

KAISER AIRCRAFT & ELECTRONICS  
DIVISION OF KAISER INDUSTRIES CORPORATION

WEST COAST ELECTRONICS LABORATORY



P. O. BOX 275, STATION A, PALO ALTO, CALIFORNIA / Davenport 1-3320

*gmc*  
*ST 35580*  
*BE 72690*  
*DI 75002*

*OX 52895*

May 16, 1961

Ref: DJ0-02-61

*ST 35580*  
*BE 72690*  
*DI 75002*

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Dyna Metric, Inc.  
2955 East Colorado Boulevard  
Pasadena, California

Attention:

STAT

Subject: Kaiser Proposal No. 229

Gentlemen:

In reponse to verbal requests from Dyna Metric, Inc., Kaiser proposes to exert its best efforts in utilizing the following method to produce a sealed window.

Two pieces of plate glass will be sandwiched together with an O-ring used as a separator. The O-ring will also serve as a seal so that a vacuum can be obtained in the area between the two panels of glass. Tubulation will be attached to an ionization gage so that a reading of vacuum pressure inside the sealed area can be recorded.

Kaiser also considered the possibility of using fused quartz to metal seals. This type of seal is very complex and requires metalizing the surface of the quartz where the seal is to be made. We have been unable to find any reference to seals of this kind with diameters of larger than one inch. This method might be possible in the future, but would require a long development contract. The use of other types of high temperature glass to metal seals might be possible, but at present they appear to be as complicated as the quartz to metal seal.

If the O-ring technique proves feasible it could be a means of making a low cost vacuum window in the future. We cannot guarantee that our efforts will be successful, but information obtained from the test to be made will indicate whether the O-ring technique is the right approach.

25 YEAR RE-REVIEW

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Dyna Metric, Inc.

Kaiser proposes that a fixed price purchase order in the amount of \$800.00 be written to provide for this best efforts program. If this proposal is acceptable we will begin work immediately upon receipt of written authority from Dyna Metric.

It is estimated the task can be completed within two to four weeks after receipt of approval to proceed.

We welcome the opportunity to work with Dyna Metric and we look forward to receiving your reply in the near future.

Very truly yours,



Plant Manager

STAT

*10" diam plate  
1/2" thick glass*

DJO:RFK:mb