made with interest such that upon fitting in and reassemble of the drive unit the vane of the impeller abuts the impeller seat. Thereafter the maintenance staff measure the obtained distance between the real abutment surfaces of the drive unit and the hydraulic unit, whereupon the drive unit once more is lifted away from the hydraulic unit and the impeller is displaced in the axial direction along the drive shaft in the direction towards the drive unit the measured distance plus the predetermined height of the gap. Finally fitting in and reassembly of the drive unit takes place and then the maintenance staff may only inspect that the impeller runs freely and that the real abutment surfaces abut each other, and in other respects the maintenance staff has to rely on that the measuring and the trimming have been made in a satisfactory way. It shall be pointed out that a difference of the height of the gap by tenths of millimeters will affect the performance of the pump.

Today some suction connections comprises a small inspection hole, through which one with difficulty may introduce a mirror and see if the impeller and/or the inlet opening is clogged, in order to ensure that the drive unit is not unnecessarily detached and removed from the hydraulic unit. However, this inspection hole may neither be used to clean the impeller and/or the inlet opening, nor to trim and/or check the position of the impeller.

## Summary~~Object~~ of the Invention

Embodiments of t~~T~~he present invention seeks to~~aims at~~ obviate~~ing~~ the aforementioned disadvantages and failings of previously known suction connections, and to~~at~~ provide~~ing~~ an improved suction connection. Embodiments~~A primary object~~ of the present invention seek~~is~~ to provide an improved suction connection of the initially defined type which renders it possible to clean the inlet opening of the centrifugal pump and/or the impeller without having to remove the drive unit from the hydraulic unit.

Embodiments~~It is another object~~ of the present invention seek to provide a suction connection, which admit trimming of the impeller without having the drive unit to be removed from the hydraulic unit.

~~Summary of the Invention~~

According to ~~the invention at least the primary object is attained by means of the initially defined suction connection, which is~~an aspect, there is provided suction connection for connecting a suction pipe to a dry installed centrifugal pump, comprising a first flange that includes a centrally located through hole and that is arranged to be connected to an outlet of a suction pipe and a second flange that includes a centrally located through hole and that is arranged to be connected to an inlet of a centrifugal pump, characterized in that the suction connection~~it~~ comprises a
first pipe socket which is displacable in the axial direction, seen in the flow direction, between an operative position in which said first pipe socket disengageably connects the first flange and the second flange and thereby puts the through hole of the first flange in fluid communication with the through hole of the second flange, and a service position in which said first pipe socket is located at a distance from the second flange and thereby admit access to the through hole of the second flange.

Thus, embodiments of the present invention are~~is~~ based on the insight that if the access to the inlet opening of a dry installed centrifugal pump may imitate the access to the inlet opening of a hoisted submersible centrifugal pump, the inspection and maintenance will be performed in a rapid and more satisfactory way.

Preferred embodiments of the present invention are further defined by the dependent claims.

Preferably the first pipe socket at the area of the downstream located end thereof comprises a radially projecting end flange, which is disengageably connectable to the second flange. According to a preferred embodiment the first pipe socket comprises a radially projecting sealing flange movable along said first pipe socket, which sealing flange is disengageably connected to the first flange. This entail that the first pipe socket in a simple way may be put in tight connection with the first flange and the second

Claims

1. Suction connection for connecting a suction pipe to a dry installed centrifugal pump, comprising a first flange ~~(10)~~ that includes a centrally located through hole ~~(11)~~ and that is arranged to be connected to an outlet of a suction pipe and a second flange ~~(12)~~ that includes a centrally located through hole ~~(13)~~ and that is arranged to be connected to an inlet of a centrifugal pump, **characterized** in that the suction connection comprises a first pipe socket ~~(15)~~, which is displacable in the axial direction, seen in the flow direction, between an operative position in which said first pipe socket ~~(15)~~ disengageably connects the first flange ~~(10)~~ and the second flange ~~(12)~~ and thereby puts the through hole ~~(11)~~ of the first flange ~~(10)~~ in fluid communication with the through hole ~~(13)~~ of the second flange ~~(12)~~, and a service position in which said first pipe socket ~~(15)~~ is located at a distance from the second flange ~~(12)~~ and thereby admit access to the through hole ~~(13)~~ of the second flange ~~(12)~~.

2. Suction connection according to claim 1, **characterized** in that the first pipe socket ~~(15)~~ at the area of the downstream located end thereof comprises a radially projecting end flange ~~(16)~~, which is disengageably connectable to the second flange ~~(12)~~.

3. Suction connection according to claim 1 or 2, **characterized** in that the first pipe socket ~~(15)~~ comprises a radially projecting sealing flange ~~(20)~~ movable along said first pipe socket, which sealing flange ~~(20)~~ is disengageably connected to the first flange ~~(10)~~.

4. Suction connection according to any of claims 1-3, **characterized** in that said first pipe socket ~~(15)~~ extends

through and is displacable in relation to the through hole~~(11)~~ of the first flange~~(10)~~.

5. Suction connection according to any preceding claim, **characterized** in that the suction connection furthermore comprises a second pipe socket~~(25)~~, which is connected to the first flange~~(10)~~ and projects in the axial direction in the direction away from the second flange~~(12)~~, and through which the first flange~~(10)~~ is arranged to be connected to the outlet flange of the suction pipe.

6. Suction connection according to claim 5, **characterized** in that the first pipe socket~~(15)~~ is telescopically displacable in said second pipe socket~~(25)~~.

7. Suction connection according to claim 1 or 2, **characterized** in that the suction connection furthermore comprises a second pipe socket~~(25)~~, which is connected to the first flange~~(10)~~ and projects in the axial direction in the direction towards the second flange~~(12)~~.

8. Suction connection according to claim 7, **characterized** in that the first pipe socket~~(15)~~ is telescopically
displacable in said second pipe socket~~(25)~~ and comprises a sealing flange~~(20)~~ displacable along the first pipe socket, which sealing flange is disengageably connectable to the first flange~~(10)~~ through the second pipe socket~~(25)~~.

9. Suction connection according to claim 7, **characterized** in that the first pipe socket~~(15)~~ is telescopically
displacable outwardly of said second pipe socket~~(25)~~ and comprises a sealing flange~~(20)~~ displacable along the second pipe socket, which sealing flange is disengageably connectable to the upstream located end of the first pipe socket~~(15)~~.

10. Suction connection according to any preceding claim, **characterized** in that the first flange ~~(10)~~ and the second flange ~~(12)~~ are fixedly connected to each other by means of at least one stiffening bar ~~(14)~~.