TOOL & GSE SERVICES









CREATING TOOLING AVAILABILITY ANYWHERE AND AT ANYTIME

DEDIENNE AEROSPACE



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WHY TOOL & GSE SERVICES BY DEDIENNE AEROSPACE?

YOUR TOOLING SERVICES, ANYWHERE AT ANYTIME

WORLDWIDE FOOTPRINT

ONE STOP SHOP FOR ALL TOOLING

OFFICIAL OEM LICENSEE

SHORT TAT

HIGH QUALITY

HIGH OTD

LOAN OFFER

DIGITAL PLATFORM



WE ARE THE
OEM LICENSED COMPANY

OEM LICENSES

1989
- SAFRAN AIRCRAFT ENGINES — LICENSE SAFRAN CFM56 TOOLING
- BOEING — LICENSE BOEING

2010
- LICENSE PRATT & WHITNEY (ENGINE STANDS)

2012
- cfm The Power of Flight — LICENSE CFM56 (ENGINE STANDS)

2013
- IAE — LICENSE IAE (ENGINE STANDS)

2015
- Rolls-Royce — LICENSE ROLLS-ROYCE (GSE, TOOLING, STANDS, ..)
- Collins Aerospace — LICENSE COLLINS (A350 NACELLE TOOLING)
- LEAP — LICENSE CFM LEAP (ENGINE TOOLING)

2017
- Collins Aerospace — LICENSE COLLINS (A320NEO NACELLE TOOLING)

2018
- GE — LICENSE GE9X

2019
- Collins Aerospace — LICENSE COLLINS (LEGACY NACELLE TOOLING)

2021
- DASSAULT AVIATION — PREFERRED PARTNER FOR TOOLING

2024
- PWDEFENCE — DEFENSE LOGISTIC AGENCY
- DIRECTION DE LA MAINTENANCE AÉRONAUTIQUE

2025
- Pratt & Whitney An RTX Business — PWEL AGREEMENT

ONE STOP SHOP COVERING
ALL SERVICES SCOPE






1/ PERIODIC **RECERTIFICATION** | 2/ REPAIR | 3/ UPGRADE | 4/ SPARE **PARTS**






5/ TRAINING | 6/ LOAN | 7/ TRACKING | 8/ LOGISTICS

ToolLive
CREATING ASSETS AVAILABILITY

WORKFLOW INTEGRATED WITH
TOOLLIVE DIGITAL PLATFORM

ACCESS TO
- TOOLING SERVICEABILITY STATUS
- ORDER IN PROGRESS
- DATE OF DELIVERY
- SERVICES HISTORY & CERTIFICATES

SERVICES BY DEDIENNE AEROSPACE
FLEXIBILITY AND ADAPTIVENESS

TOOL SERVICEABLE WHEN NEEDED

REDUCED OWNERSHIP COSTS

REDUCED LOGISTIC COSTS

EXTENDED TOOLING LIFE DURATION

CONFORMITY TO ALL REGULATIONS & OEM STANDARDS



WORLDWIDE MOBILE SERVICES SHOP



ON SITE SERVICES



SERVICES CENTERS

DEDIENNE AEROSPACE



PERIODIC CERTIFICATION

- PRECISION EQUIPMENT CALIBRATION
- ELECTRONIC & ELECTRIC CALIBRATION
- LOAD TESTING
- LIFTING EQUIPMENT PERIODIC CHECK & VERIFICATION

1

PRECISION EQUIPMENT CALIBRATION

IMPORTANT INFORMATION:

Precision equipment calibration is a necessary stage among many in a tool's full recertification, but it is not the only one. Precision equipment is a critical component of the overall tool. Once it is calibrated, it is mounted on the tool for load testing, pressure testing, and other evaluations.

To reduce turnaround time (TAT) associated with tool recertification, precision equipment is calibrated either in our lab or at a local partner lab.

MANOMETER CALIBRATION



APPLICATION EXAMPLE

FULL TOOL PN	636-3000-13GSE
TOOL DESCRIPTION	PUMP OPEN-THRUST REVERSER
GAUGE	MANOMETER 0-250 BARS
FOR FULL CERTIFICATION	• TECHNICAL DIAGNOSTIC • MANOMETER CALIBRATION • PRESSURE TEST

DYNAMOMETER CALIBRATION



APPLICATION EXAMPLE

FULL TOOL PN	J71043-131_J
TOOL DESCRIPTION	GE90 ENGINE BOOTSTRAP
DYNAMOMETER	3 T
FOR FULL CERTIFICATION	• HOISTS MAINTENANCE • DYNAMOMETER CALIBRATION • LOAD TEST • DIMENSIONAL CONTROL

GAUGE CALIBRATION



APPLICATION EXAMPLE

FULL TOOL PN	J27079-38
TOOL DESCRIPTION	INSPECTION EQUIPMENT B777
GAUGE	COMPARATOR +/-0,002
FOR FULL CERTIFICATION	• TECHNICAL DIAGNOSTIC • MANOMETER CALIBRATION • PRESSURE TEST

ELECTRONIC & ELECTRIC CALIBRATION



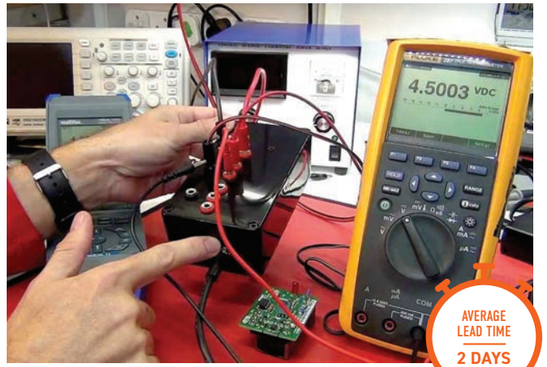
TEST
EQUIPMENT B737



APPLICATION EXAMPLE

FULL TOOL PN	C32051
TOOL DESCRIPTION	TEST EQUIPMENT BRAKE SYSTEM PRESSURE CHECKING B737
FOR FULL CERTIFICATION	• TECHNICAL DIAGNOSTIC • ELECTRONIC CALIBRATION OF THE BOX • PRESSURE & LEAKAGE TESTS

TEST
UNIT SENSOR



APPLICATION EXAMPLE

FULL TOOL PN	38-368-02
TOOL DESCRIPTION	TEST UNIT SENSOR
FOR FULL CERTIFICATION	• TECHNICAL DIAGNOSTIC • ELECTRONIC CALIBRATION

LOAD TESTING

TEST JIGS	
COLUMN TEST TRACTION/COMPRESSION	0-250 T
TEST BENCH LATERAL	0-50 T
TEST JIG TYPE 1	FOR ENGINE STANDS
TEST JIG TYPE 2	FOR BOOTSTRAPS
TEST JIG TYPE 3	LIFTING EQUIPMENT
TEST JIG TYPE 4	PORTABLE TEST JIGS FOR AXLE & TRIPOD JACKS <45T
TEST JIG TYPE 5	PORTABLE TEST JIGS FOR AXLE & TRIPOD JACK >45T

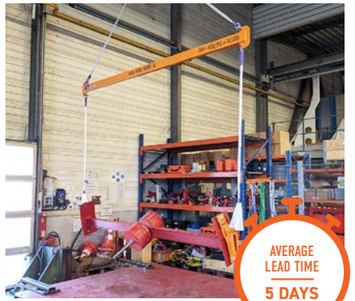
TRIPOD JACK
LOAD TESTING



APPLICATION EXAMPLE

FULL TOOL PN	D07TRJ00006
TOOL DESCRIPTION	A320/B737 TRIPOD JACK WING
USED TEST DEVICE	0-200 T COLUMN TEST OR MOBILE TEST JIGS
FOR FULL CERTIFICATION	• FULL INSPECTION AND PREVENTIVE MAINTENANCE • HYDRAULIC CHECK • LOAD TEST

LIFTING EQUIPMENT
LOAD TESTING



APPLICATION EXAMPLE

FULL TOOL PN	636-1100-1GSE_G
TOOL DESCRIPTION	INLET COWL SLING A320 NEO
USED TEST DEVICE	TEST JIG TYPE 3
FOR FULL CERTIFICATION	• FULL INSPECTION AND PREVENTIVE MAINTENANCE • PERIODIC MAINTENANCE OF HOISTS • PROOF LOAD TEST

ENGINE STAND
LOAD TESTING



APPLICATION EXAMPLE

FULL TOOL PN	D71CRA00004
TOOL DESCRIPTION	V2500 ENGINE STAND
USED TEST DEVICE	DEDICATED DUMMY ENGINE
FOR FULL CERTIFICATION	• FULL INSPECTION AND PREVENTIVE MAINTENANCE • FUNCTIONAL CHECK • CLEANING & GREASING • LOAD TEST WITH DUMMY ENGINE

B737 MAX BOOTSTRAP
LOAD TESTING



APPLICATION EXAMPLE

FULL TOOL PN	C71029-1
TOOL DESCRIPTION	B737 MAX BOOTSTRAP
USED TEST DEVICE	TEST JIG TYPE 2
FOR FULL CERTIFICATION	• FULL INSPECTION AND PREVENTIVE MAINTENANCE • DYNAMOMETERS CALIBRATION • HOISTS PERIODIC MAINTENANCE • LOAD TEST • DIMENSIONAL CONTROL

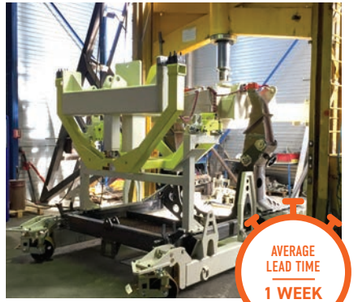
TRENT 7000 APS
LOAD TESTING



APPLICATION EXAMPLE

FULL TOOL PN	RRT095052
TOOL DESCRIPTION	TRENT 7000 APS
USED TEST DEVICE	TEST JIG TYPE 1
FOR FULL CERTIFICATION	• FULL INSPECTION AND PREVENTIVE MAINTENANCE • HYDRAULIC CHECK • LOAD TEST

TRENT XWB
LOAD TESTING



APPLICATION EXAMPLE

FULL TOOL PN	RRT089134
TOOL DESCRIPTION	BASIC STAND TRENT XWB
USED TEST DEVICE	TEST JIG TYPE 1
FOR FULL CERTIFICATION	• FULL INSPECTION AND PREVENTIVE MAINTENANCE • HYDRAULIC CHECK • LOAD TEST

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LIFTING EQUIPMENT CHECK & VERIFICATION



INSPECTION



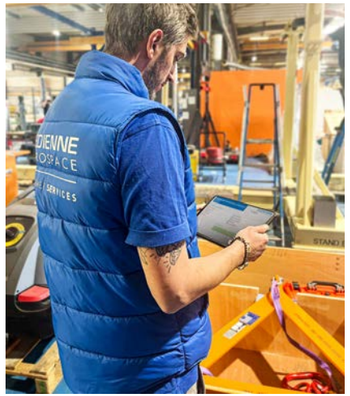
- VISUAL INSPECTION
- FUNCTIONAL CHECK
- PREVENTATIVE MAINTENANCE
- INTERNAL MECANISM REPLACEMENT IF NEEDED

LOAD TESTING



- STATIC TESTS
- DYNAMIC TESTS

REGULATORY CHECK



- ACCORDING TO LOCAL REGULATIONS
- OFFICIAL REPORTS



REPAIR

- SCHEDULED & PREVENTIVE MAINTENANCE
- HYDRAULIC & PNEUMATIC REPAIR
- ENGINE STANDS INSPECTION, REPAIR & MAINTENANCE

2

IMPORTANT INFORMATION:

Critical spare parts and preventive maintenance kits are always kept in stock to ensure a short turnaround time (TAT).

SCHEDULED & PREVENTIVE MAINTENANCE

CFM56 ENGINE STAND SHOCK ABSORBER REPLACEMENT



APPLICATION EXAMPLE

TOOL CATEGORY	ENGINE STANDS
REPAIR OPERATIONS	SHOCK ABSORBER REPLACEMENT
DETAILED OPERATIONS	• FULL INSPECTION • PREVENTIVE MAINTENANCE • SHOCK ABSORBER REPLACEMENT • LOAD TEST WITH DUMMY ENGINE

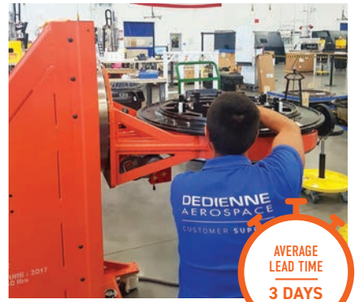
JACKS PISTONS & SEALS REPLACEMENT



APPLICATION EXAMPLE

TOOL CATEGORY	TRIPOD & AXLE JACKS
REPAIR OPERATIONS	PISTONS & SEALS REPLACEMENT
DETAILED OPERATIONS	• FULL INSPECTION • PREVENTIVE MAINTENANCE • PISTONS REPLACEMENT • SEALS REPLACEMENT • LOAD TEST

LEAP TOOLING PREVENTIVE MAINTENANCE



APPLICATION EXAMPLE

TOOL CATEGORY	LEAP TOOLING
REPAIR OPERATIONS	OVERALL PERIODIC INSPECTION
DETAILED OPERATIONS	• GREASING & CLEANING • DIMENSIONNAL INSPECTION • LOAD TEST

HYDRAULIC & PNEUMATIC REPAIR



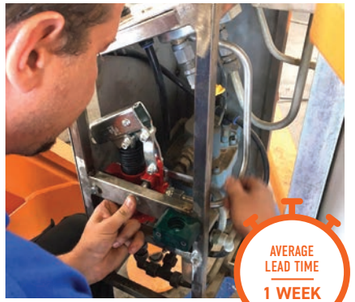
EXTRACTOR BOLT
VERTICAL STABILISER



APPLICATION EXAMPLE

TOOL CATEGORY	AIRCRAFT TOOLING
REPAIR OPERATIONS	HYDRAULIC ASSEMBLY REFURBISHMENT
DETAILED OPERATIONS	• FULL INSPECTION • PREVENTIVE MAINTENANCE • FLEXIBLES REPLACEMENT • MANOMETER CALIBRATION • LOAD TEST • PRESSURE TEST

TRIPOD JACK HYDRAULIC
ASSEMBLY REPAIR



APPLICATION EXAMPLE

TOOL CATEGORY	TRIPOD JACKS
REPAIR OPERATIONS	HYDRAULIC ASSEMBLY REFURBISHMENT
DETAILED OPERATIONS	• FULL INSPECTION • PREVENTIVE MAINTENANCE • FLEXIBLE REPLACEMENT • TEST OF THE PUMP • LEAKAGE TEST • LOAD TEST

ENGINE
STAND

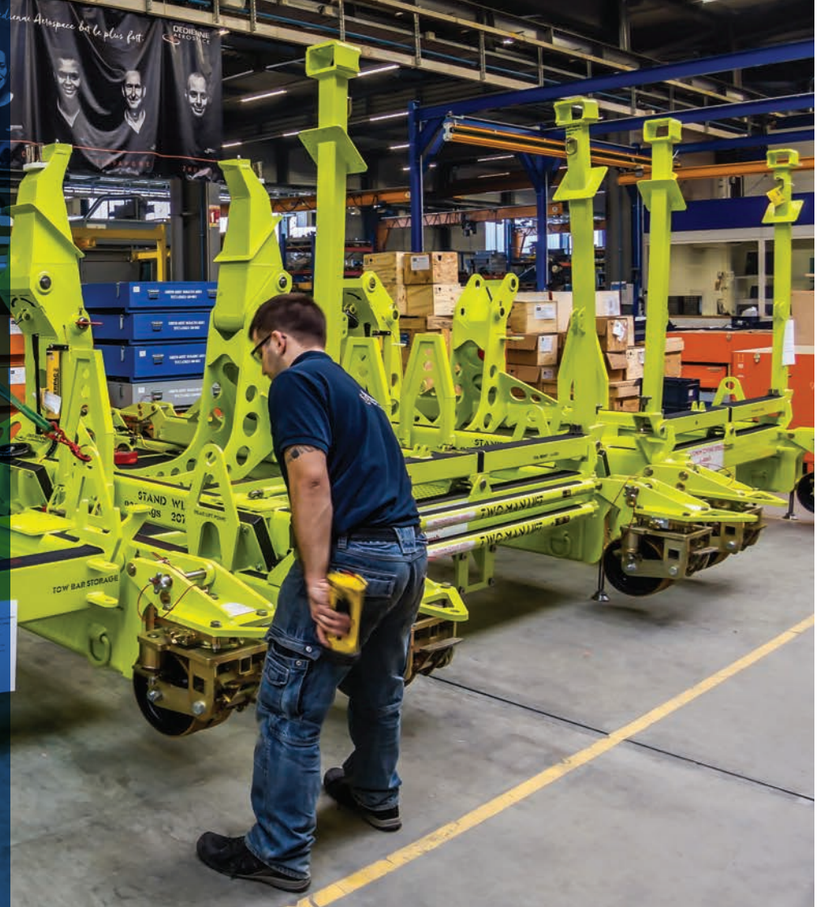


APPLICATION EXAMPLE

TOOL CATEGORY	ENGINE STANDS
REPAIR OPERATIONS	HYDRAULIC & PNEUMATIC ASSEMBLY MAINTENANCE & CHECK
DETAILED OPERATIONS	• FULL INSPECTION • PREVENTIVE MAINTENANCE • VALVES CALIBRATION • PRESSURE/LEAKAGE TEST • LOAD TEST

ENGINE STAND INSPECTION, REPAIR & MAINTENANCE

All critical spare parts are kept in stock to ensure high on-time delivery and low turnaround time (TAT).



SERVICE LEVEL 1 *INSPECTION & PREVENTATIVE MAINTENANCE*	AVERAGE LEAD TIME 1 DAY	• **FULL INSPECTION** • GREASING AND CLEANING • LANYARDS AND SAFETY PINS REPLACEMENT IF REQUIRED
SERVICE LEVEL 2 *MINOR AND MEDIOR REPAIR*	AVERAGE LEAD TIME 5 DAYS	• **FULL INSPECTION** • GREASING AND CLEANING • LANYARDS AND SAFETY PINS REPLACEMENT • **SHOCK ABSORBERS REPLACEMENT** • ADDITIONAL SPARE PARTS REPLACEMENT FROM STOCK IF REQUIRED • **LOAD TESTING IF NEEDED**
SERVICE LEVEL 3 *FULL REFURBISHMENT*	AVERAGE LEAD TIME 20 DAYS	• **FULL INSPECTION** • FULL DISASSEMBLY OF THE ENGINE STAND • SANDBLASTING AND REPAINTING OF CRADLE AND TROLLEY • SURFACE TREATMENT OF ALL PARTS • **SHOCK ABSORBERS REPLACEMENT** • CASTER WHEELS REWORK OR REPLACEMENT • **SKID PALLET REPLACEMENT OR REPAIR IF REQUIRED** • ADDITIONAL SPARE PARTS REPLACEMENT FROM STOCK IF REQUIRED • COMPLETE RE-ASSEMBLY & RE-MARKING • **LOAD TESTING**



SHOCK ABSORBERS REPLACEMENT



SKID PALLET REPLACEMENT



WHEELS ASSEMBLY REPLACEMENT



FULL REFURBISHMENT

- EXAMPLE OF CFM56-5A/5B ENGINE STAND
- EXAMPLE OF TRENT XWB SES ENGINE STAND

3







CFM56-5A/5B ENGINE STAND

AVERAGE LEAD TIME
1 MONTH

DETAILED LIST OF OPERATIONS

- FULL INSPECTION OF THE STAND
- FULL DISMANTLE OF THE STAND
- SURFACE TREATMENT REWORK OF RUSTED COMPONENTS
- CASTERS REFURBISHMENT
- PAINT REMOVAL FROM CRADLE & TROLLEY
- SAND BLASTING OF CRADLE & TROLLEY
- SHOCK ABSORBERS REPLACEMENT
- CRADLE & TROLLEY PAINTING
- STAND RASSEMBLING
- CABLES REPLACEMENT
- FLEXIBLES REPLACEMENT
- MARKING REWORK
- LOAD TEST USING DUMMY ENGINE

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BEFORE



AFTER

TRENT XWB SES ENGINE STAND

AVERAGE LEAD TIME
1 MONTH

DETAILED LIST OF OPERATIONS

- FULL DIAGNOSTIC OF THE STAND
- FULL DISMANTLE OF THE STAND
- SURFACE TREATMENT REWORK OF RUSTED COMPONENTS
- CASTERS REFURBISHMENT
- PAINT REMOVAL FROM CRADLE & TROLLEY
- SAND BLASTING OF CRADLE & TROLLEY
- CRADLE & TROLLEY PAINTING
- SHOCK ABSORBERS REPLACEMENT
- STAND RASSEMBLING
- CABLES REPLACEMENT
- FLEXIBLES REPLACEMENT
- MARKING REWORK
- LOAD TEST USING DUMMY ENGINE

34




IDENTIFY P/N NEEDING UPGRADE FROM OEM STOP ORDER/ TECHNICAL BULLETIN/ DRAWINGS
IDENTIFY THE UPGRADE INSTRUCTION
MANUFACTURE THE UPGRADE KITS
UPGRADE AND RECERTIFICATION BY DEDIENNE AEROSPACE
CERTIFICATE OF CONFORMITY FOR THE UPGRADED P/N

UPGRADE

4

UPGRADE/ MODIFICATIONS/ VARIANT INTEGRATION

As an OEM licensee, we have access to all tooling bulletins. This enables us to manage upgrades with a short TAT.

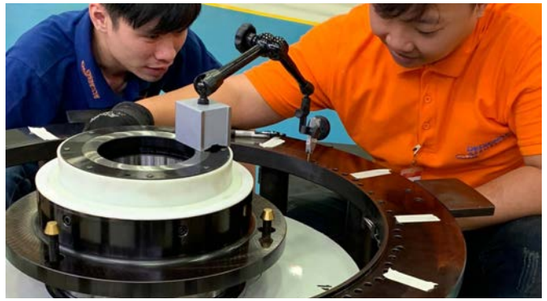
UPGRADE ACCORDING TO OEM TOOLING BULLETIN



B737 BOOTSTRAP TOOLING

- C71020-91 TO C71020-105
- 100 BOOTSTRAP UPGRADED WITH 20 DAYS LEAD TIME

ON REQUEST MODIFICATION



- CUSTOMIZED DESIGNS
- OEM SPECIFICATIONS FULFILLMENT



5

SPARE PARTS

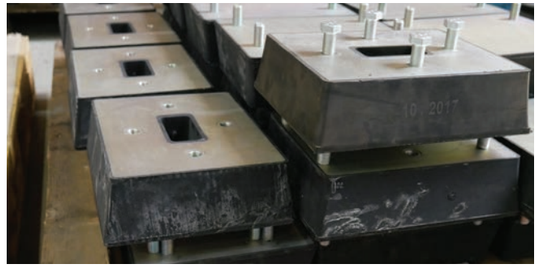
SPARE PARTS

EXAMPLE

SEALS



SHOCK MOUNTS



WHEELS



TOW BARS





TRAINING

6

TRAINING AND COMISSIONNING

Our technical team is always pleased to provide on-site support for:

- Tooling delivery and commissioning
- Training on usage and troubleshooting analysis

AIRCRAFT TOOLING



APPLICATION EXAMPLE

TRAINING EXAMPLE	COLLINS TOOLING
PN	636-3000-7GSE
TOOL DESCRIPTION	THRUST REVERSER HANDLING SLING, A320NEO
TRAINING PURPOSE	*Aircraft maintenance technicians are trained on the usage and functionality of the Thrust Reverser Handling Sling*

ENGINE TOOLING



APPLICATION EXAMPLE

TRAINING EXAMPLE	ROLLS ROYCE TOOLING
PN	RRT095052-2_A
TOOL DESCRIPTION	ALL PURPOSE TRANSPORTATION STAND TRENT 7000, A330NEO
TRAINING PURPOSE	*Aircraft maintenance technicians are trained on the usage and functionality of the TRENT 7000 APS*

GROUND SUPPORT EQUIPMENT



APPLICATION EXAMPLE

TRAINING EXAMPLE	GSE TOOLING
PN	D07TRJ00006G01
TOOL DESCRIPTION	POLYVALENT TRIPOD JACK ABLE TO LIFT AIRCRAFT
TRAINING PURPOSE	*Aircraft maintenance technicians are trained to use polyvalent tripod jacks on both B737 and A320 aircraft*



LOAN

ToolLive
CREATING ASSETS AVAILABILITY

DEDIENNE AEROSPACE'S EXCLUSIVE PARTNER FOR LOAN

7

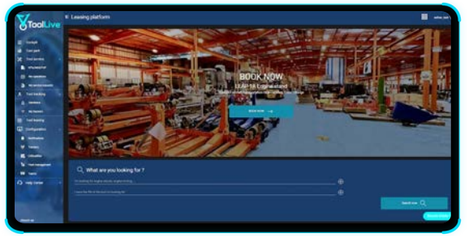
LOAN



ToolLive

CREATING ASSETS AVAILABILITY





BOOK YOUR TOOLING FROM THE PLATFORM

ENGINE STANDS



ENGINE TOOLING



NACELLE TOOLING



BOOTSTRAP



GROUND SUPPORT EQUIPMENT



ENGINE CHANGE KIT





SERVICES
SHOWROOM

- BOOTSTRAP CERTIFICATION
- TRIPOD JACK CERTIFICATION
- ENGINE STAND CERTIFICATION

8

BOOTSTRAP CERTIFICATION





CERTIFICATION



IN USE

LIST OF DELIVERED DOCUMENTS

- DIAGNOSTIC SHEET
- DYNAMOMETER CALIBRATION CERTIFICATES
- HOISTS MAINTENANCE CERTIFICATES
- LOAD TEST CERTIFICATES
- DIMENSIONAL CONTROL REPORT
- CERTIFICATE OF CONFORMITY
- CE CERTIFICATE (IF TOOL IS CE)
- TECHNICAL REPORT

TRIPOD JACK CERTIFICATION


CERTIFICATION



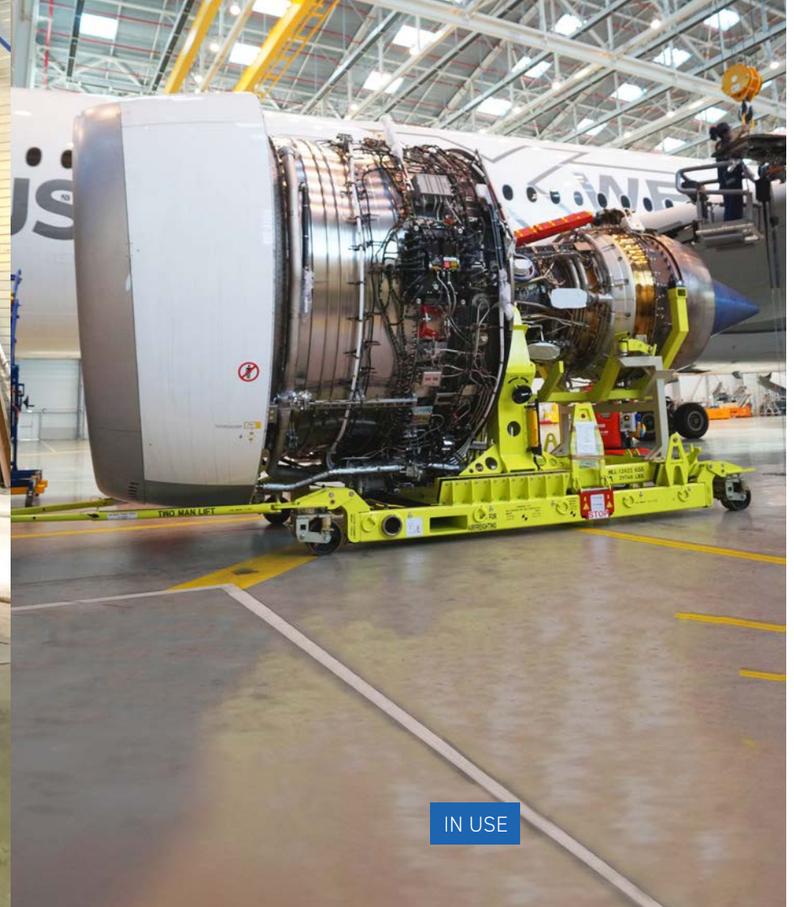
IN USE

LIST OF DELIVERED DOCUMENTS

- DIAGNOSTIC SHEET
- STATIC LOAD TEST CERTIFICATE
- DYNAMIC LOAD TEST CERTIFICATE
- CERTIFICATE OF CONFORMITY
- CE CERTIFICATE (IF TOOL IS CE)
- TECHNICAL REPORT

ENGINE STAND CERTIFICATION





LIST OF DELIVERED DOCUMENTS

- DIAGNOSTIC SHEET
- STATIC LOAD TEST CERTIFICATE
- DYNAMIC LOAD TEST CERTIFICATE
- PRESSURE LEAKAGE TEST CERTIFICATE
- CERTIFICATE OF CONFORMITY
- CE CERTIFICATE (IF TOOL IS CE)
- TECHNICAL REPORT

CHECKLIST DETAILS

- ARMS CHECK
- BRAKING SYSTEM CHECK
- CASTERS ASSEMBLY CHECK
- SHOCK ABSORBER VALIDITY CHECK
- CHECK FOR RUSTED ELEMENTS
- CHECK FOR MISSING ELEMENTS
- ENGINE MOUNTS CHECK
- HYDRAULIC ASSEMBLY FULL CHECK
- MARKING CHECK
- USER MANUAL CHECK
- IDENTIFICATION PLATE CHECK





DEDICATED SERVICES WORLDWIDE TEAM









CONTACT

- SALES & TECHNICAL SUPPORT
- PRODUCTION FACILITIES & SALES OFFICES
- WEBSITES & SOCIAL MEDIAS



SALES & TECHNICAL SUPPORT

NORTH & SOUTH AMERICAS	sales.americas@dedienne-aero.com	support.americas@dedienne-aero.com
EUROPE	sales.europe@dedienne-aero.com	support.europe@dedienne-aero.com
MIDDLE EAST, AFRICA & TURKEY	sales.mea@dedienne-aero.com	support.mea@dedienne-aero.com
INDIA	sales.india@dedienne-aero.com	support.india@dedienne-aero.com
SINGAPORE & ASIA PACIFIC	sales.sea@dedienne-aero.com	support.sea@dedienne-aero.com
CHINA & HONG-KONG	sales.cn@dedienne-aero.com	support.cn@dedienne-aero.com

SAY HELLO TO OUR WORLDWIDE MOBILE SERVICES SHOP!



CONCORDE, PARIS, FRANCE



RUBY, CINCINNATI, USA



SHAMROCK, SHANNON, IRELAND

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