

BINT STROBOSCOPES

HIGH BRIGHTNESS AT ANY SPEED

THE WIDE RANGE OF BINT STROBOSCOPES PERMITS TO COMPLY
WITH ANY APPLICATION



Principle of Functioning and Stroboscopes Applications

BINT Stroboscopes work according to the stroboscopic principle. It makes motion sequences visible which otherwise cannot be observed by the naked eye: by synchronizing the flash frequency to the movement of the observed object and emitting intensive light pulse of short duration, the object is always illuminated at the same point of its movement, so that it appears to the eye as if it were motionless. It is therefore possible to measure its speed and analyze its movement.

BINT Stroboscopes are always used wherever motion sequences have to be analyzed or rotation speeds have to be measured. Their applications involves many sectors of production and maintenance industry, research and training: measurement of rotation speeds, frequencies and periods - observation of thread movement on textile machines - quality monitoring of web printing machines - roll label inspections - vibrations measurements - observation of mechanical deformation - packaging - cavitation - photographic applications - loudspeaker studies - physic demonstrations - production and maintenance industries - etc.

DIV-STROB Innovation in stroboscopic observation

DIV STROB

With the new D5-D20-HD25-HD50 stroboscopes it is possible to obtain stationary images of an object always with a high flash brightness at any movement speed, thanks to an innovative microprocessor circuit that automatically divides real frequency each time a certain limit has been overcome: stopped image happens at submultiple frequencies of the real frequency, while flash brightness is always with high intensity. Functionality and reliability of instrument will be particularly appreciated, a high flash brightness is always available for constant optimal observation: instruments accept external trigger up to 128.000 impulse/min, the problems of over-range and over-heating due to flash synchronization of fast speed by external trigger are totally eliminated. Moreover a "direct readout" function is available to directly measure the real speed of an object: flash frequency is not divided by microprocessor and it is possible to observe and to measure the real speed of an object in a precise way.

Applications

The applications of the Stroboscopes are limited only by our imagination. In general, BINT stroboscopes are used for instantaneous and accurate measurement of the speed of moving, vibrating or rotating objects. They are also suitable for the observation of the movement, by synchronizing the flashing frequency to the speed of the object under observation a steady or slowed image of the observed phenomenon is obtained in order to analyze the motion.

BINT Stroboscopes are ideal for Printing, Textile, Production and Industrial Maintenance: handy, robust and reliable, they offer high brightness of the flashing, power supply from rechargeable batteries or from 220Vac, digital display of the flashing frequency, delay circuit (phase shifter) for the observation of motion over 360°, CE marking and compliance with electrical safety standards, excellent quality/price ratio.

Below we mention only some fields of application:

Electrical industry

Observation of moving shafts, axles, guide elements, rotors, drive gears, clutches, belts, bearings, sprockets, sliding measurements between two shafts, early determination of stress due to vibration, material testing, calibration of motor speedometers, meters, measurement of the amplitude of the movement, etc.

Automotive and engine industries

Valve testing, valve discs and springs, valve rockers, etc., fuelspray studies of gasoline injection equipment, nozzle inspection for propeller operation, observation of belts, propellers, air intakes, transmission of gears, vibrations, springs, generators, etc.

Textile industry

Speed controls on buckets, spindles, travelers, masts, frames, cylinders, spoolers. Observation of the gain and loss movement of the coil drives on roving frames. Control of guide rollers, ballooning, twists and shuttles. Detection of defects with bands and ribbons, chokes, rings, twisted coils, worn travelers, spiral thread, ribbon and tape slip, uneven yarn, mixed yarn, adjustment of sewing machines, etc.

Chemical industry

Study and testing of mixers, dosers, pumps, conveyors, stirrers, packaging machines, punching and punching machines, separators, centrifuges, air pressure conveying systems, filters, propellers, oscillating sieves, mincers, grinders and crushers, etc.

Optical industry

Camera shutter test, shutter speed calibration, film transfer control, camera and projector control, and parts such as ventilation systems, air vents, drive belts, etc., grinder analysis, cutters, and other machines, taking pictures and making videos for motion studies under a stroboscope, etc.

Naval and aeronautical industry

Studies of cavitation of air pockets against turbine blades and propellers, controlling all movements of engines of ships, generators, ventilation systems, testing of aircraft engines and propeller blades, etc.

Medical applications

Observation of vocal cords, diagnostic and research tools used by psychologists and physiologists to stimulate brain waves, control the dental perforation instrument, etc.

Science and education

Observations and studies on fast moving objects for demonstration and testing purposes, visual evidence of laws or physical theories, visual arrest of fast moving objects or slow motion demonstrations, etc.

BINT reserves the right to change specifications or design without prior notice.