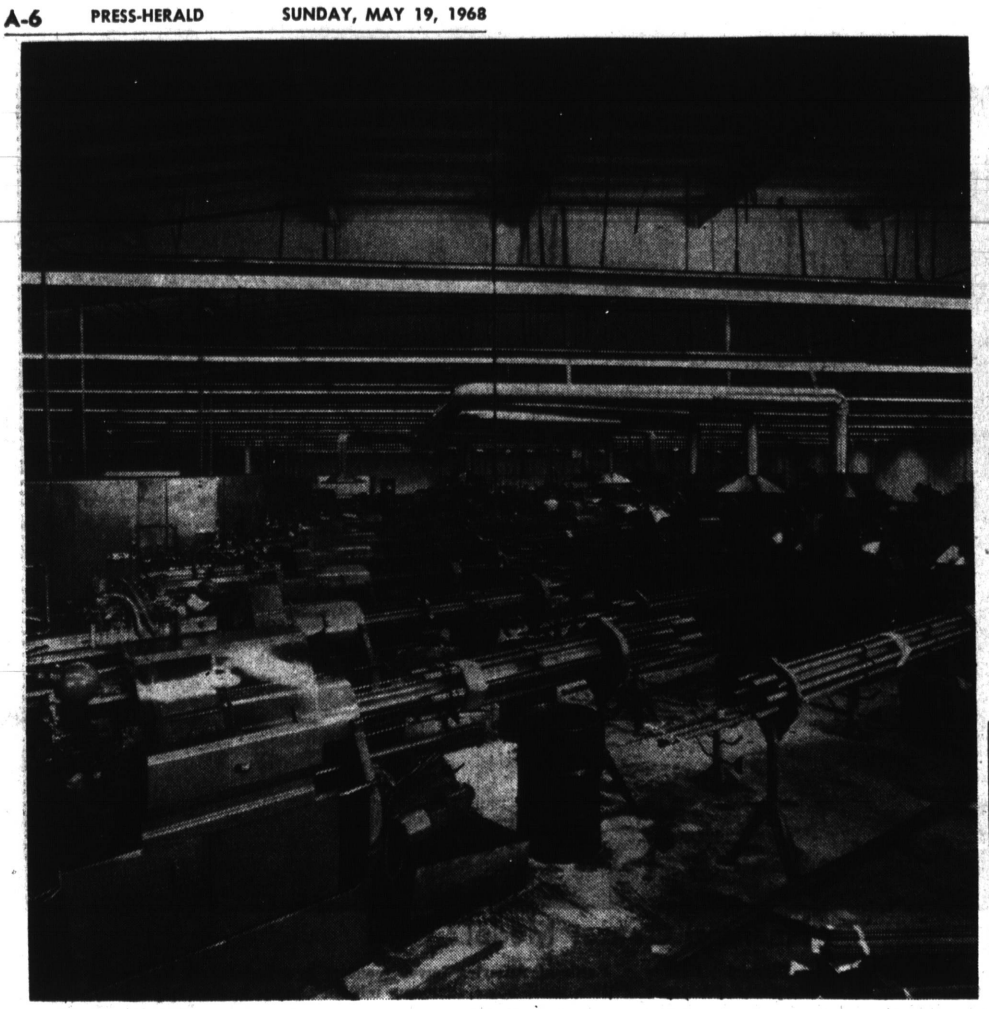
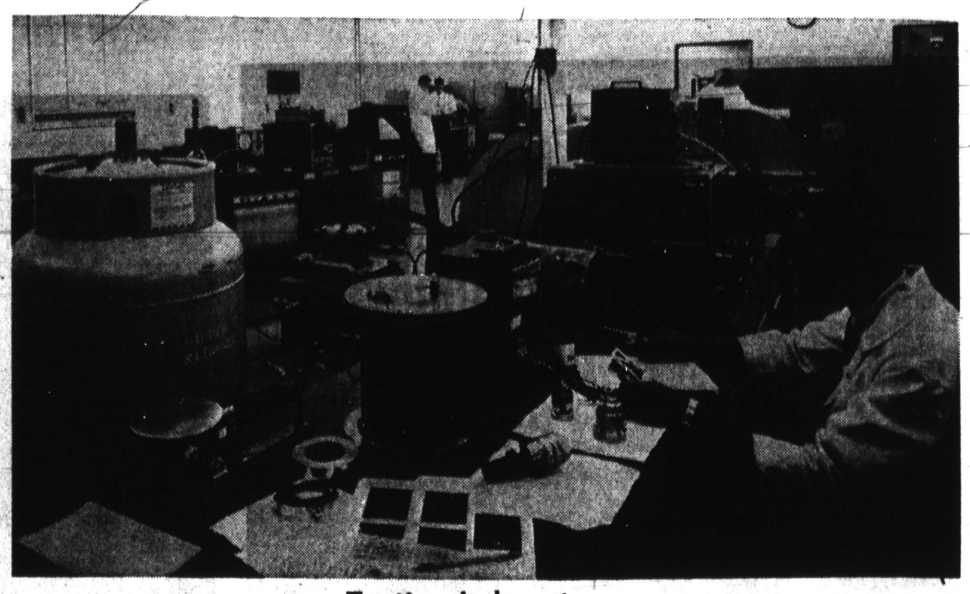


Automatic Production

These modern, fully automatic multispindle machines at the Hi-Shear Corp. in Torrance are used to produce a wide variety of Hi-Shear fastening systems to meet the growing requirements of the booming aerospace industry. Hi-Shear fastening systems are used on virtually every missile and rocket made in the Free World.



Testing Laboratory

Ordnance Testing Laboratory at the Hi-Shear Corp. in Torrance is where firing characteristics and reliability of ordnance actuated products made by the firm are determined. These products are used in land, sea, and space programs.

Hi-Shear Systems Used in Land, Sea, Air Programs

Twenty-five years ago it was three people and a garage in Hermosa Beach. Today at the Torrance Municipal Airport, Hi-Shear Corp. is 1,100 employes, a third of a million square feet of floor space, and gross sales exceeding $23 million. Success has been achieved through invention, innovation, and the production of the finest high strength fastening systems offered to the aerospace industry.

Twenty-five years ago the Hi-Shear Rivet was invented by George S. Wing, president of the corporation. This single product was first used in the famous P-51 Mustang fighter plane of World War II. Today, the Hi-Shear Rivet has been joined by the famous Hi-Lok fastening system, Blind Nut and Blind Bolt, the recently introduced Hi-Kor high strength blind fastening system, and the Six-Wing high strength nut-bolt system. These advanced precision fasteners are employed in practically every major aircraft and space program today.

Hi-Shear Corp.'s proprietary fastening systems are extensively used in Boeing's 707, 720, 727, and 737 jets, and in the McDonnell-Douglas DC-8 series and DC-9 airliners. Most fixed and rotary wing aircraft in the military inventory employ the company's fasteners, including the giant of them all, the Lockheed-Georgia C-5A Galaxy jet cargo plane.

At the end of the 1967 fiscal year last February 29, Wing, the corporation president, announced another year of unprecedented growth. Sales had reached $23,326,260, an increase of 32 per cent over the previous year's gross. Net income was $2.02 per common share, a 23 per cent increase over that of last year. And a continuing high level of production was anticipated in the current fiscal year with a backlog of some $15 million in orders.

Keeping pace with the airline giants and the supersonic aircraft of tomorrow, Hi-Shear Corp., has been a pioneer in the development and manufacture of titanium fasteners. This material is as strong as steel but only half the weight. The Boeing Supersonic Transport and the 747 airliner, as well as the McDonnell Douglas DC-10 and the Lockheed L-1011 air giants, will be using a wide variety of high strength titanium fastening systems from Hi-Shear Corp.

Hi-Shear precision fastening and unfastening systems which have helped place man into orbit and to explore the depths of the oceans were in the first ranks again in the exploration of our universe.

Every Surveyor moon landing vehicle employed both separation systems and gas generating power cartridges developed by the ordnance technicians of the Hi-Shear Ordnance Division. The unique company-designed separation nuts released Surveyor's main braking rocket some six miles above the surface of the moon. And after the landing, numerous gas producing Hi-Shear designed and manufactured cartridges extended antennas and performed a number of other functions vital to mission successes.

Hi-Shear products not only perform in outer space but in inner space—the dark depths of the ocean. Lockheed's research submarine "Deep Quest" uses Hi-Lok fasteners and Hi-Kor Blind Bolts as structural fasteners. On February 28, 1968, "Deep Quest" dived to 8,310 feet, setting a new deep-dive record for commercial submarines.

Flow-Wing Valves and Flo-Lok Fittings were introduced this year by the newly established Flow-Wing Division of the corporation. Flow-Wing is a simplified no-leak valving system that can be used for aerospace, industrial, and commercial applications. It features positive shutoff and low operating torque under maximum pressure. The Flo-Lok fitting utilizes a flexible sealing concept to achieve low torque sealing in flared tube fittings.

A new Lux-Therm infrared unit, the bench model "Little Shrinker," was added to the Lux-Therm product line. "Little Shrinker" provides controlled rings of intense radiant head to reduce shrinkable tubing. This uniquely designed unit is the most advanced production heater of its type available to the electronics industry.

The Ordnance Division recently introduced the only truly portable, self-contained laser ordnance system. This system uses a laser light beam that travels down fibrous optic cables to actuate Hi-Shear designed laser power and detonating cartridges.

Officers of this 25-year-old company, include Wing, president; Albert E. Anderson, vice president, manufacturing; Guy Nash, vice president, sales; Vene L. Darby, vice president, engineering; and William Halpern, secretary and legal counsel.