 Y	5	40	X = 410	6000 (main spindle) 12000 (milling spindle)
					Y = +/-50	
					Z = 570	
1	MAZAK	INTEGREX i-300 Y Mark III	5	40	X = 630	6000 (main spindle) 12000 (milling spindle)
					Y = +/-115	
					Z = 1585	
1	MAZAK	INTEGREX i-200 Y Mark III	5	40	X = 580	5000 (main spindle) 12000 (milling spindle)
					Y = +/-80	
					Z = 1045	
1	MAZAK	QTN 250 MY		12	X = 350	4000 (main spindle) 6000 (milling spindle)
					Z = 472	

Qty	Manufacturer	Model	Axis n°	Tools	Axial strokes (mm)	Speed (rpm)
1	MAZAK	INTEGREX i-400 IV	5	40	X = 630 Y = +/-115 Z = 1585	3300 (main spindle) 12000 (milling spindle)
1	MAZAK	INTEGREX i-100 Y Second Turret (multitask)	5	40	X = 400 Y = +/-60 Z = 400	6000 (main spindle) 12000 (milling spindle)
1	MAZAK	INTEGREX i-400 (multitask)	5	120	X = 450 Y = +/-125 Z = 2000	2600 (main spindle) 12000 (milling spindle)
1	HARDINGE	QUEST 8 / 51 SUPER PRECISION		12	X = 190 Z = 610	6000 (main spindle) 6000 (milling spindle)
1	DMG	CTX BETA 1250		16	X = 410 Y = +/-60 Z = 1250	4000 (main spindle) 4000 (milling spindle)
1	DMG	CTX GAMMA 2000 TC		120	X = 700 Y = +/-200 Z = 2050	4000 (main spindle) 12000 (milling spindle)

Qty	Manufacturer	Model	Axis n°	Tools	Axial strokes (mm)	Speed (rpm)
2	WFL	M65 (multitask)		72	X = 720 Y = 600 Z = 3150	2600 (main spindle) 6000 (milling spindle)
1	Mazak	INTEGREX i-500 (multitask)		250	X = 720 Y = 600 Z = 3150	2500 (main spindle) 5000 (milling spindle)



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3.2.2 CONVENTIONAL LATHES

Qty	Manufacturer	Model
1	MONDIAL	HYDROGALLIC
1	GRAZIANO	SAG 14
1	COMEV	MT 200P X 1500
1	SIBIMEX	C10-M (Used for deep finishing)

3.2.3 CONVENTIONAL PRECISION LATHES

Qty	Manufacturer	Model
1	HARDINGE	HLV-H with "ACU-RITE" dimension detector
1	EMCO	Mod. 20D with "EMCO" dimension detector
1	ACRA	ATL 618 EVS

3.3 DRILLING MACHINES

Qty	Manufacturer	Model	Notes
1	IMSA	MFTB 100072T 20-70	Numerically Controlled Drilling Diameter Range: from 18 to 100mm Max Drilling Depth: 1000mm
1	TOVAGLIERI	TU 400-CERAMIC	Conventional lathing machine adapted to drill holes dia. < 18 mm

3.4 GRINDING MACHINES

3.4.1 NC GRINDING MACHINES

Qty	Manufacturer	Model	Notes
2	STUDER	S33 with GE-Fanuc Numerical Control	Internal & External Grinding Max Length External Grinding = 650 mm Max diameter = 300 mm Spindle speed = 1250 rpm
1	TACHELLA	ELEKTRA EVO 1018 CNC	Internal & External Grinding Max Length External Grinding = 1000 mm Max Diameter = 350 mm Spindle = 800 rpm

3.4.2 MICRO PROCESSOR CONTROLLED GRINDING MACHINES

Qty	Manufacturer	Model	Notes
1	TACHELLA	ELEKTRA MPC 1018	Internal & External Grinding Max Length External Grinding = 1180 mm Max Diameter = 350 mm Spindle = 800 rpm

3.4.3 CONVENTIONAL GRINDING MACHINES

Qty	Manufacturer	Model
2	TACHELLA	612 UA
1	GHIRINGHELLI & PISONI	M200 DI Centerless Grinding
1	RASTELLI	RT1 – PLANE GRINDER Surfaces Grinding

3.5 HONING / LAPPING / SHARPENING

3.5.1 MICRO PROCESSOR CONTROLLED HONING/LAPPING MACHINES

Qty	Manufacturer	Model	Notes
1	SUNNEN	HTC 2000	Max Diameter = 1000 mm Max Stroke = 2000 mm Spindle Speed = 350 rpm Power = 5.5 kW
1	SUNNEN	ML-5000	Max Diameter = 100 mm Max Stroke = 120 mm Spindle Speed = 3000 rpm Power = 3 kW
1	CAR	PE-1550T3	MAX DIAMETER = 300 mm MAX STROKE = 1800 mm SPINDLE SPEED = 150 rpm POWER = 6 kW

3.5.2 CONVENTIONAL HONING / LAPPING MACHINES

Qty	Manufacturer	Model
1	SUNNEN	MBC 1804
1	SUNNEN	CV 616

3.5.3 CONVENTIONAL SHARPENING MACHINES

Qty	Manufacturer	Model
1	TACHELLA	3L - SHARPENER
1	TACHELLA	40 LN - SHARPENER
1	AGM	SHARPENER
1	LA PRORA	U50RI – SHARPENER

3.5.4 RAW MATERIAL CUTTING MACHINES

Qty	Manufacturer	Model	Notes
1	SCHIAVI	SC 630/B	Automatic Shearing Machine for Sheet Metal
1	MEP	COBRA 352 SX EVO	Manual Disk Saw for Light Alloy Bars/Extrusions

1	MEP	SHARK 281	Manual Disk Saw for Steel & Light Alloy Bars (Small Diameters)
1	MEP	SHARK 330	C.N.C. Disk Saw for Steel & Light Alloy Bars (Big Diameters)
1	OPUS	1000 TM	Belt Saw for Steel & Light Alloy Plates



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4.0 SHEET METAL PARTS MANUFACTURING
4.1 RUBBER CUSHIONS PRESSES

Qty	Model	Table Dimension (mm)	Max Pressure	Capacity (Ton)	Notes
1	OLEODYNAMIC RUBBER PRESS "MURARO"	2500 x 900	400	10000	
1	RUBBER PRESS "PICHETTO" DOUBLE UPRIGHT			350	
1	OLEODYNAMIC PRESS "ENERGO 099-88"			1400	
1	OLEODYNAMIC PRESS "GIGANT G2/850/2"			850	

4.2 DOUBLE ACTING PRESSES (WITH BLANK HOLDER)

Qty	Model	Capacity (Ton)	Max Pressure	Capacity (Ton)	Notes
1	Oleodynamic Double-Acting Press "ENERGO"	350			fsdf
1	Double-Acting Press "EMANUEL"	150			With electrical resistance device for Heat Forming. Able to perform joggles.
1	Eccentric-Shaft Press "CLUANA"	30			With electrical resistance device for Heat Forming. Able to perform joggles.

4.3 HYDRAULIC BENDING PRESSES

Qty	Model	Capacity (Ton)
1	Hydraulic Forming Press "LVD"	
1	Hydraulic Forming Press "SCHIAVI HFB 50-20"	
1	Hydraulic Forming Press "SCHIAVI RG 104"	100

4.4 STRETCH FORMING MACHINES FOR EXTRUSION PARTS

Qty	Model	Capacity (Ton)
1	Stretching Machine "HUFFORD A-10"	17.5

4.5 CALENDERING MACHINES

Qty	Model
1	DUCCI CEI 8/6 X 250
1	MG Mod. MH 206 P/RR 130
1	MG
1	HYLLUS

4.6 ROUTING MACHINES

Qty	Manufactures	Model	Axis n°	Tools	Spindle/Table
1	PROTEK	CNC Routing Machine F3A-CONCEPT-4025-2T	3	32	2
1	CMS	CNC Routing Machine FXB 2-25-21 Stack	3	16	2
1	COSMEC	Conventional Routing Machine			

4.7 DEBURRING MACHINES

Qty	Manufacturer	Model
1	COSTA	AUTOMATIC DEBURRING MACHINE



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4.8 OTHER MACHINERY FOR SHEET METAL PARTS

Qty	Type	Notes
1	Shaping Machine ECKOLD KF 310	
1	Shaping Machine ECKOLD KF 314	
3	Shaping Machine ECKOLD KF 320	
1	Shaping Machine ECKOLD KF 460	
3	Column Drilling Machines	
4	Fly Presses	
2	Refrigerators	Dimensions: [800 x 1000 x 1210] mm
2	Refrigerators	Dimensions: [4000 x 1000 x 1500] mm



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5.0 HEAT AND SURFACE TREATMENTS

5.1 HEAT TREATMENTS

Qty	Model	Technical Characteristics
1	Heat treatment furnace "Ferrè"	Solubilization and Precipitation of Light Alloys (SPEC. MIL-H-6088) Thermal Power: 300kW Total Power: 366 kW Forced Air Circulation Useful Dimensions: 3450 x 1500 x 1150 mm Heating Method: Electric Resistance Quenchant: Water (a water-basin is under the heat treatment furnace)
1	Heat treatment furnace "Siem"	Precipitation of Light Alloys (SPEC. MIL-H-6088) Tempering and Precipitation of Steels (SPEC. MIL-H-6875) Thermal Power: 50 kW Forced Air Circulation Useful Dimensions: Diameter =700mm, Depth=1000mm Heating Method: Electric Resistance Electronic Regulation and Adjustment
1	Heat treatment furnace "Felind"	Ageing of Light Alloys (SPEC. MIL-H-6088) Thermal Power: 184 kW Forced Air Circulation Heating Method: Electric Resistance Electronic Regulation and Adjustment
1	Heat treatment furnace "Siem"	Annealing, Hardening, Precipitation, Tempering of Alloy Steels Thermal Power: 20 kW
1	Heat treatment furnace "Carbolite"	Dehydrogenation and Stress Relieving Max Temperature: 250 °C
1	Heat treatment furnace "Carbolite"	Dehydrogenation and Stress Relieving Max Temperature: 250 °C
1	Heat treatment furnace "Sib Turbomax"	Tempering and Precision Heat Treatments

Qty	Model	Technical Characteristics
1	Heat Treatment Furnace "SOLO"	Type 11Cg Bell-Shaped Controlled Atmosphere Annealing, Hardening, Precipitation, Tempering, Nitriding, Case-Hardening of Alloy Steels Useful Dimensions: 300 x 300 x 600 (height) mm; (54 dm ³) Max Charge Weight: 80 kg Max Temperature: 1100 °C Heating Power: 30 kW Feeding Power: 32 kW Gas Consumption: 0,6 / 0,8 Nmc/h Water Cooling Consumption: 50 l/h Total Weight of Plant: 1250 kg
1	Heat Treatment Furnace "SOLO"	Type 11Cg Bell-Shaped Controlled Atmosphere Annealing, Hardening, Precipitation, Tempering, Nitriding, Case-Hardening of Alloy Steels Useful Dimensions: 400 x 400 x 1000 (height) mm; (160 dm ³) Max Charge Weight: 250 kg Max Temperature: 1100 °C Heating Power: 90 kW Feeding Power: 96 kW Gas Consumption: 1,4 / 1,8 Nmc/h Water Cooling Consumption: 150 l/h Total Weight of Plant: 3100 Kg
1	Heat Treatment Furnace "SOLO"	Type 6Cg Bell-Shaped Controlled Atmosphere Precipitation, Tempering, Nitriding of Alloy Steels Useful Dimensions: 300 x 300 x 600 (height) mm; (54 dm ³) Max Charge Weight: 80 kg Max Temperature: 700°C Heating Power: 24 kW Feeding Power: 26 kW Gas Consumption: 0,6 / 0,8 Nmc/h Water Cooling Consumption: 50 l/h Total Weight of Plant: 1220 Kg
1	Degreasing Machine	"UNION – mod. MUM" Closed Circuit, for Cleaning of Parts Before & After Heat Treatments

5.2 SURFACE CHEMICAL TREATMENTS

Facility	Spec.	Size (mm)
Chemical oxydation (Alodine 1000 and 1200)	MIL-C-5541	2000 x 1000 x 2000
Chromic acid anodizing	MIL-A-8625	2000 x 1500 x 2000
Sulfuric acid anodizing	MIL-A-8625	1300 x 900 x 1000
Hard anodizing of aluminium	MIL-A-8625	1300 x 900 x 1000
Cadmium plating electrodeposited – types: I, II, III.	QQ-P-416	1000 x 600 x 400
Chromium plating (flash and hard)	QQ-C-320	2000 x 1500 x 2000
Chemical milling		2000 x 1100 x 2200
Passivation of corrosion resistant steels		700 x 700 x 1000
Titanium pickling		1300 x 600 x 1000
Rilsan covering		
Nichel sulfammate		
Magnesium mordanting		

5.3 SHOT PEENING

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Qty	Model	Type	Size
1	NORBLAST (6 AXIS MACHINE - ROTARY TABLE)	STEEL-BEAD PEENING MACHINE	Dia = 1000 mm H = 1000 mm

5.4 SAND BLASTING

Qty	Manufacturer	Model
1	VACUBLAST INTERNATIONAL	
1	VACUBLAST INTERNATIONAL	VENTUS 125S
1	VACUBLAST INTERNATIONAL	VENTUS125PR

6.0 PAINTING AND SEALING

6.1 PAINTING

Qty	Type	Model/Manufacturer
1	Open Cabin	SAICO
1	Pressurized Cabin	SAICO
1	Pressurized Cabin	EUROPEA
1	Pressurized Cabin	EUROPEA
1	Cabin for Cleaning & Smoothing of Parts Before Painting	EUROPEA
1	Mixing Box	

6.2 SEALING OF HYDRAULIC ACCESSORIES

Qty	Type	Model/Manufacturer
1	Sealing Room with Pressurized Cabin	SAVIM

6.3 PAINTING OF ASSEMBLED STRUCTURES

Qty	Type	Model/Manufacturer
1	Cabin for Cleaning & Smoothing of Parts Before Painting	EUROPEA
2	Pressurized Cabins	EUROPEA
1	Mixing Box	

6.4 PAINTING OF PARTS AND SMALL ASSEMBLED STRUCTURES

Qty	Type	Model/Manufacturer
1	CMV AUTOMATIC PAINTING SYSTEM	CMV

7.0 WELDING

Qty	Type	Model/Manufacturer
2	Welding Machine Tig Welding 300 Amperes	PANASONIC Mod. WX300
1	Welding Automatic Machine Tig Welding 450 Amperes With tool for Circular Weldings	SIAD Mod. MW450
1	Welding Automatic Machine Tig Welding 500 Amperes With tool for Circular Weldings	SIAD Mod. AREL 500
2	Welding Manual Machine Tig Welding 350 Amperes	SIAD Mod. IT-SYNCROWAVE 30 CY 50
1	Welding Machine Tig Welding 300 Amperes	MILLER - RIVOIRA Mod. 330 A/BP

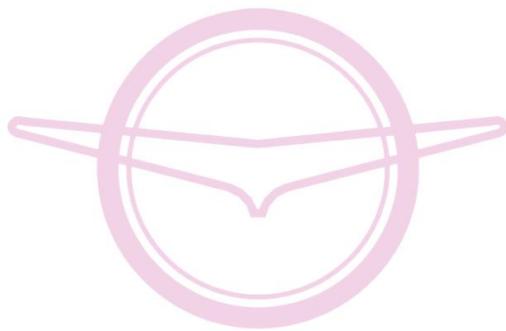
8.0 CONTROL AND TEST INSTRUMENTS

Qty	Test Type	Machine Type	Model/Manufacturer
Many	PHYSICAL TESTS OF MATERIALS	Traction Test SCALE 2000, 4000, 10000, 20000 kg with electric extensometer	GABALDINI TYPE TM-20
1		Spring Test Machine	PROBAT WERKE
1	HARDNESS TEST	Hardometer	GALILEO A-200
1		Hardometer	GALILEO ERGOTEST DIGI 25RS
1		Microhardometer	Z WICK
1	METALLOGRAPHIC ANALISYS	Microscope	LEIZ METALUX 2
1	MAGNETIC INSPECTION	Metalloscope Inspection Method: C.C.C.A.	CGM
1	X-RAY INSPECTION	Control Machine Electric Voltage: 160 kV Electric Current: 3 mA	GILARDONI
1	PENETRANT FLUORESCENT INSPECTION	Equipped Plant – SPEC. MIL-I-23135 Method “O” - Type “1” - Level “2”	
1	THICKNESS MEASURATION AFTER PROTECTIVE TREATMENT		DERMITRON D-9
1			NAMICON DIGI-CHEK NFE-2
1	CHEMICAL ANALISYS	Atomic Spectrometer	PERKIN-ELMER MODEL 22-80
1	ABRASION TEST	Abrasometer	TABER
1	THERMOCOUPLE CALIBRATION	Control System	LEEDS NORTHROP
1	DIMENSIONAL CONTROLS	Motorized Machine with Movement of X-Y-Z Axis	DEA JI203

Qty	Test Type	Machine Type	Model/Manufacturer
1		Height Gauge	MICRO-HITE "TESA"
1		Prophilometr	HELIOS 3
1			MITUTOYO CONTRACER 410 PC
1		Roughness Measurer	HOMMELWERK
1		Ultrasonic Thickness Measurer	GILARDONI PG 40
1		Roundness Formtester	MAHAR
1		Precision Laser Bench Micrometer	MECLAB – AEROEL
2		CMM	Zeiss Duramax
1			Zeiss Accura 2000
1			DEA
1			"TROLL" SYSTEM, DEA MOD. IOTA 1203
1			Roundmeter
1		I.A.C.S. CONDUCTIVITY TEST	Sigmatest Machine
1	VISCOSITY MEASUREMENT	Viscosimeter	TUNINETTO
1	PRECISION WEIGHING	Precision Balance	GIBERTINI
1	PH - TEST	Ph-Meter	CORNING
1	CONDUCTIVITY MEASUREMENT	Conductivity Measurer	AMEL

9.0 ENGRAVING AND MARKING MACHINES

Qty	Machine Type	Model/Manufacturer
1	PANTOGRAPH ENGRAVING MACHINE	CIELLE
1	PANTOGRAPH ENGRAVING MACHINE	VENTURE
1	DOT ENGRAVING MACHINE	PRIOR – MARKTRONIC MULTIDOT



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10.0 TEST BENCHES AND CLIMATIC CHAMBERS
10.1 HYDRAULIC TEST BENCHES

Qty	Model/Manufacturer	Fluid Type	Technical Characteristics
1	Universal	MIL-PRF-5606	Pressure: 320 bar Flow Rate: 210 l/min Power: 160 kW
1	Universal	MIL-PRF-5606	Pressure: 315 bar Flow Rate: 28 l/min Power: 15 kW
2	Universal	MIL-PRF-5606	Equipped with 3 pumps Power: 40 kW Pump 1: Pressure: 350 bar; Flow Rate: 45 l/min Pump 2: Pressure: 350 bar; Flow Rate: 15 l/min Pump 3: Pressure: 550 bar; Flow Rate: 0,9 l/min
2	Universal	MIL-PRF-5606	Equipped with 2 pumps Power: 15 kW Pump 1: Pressure: 350 bar; Flow Rate: 15 l/min Pump 2: Pressure: 550 bar; Flow Rate: 0,7 l/min
2	Universal	MIL-PRF-5606	Pressure: 315 bar Flow Rate: 55 l/min Power: 40 kW With Hand Pump @ 600 Bar for proof/burst tests
1		MIL-PRF-5606	Pressure: 350 bar Flow Rate: 80 l/min Power: 80 kW
1	Bimal	MIL-PRF-5606	Hydraulic bench for dynamic impulse test: spectrum according to PREN 2624 and ARP 1383 Temp control up to 135 °C
1	Universal	Skydrol	Pressure: 315 bar Flow Rate: 55 l/min Power: 40 kW With Hand Pump @ 600 Bar for proof/burst tests
2	Universal	Skydrol	Equipped with 3 pumps Power: 40 kW Pump 1: Pressure: 350 bar; Flow Rate: 45 l/min Pump 2: Pressure: 350 bar; Flow Rate: 15 l/min Pump 3: Pressure: 550 bar; Flow Rate: 0,9 l/min

10.2 HYDRAULIC POWER UNITS

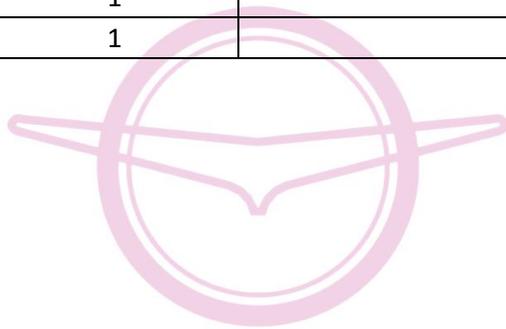
Qty	Model/Manufacturer	Fluid Type	Technical Characteristics
2	Universal	MIL-PRF-5606	Pressure: 420 bar Flow Rate: 5 l/min Power: 4 kW
1	Universal	MIL-PRF-5606	Pressure: 600 bar Flow Rate: 1 l/min Power: 2 kW
1	Universal	MIL-PRF-83282	Pressure: 600 bar Flow Rate: 1 l/min Power: 2 kW
1		Skydrol	Pressure: 420 bar Flow Rate: 5 l/min Power: 4 kW

10.3 ENVIRONMENTAL TEST CHAMBERS

Qty	Model/Manufacturer	Type	Technical Characteristics
1	Angelantoni Mod. CH 1200 C	THERMOSTATIC-CLIMATIC ROOM	Temperatures: -60°C +180°C Internal Size (mm): 1000 x 1130 x 1020 Humidity Control
1	Angelantoni Mod. CH 150 TC	THERMOSTATIC-CLIMATIC ROOM	Temperatures: -54°C +135°C Internal Size (mm): 700 x 700 x 1000
1	Angelantoni Mod. SU1000C15ESS, S/N 63858	THERMOSTATIC-CLIMATIC ROOM	Temperatures: -70°C +180°C Internal Size (mm): 1000 x 1000 x 1000 Thermal Shock (10°C/min)
1	BIEMME	BARIC-THERMOSTATIC-CLIMATIC ROOM	Combined Temperature / Humidity / Altitude
1	Angelantoni DCTC 600P	THERMOSTATIC-CLIMATIC ROOM	
1	BIEMME Climatic Test Bench TP480	SAND AND DUST TEST ROOM	
1		SALT SPRAY FOG TEST	

11.0 APU AND GEARBOXES OVERHAUL

Qty	Type / Manufacturer
1	Test Bench APU T-312
1	Test Bench APU GTC85-71A
1	Test Bench APU GTCP85-100
1	Test Bench Gearbox Starboard G-116S
1	Test Bench Gearbox Port G-119P
1	Hydraulic Accessories Test Bench – Test Fluid: Oil MIL-L-7870A
1	Balancing Machine “CEMB ZE” max. Weight of the rotating part: 30 kg min. Umbalance: 0,2 g · mm
1	Instrument for Radial Clearance Bearing Test
1	Fuel Test Bench, for Flow Fuel Sprayers of APU T-312
1	Fuel Test Central Case, for Flow Fuel Sprayers of APU T-312
1	Thermostatic Room
1	Sonic Test Bench “FAAG” for Bearings
1	Television-Camera Enlarger



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