

20th, April 1962

D.O.S

Mngr.....	Eng. Supt.....
Scc.....	A/c. Mngr.....
Asst. Scc.....	Ch. Eng. A/D.....
Ch. Acct. 30 APR 1962	Pers. Supt.....
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AUSTRALIAN MISSION
S.N.E.C.M.A
70, bld Kellermann

PARIS 13e

COMMONWEALTH AIRCRAFT CORPORATION PTY.LTD.
BOX 779 H P.O.
Elizabeth st.

MELBOURNE
Australia

Attention : the MANAGER.

Subject : Faville-Levally testing equipment.

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A/F MANAGER	SUPT. INSPECTION

Dear Sir,

This form of testing is called for inspecification DTM 148-61 covering the Sulf-inuz treatment of common parts, and is adopted by SNECMA to approve batches of ATAR 9C engine parts that are treated by this process.

While SNECMA are sulf-inuz processing parts at their Suresnes plant, they are not equipped to carry out Faville-Levally testing. The test pieces representing production batches are forwarded to Ateliers Partiot Cémentation, where Faville-Levally testing is carried out and results obtained reported back to SNECMA.

Ateliers Partiot Cémentation carry out extensive sulf-inuz processing on a commercial basis and, claim that, in association with Sté. d'Application des Traitements de surface (S.A.T.S), they have used the process since its inception and therefore have more background and up to date experience than anyone else in the field of application of the process. They have also processed a number of engine parts for SNECMA.

SNECMA however, are not satisfied with the dimensional control on parts processed by Partiot, and are now processing all ATAR 9C engine parts at their Suresnes plant, where good control of dimensions is maintained on finished parts.

Technical aspects of the process have now been discussed with both Partiot and SNECMA, the details of which will be available on my return.

*In Melbourne - will you please
see me etc.*

NOTED
CNPS

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Both Partiot and SNECMA are using the Faville-Levally test as the final approval of a batch of treated parts. While they agree that it is not a precise form of test, it is in fact, and has proved with use, to be a very adequate and practical one.

Partiot have records of photomicrographs of the case produced after processing on various materials having received a variety of treatments. They would not however give any assurance that a micro examination of the case of a treated test piece would be a satisfactory form of test evaluation to approve a treatment. SNECMA have had no worthwhile experience with micro-structure of processed parts, and are not in a position to comment. They, like Partiot, recommend and accept the Faville-Levally test as the arbitrator for satisfactory batch processing.

For information, there are 10 only ATAR 9C engine parts requiring this treatment, the largest being a ring approx. 5 1/2 " diam. x 1 " wide . A complete list of these parts is attached.

In view of the foregoing, a decision will have to be made regarding providing facilities for Faville-Levally testing at C.A.C.

Faville-Levally type of testing equipment available.

This type of testing equipment is understood to be available from the following sources :

- a) FAVILLE-LEVALLY Corp.
105, West Adam st. Faville-Levally machine;
Chicago 3 (Ill)
price : 750 U.S.A \$ in 1955.
- b) C.W. BIRD LTD.
Junction works
Oldbury Road MEKATEST machine.
Smethwick
Staffs (England)
price : £ 350 (s) in 1959.
- c) PROLIN PRODUCTS
Corso sempione 20
Milano (Italia)
- d) Ateliers PARTIOT Cémentation
56, av. de Chatou
Rueil-Malmaison (S & O)

N.B. The Partiot machine has not yet been produced. Enclosed

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herewith please find details of this machine that have been received from Partiot. The price of their basic machine, which would be similar to the Faville-Levally machine they are now using, would be 4 275 NF with delivery in 4 months.

Recommendations.

It is recommended that the Faville-Levally type of testing be made available at C.A.C and arrangements be made for the purchase of suitable equipment.

In view of the practical nature that this form of testing provides, and to facilitate rapid test evaluation of a backreaction before processing commences, it is further recommended that this equipment be installed in the processing Department at C.A.C. Partiot have adopted this idea in their plant.

No recommendations can here be made as to what particular make of Faville-Levally type of testing equipment should be purchased. This would need evaluating after having received the current quotations and specifications of those that are available.

Yours faithfully,

G.H. Foster

G.H. FOSTER

Service Ordonnancement.

30 APR 1962

- PIECES SULFINUSEES A SURESNES AU TITRE DU REACTEUR 09C -

- 502.500.321	Chapeau
- 501.534.005	Ecrou
- 502.500.320	Siège de rotule
- 502.705.132	Axe
- 502.705.325	Axe
- 502.705.126	Axe
- 502.705.303	Axe
- 502.705.100	Axe
- 502.705.123	Axe
- 502.705.130	Axe

Pour l'instant pas de pièces chez PARTIOT au titre du réacteur 09C

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