

# TEST BENCH FOR AIRCRAFT HYDRAULIC SYSTEMS

## The function and purpose of the equipment



The main function of this bench is testing of hydraulic fuses, used in the hydraulic systems of aircraft ships.

The bench can be used as test equipment for various units of aircraft hydraulic systems: valves, throttles, distributors, actuators and other equipment.

Measuring apparatus of the bench allows the measurement of pressure, flow rate, working fluid temperature in real time.

## Working fluid

The hydraulic fluid Skydrol® LD-4 is used as working fluid, based on esters of phosphoric acid.

## Security

The bench is designed and manufactured according to the safety requirements when working with hydraulic drive in accordance with EN 982: 1996 A1: 2008 Safety of machinery - Safety requirements for hydraulic and pneumatic systems and their components.

## Equipment

The main equipment of hydraulic system of the bench is "Parker Hannifin"

## Chemical resistance

Materials and components of the bench are chemically stable with hydraulic fluid. The input control of materials for compatibility with working fluid was done in USP laboratory.

## Structure

Structurally, the bench has a folding design. There is a control panel, information panel outside. The hydraulic units inside the stand are closed with the quick release panels of the stainless steel. Test bath is closed with the departing lid with the sight glass.

## Cooling and Filtration

It is equipped with an automatic autonomous circuit for cooling and filtration

<b>Range of relief valves pressure setting, Bar</b>	0...350
<b>Liquid supply range, l / min</b>	0,2...80
<b>Electric motor speed control rev / min</b>	Regulation with the frequency converter in the range 0 ... 2910
<b>Electric motor power, kW</b>	45
<b>Supply voltage</b>	380 V, 3-phase current, 50Hz
<b>Tank capacity, l</b>	150
<b>Pump displacement cc. / rev</b>	30
<b>Maximum working pressure of pump, Bar, (PSI)</b>	420 (6090)
<b>Maximum speed of the pump, rev / min</b>	3000
<b>Volume of the test bath, l</b>	300
<b>Dimensions of the test bath, mm</b>	
	<b>Length</b> 1700
	<b>Width</b> 600
	<b>Height</b> 390
<b>Material of a test bath, tank, exterior panels</b>	Stainless steel AISI 430, thickness of 3mm, thickness of 1.5 mm
<b>Dimensions of the stand, mm</b>	
	<b>Length</b> 2970
	<b>Width</b> 1830
	<b>Height</b> 1890
<b>Weight, kg</b>	1300
<b>5 simultaneously connected units inlet-outlet in test bath, (10 ports)</b>	
<b>Contacts</b>	<a href="http://www.usp-ltd.com.ua">www.usp-ltd.com.ua</a> <a href="mailto:usp@usp-ltd.com.ua">usp@usp-ltd.com.ua</a> +38 050 323 43 50