ATP:MM II-2

DEPARTMENT OF COMMERCE BUREAU OF STANDARDS WASHINGTON

Letter Circular LC 91

(July 9, 1923) The FITTING OF FLUGS FOR CLASS B WEIGHTS

To give greater definiteness to the accuracy of fitting ired for hard metal driven plugs such as are allowed in required for hard metal driven plugs such as are allowed in Class B weights, the following test has been established.

The plug will be covered with a few millimeters of water that extends a little beyond the plug on all sides. The air pressure over the plug will then be reduced by 1/5 of its value and held at this lower value for one minute. The air pressure will then be returned to its original value and the water removed as completely as can be done by wiping and by pressing filter paper or similar absorbent material over the plug. After standing 24 hours at ordinary room temperature the weights must not show an increase greater than 1/5 of . the tolerance.

To meet this requirement it will not be necessary to do such extremely perfect and expensive work as is required for air tight joints intended to hold a pressure of several atmospheres. On the other hand an ordinary drilled hole is not likely to be accurate enough.

A number of weights made without elaborate equipment and with only a moderate amount of work on the plugs have been tested and found entirely satisfactory both in the above test and in constancy of value over a number of years.

It is hoped that the establishment of the above test will encourage the manufacture of this type of weights both by showing that the requirements do not demand extremely expensive methods of construction and by removing any doubts as to the real nature of the requirements.

It should be noted that it is not necessary to use the driven plug in Class B weights. A strictly one-piece weight is in many ways preferable to one with the plug. However, if the driven plug is used on any of the weights of a set it should be used on all of the weights of that set above a certain size. The very small ones will of necessity be onepiece weights in either case.

្រុម ស្ត្រី ខែ ខេត្ត ដើម្បីប្រទេស នៃ នេះ ស្រួន ស ស្រួន ស

o viete in in factor in it is not a long to the figure of the factor in the factor in

The control of the co

en it it.

And pour inject the light of the control of the control

- కెబెంగ్ గ్రామం గుడింద్రాలో ఉందిన అనేకాడు. అనకార్ కిట్నికిందిన కార్యాడ్లు ఎంది ఇంటికుండు నీ - ఎక్కువుడు కొళ్లుని మీడితో తోడితో తోడితో మీడితో మీడితో మందికు కార్యాడు కారుకు అయిన కార్యాత్రి అనికి అనికి అనికి - కార్యాడ్లు మందికు కార్యాడ్లు మందికు మంద - కార్యాడ్లు కొర్యాడుకు మందికు మందికు

I AF COURT CONTROL OF THE STATE OF STATE OF STATE ASSOCIATED STATE OF STATE

Accordances of a fire according to the constraint of a larger of a larger of the constraint of the con

7.4

Letter Circular LC 91

(July 9, 1923)

## FITTING OF PLUGS FOR CLASS B WEIGHTS

To give greater definiteness to the accuracy of fitting required for hard metal driven plugs such as are allowed in Class B weights, the following test has been established.

The plug will be covered with a few millimeters of water that extends a little beyond the plug on all sides. The air pressure over the plug will then be reduced by 1/5 of its value and held at this lower value for one minute. The air pressure will then be returned to its original value and the water removed as completely as can be done by wiping and by pressing filter paper or similar absorbent material over the plug. After standing 24 hours at ordinary room temperature the weights must not show an increase greater than 1/5 of the tolerance.

To meet this requirement it will not be necessary to do such extremely perfect and expensive work as is required for air tight joints intended to hold a pressure of several atmospheres. On the other hand an ordinary drilled hole is not likely to be accurate enough.

A number of weights made without elaborate equipment and with only a moderate amount of work on the plugs have been tested and found entirely satisfactory both in the above test and in constancy of value over a number of years.

It is hoped that the establishment of the above test will encourage the manufacture of this type of weights both by showing that the requirements do not demand extremely expensive methods of construction and by removing any doubts as to the real nature of the requirements.

It should be noted that it is not necessary to use the driven plug in class B weights. A strictly one-piece weight is in many ways preferable to one with the plug. However, if the driven plug is used on any of the weights of a set it should be used on all of the weights of that set above a certain size. The very small ones will of necessity be one-piece weights in either case.

The play of the court of the co

Post of a contract of the cont

ा देवच तत पुष्टत । एक का देवूक को जो जो देन जिल्हा

sa si lieno illus la molli an al da

Letter Circular LC 91

(Jüly 9; 1923) -

## FITTING OF PLUGS FOR CLASS B WEIGHTS

To give greater definiteness to the accuracy of fitting required for hard metal driven plugs such as are allowed in Class B weights, the following test has been established.

The plug will be covered with a few millimeters of water that extends a little beyond the plug on all sides. The air pressure over the plug will then be reduced by 1/5 of its value and held at this lower value for one minute. The air pressure will then be returned to its original value and the water removed as completely as can be done by wiping and by pressing filter paper or similar absorbent material over the plug. After standing 24 hours at ordinary room temperature the weights must not show an increase greater than 1/5 of the tolerance.

To meet this requirement it will not be necessary to do such extremely perfect and expensive work as is required for air tight joints intended to hold a pressure of several atmospheres. On the other hand an ordinary drilled hole is not likely to be accurate enough.

A number of weights made without elaborate equipment and with only a moderate amount of work on the plugs have been tested and found entirely satisfactory both in the above test and in constancy of value over a number of years.

It is hoped that the establishment of the above test will encourage the manufacture of this type of weights both by showing that the requirements do not demand extremely expensive methods of construction and by removing any doubts as to the real nature of the requirements.

It should be noted that it is not necessary to use the driven plug in class B weights. A strictly one-piece weight is in many ways preferable to one with the plug. However, if the driven plug is used on any of the weights of a set it should be used on all of the weights of that set above a certain size. The very small ones will of necessity be one-piece weights in either case.

.. Two notes that the second of the second o

consecution of the construction of the constru

To meet this require ont it will not he set.

The meet this perfect has expendive work to a table of a control of this chirt times of a control of this times of a control of this times, and the control of the control

Date firmer:

Second of the same of the sa

it seedlik be store i te is is is the constant of the constant

...



