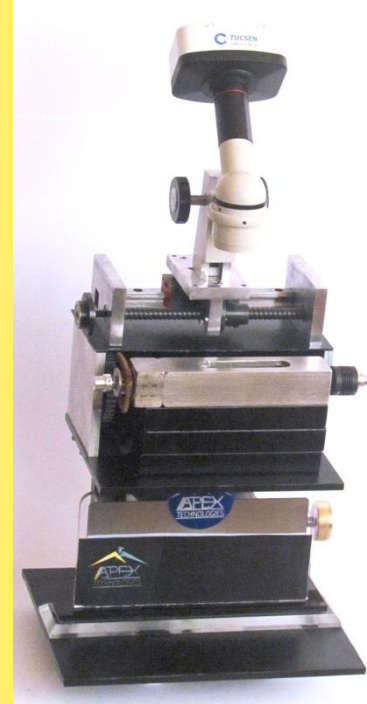**APEX TECHNOLOGIES**

دستگاه اندازه‌گیری کشش بین‌سطحی
Interfacial Tension Measurement Apparatus (IFT-PDSA-09)

**Apex technologies co.,** designed and manufactured a video based spinning drop tensiometer to measure extremely low interfacial tensions up to minimum value of 10^{-4} dyn/cm. The provided system is compactly designed and comprises fo three different parts including the main chamber, tliting system and image analysis software. The main chamber is newly designed to be compact, low weight and easy for assemble and disassemble with the low number of moving parts as possible. A manual and simple tilting system is utilized to rotate the main chamber toward the desired position. In addition, the system is equipped with a miniature stereomicroscope with two different magnifications of 20 and 40 coupled with high performance microscope camera (wireless type is available)

High-resolution microscope for enhanced accuracy. The Apex spinning drop equipment utilizes a microscope with magnification up to 40x which enables a numerical display resolution of 0.001 mm, giving the researcher the greatest measurement accuracy of any comparable device

Light-weight and easy to handle. The Apex spinning drop equipment is compact and low weighs (only 16 lbs) gives the operator the opportunity of easy handling and pick it up using the handles mounted on it.

Technical Specifications:

✓ Rotational speed: up to 8000 rpm (higher rotational speed for higher IFT ranges measurement is available upon request)
✓ Online professional special software for measurement of IFT and parameter logging
✓ Chamber volume: 2 cc (very compact design to need the least volume of samples)
✓ *Compatible with dead oil and other non-corrosive chemicals*
✓ Cold backlight for better contrast and sharpness
✓ Bulk and drop phase injection: Manual
✓ Required drop volume: Max. 20 μl
✓ Required bulk volume: Max. 2 cc
✓ Measuring range: 10^{-4}-1 mN/m
✓ Compact and portable design
✓ Working pressure: Ambient
✓ Max. temperature: 80 ºC
✓ Macro lens × 1